USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 8/23/10

Instrument ID: FAL3 GC Column ID: db5

Analysis Date: 23-AUG-10 14:25:46 CS3 or VER Data Filename: 23AUG10M Sam:1

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
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
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			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.239	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	0.923-1.203
13C-2,3,4,7,8-PeCDF		1.223	0.923-1.303

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 8/24/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 8/23/10

Instrument ID: FAL3 GC Column ID: db5

Analysis Date: 23-AUG-10 14:25:46 CS3 or VER Data Filename: 23AUG10M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
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-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
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	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.270	1.032-1.311
13C-OCDF		1.279	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 8/24/10

FAL ID: ST082310M3 Filename: 23AUG10M Sam:1 Acquired: 23-AUG-10 14:25:46 ICal: PCDDFAL3-8-23-10
Client ID: 1613 CS3 100511J ConCal: ST082310M3 EndCal: ST082310M6
Results: GC Column: db5 Amount: 1.000 NATO 1989 Tox: 100
WHO 1998 Tox: 125 WHO 2005 Tox: 114

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	5.04e+06	0.73 y	27:24	1.11	10.4		2.50	-	-	*
1,2,3,7,8-PeCDD	1.95e+07	1.64 y	33:14	1.10	50.6		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.81e+07	1.41 y	38:36	1.37	49.6		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.75e+07	1.39 y	38:46	1.37	48.0		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.74e+07	1.41 y	39:13	1.36	47.9		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	1.56e+07	1.04 y	44:13	1.45	49.5		2.50	-	-	*
OCDD	1.96e+07	0.95 y	49:47	1.43	100		2.50	-	-	*
2,3,7,8-TCDF	9.40e+06	0.67 y	26:39	1.50	9.30		2.50	-	-	*
1,2,3,7,8-PeCDF	2.67e+07	1.53 y	31:30	0.94	50.9		2.50	-	-	*
2,3,4,7,8-PeCDF	2.56e+07	1.52 y	32:49	0.94	49.8		2.50	-	-	*
1,2,3,4,7,8-HxCDF	2.15e+07	1.29 y	37:12	0.93	48.8		2.50	-	-	*
1,2,3,6,7,8-HxCDF	2.72e+07	1.26 y	37:24	0.82	50.3		2.50	-	-	*
2,3,4,6,7,8-HxCDF	2.34e+07	1.24 y	38:21	0.92	48.5		2.50	-	-	*
1,2,3,7,8,9-HxCDF	2.60e+07	1.28 y	39:47	1.00	50.3		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.95e+07	1.04 y	42:18	1.39	49.9		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.37e+07	1.04 y	45:08	1.36	49.8		2.50	-	-	*
OCDF	2.16e+07	0.93 y	50:09	0.79	99.9		2.50	-	-	*

						Rec
13C-2,3,7,8-TCDD	4.35e+07	0.86 y	27:23	1.02	95.9	95.9
13C-1,2,3,7,8-PeCDD	3.51e+07	1.77 y	33:13	0.84	94.2	94.2
13C-1,2,3,4,7,8-HxCDD	2.66e+07	1.26 y	38:35	1.07	94.5	94.5
13C-1,2,3,6,7,8-HxCDD	2.66e+07	1.27 y	38:45	1.01	100	100
13C-1,2,3,4,6,7,8-HpCDD	2.18e+07	1.04 y	44:11	0.86	97.0	97.0
13C-OCDD	2.73e+07	0.93 y	49:45	0.55	191	95.3
13C-2,3,7,8-TCDF	6.73e+07	0.86 y	26:38	0.99	96.5	96.5
13C-1,2,3,7,8-PeCDF	5.57e+07	1.78 y	31:28	0.84	94.8	94.8
13C-2,3,4,7,8-PeCDF	5.49e+07	1.74 y	32:48	0.81	96.5	96.5
13C-1,2,3,4,7,8-HxCDF	4.74e+07	0.56 y	37:11	1.85	97.7	97.7
13C-1,2,3,6,7,8-HxCDF	6.58e+07	0.55 y	37:23	2.54	99.0	99.0
13C-2,3,4,6,7,8-HxCDF	5.25e+07	0.54 y	38:19	2.01	99.4	99.4
13C-1,2,3,7,8,9-HxCDF	5.18e+07	0.55 y	39:45	2.03	97.2	97.2
13C-1,2,3,4,6,7,8-HpCDF	2.80e+07	0.42 y	42:17	1.11	96.4	96.4
13C-1,2,3,4,7,8,9-HpCDF	2.02e+07	0.42 y	45:06	0.80	96.0	96.0
13C-OCDF	5.49e+07	0.98 y	50:08	1.08	194	96.8
37Cl-2,3,7,8-TCDD	2.77e+06		27:24	0.69	9.14	91.4
13C-1,2,3,4-TCDD	4.42e+07	0.84 y	26:49	-	98.4	
13C-1,2,3,4-TCDF	7.01e+07	0.87 y	25:33	-	97.0	
13C-1,2,3,7,8,9-HxCDD	2.62e+07	1.28 y	39:11	-	95.1	

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	2.58e+07		24:24	1.11	53.5	2.50	-	-	*		19
Total Penta-Dioxins	4.23e+07		30:15	1.10	109	2.50	-	-	*		7
Total Hexa-Dioxins	6.03e+07		36:08	1.37	165	2.50	-	-	*		11
Total Hepta-Dioxins	3.51e+07		42:49	1.45	111	2.50	-	-	*		20
Total Tetra-Furans	4.14e+07		23:04	1.50	41.0	2.50	-	-	*		9
1st Fn. Tot Penta-Furans	3.21e+07		28:25	0.94	61.7	2.50	-	-	*	PeCDF	1
Total Penta-Furans	7.50e+07		30:12	0.94	144	2.50	-	-	*	206	15
Total Hexa-Furans	1.14e+08		35:15	0.91	230	2.50	-	-	*		8
Total Hepta-Furans	3.43e+07		42:18	1.38	103	2.50	-	-	*		14

Analyst: _____ Date: 8/24/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:23AUG10M Instrument: FAL3 GC: DB5 Experiment:PCDD

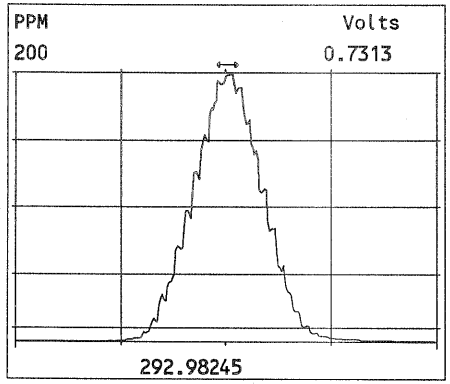
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
23AUG10M	1	ST082310M3	1613 CS3 100511J	23-AUG-10 14:25:46	ST082310M3	ST082310M6	BS
23AUG10M	2	ST082310M-1	1613 CS-1	23-AUG-10 15:21:08	NA	NA	BS
23AUG10M	3	ST082310M0	1613 CS0 100511G	23-AUG-10 16:16:35	NA	NA	BS
23AUG10M	4	ST082310M1	1613 CS1 100511H	23-AUG-10 17:12:02	NA	NA	BS
23AUG10M	5	ST082310M2	1613 CS2 100511I	23-AUG-10 18:07:23	NA	NA	BS
23AUG10M	6	ST082310M4	1613 CS4 100511K	23-AUG-10 19:02:46	NA	NA	BS
23AUG10M	7	ST082310M5	1613 CS5 100511L	23-AUG-10 19:58:08	NA	NA	BS
23AUG10M	8	SB082310M1	Solvent Blank	23-AUG-10 20:53:27	NA	NA	BS
23AUG10M	9	6114-001-0001-SA	LPTP10-S2	23-AUG-10 21:48:46	ST082310M3	ST082310M6	BS
23AUG10M	10	ST082310M6	1613 CS3 100511J	23-AUG-10 22:44:05	ST082310M3	ST082310M6	BS
23AUG10M	11	ST082310M7	8280 CS3 071227J	23-AUG-10 23:39:28	ST082310M7	ST082310M8	BS
23AUG10M	12	SB082310M2	Solvent Blank	24-AUG-10 00:34:46	ST082310M7	ST082310M8	BS
23AUG10M	13	2088-001-0001-MB	Method Blank	24-AUG-10 01:30:01	ST082310M7	ST082310M8	BS
23AUG10M	14	6263-001-0001-SA	MDL 1	24-AUG-10 02:25:23	ST082310M7	ST082310M8	BS
23AUG10M	15	6263-002-0001-SA	MDL 2	24-AUG-10 03:20:43	ST082310M7	ST082310M8	BS
23AUG10M	16	6263-003-0001-SA	MDL 3	24-AUG-10 04:16:04	ST082310M7	ST082310M8	BS
23AUG10M	17	6263-004-0001-SA	MDL 4	24-AUG-10 05:11:22	ST082310M7	ST082310M8	BS
23AUG10M	18	6263-005-0001-SA	MDL 5	24-AUG-10 06:06:41	ST082310M7	ST082310M8	BS
23AUG10M	19	6263-006-0001-SA	MDL 6	24-AUG-10 07:02:01	ST082310M7	ST082310M8	BS
23AUG10M	20	6263-007-0001-SA	MDL 7	24-AUG-10 07:57:23	ST082310M7	ST082310M8	BS
23AUG10M	21	ST082310M8	8280 CS1 071227H	24-AUG-10 08:52:46	ST082310M7	ST082310M8	BS

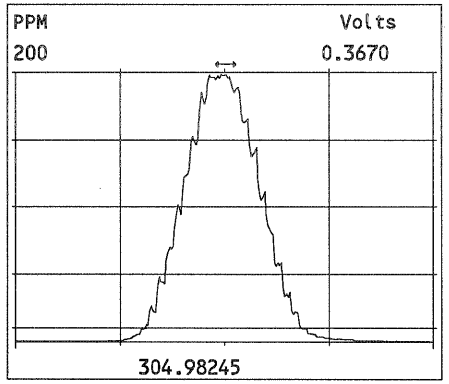
8/24/10

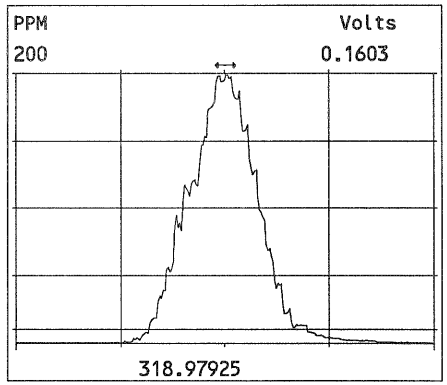
Data Backed Up:_____

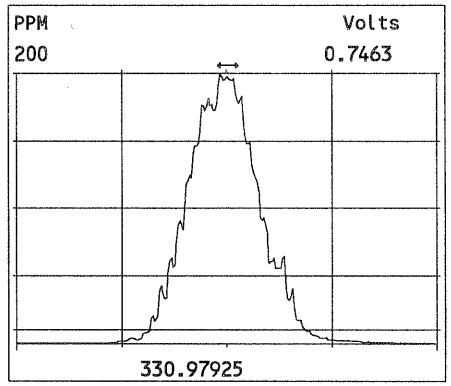
Date:_____

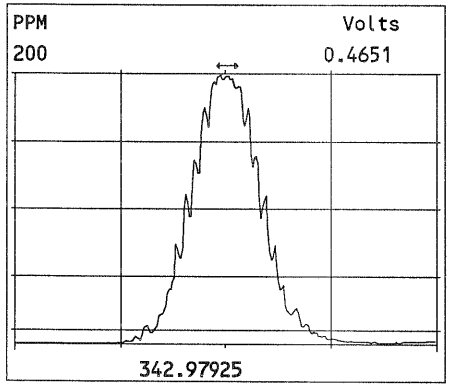
Peak Locate Examination:23-AUG-2010:14:23 File:23AUG10M
Experiment:PCDD Function:1 Reference:PFK

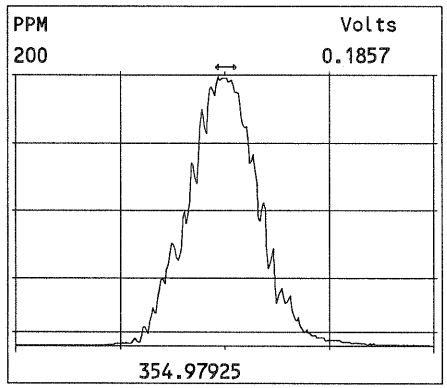


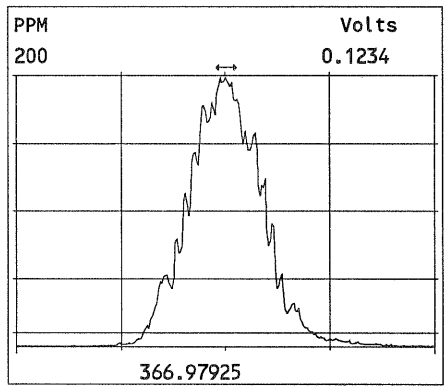


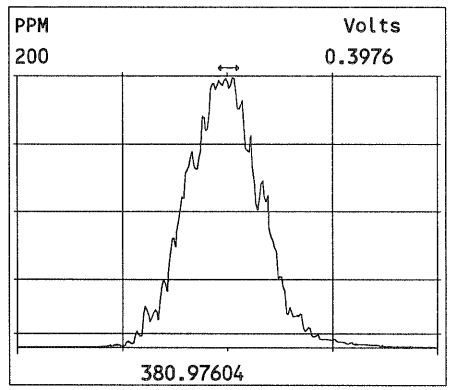


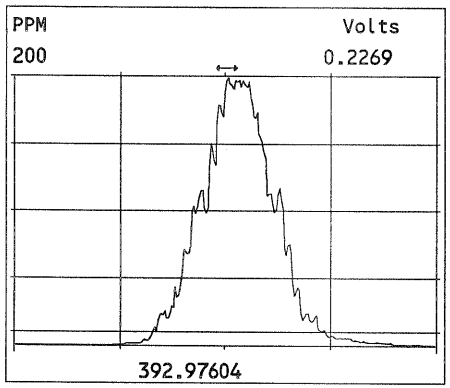


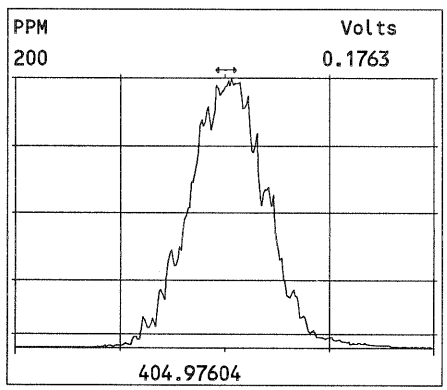


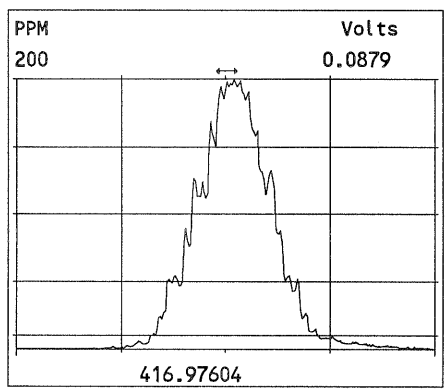




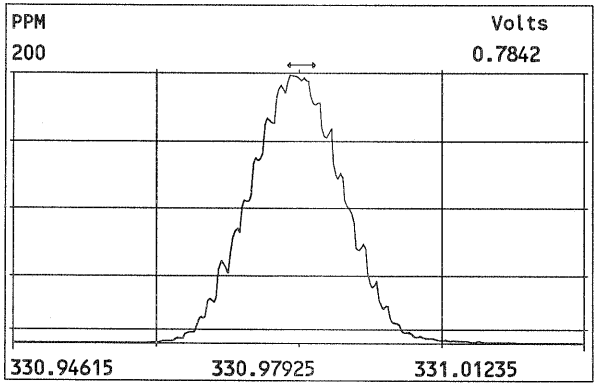


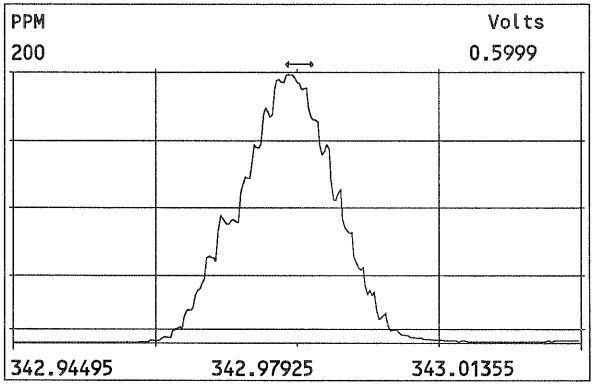


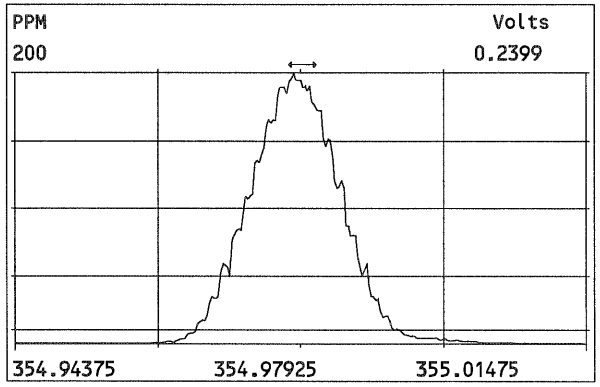


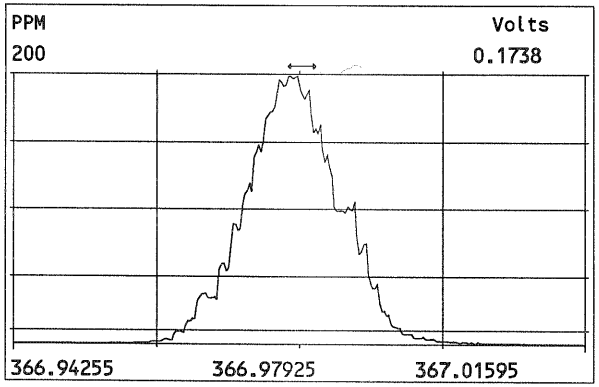


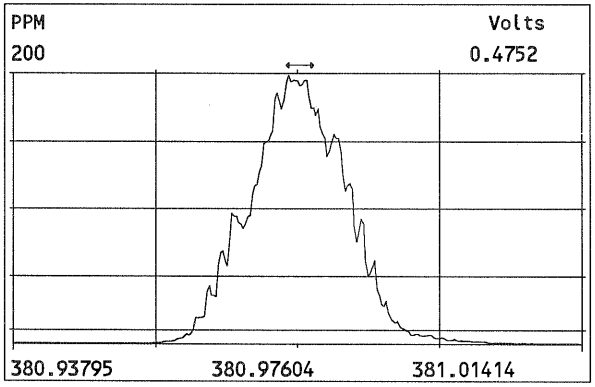
Peak Locate Examination:23-AUG-2010:14:24 File:23AUG10M
Experiment:PCDD Function:2 Reference:PFK

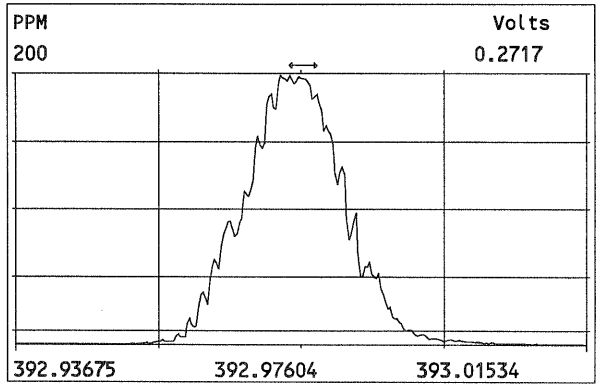


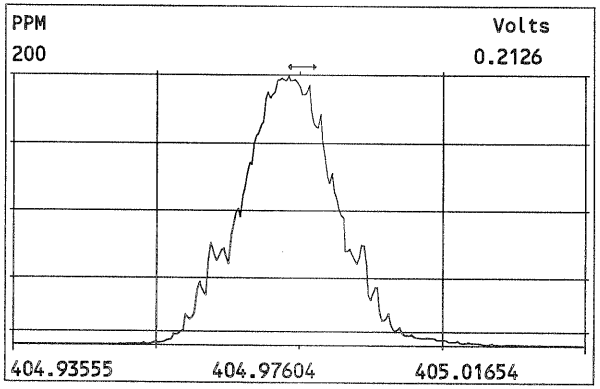


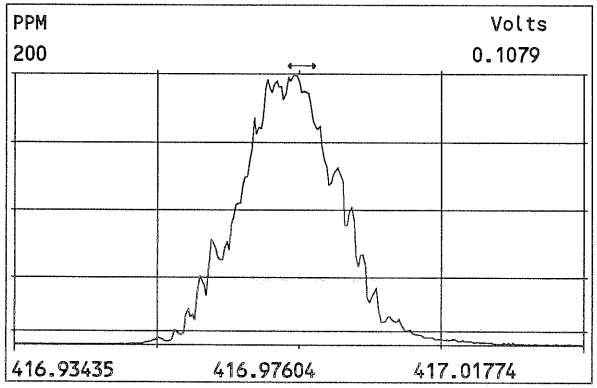




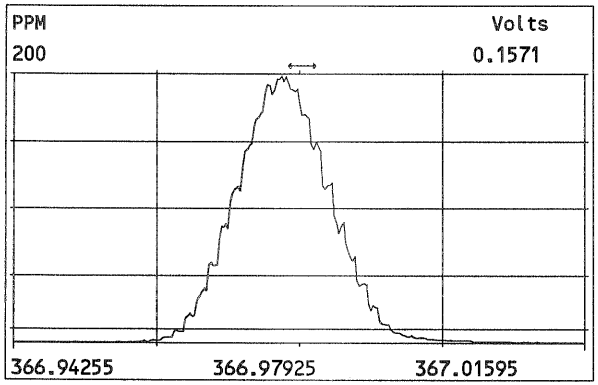


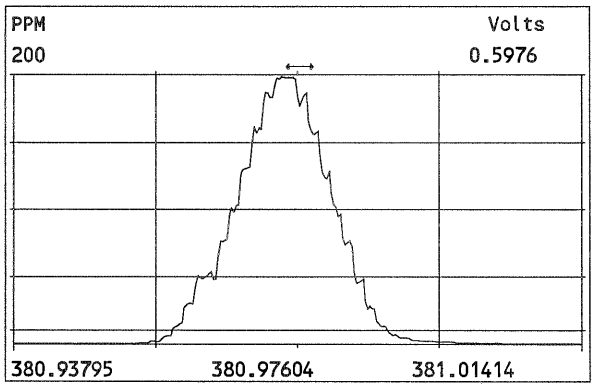


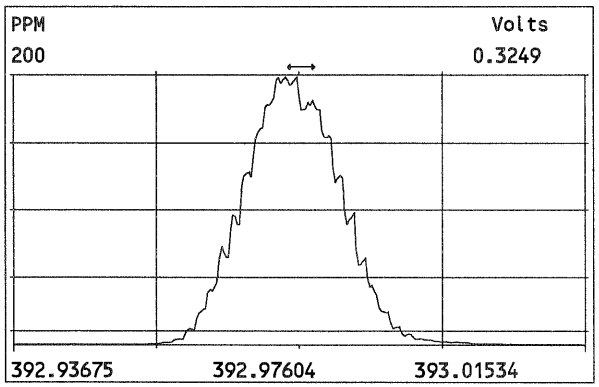


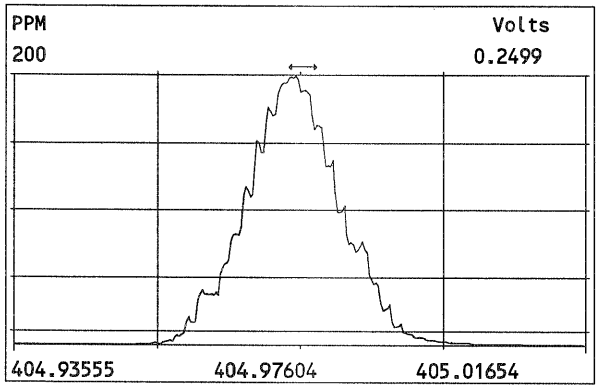


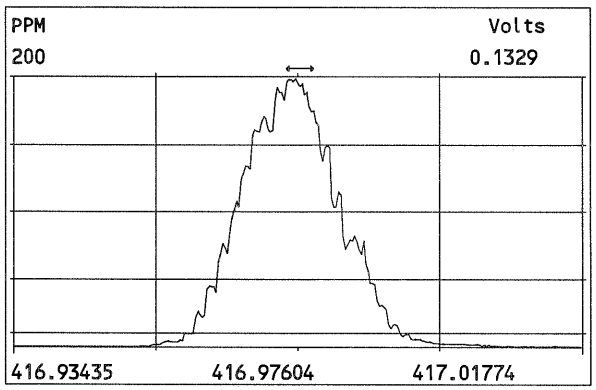
Peak Locate Examination:23-AUG-2010:14:24 File:23AUG10M
Experiment:PCDD Function:3 Reference:PFK

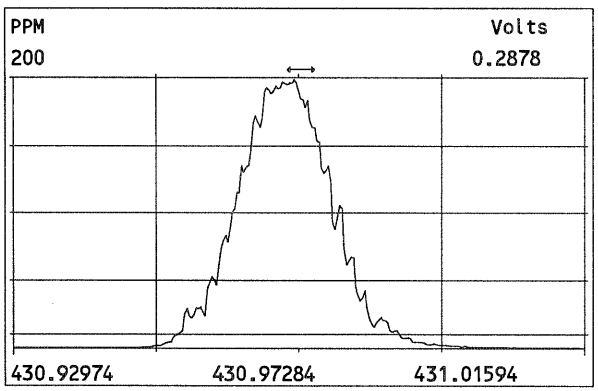


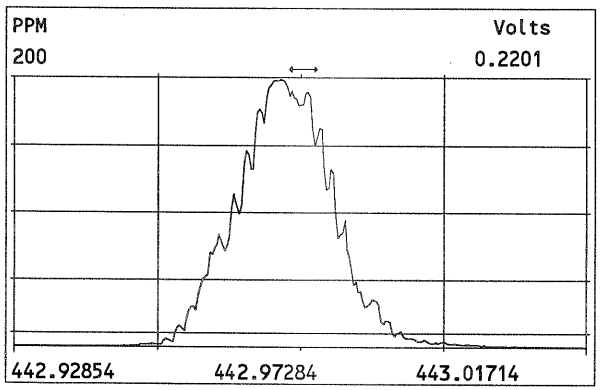


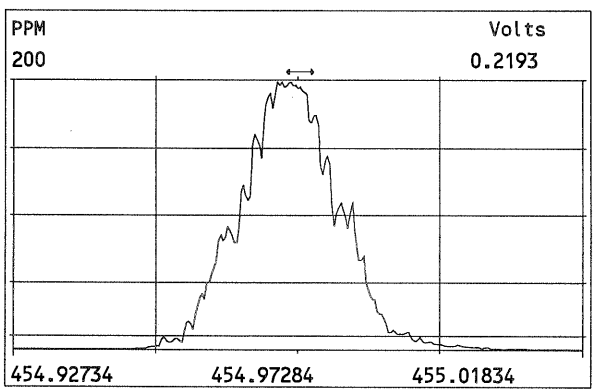




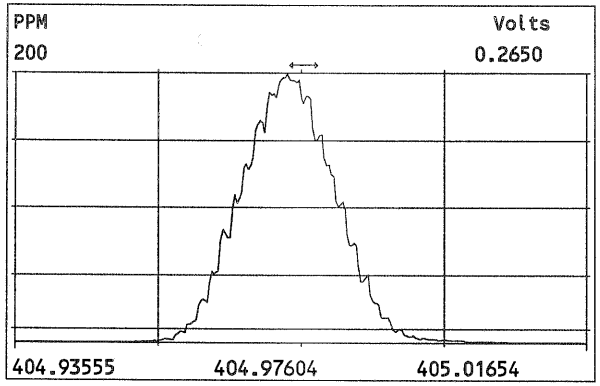


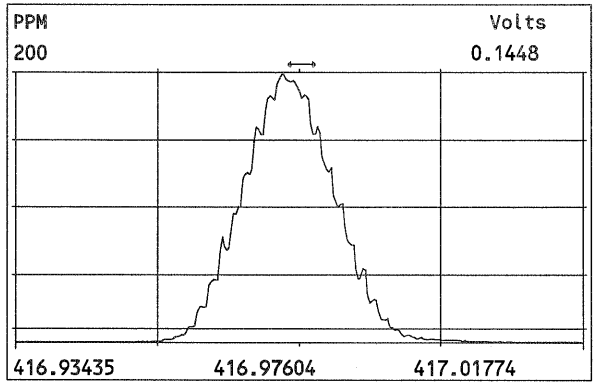


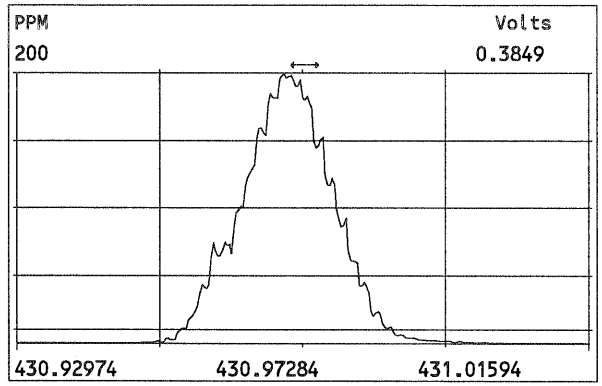


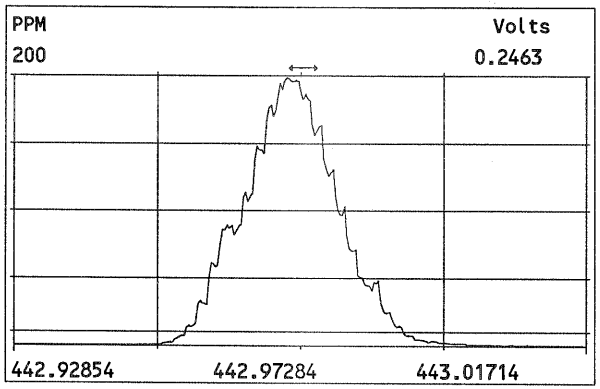


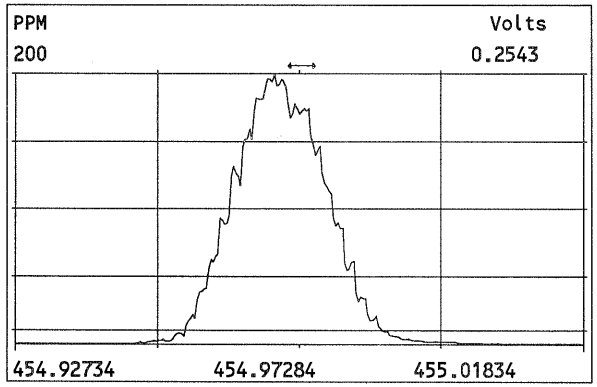
Peak Locate Examination:23-AUG-2010:14:25 File:23AUG10M
Experiment:PCDD Function:4 Reference:PFK

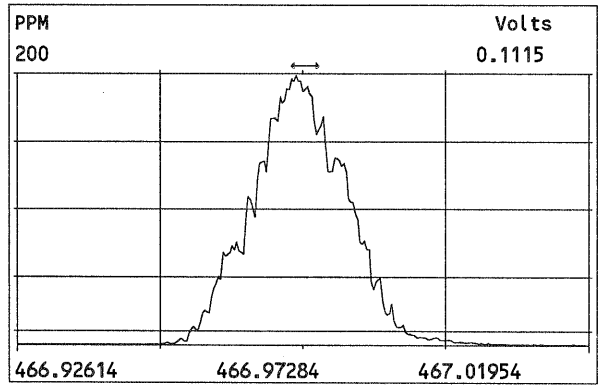


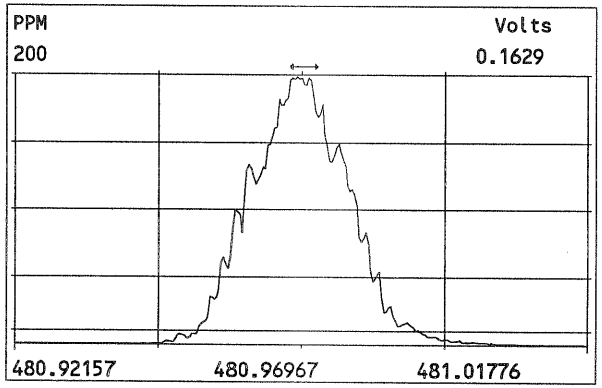




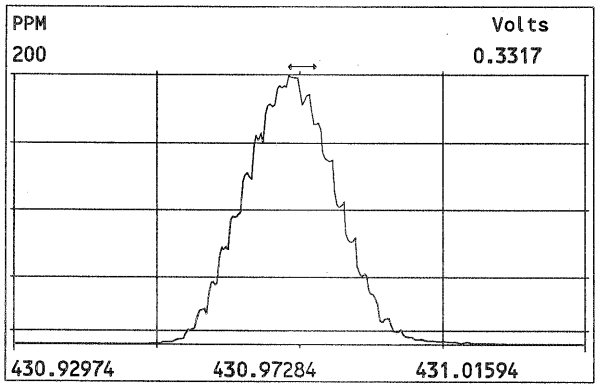


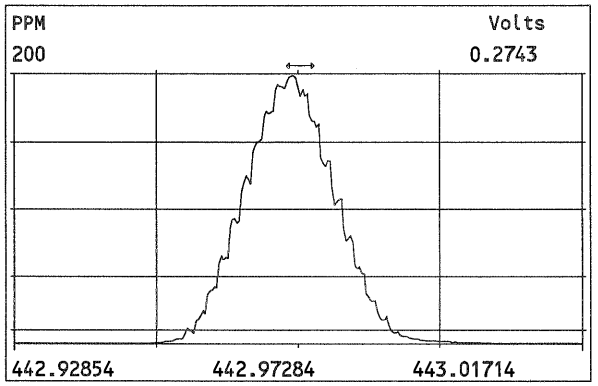


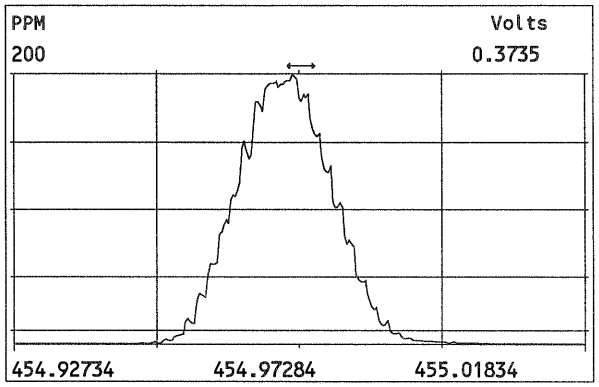


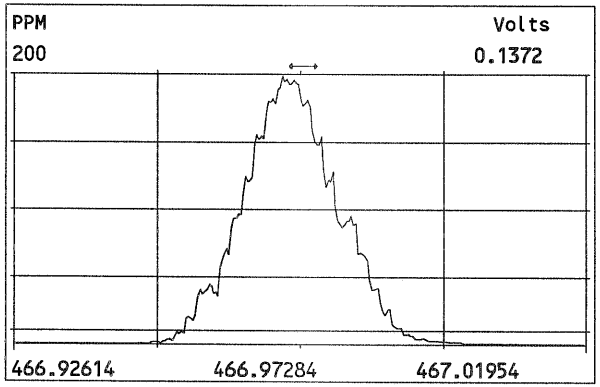


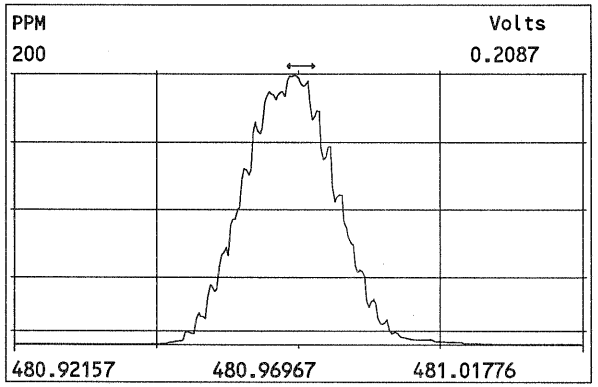
Peak Locate Examination:23-AUG-2010:14:25 File:23AUG10M
Experiment:PCDD Function:5 Reference:PFK

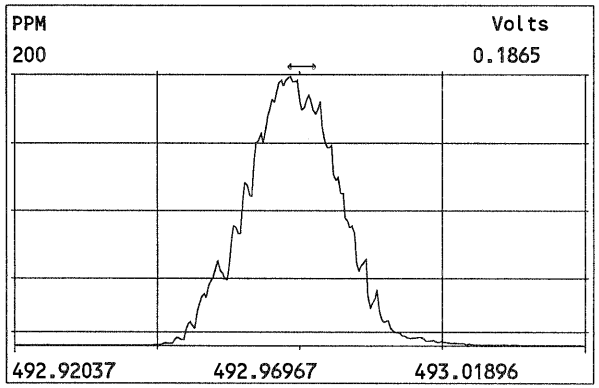


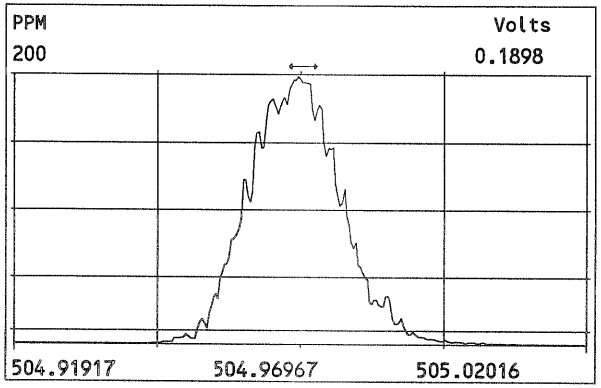


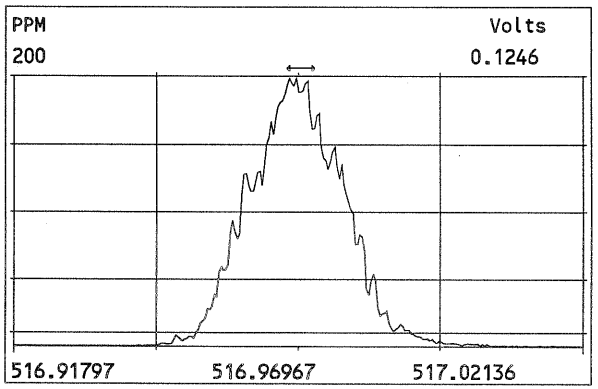




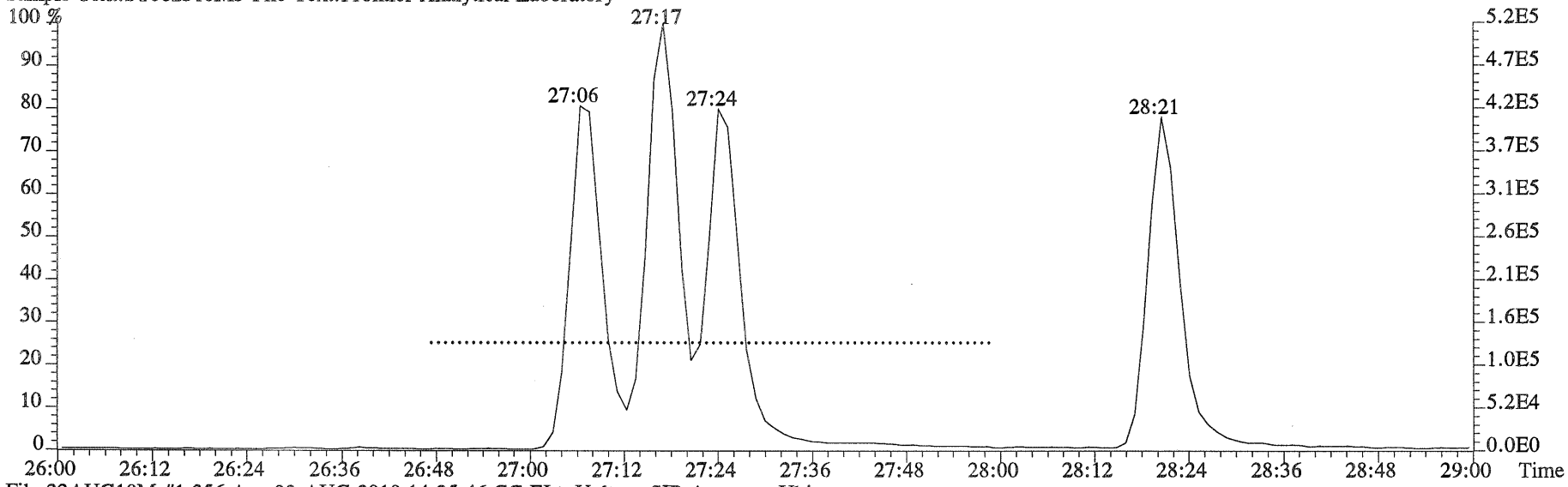




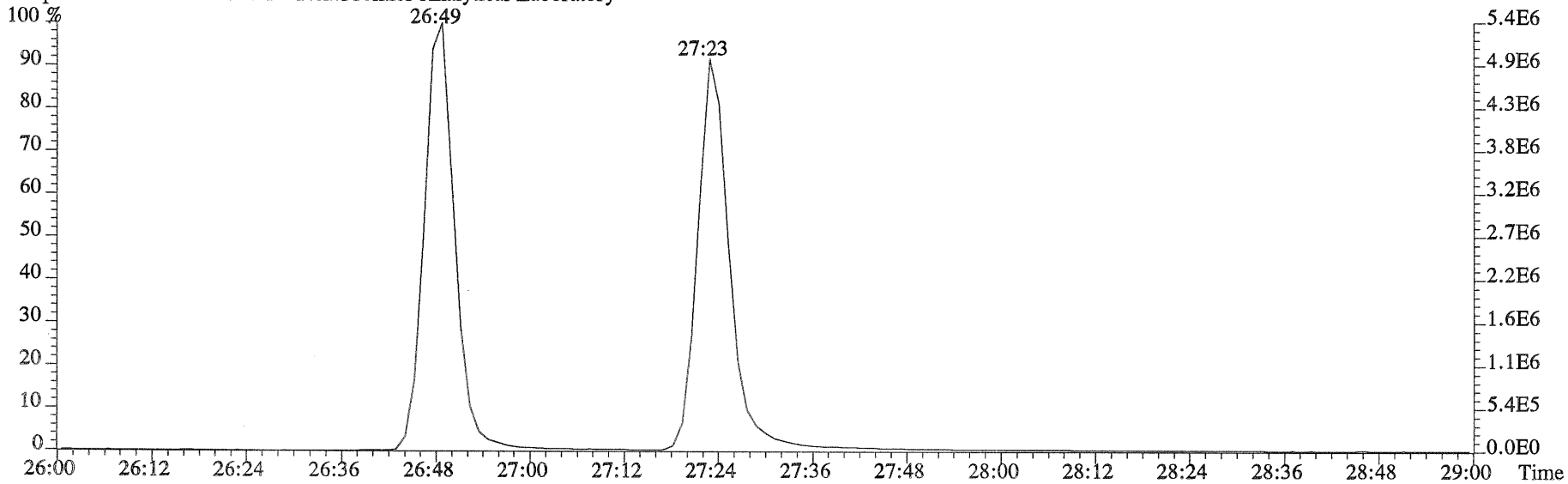




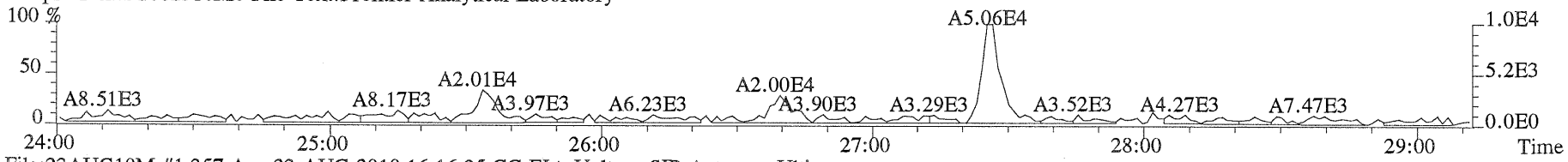
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



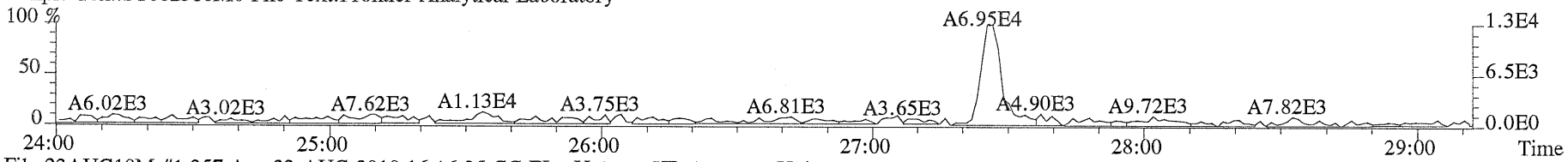
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



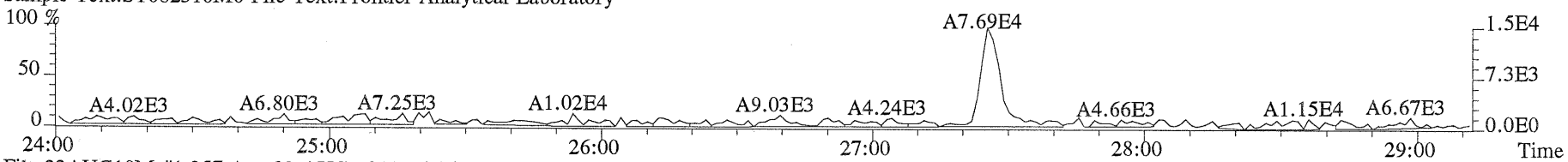
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



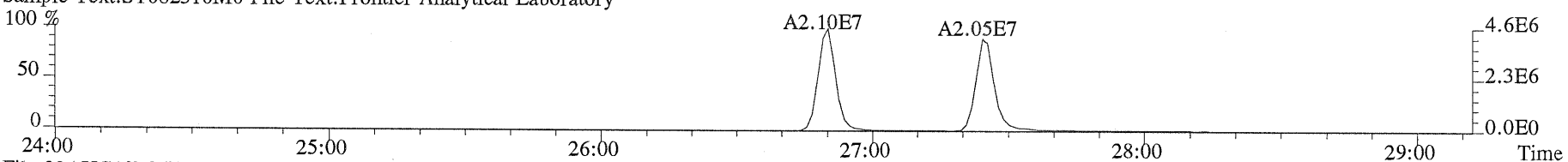
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



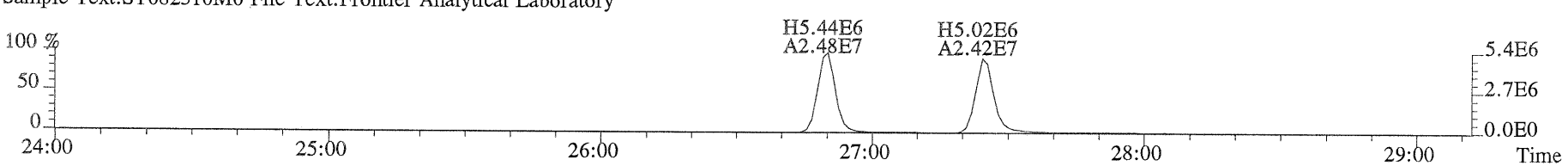
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



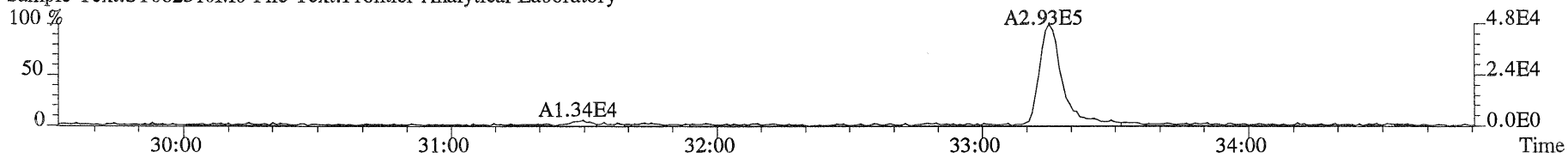
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



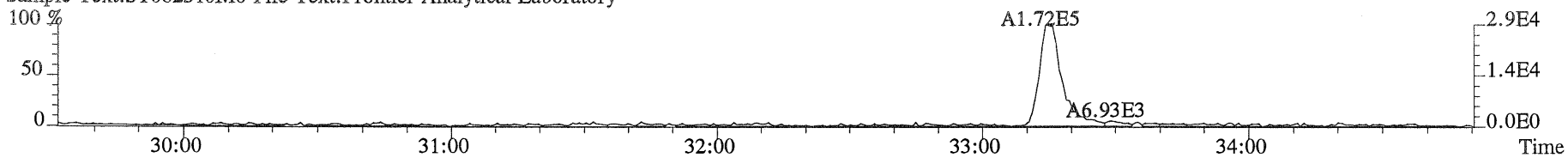
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



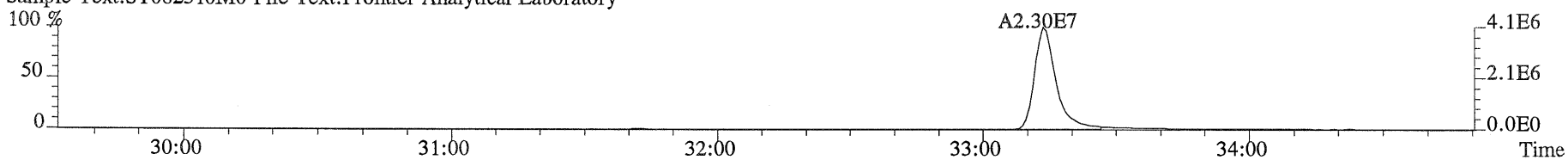
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



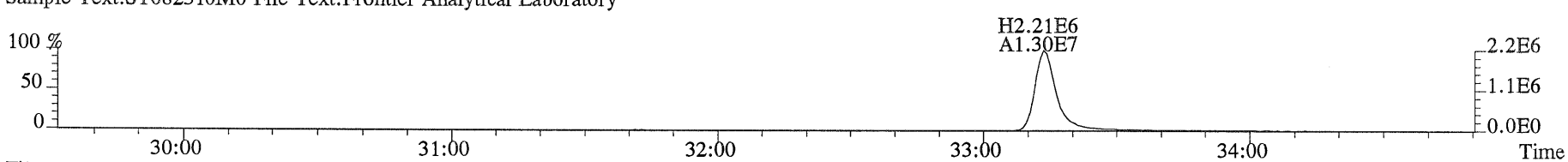
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



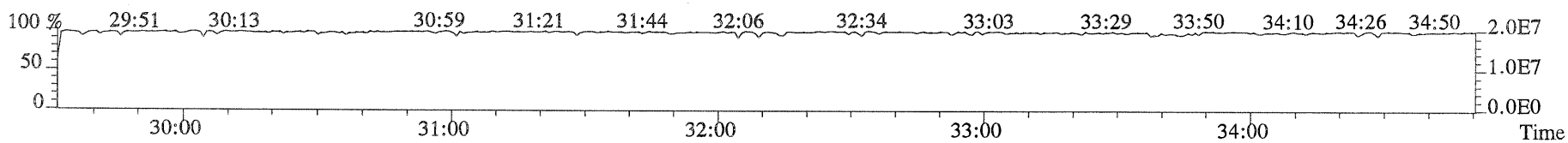
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



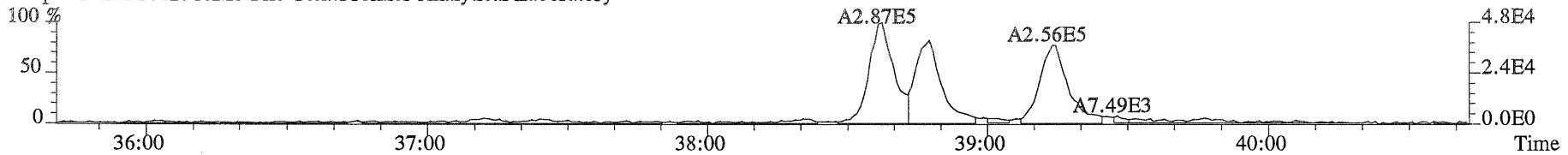
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



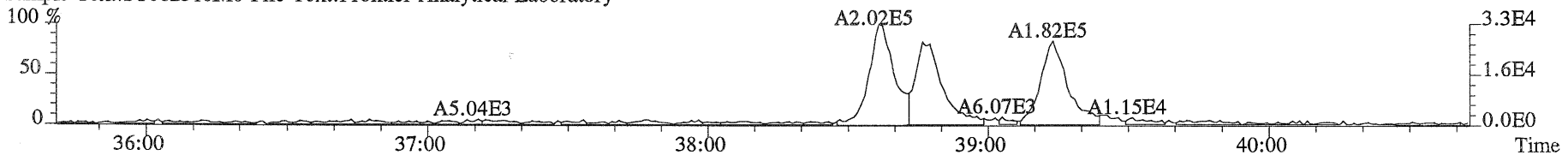
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



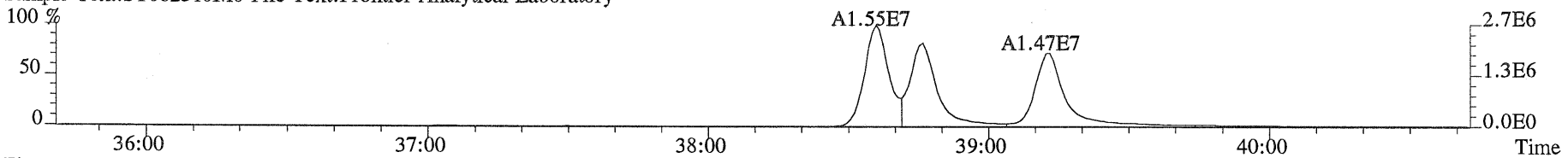
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



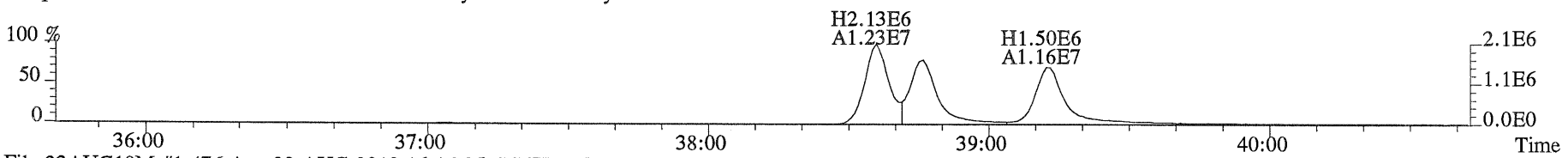
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



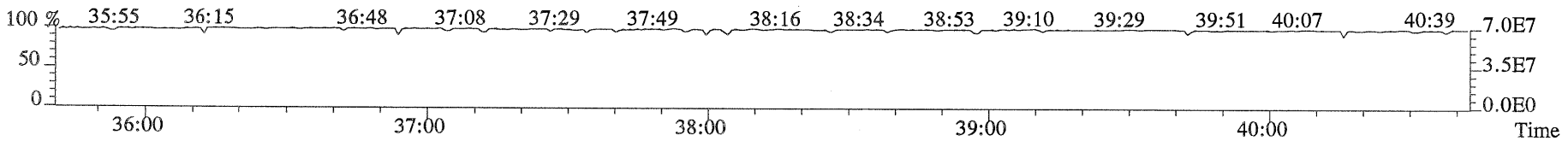
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



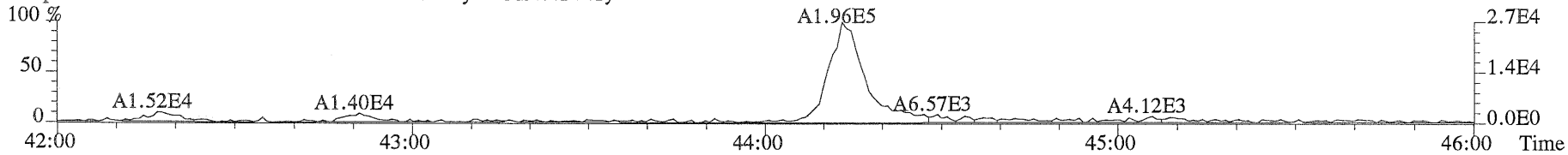
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



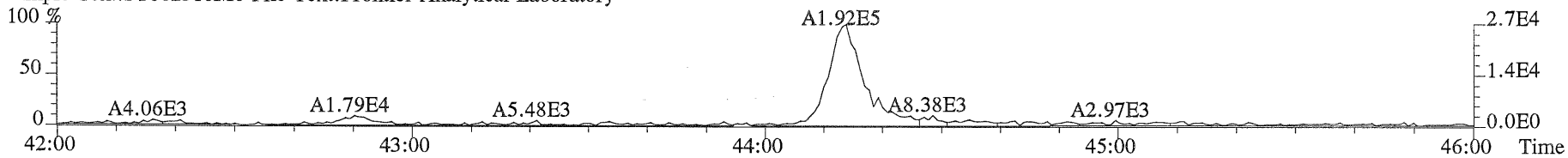
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



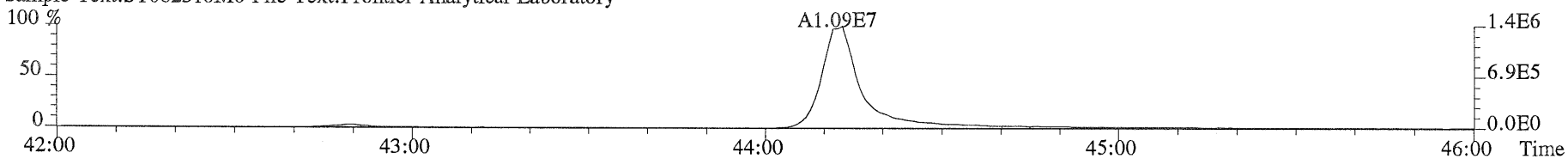
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



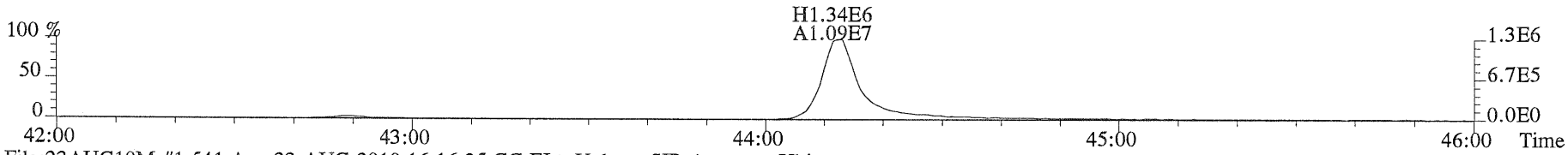
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



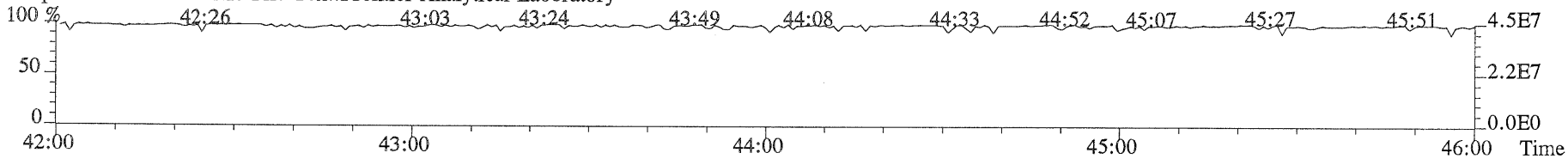
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



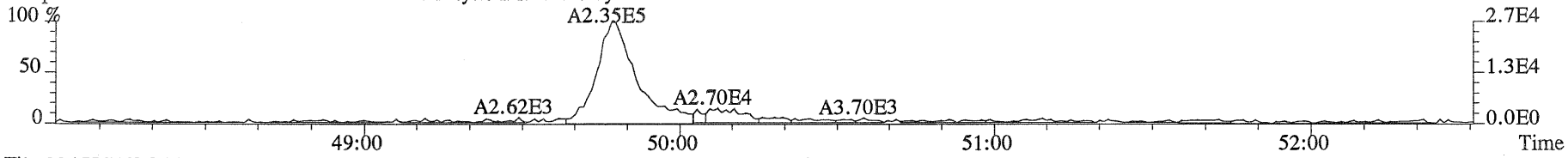
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



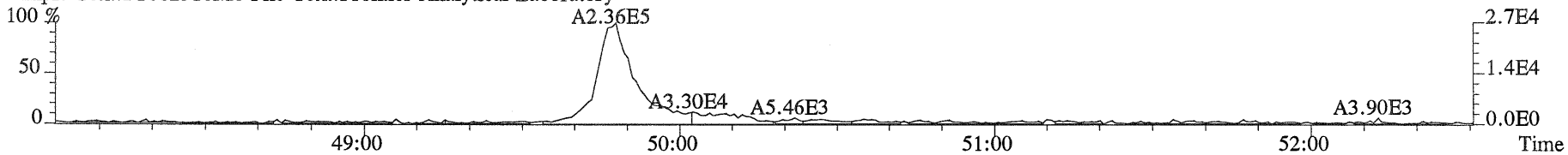
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



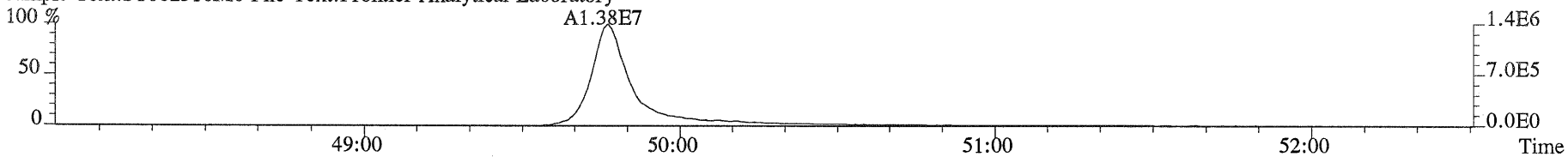
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



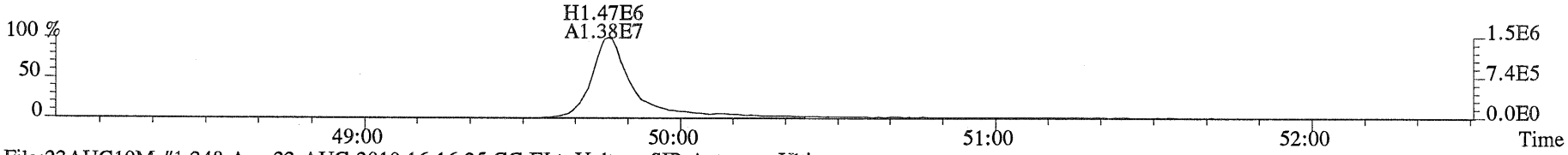
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



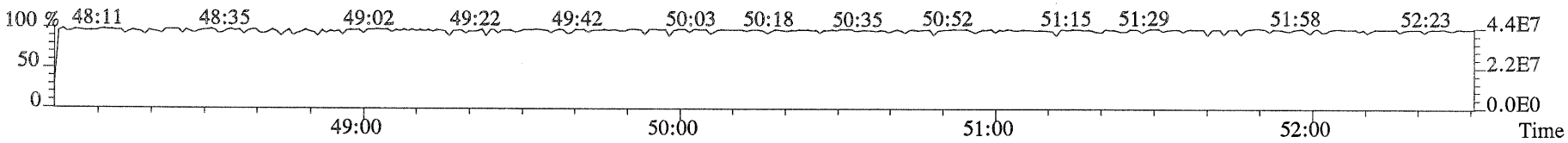
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



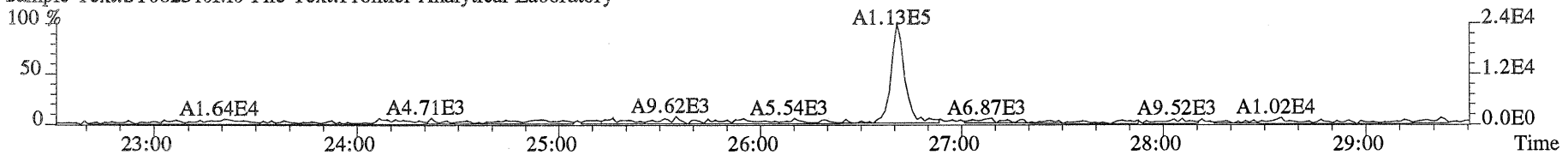
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



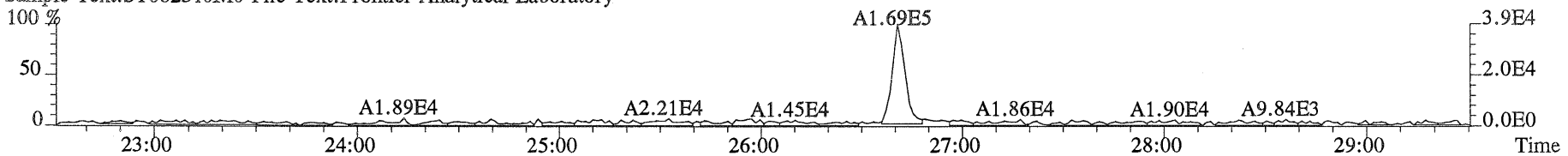
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



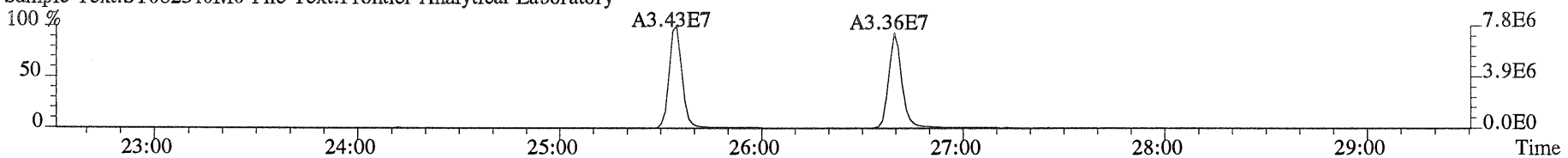
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



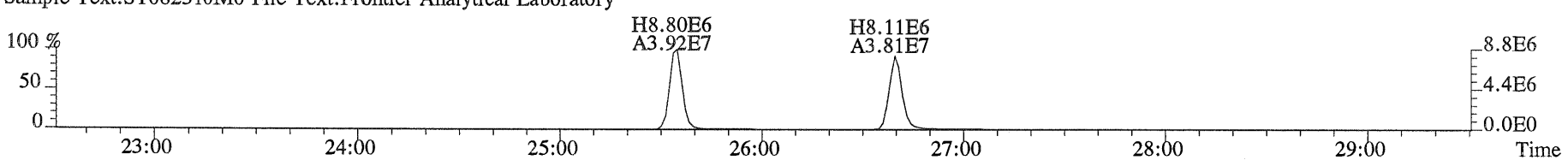
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



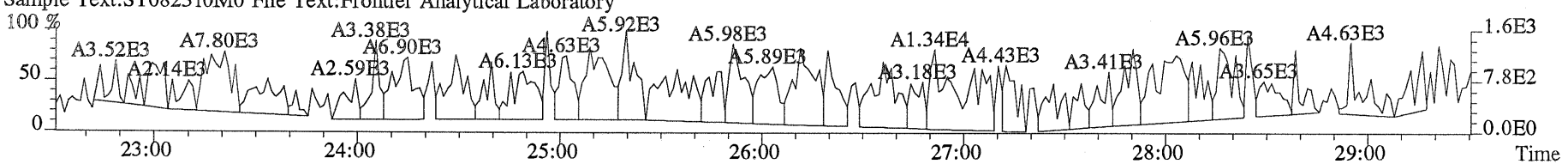
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



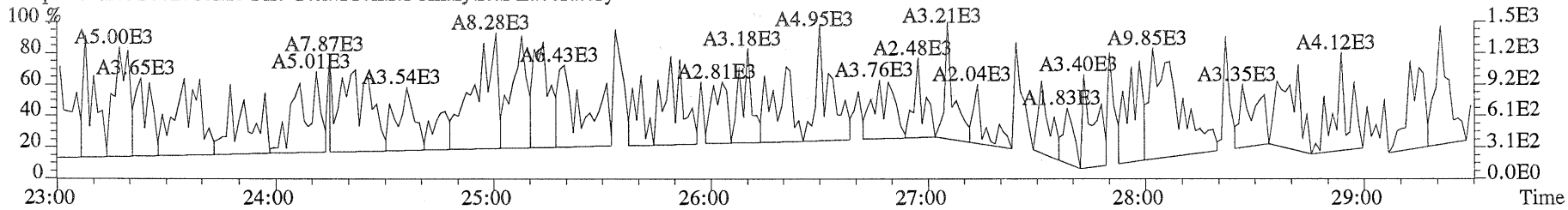
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



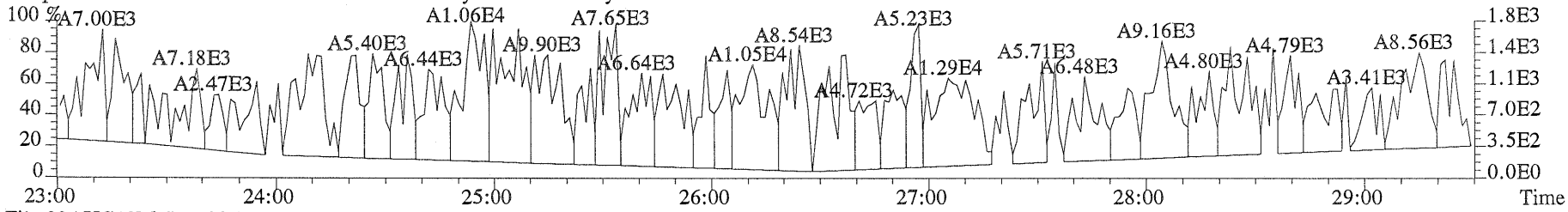
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



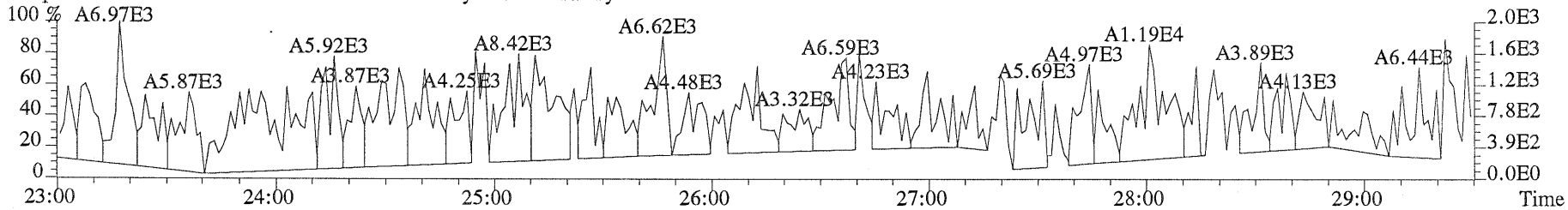
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



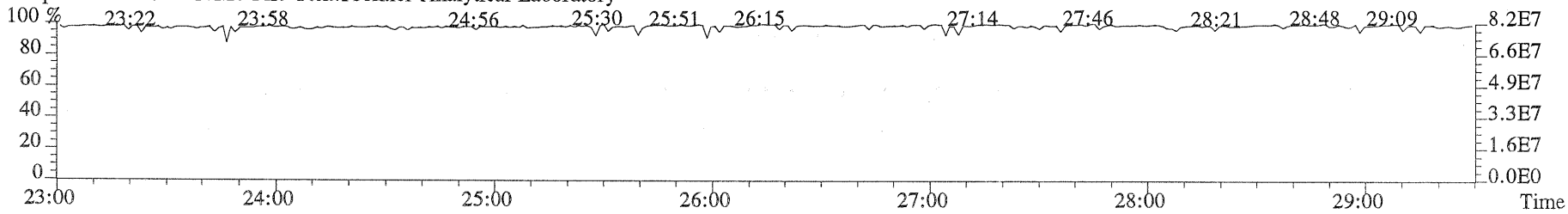
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



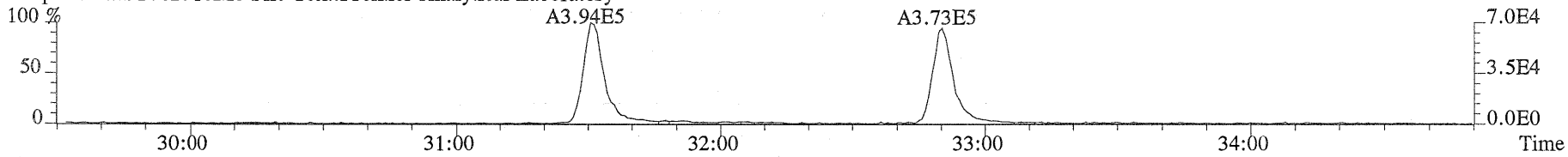
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



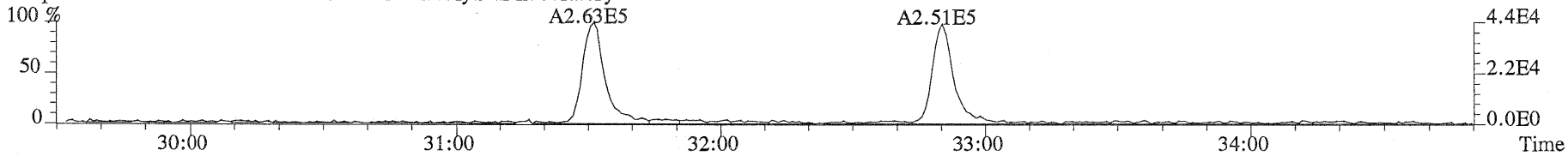
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



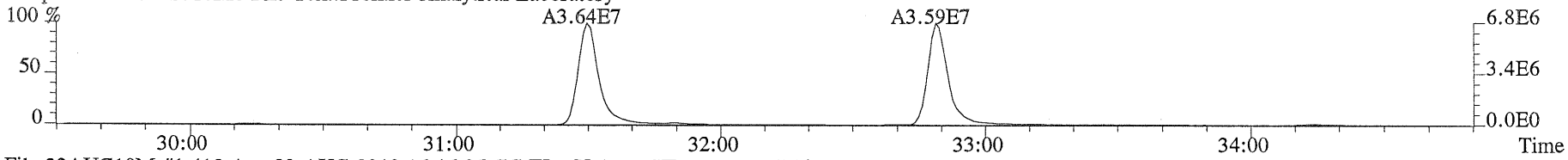
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



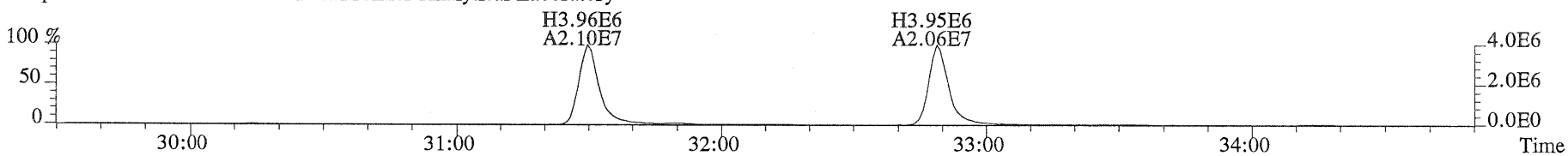
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



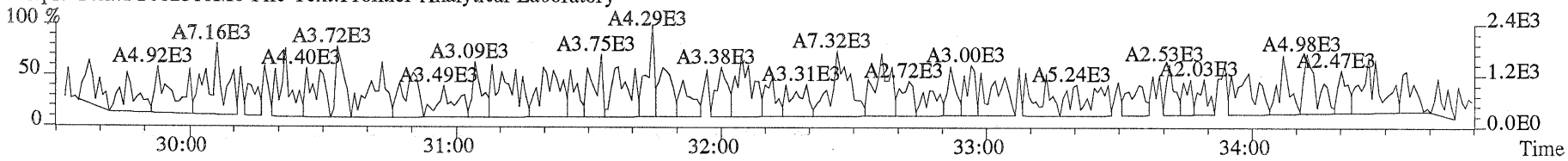
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



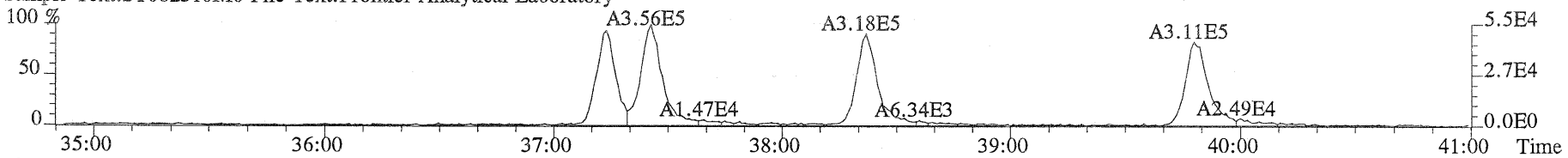
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



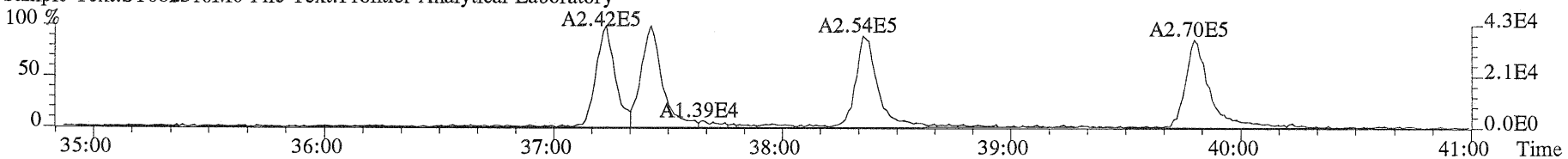
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



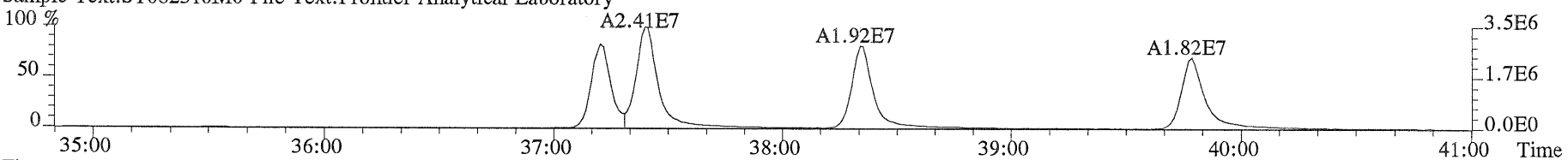
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



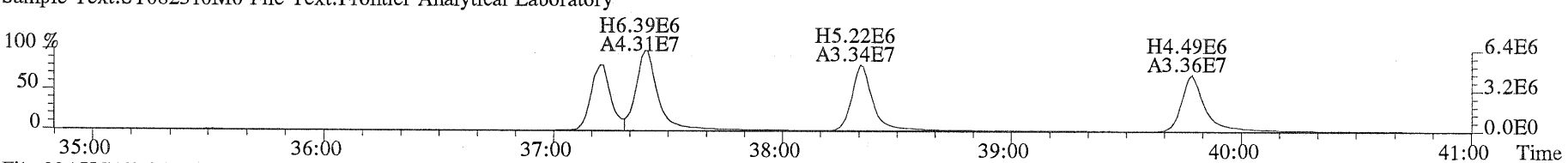
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



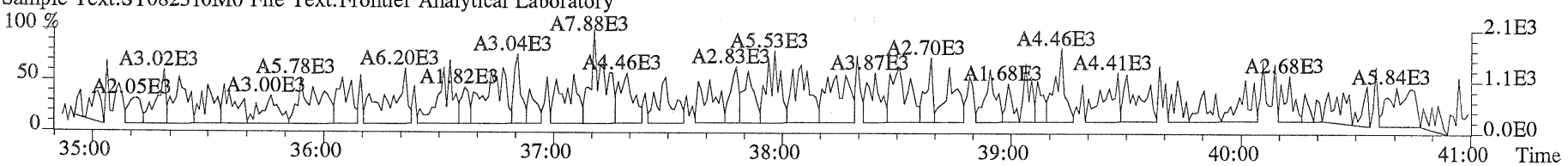
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



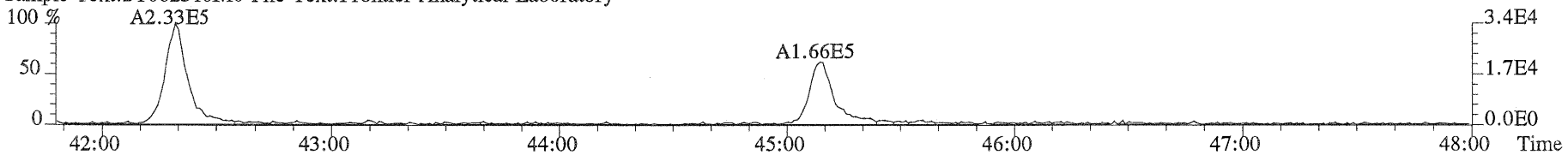
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



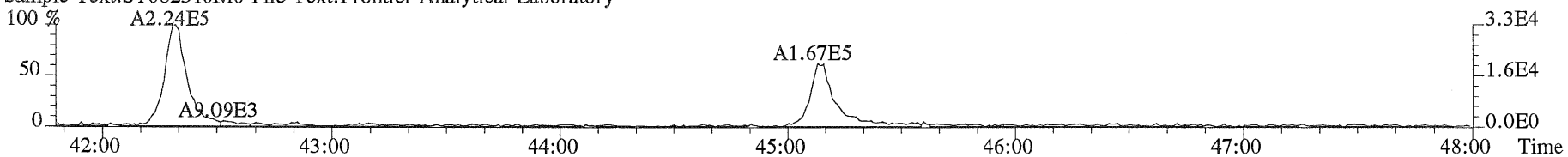
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



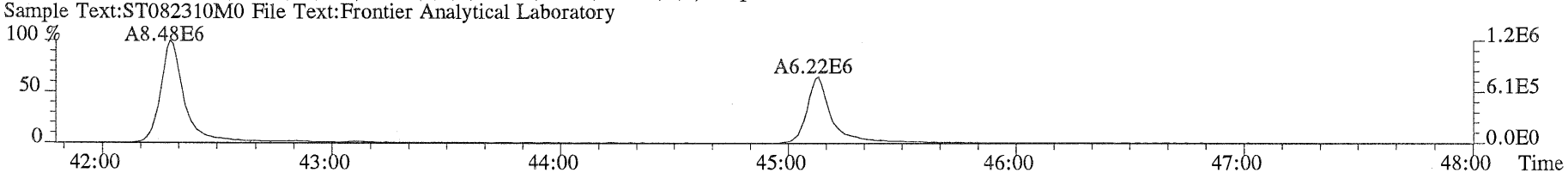
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



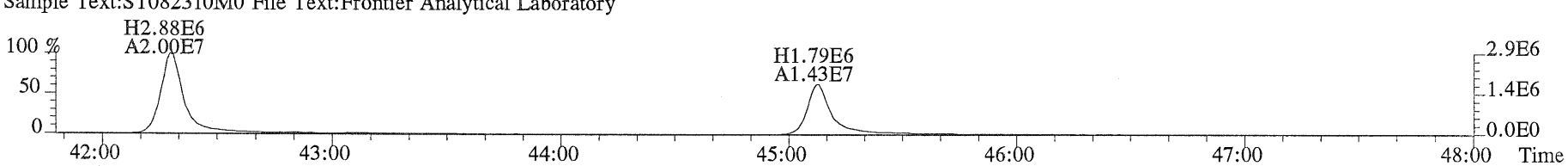
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



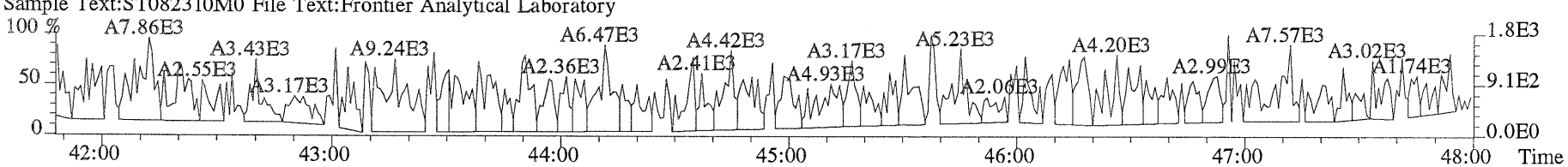
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



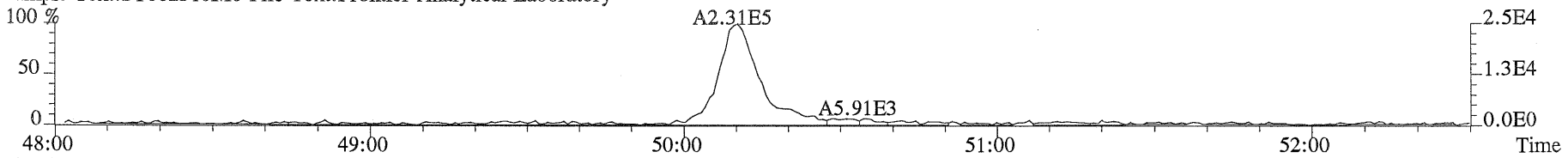
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



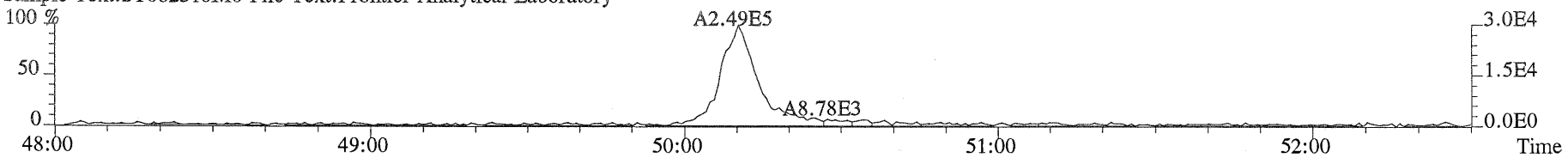
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



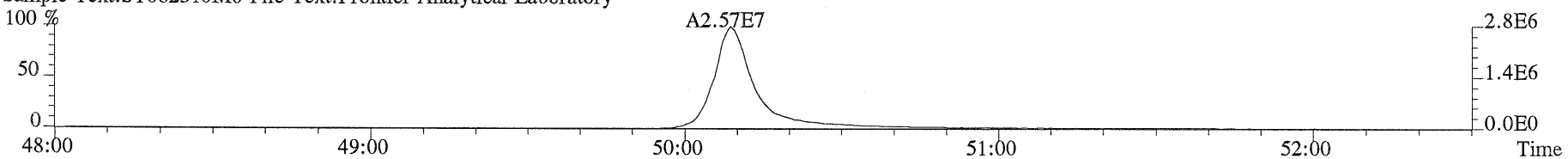
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



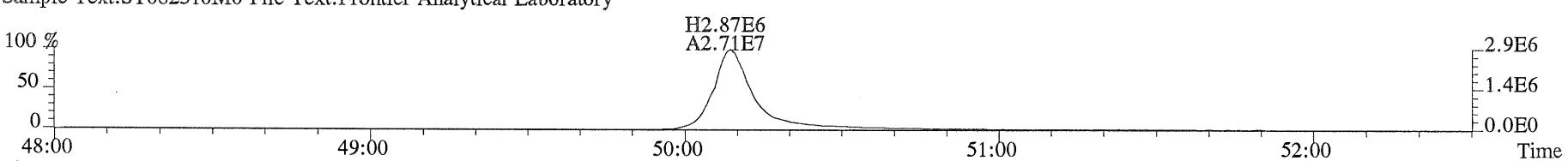
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



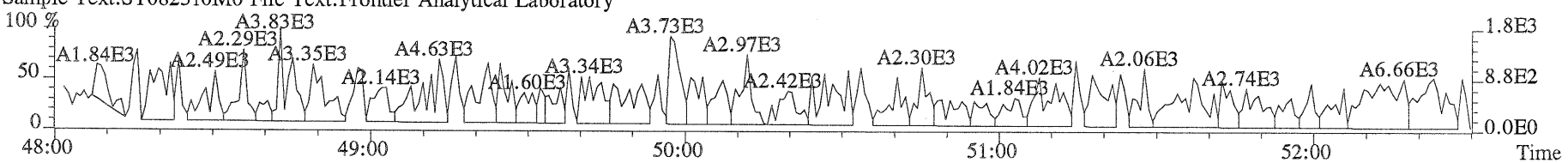
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



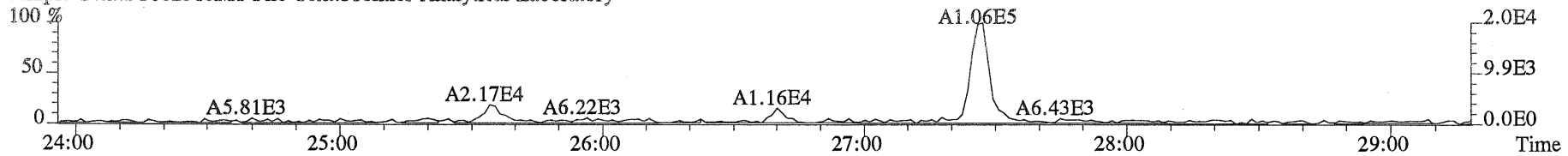
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



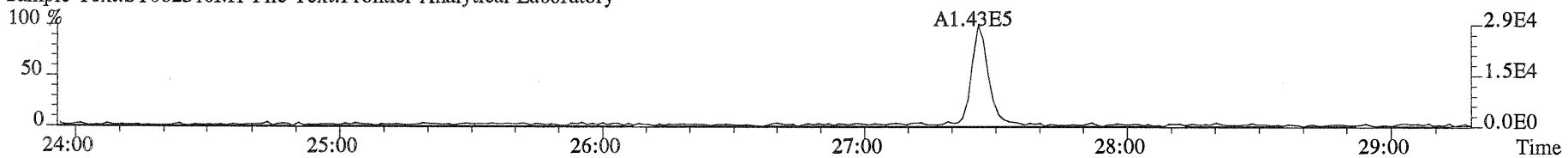
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



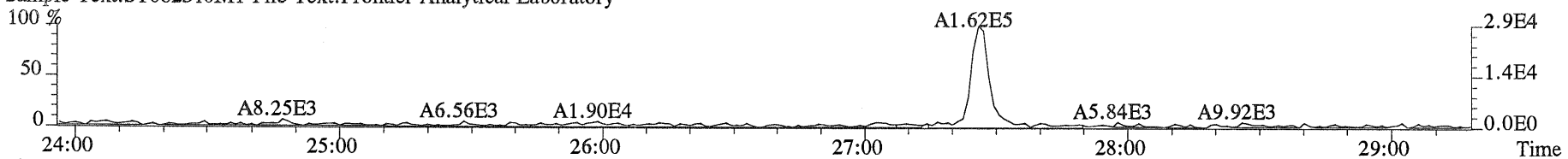
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



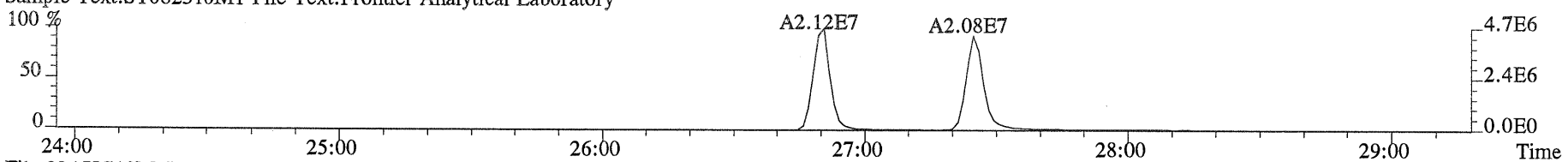
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



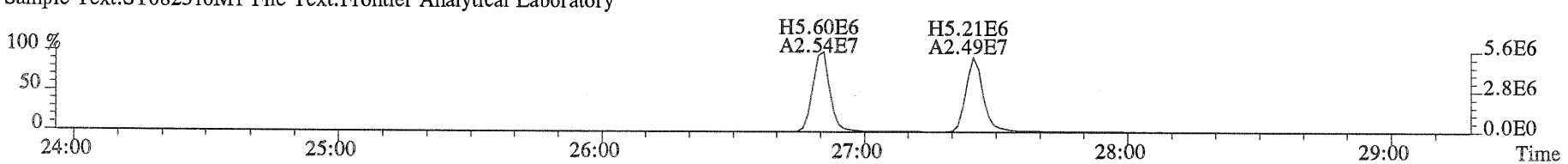
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



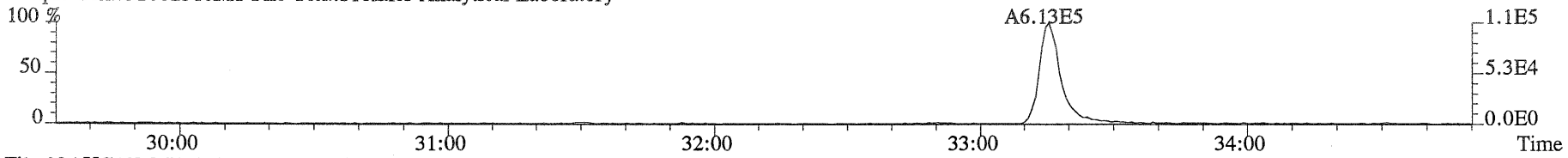
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



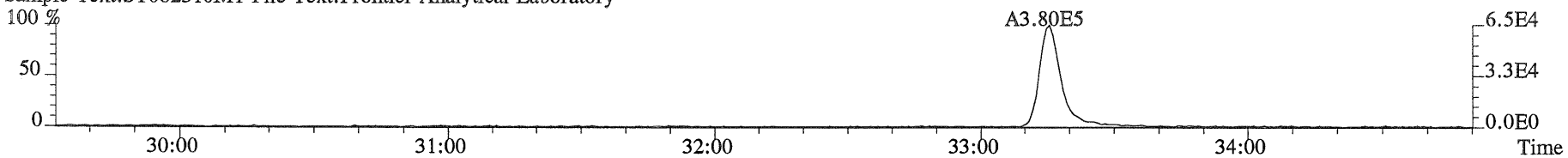
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



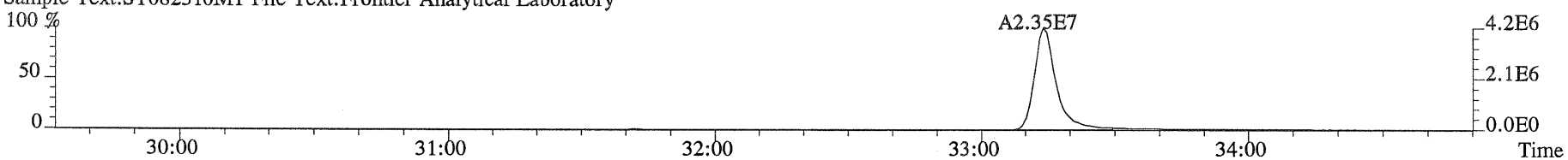
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



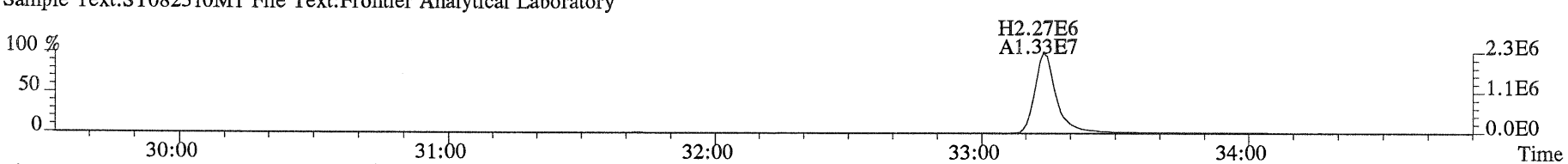
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



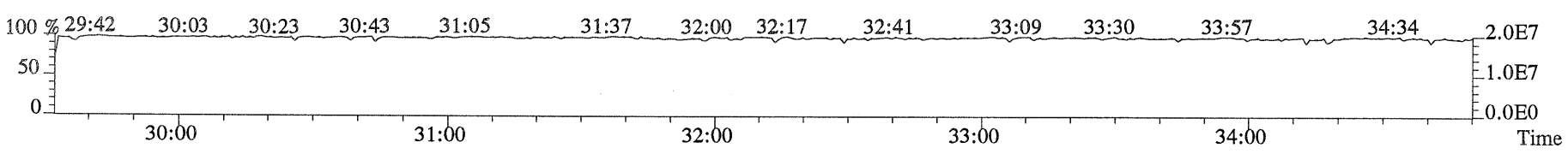
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



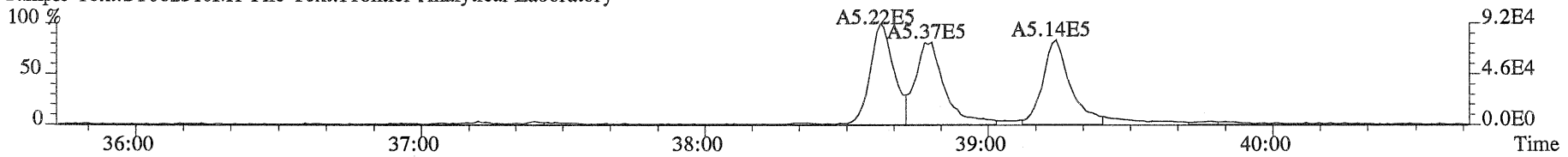
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



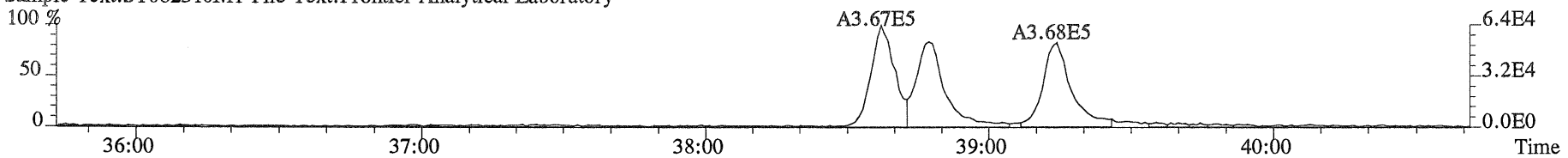
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



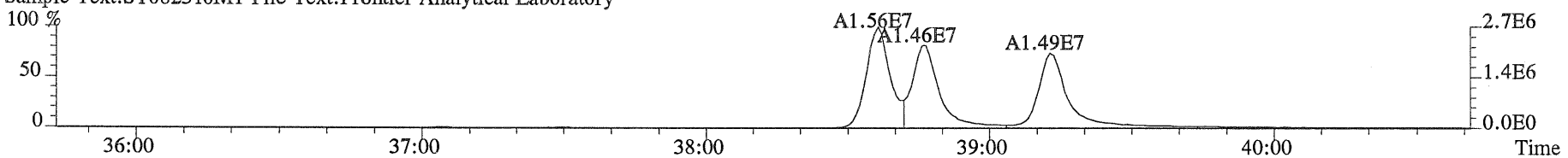
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



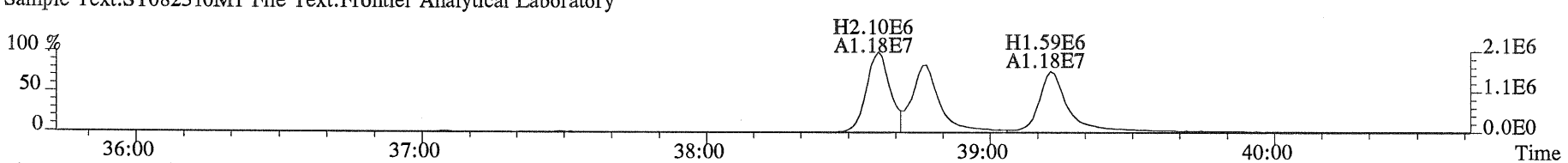
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



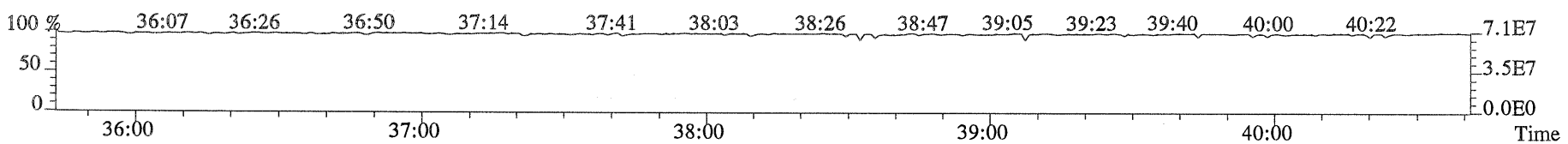
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



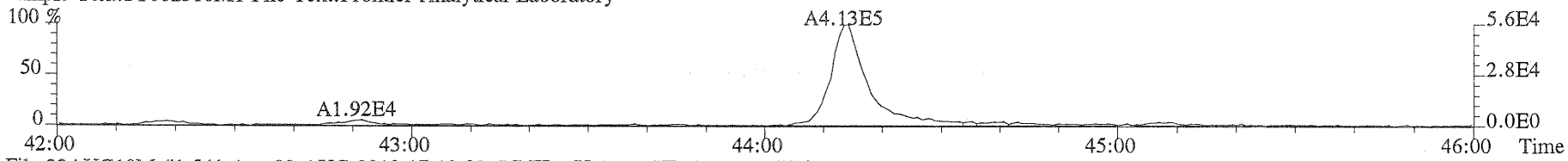
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



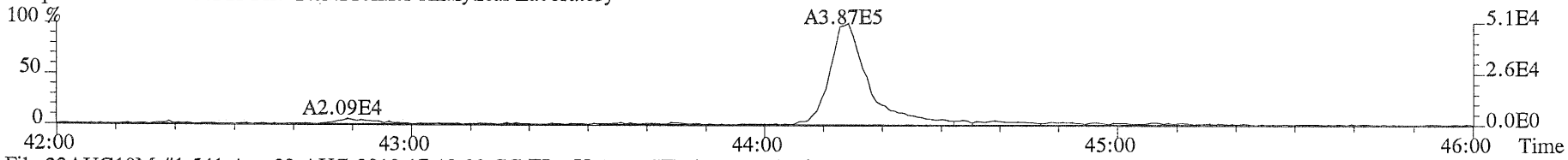
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



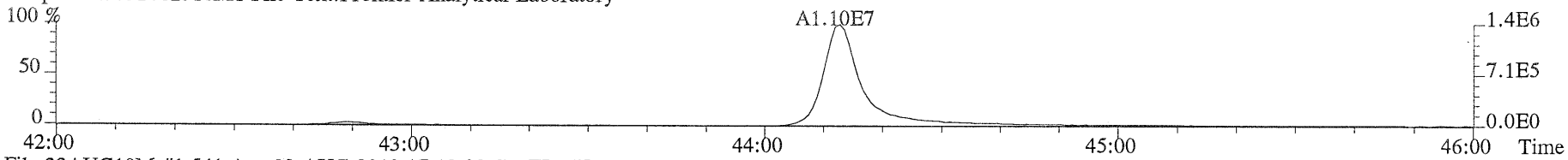
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



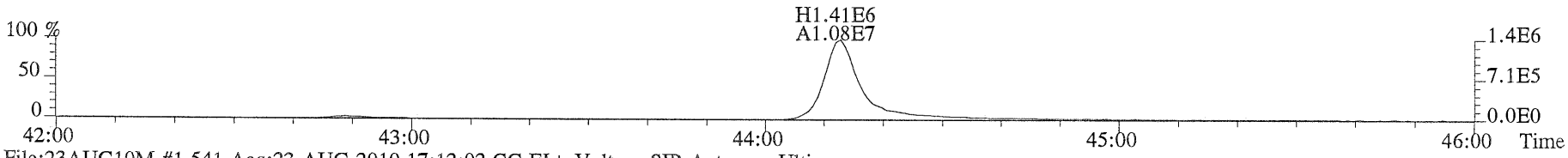
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



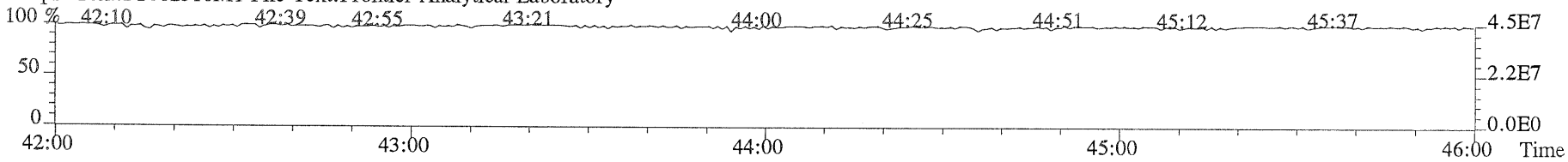
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



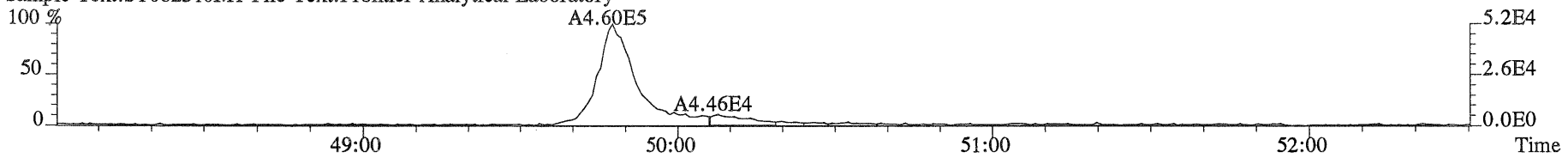
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



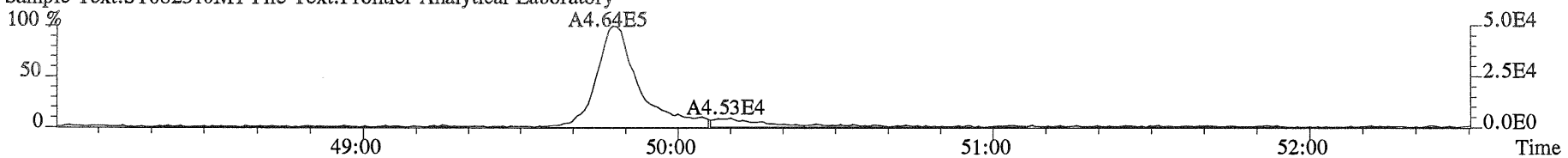
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



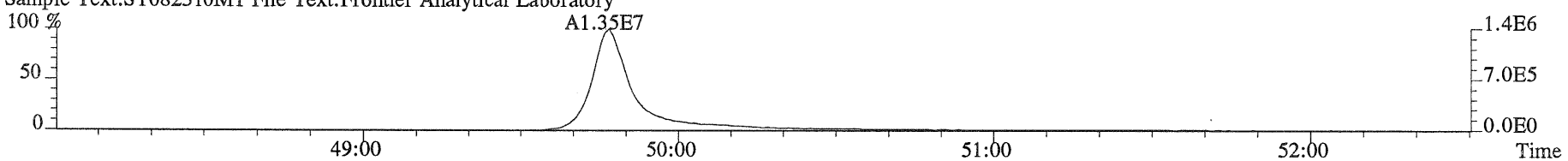
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



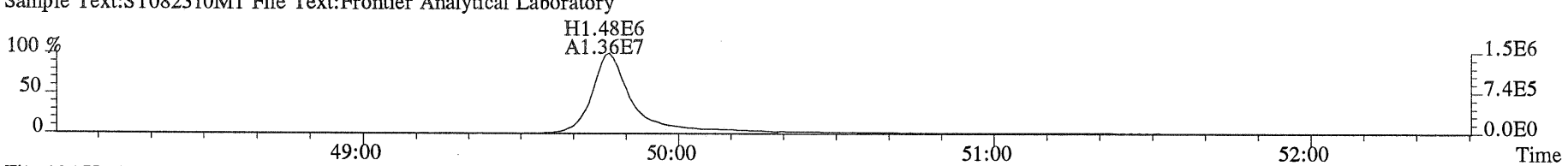
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



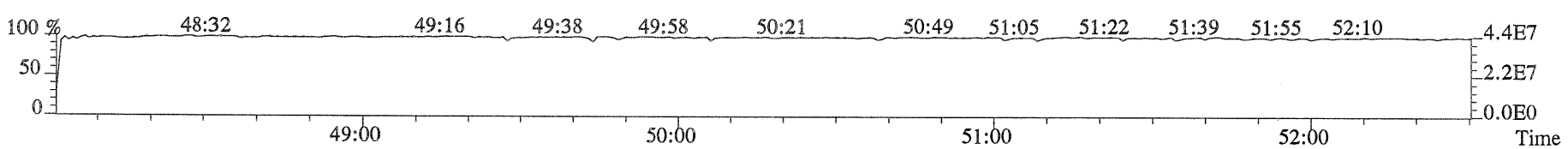
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



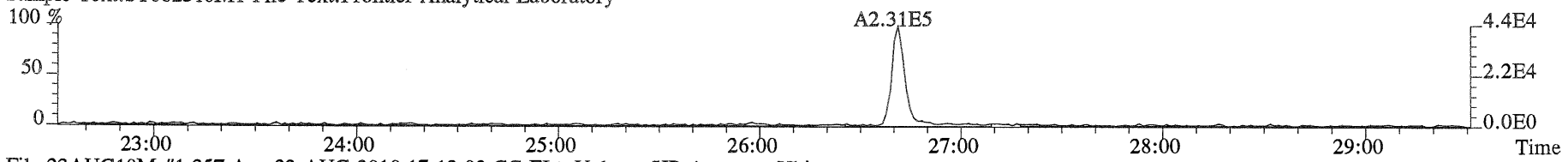
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



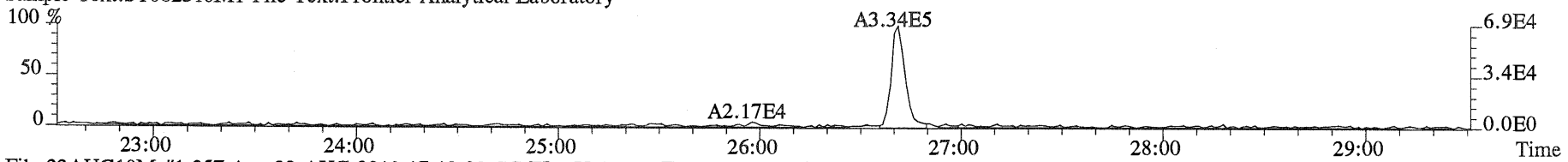
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



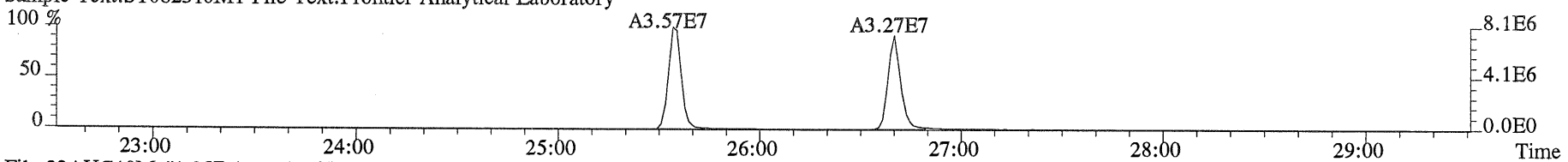
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



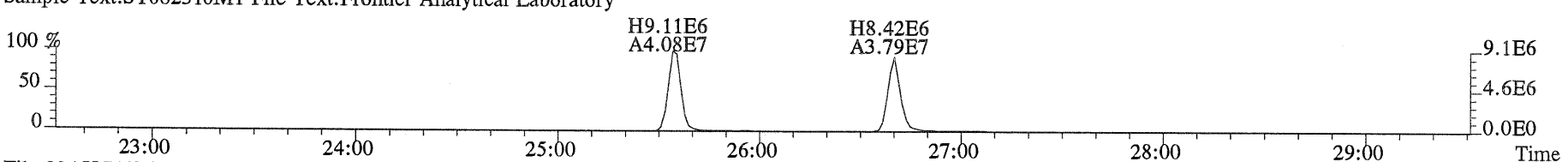
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



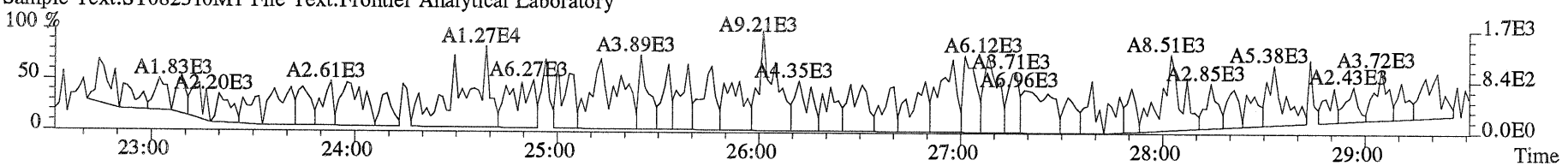
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



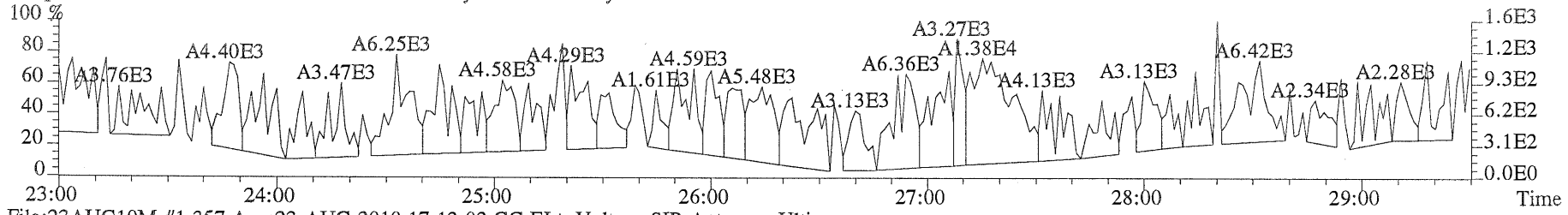
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



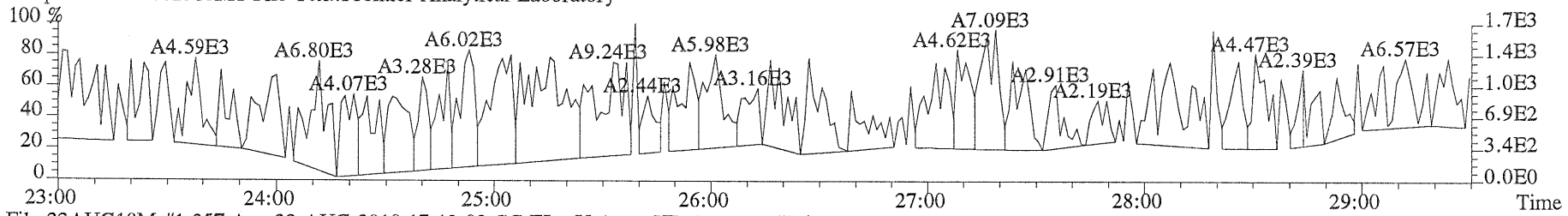
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



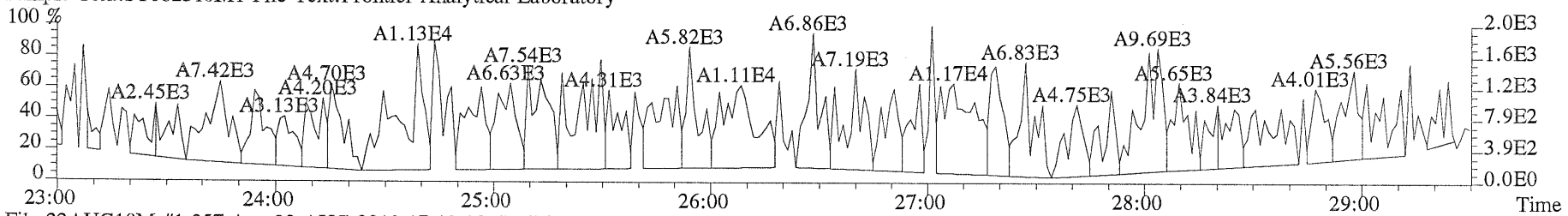
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



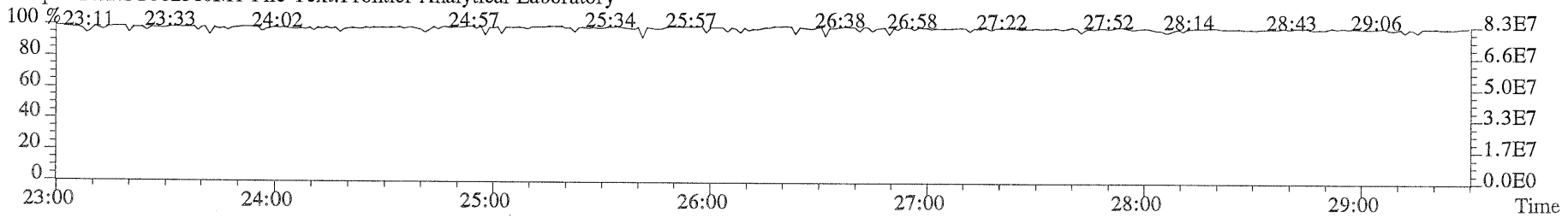
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



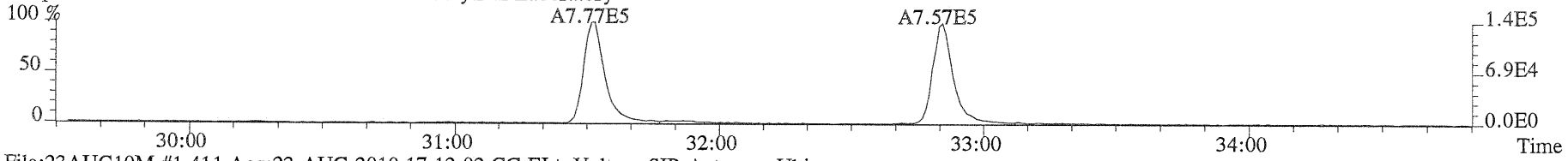
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



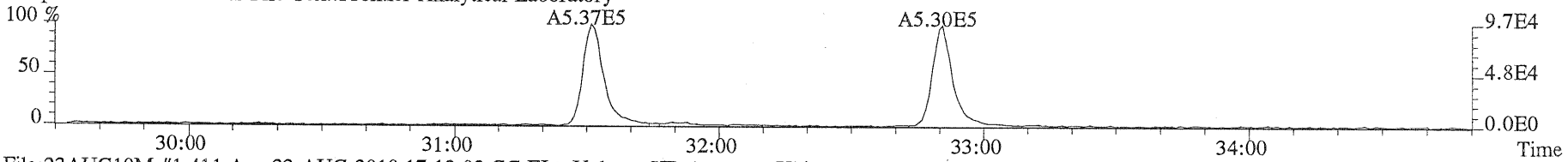
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:4 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



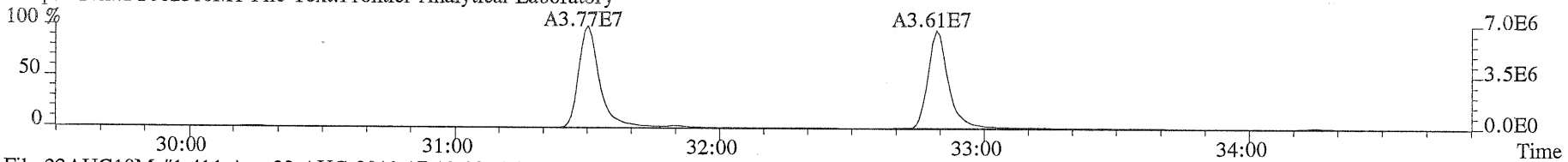
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



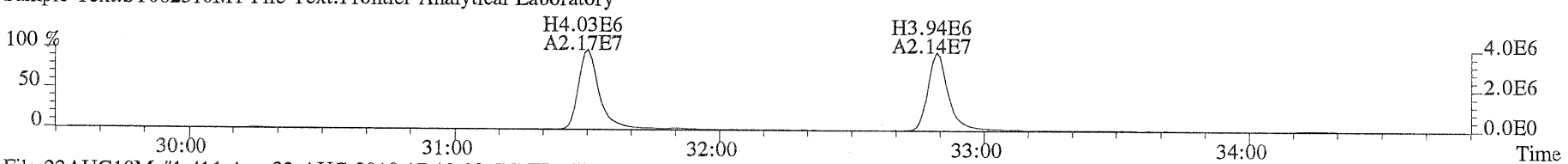
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



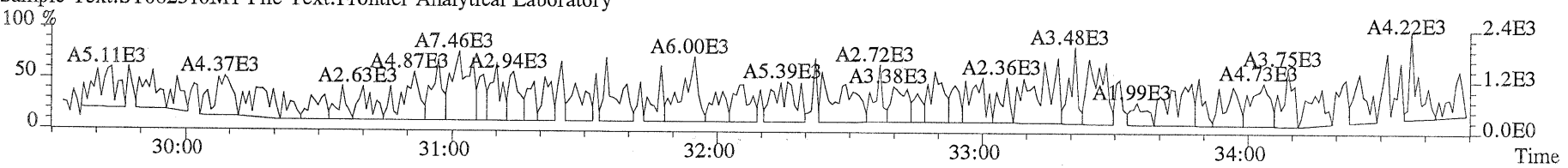
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



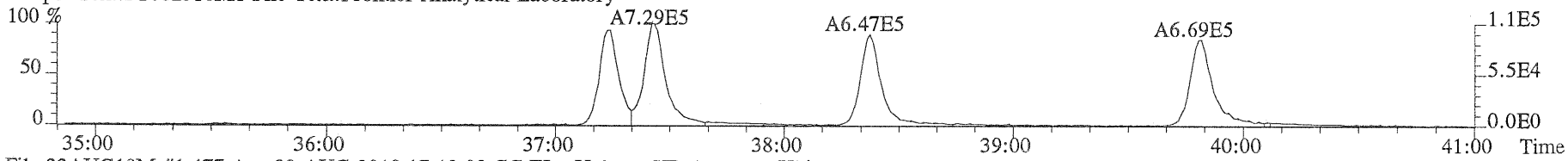
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



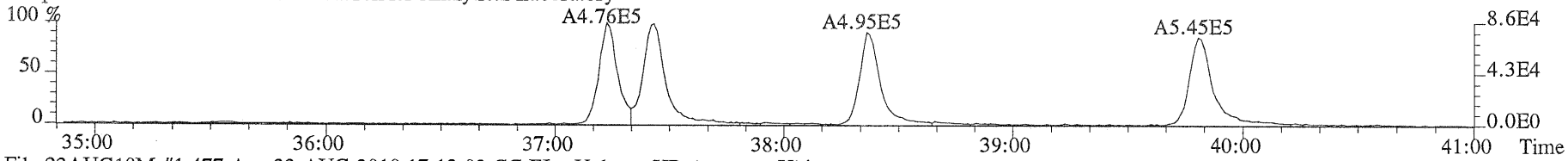
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



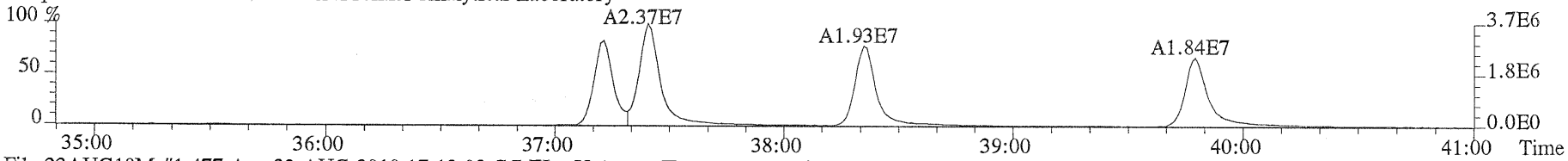
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



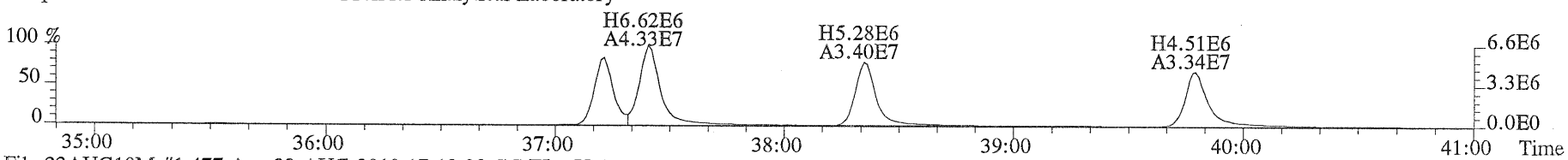
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



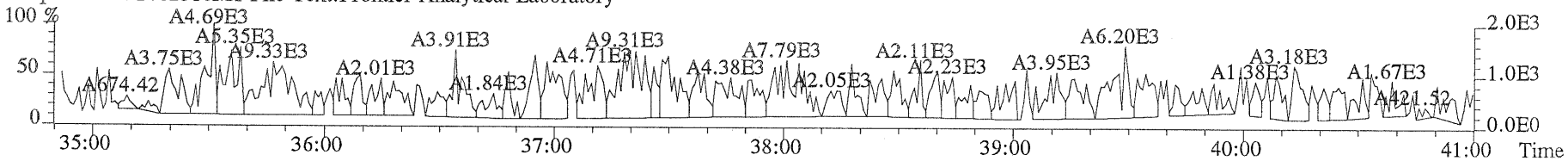
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



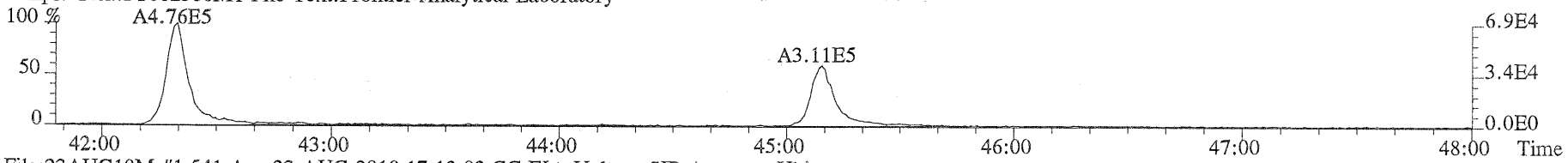
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



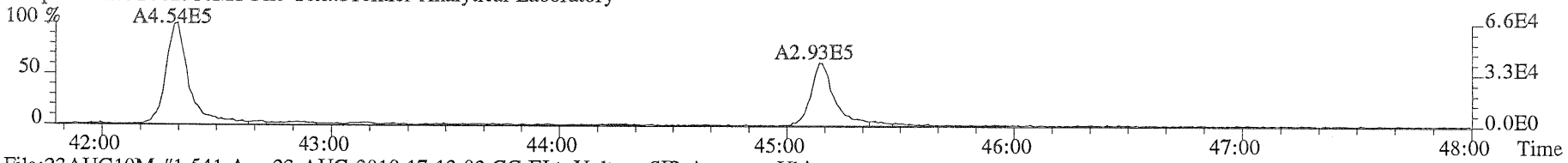
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



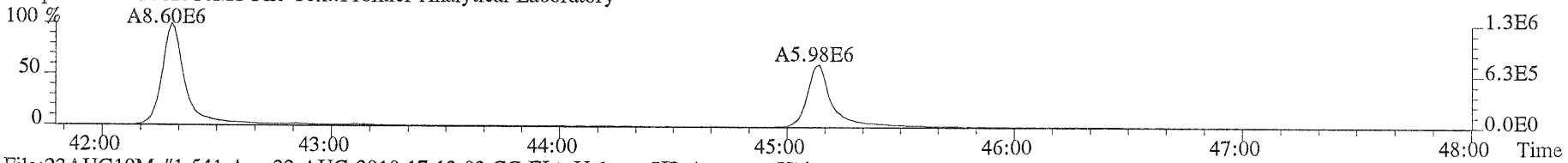
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



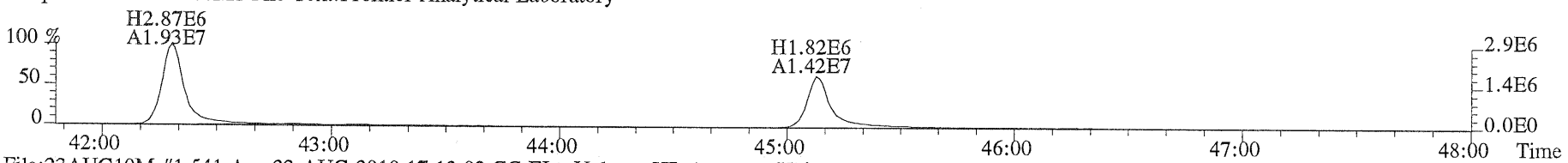
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



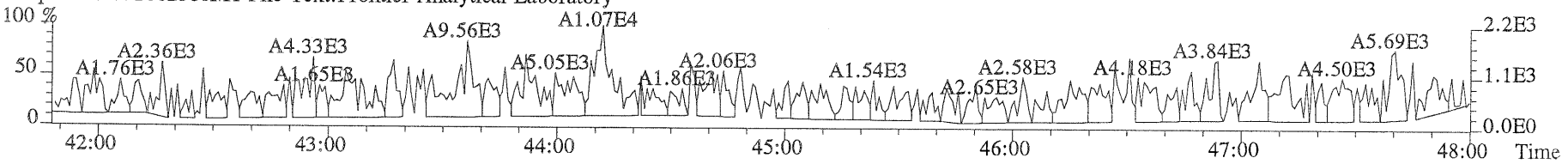
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



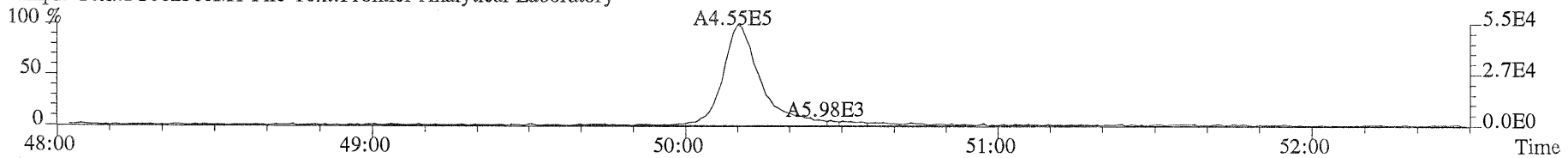
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



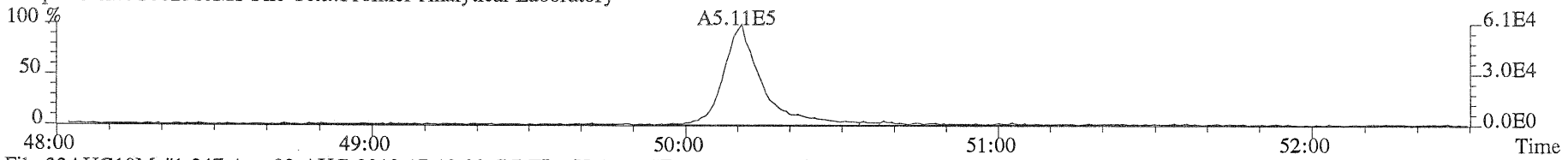
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



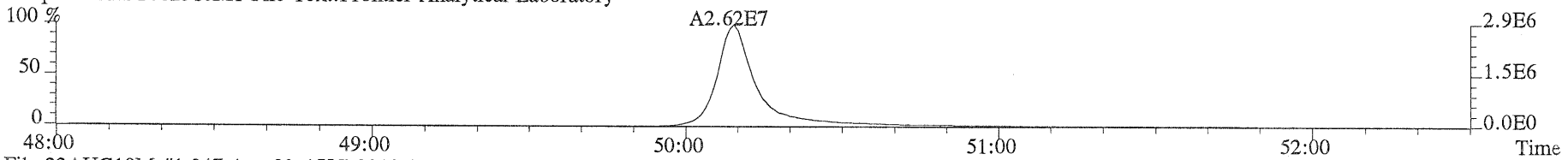
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



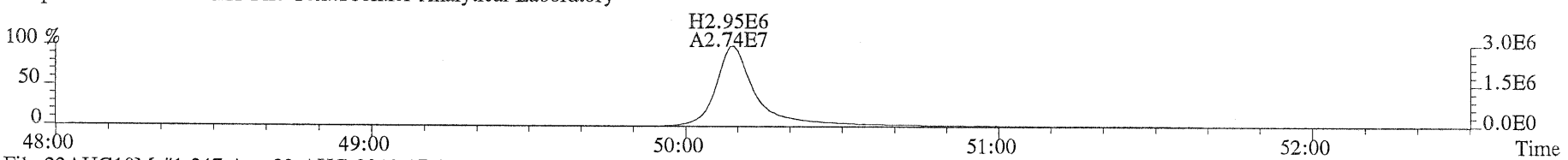
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



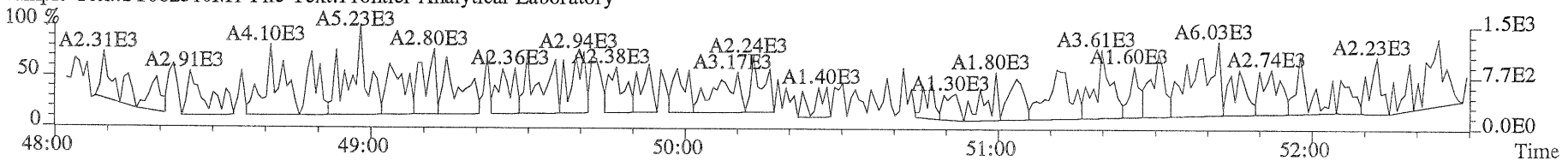
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



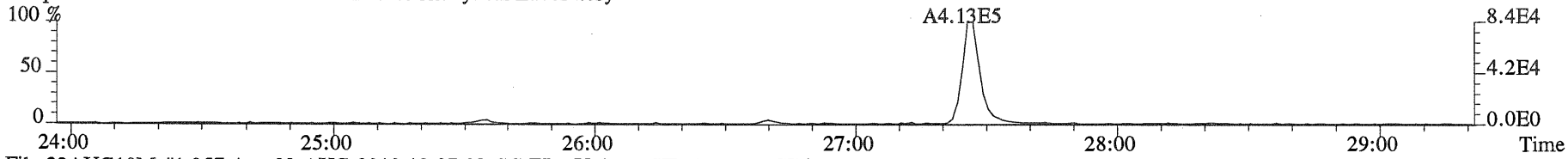
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



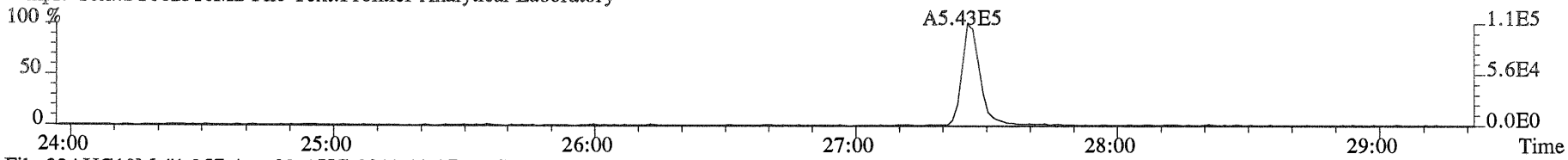
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



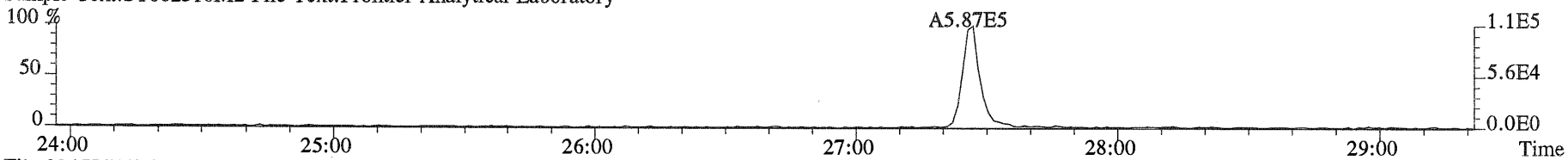
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



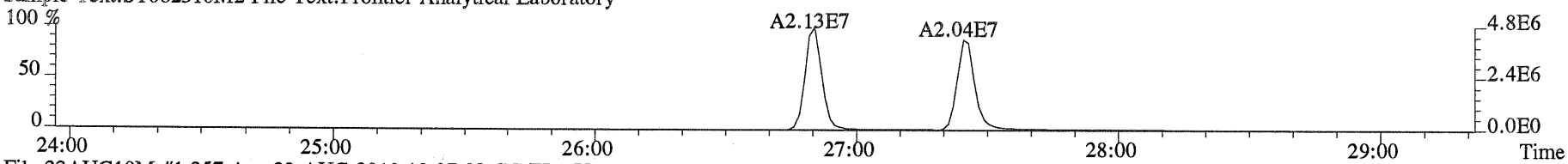
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



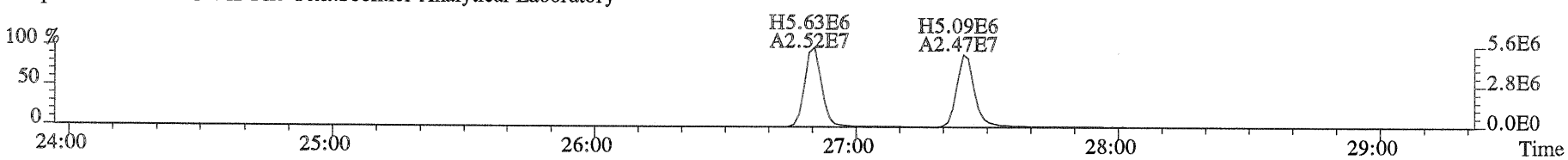
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



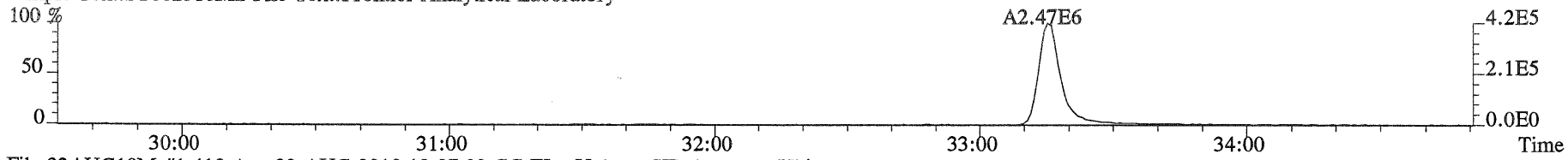
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



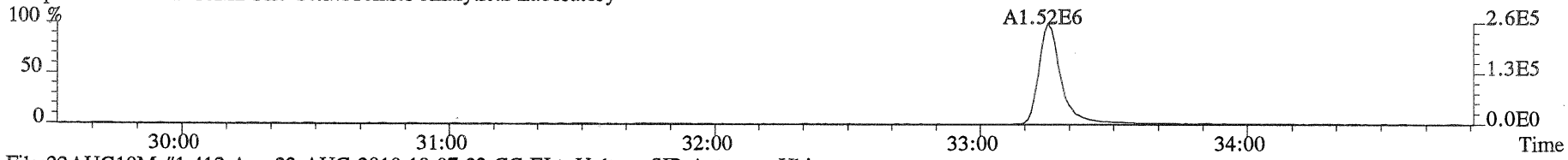
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



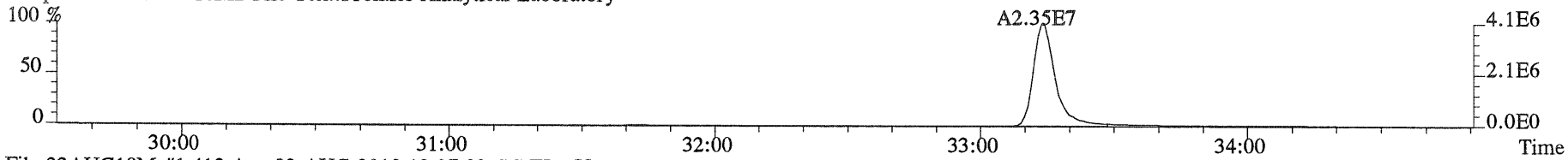
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



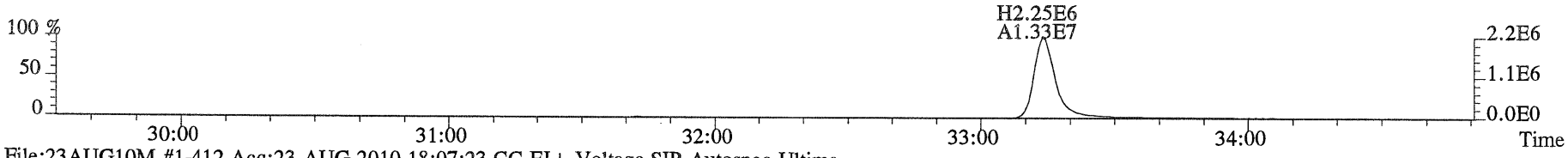
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



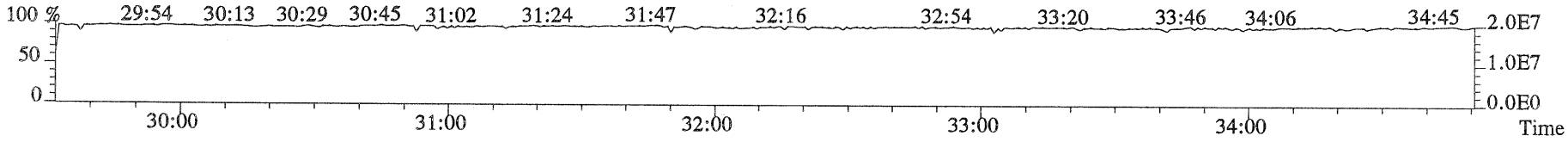
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



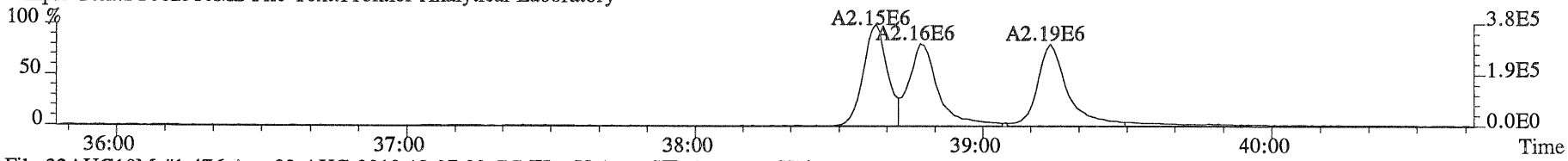
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



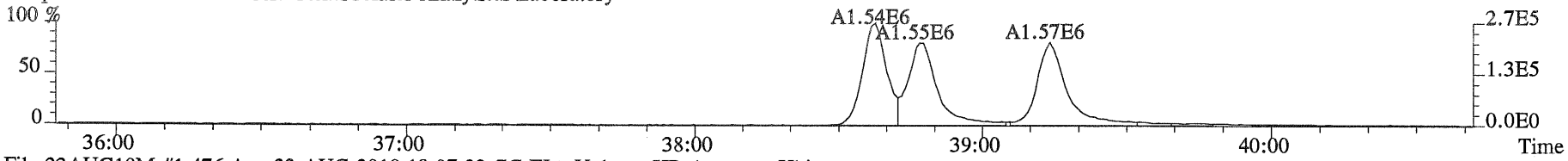
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



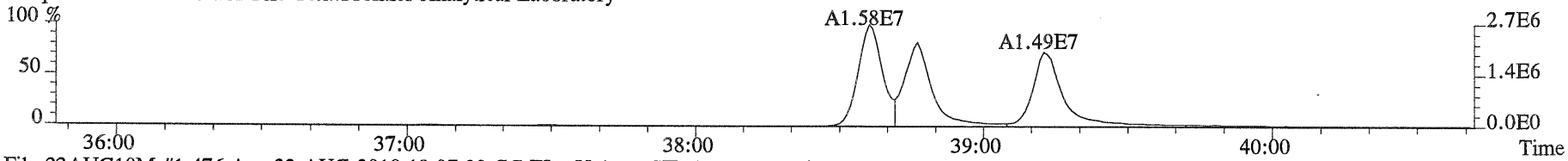
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



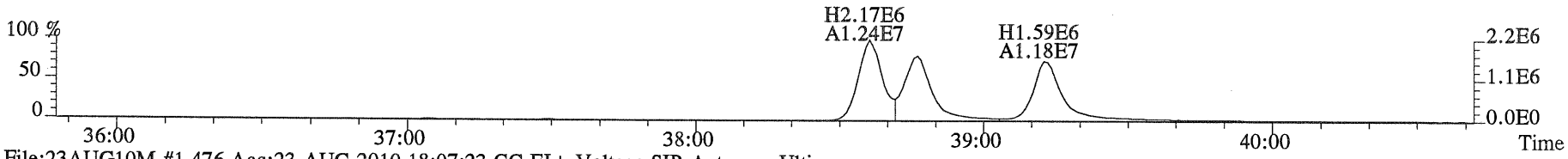
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



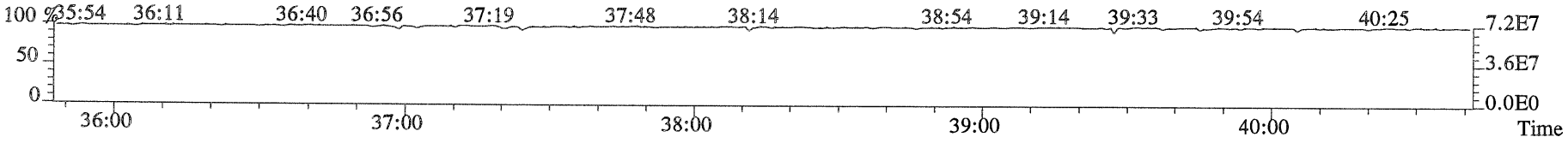
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



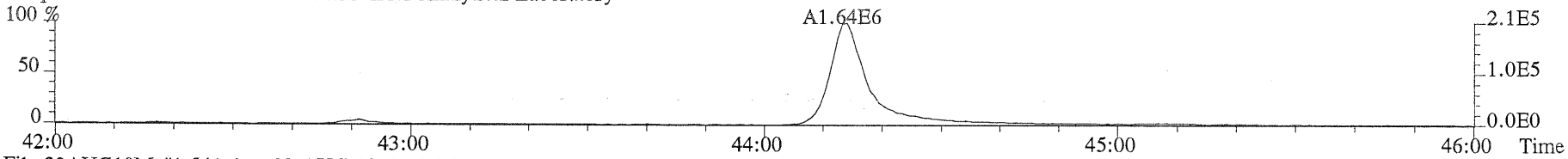
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



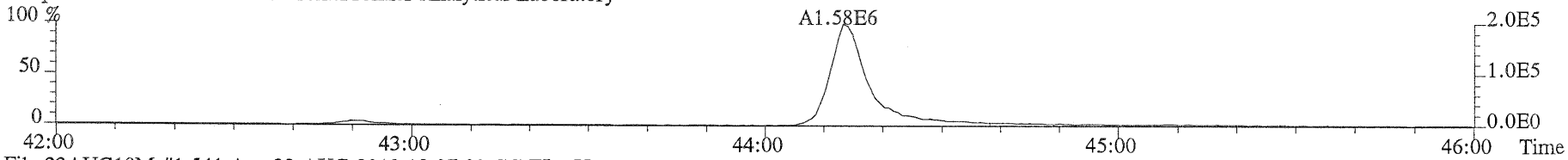
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



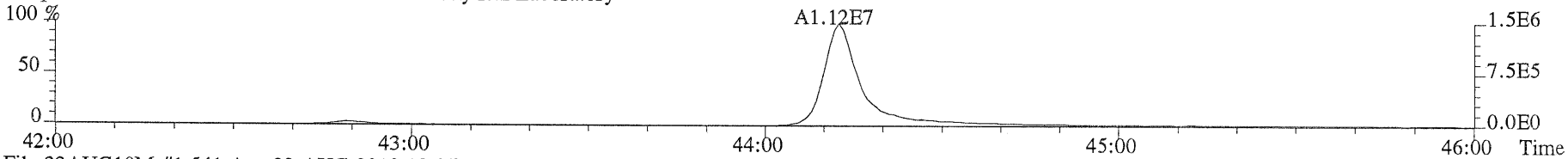
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



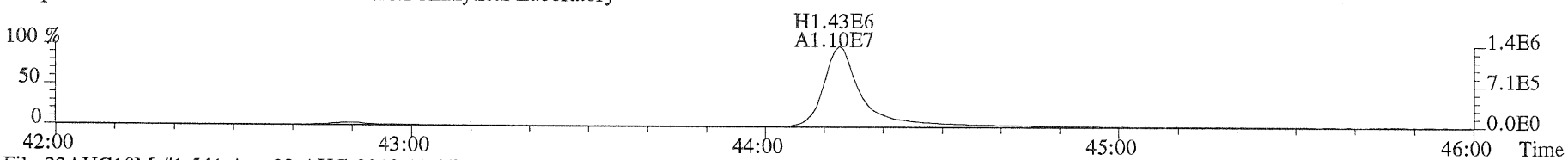
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



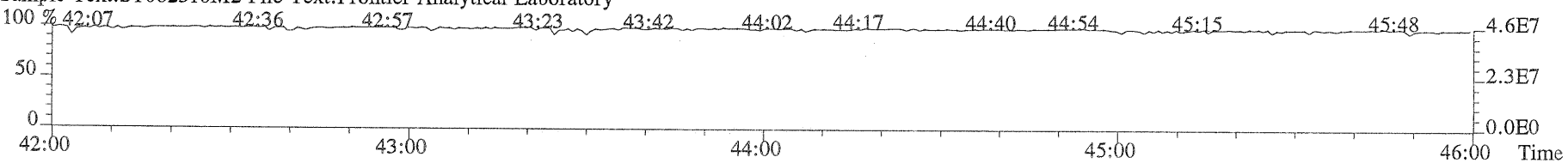
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



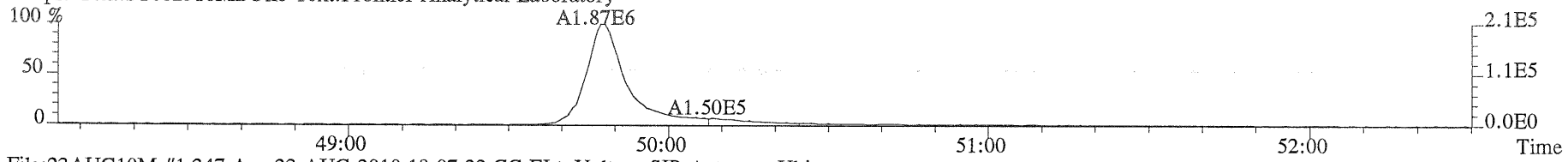
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



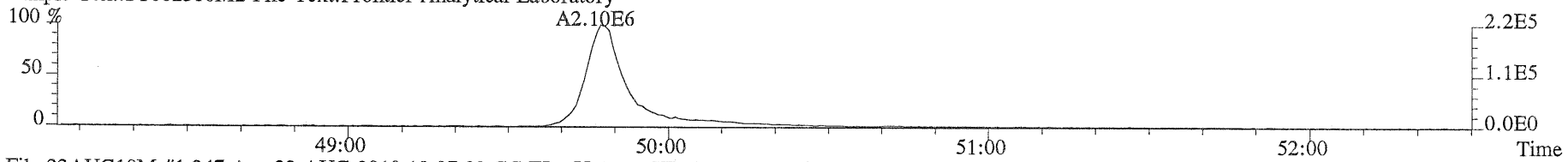
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



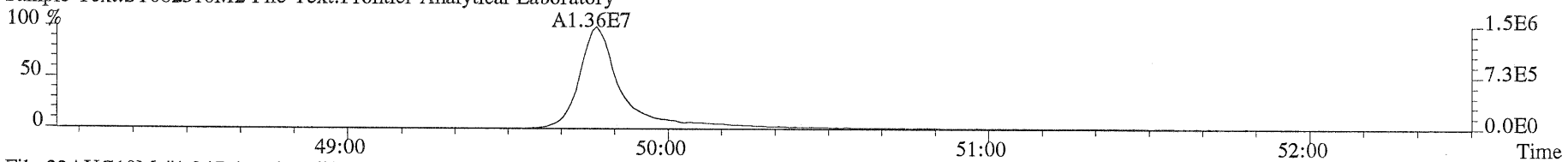
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



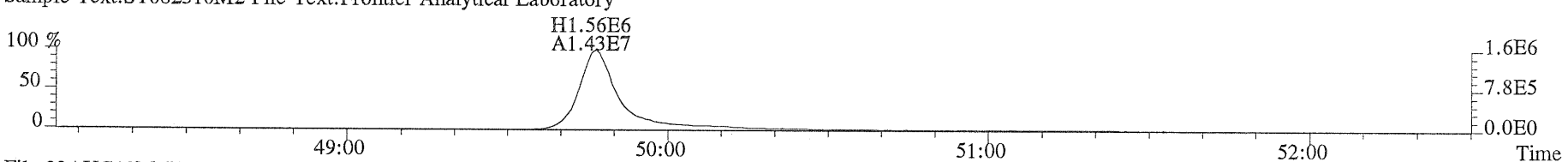
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



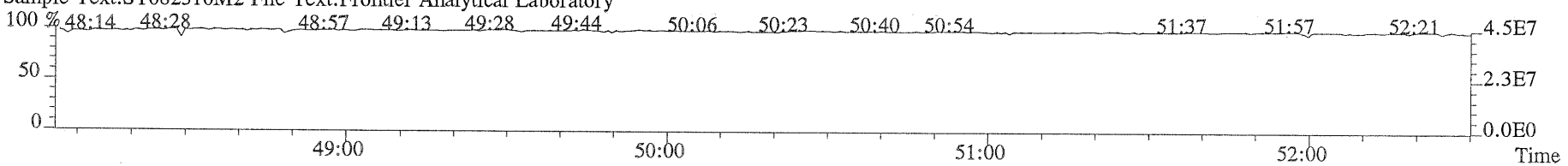
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



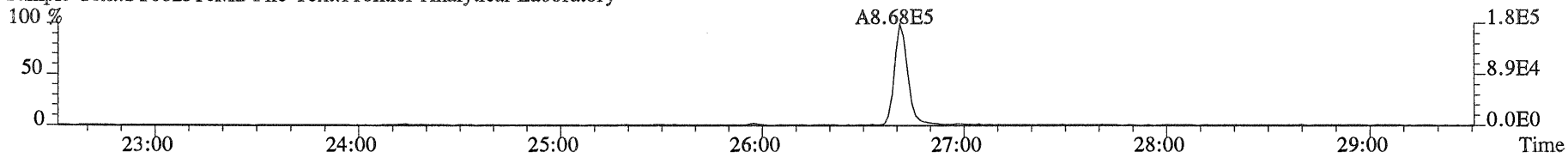
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



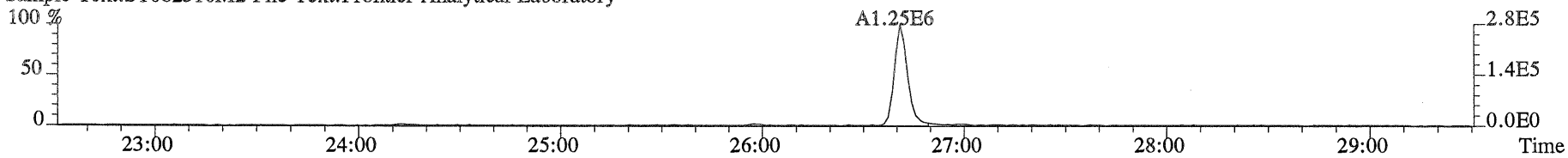
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



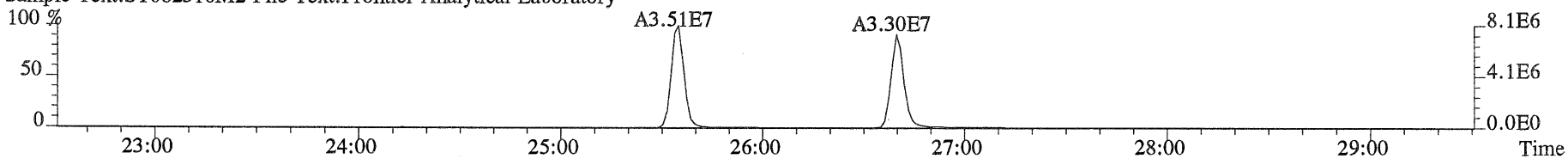
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



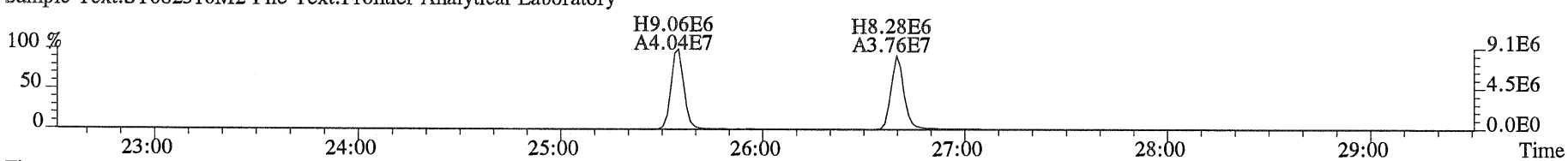
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



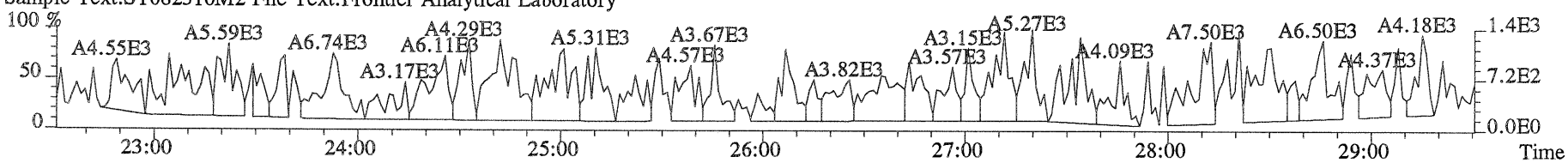
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



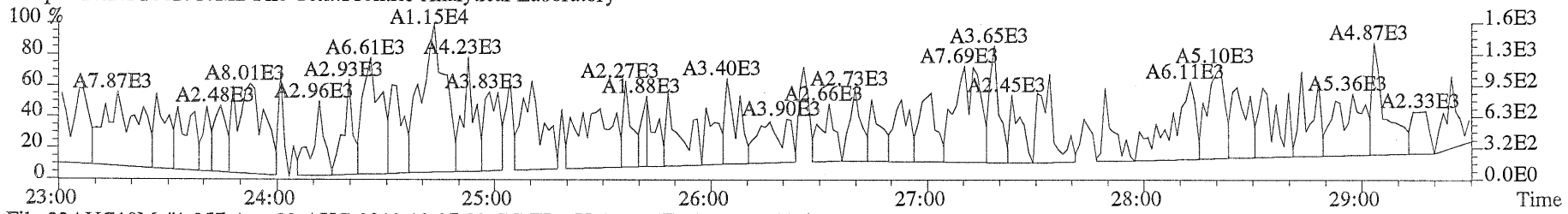
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



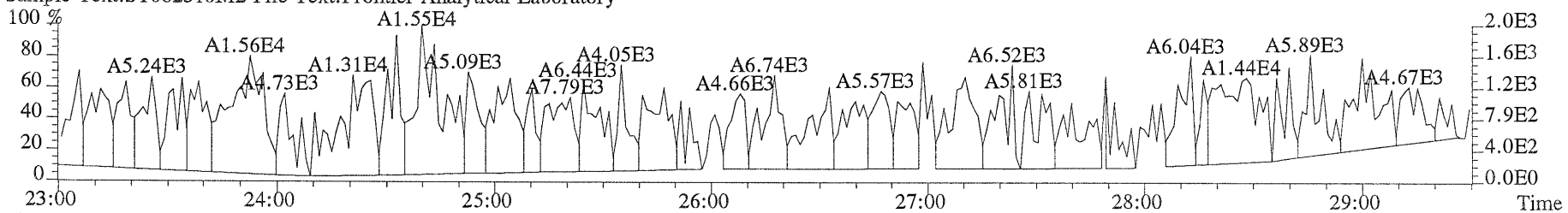
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



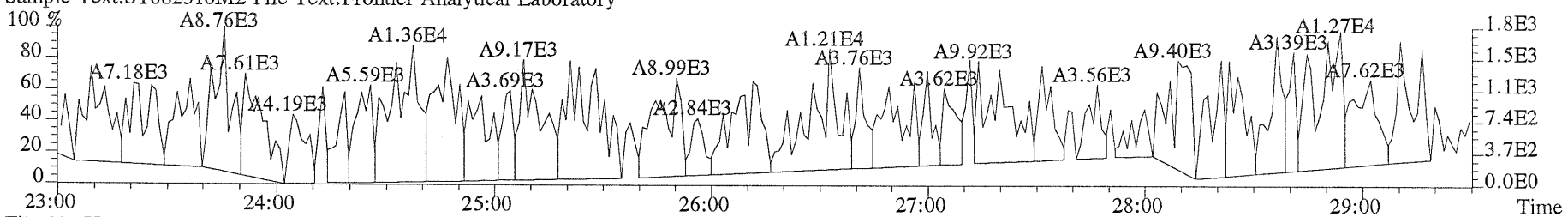
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



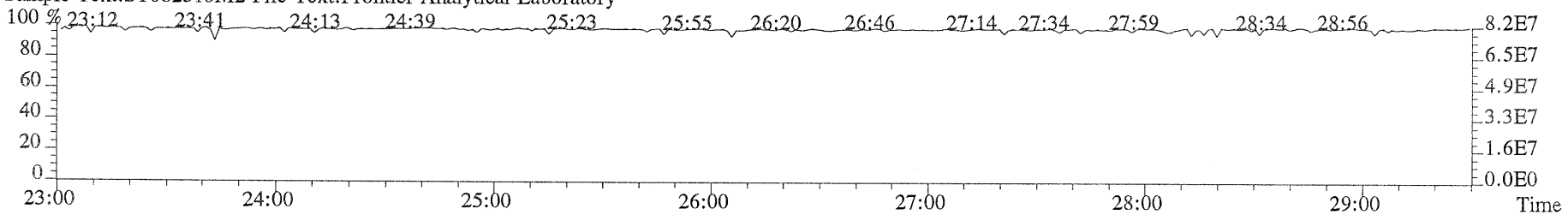
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



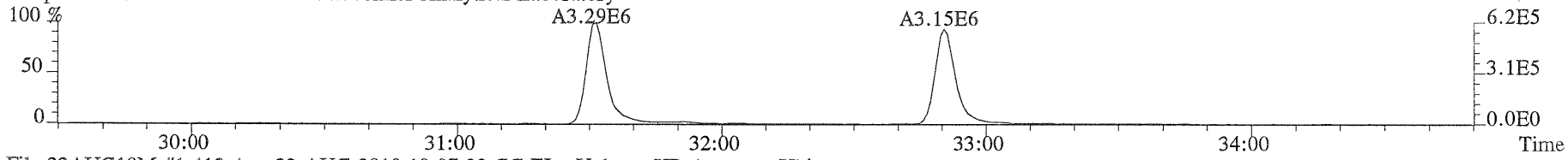
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



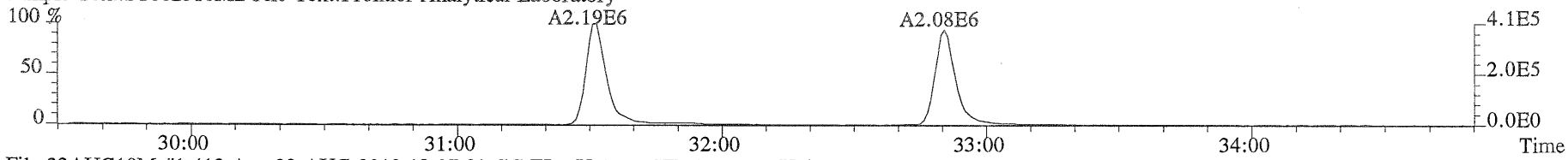
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



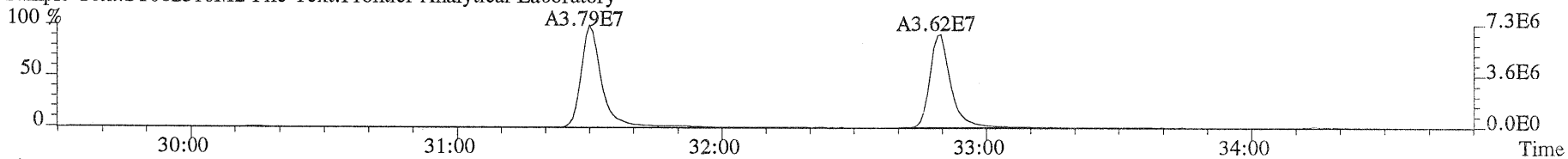
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



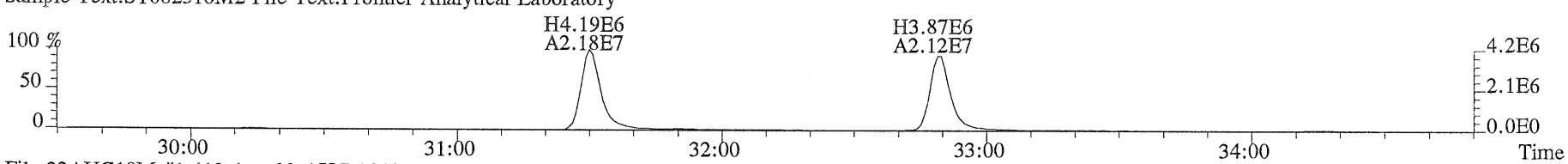
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



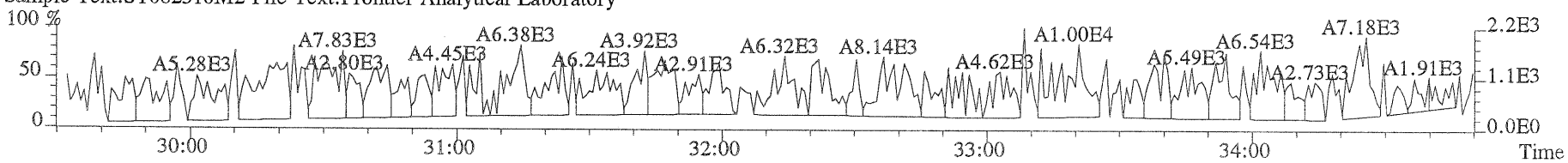
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



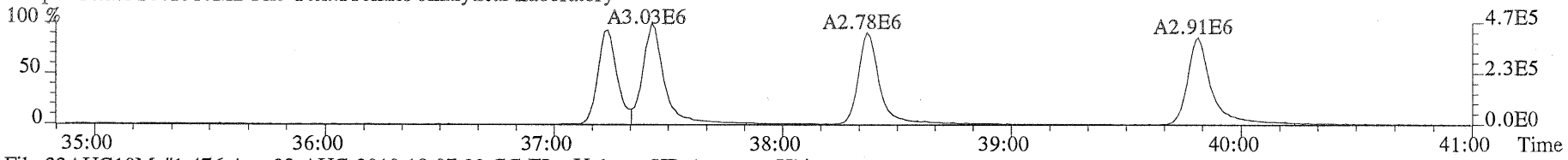
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



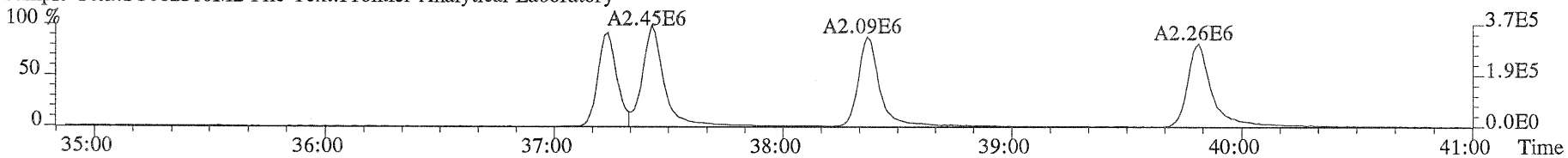
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



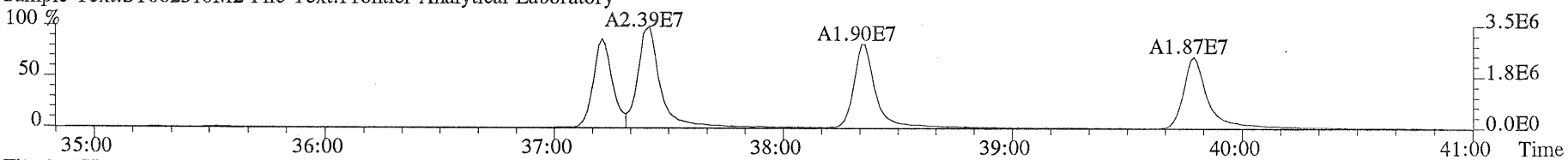
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



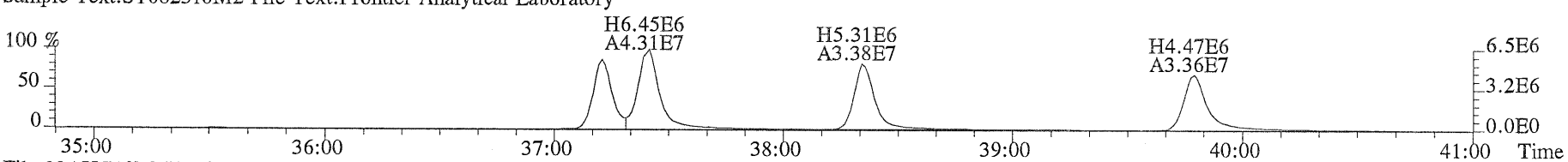
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



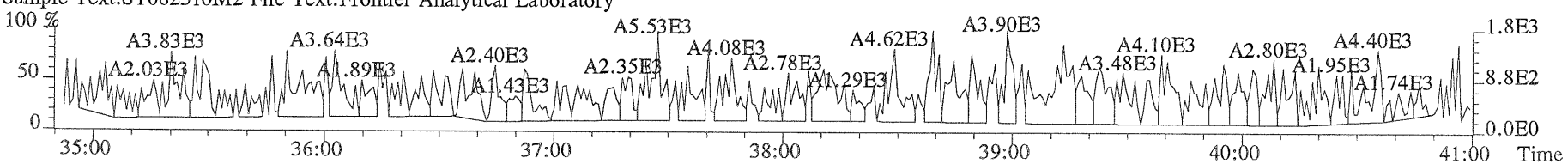
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



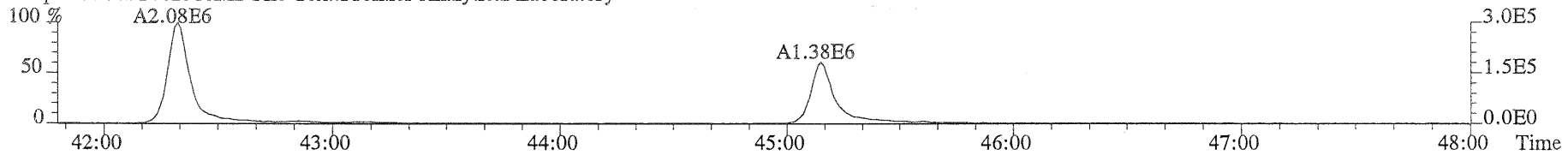
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



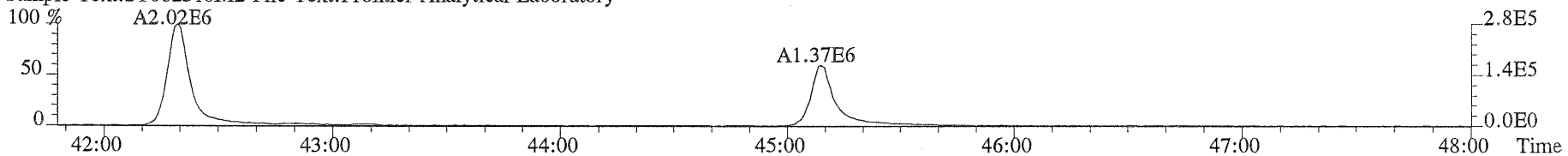
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



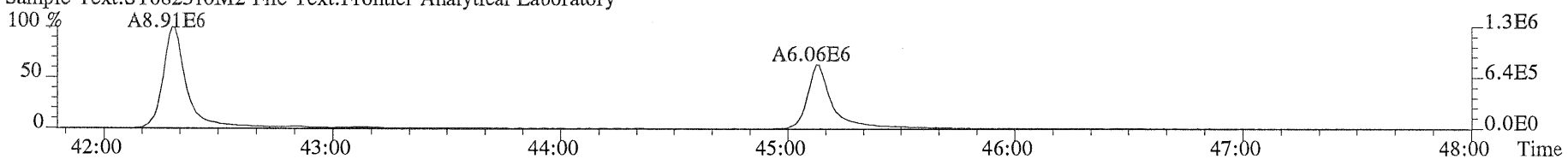
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



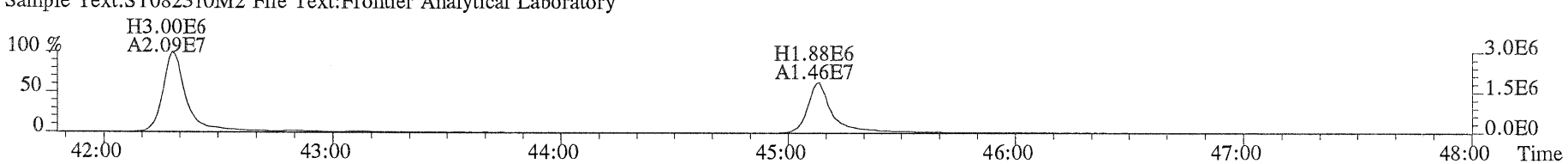
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



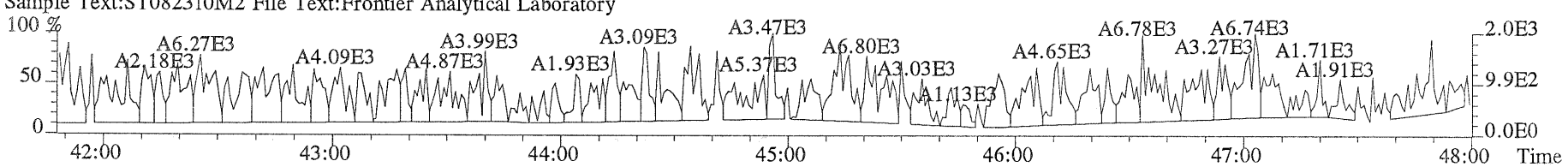
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



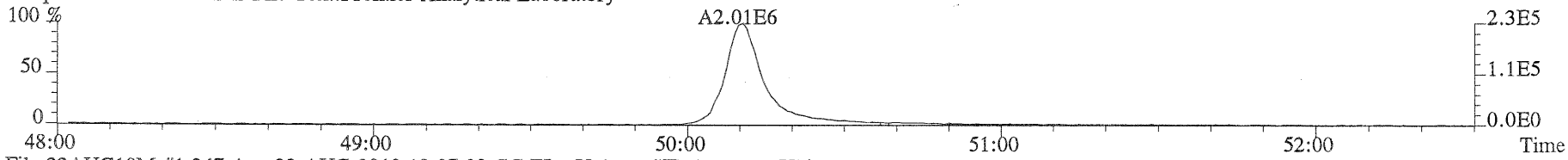
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



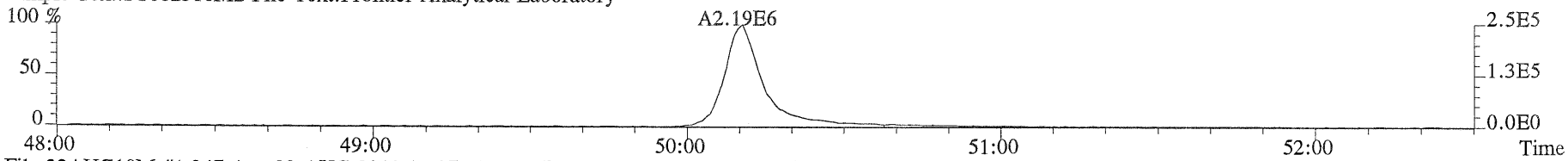
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



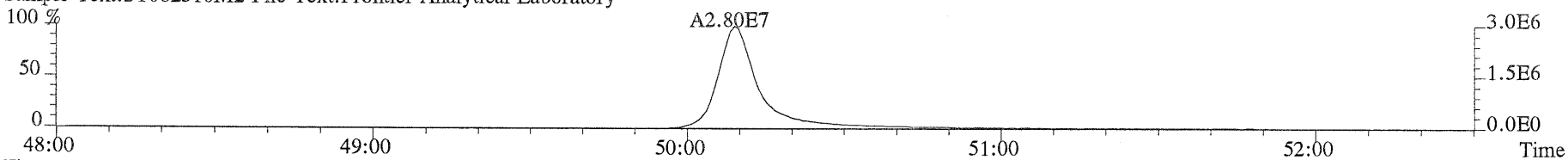
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



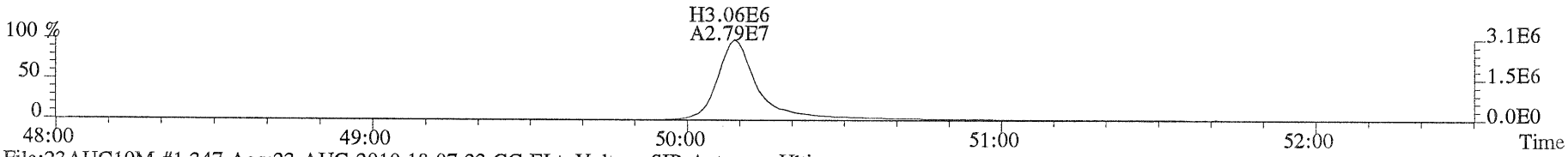
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



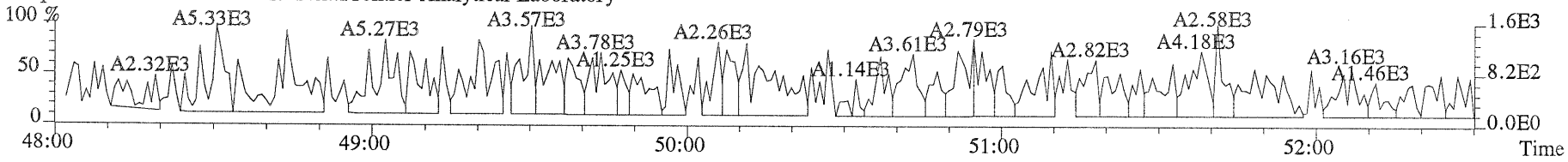
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



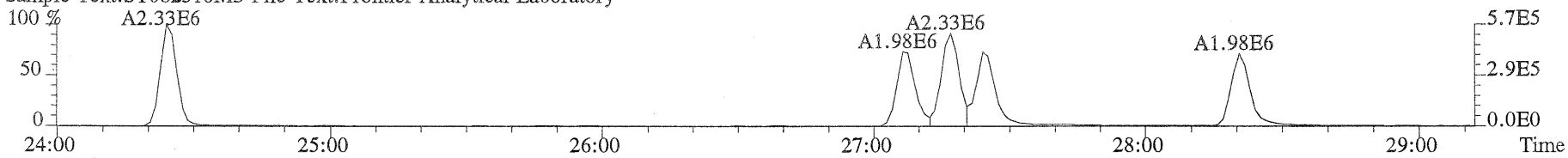
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



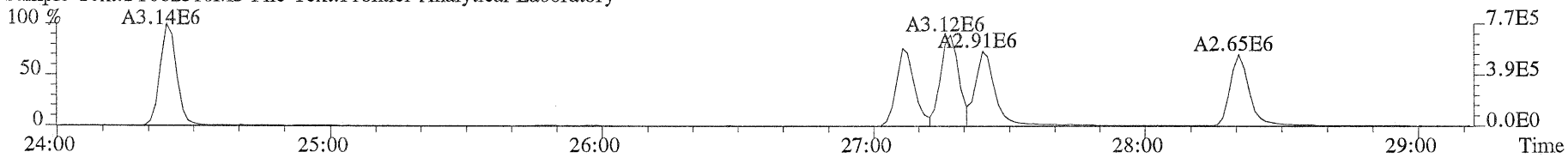
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



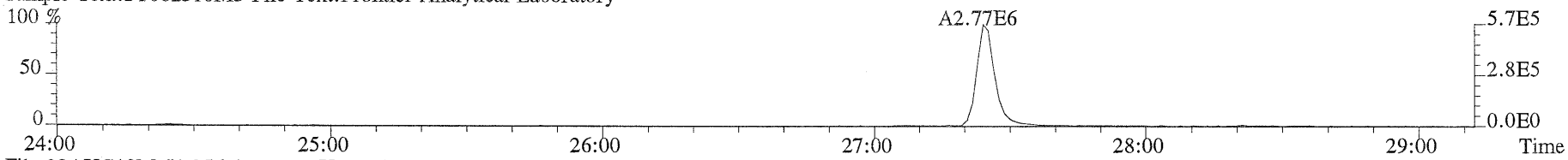
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



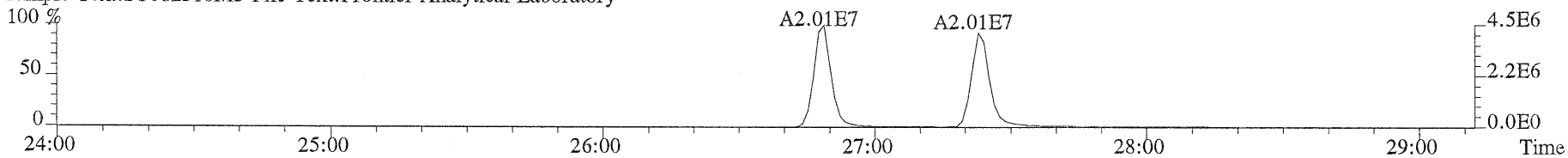
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



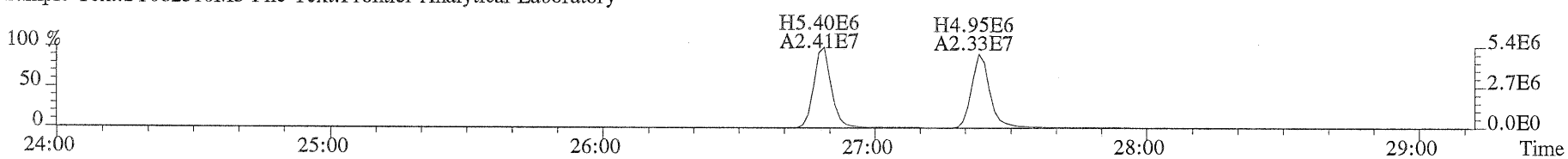
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



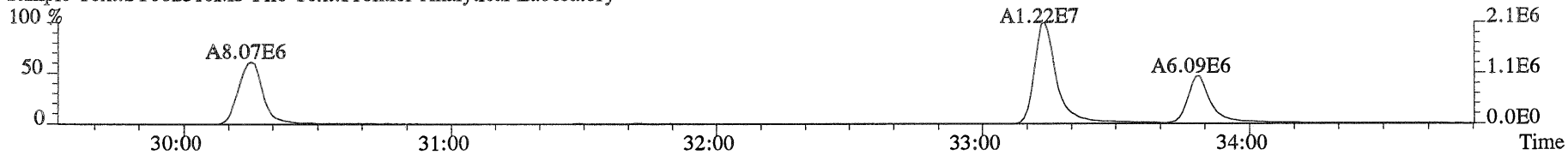
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



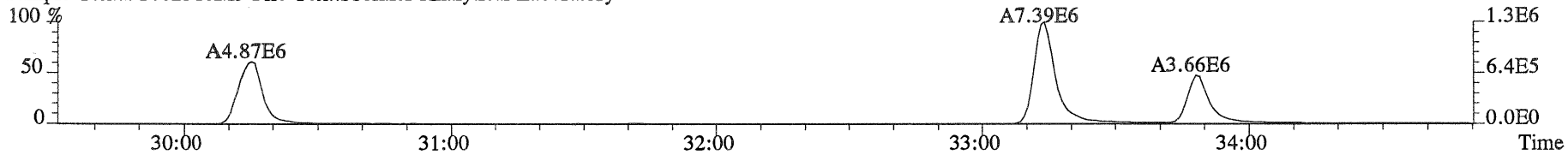
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



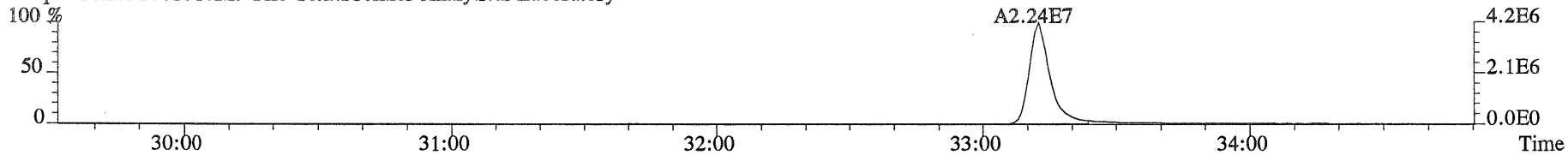
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



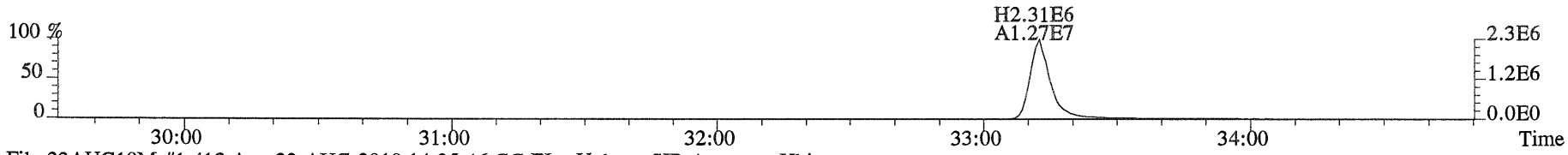
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



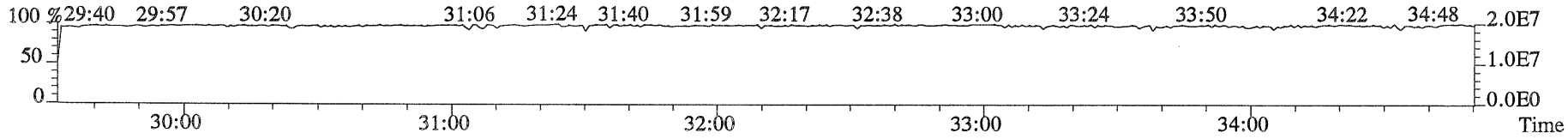
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



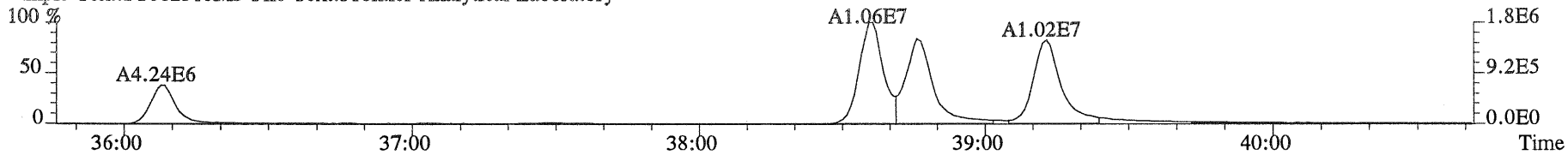
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



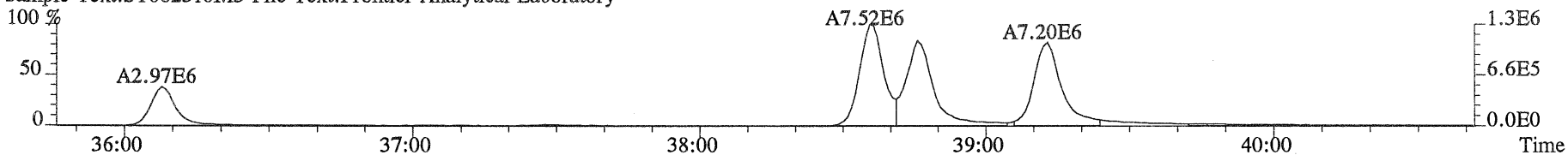
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



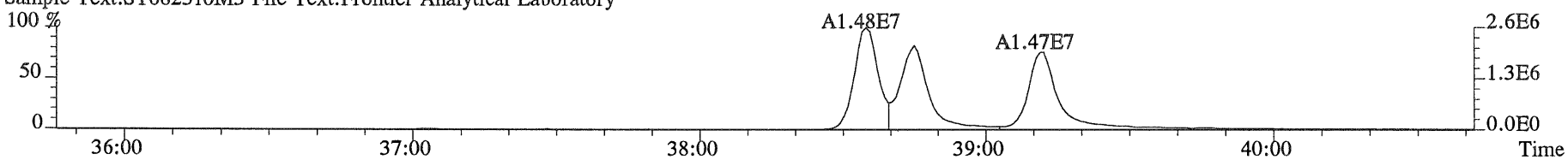
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



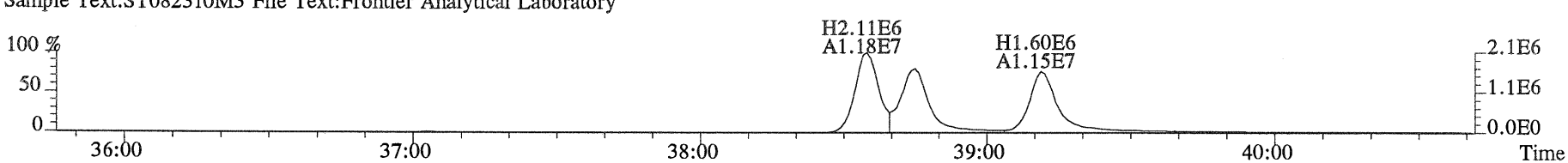
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



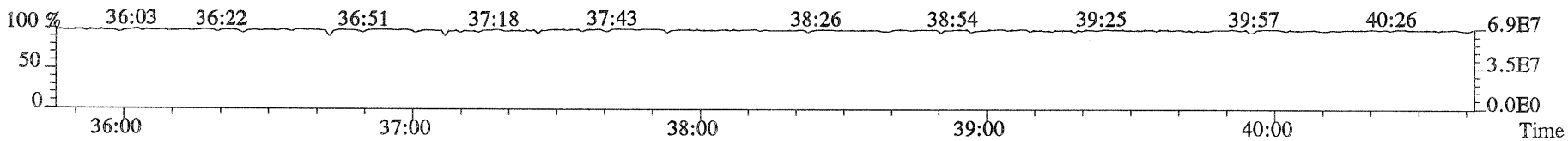
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



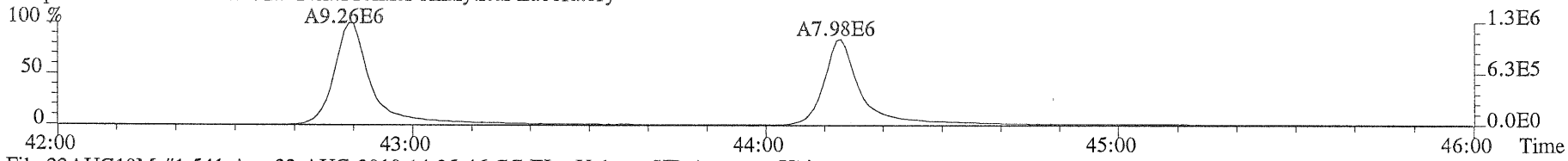
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



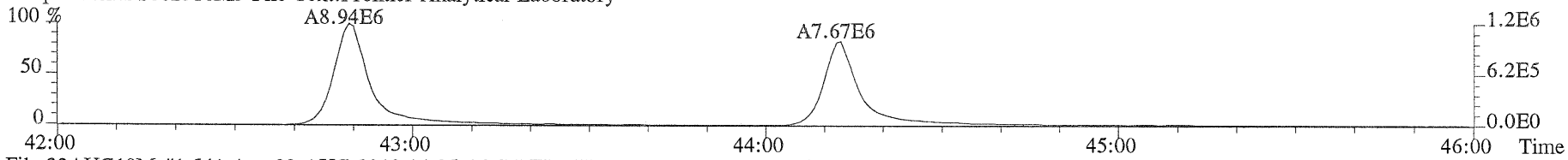
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



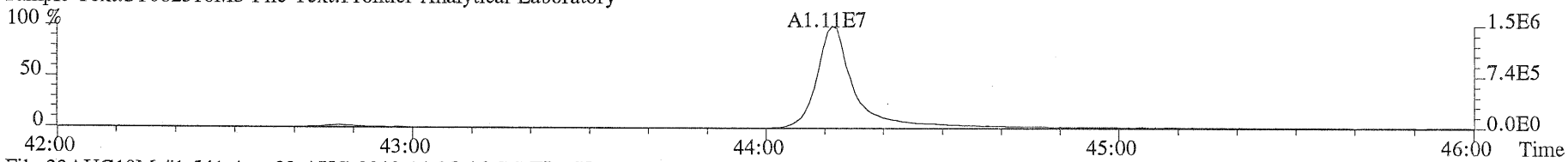
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



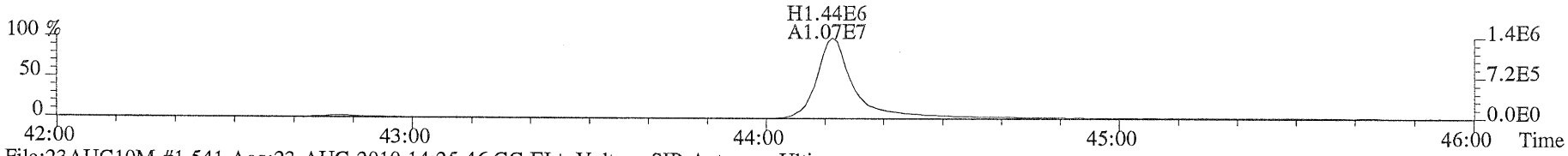
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



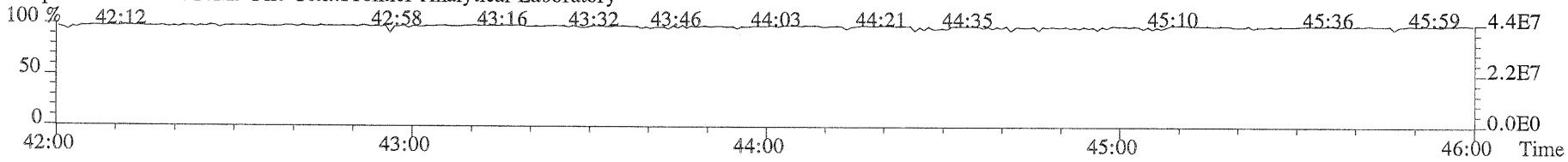
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



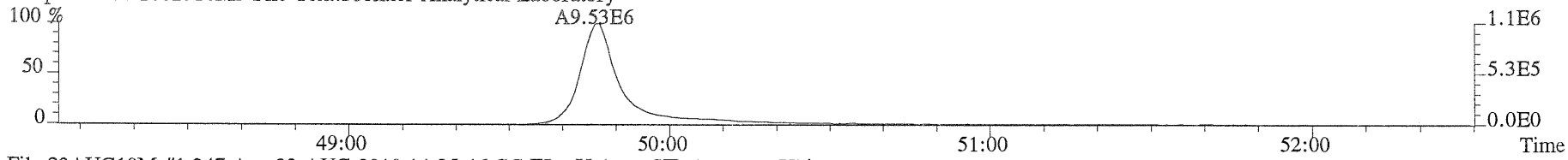
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



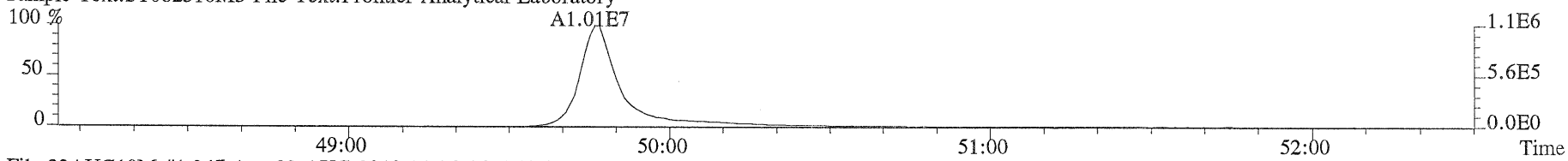
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory

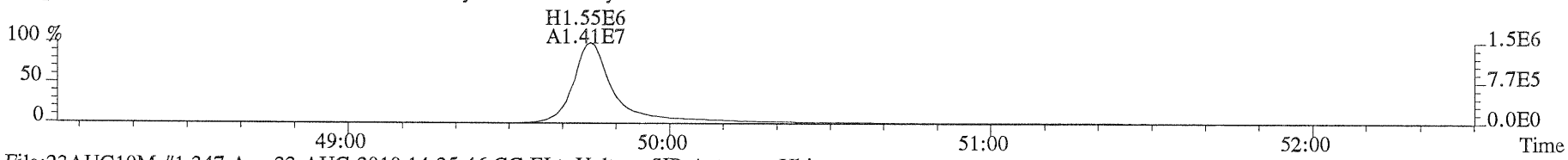


File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory

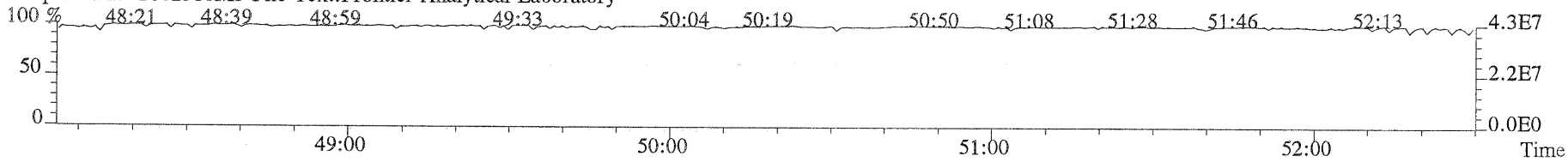


File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory

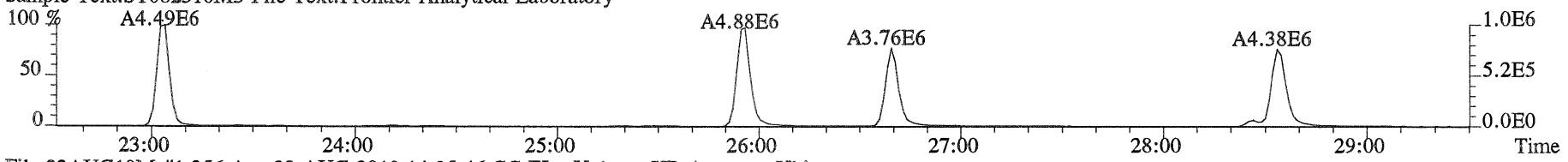
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



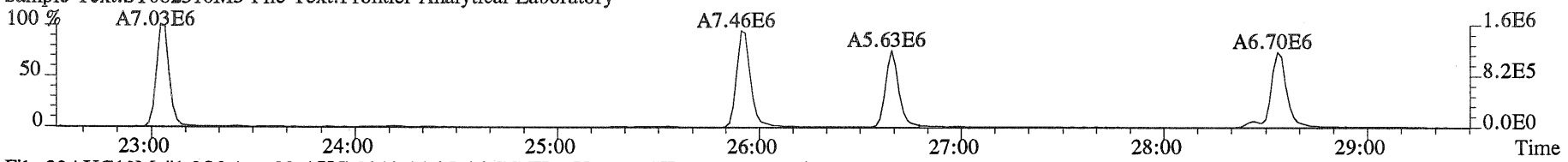
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



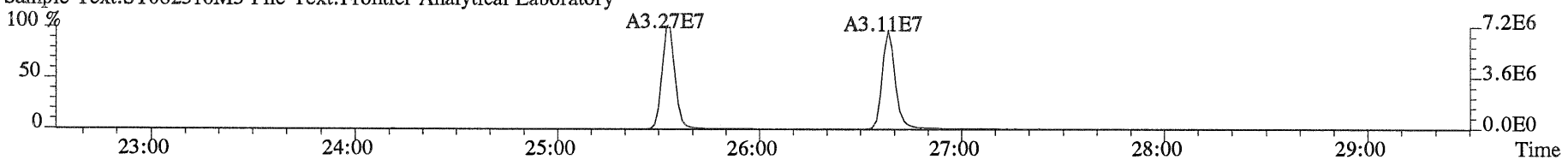
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



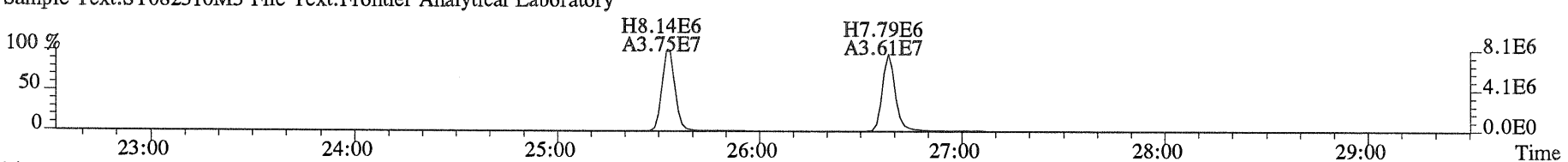
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



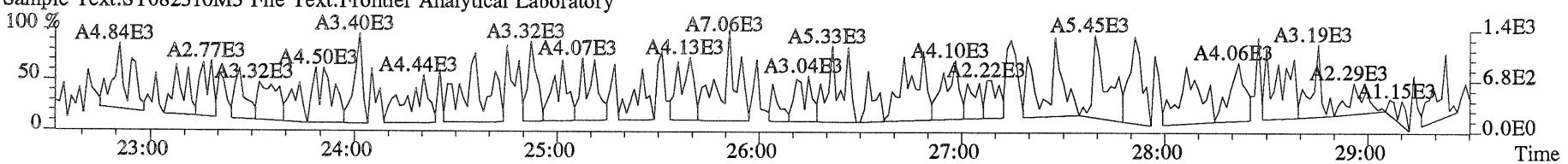
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



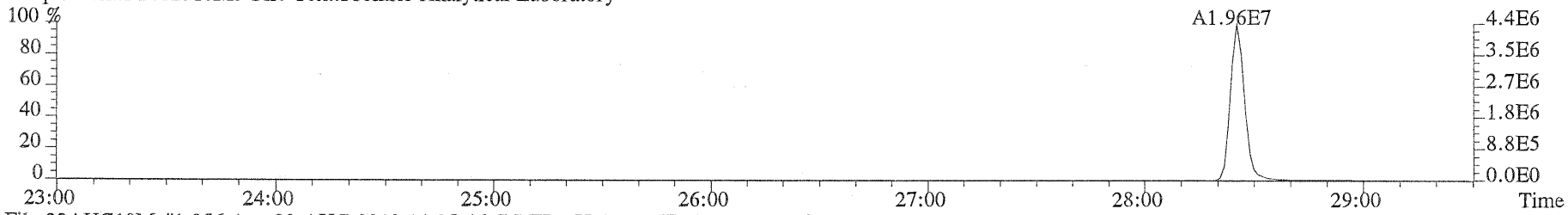
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



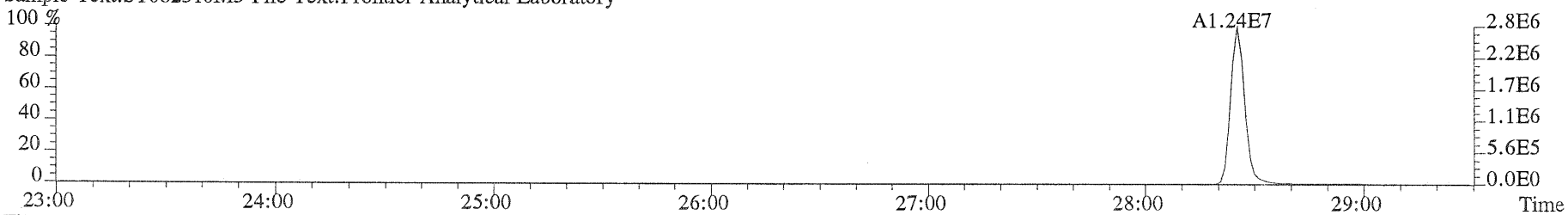
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



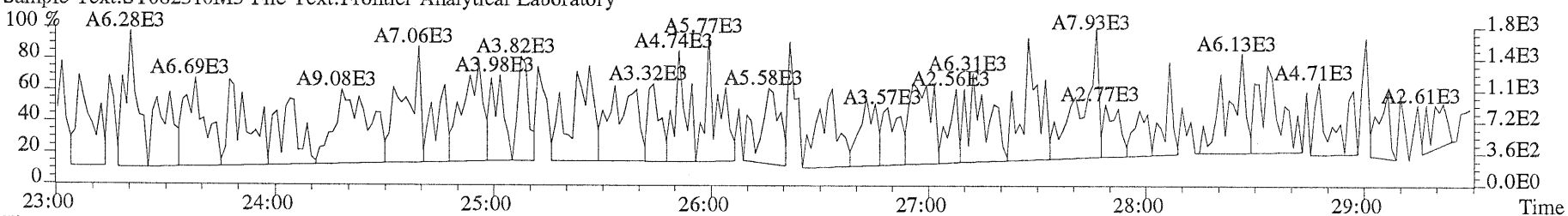
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



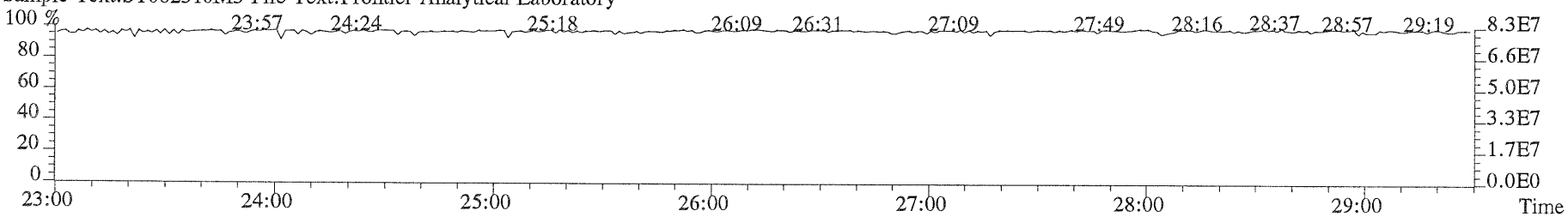
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



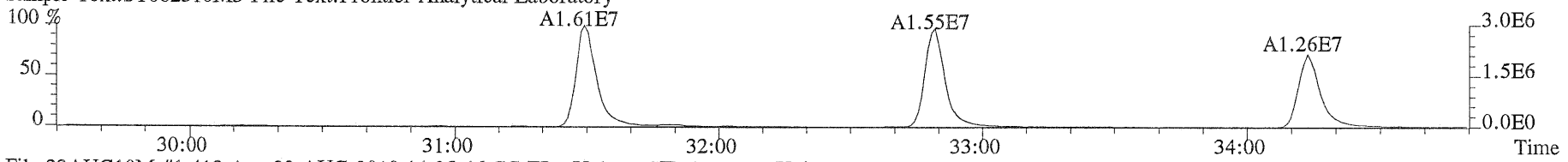
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



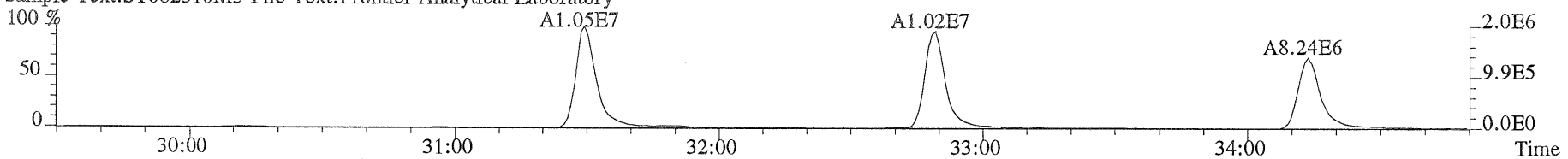
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



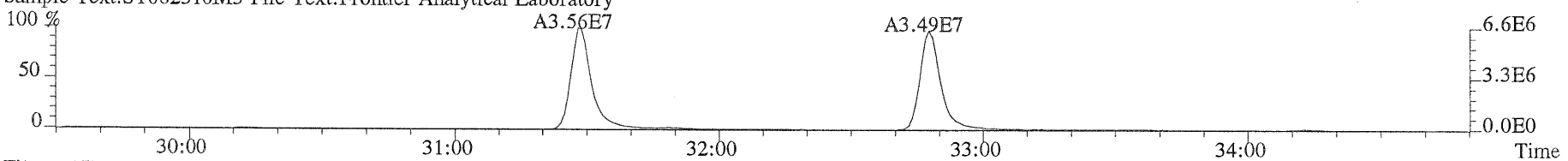
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



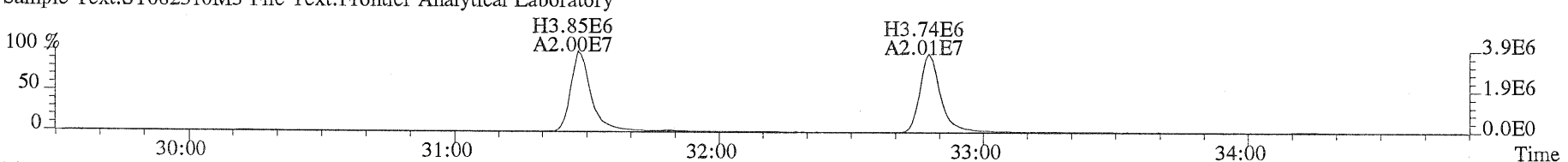
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



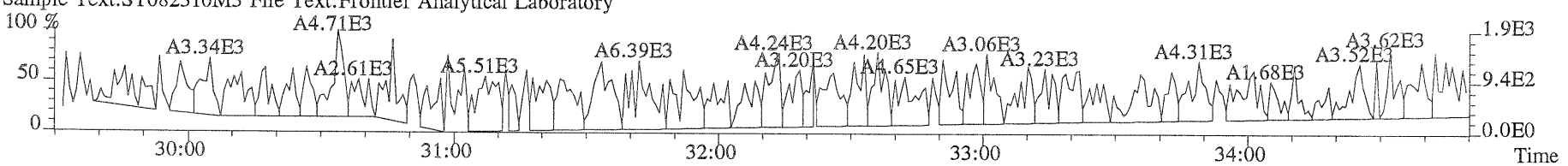
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



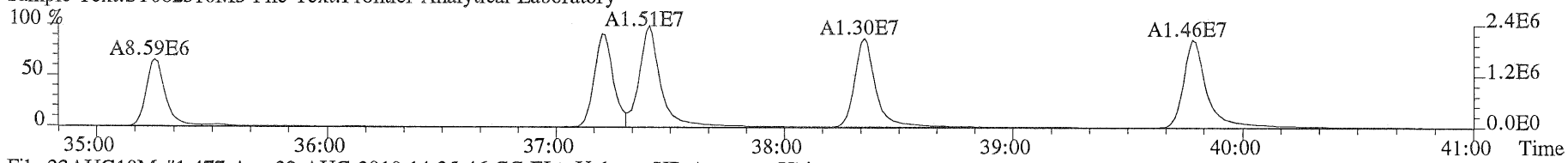
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



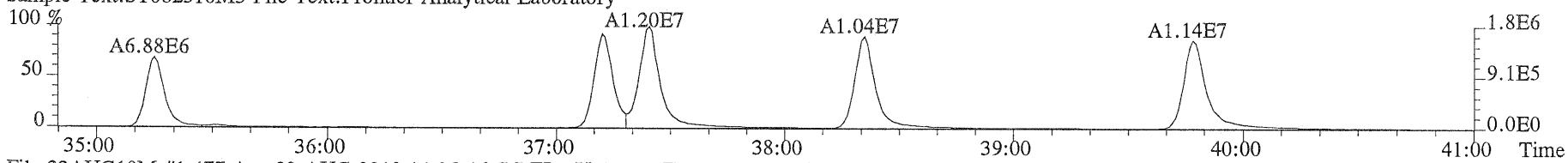
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



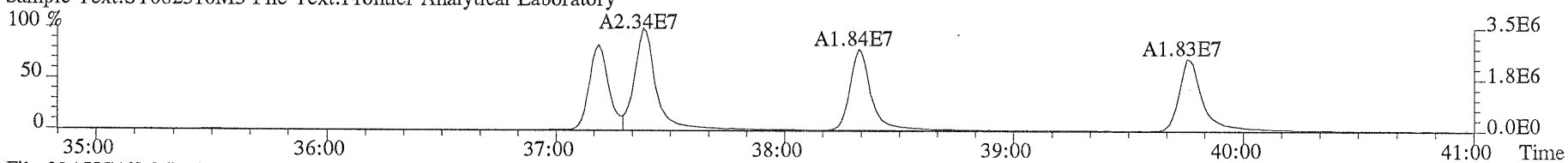
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



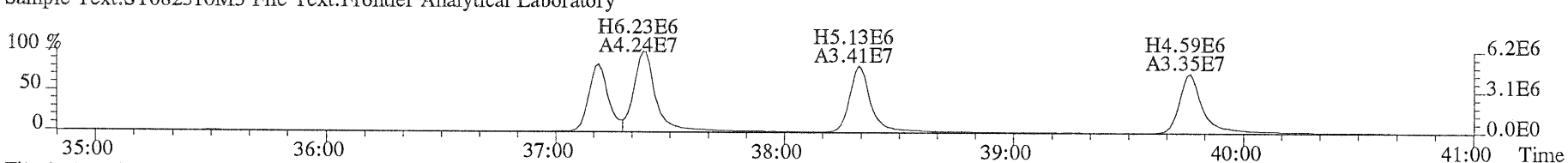
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



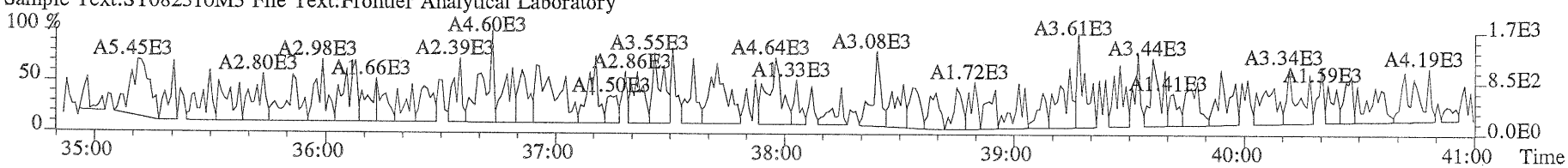
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



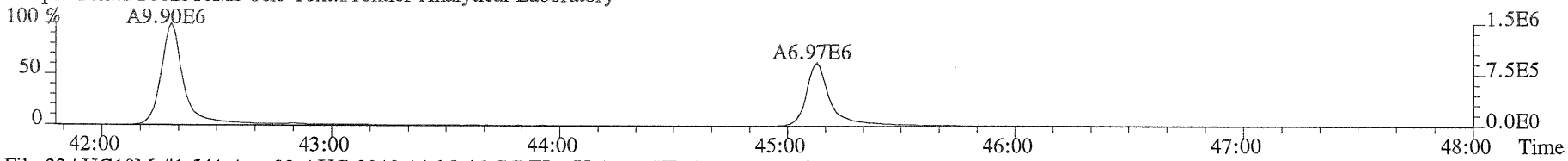
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



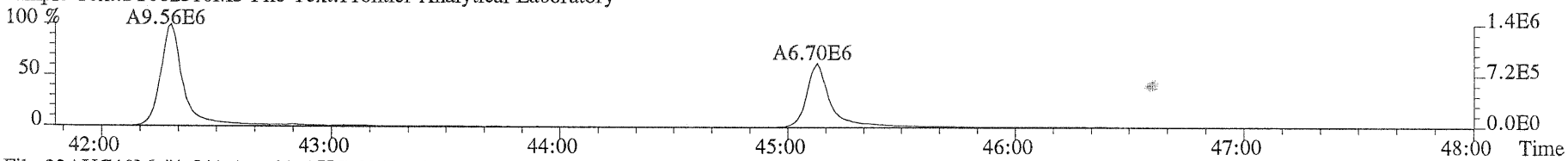
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



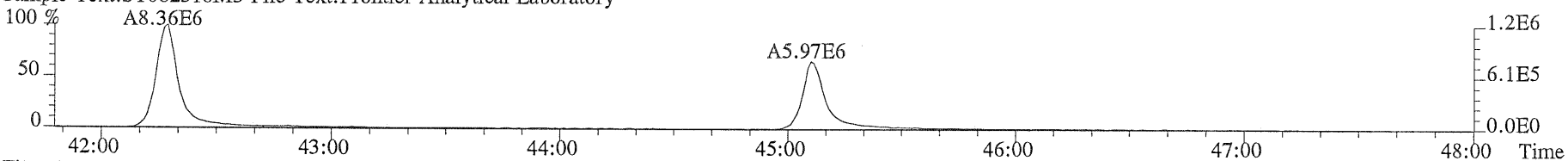
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



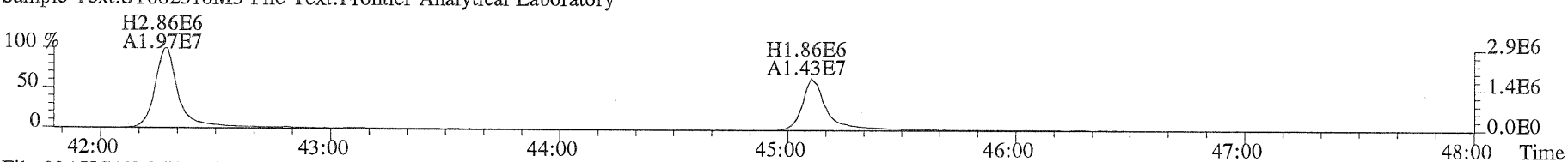
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



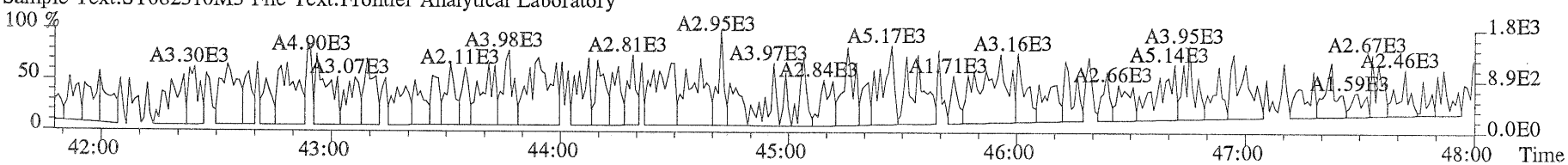
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



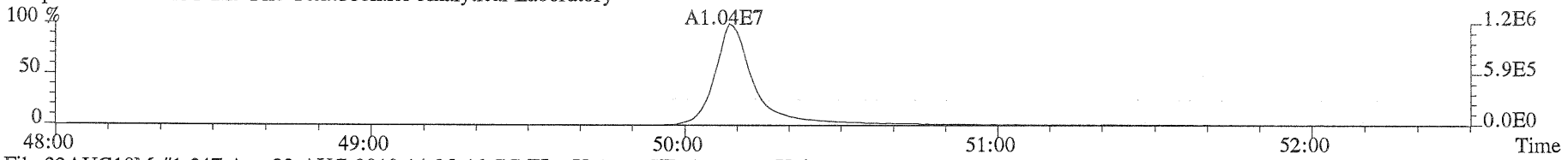
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



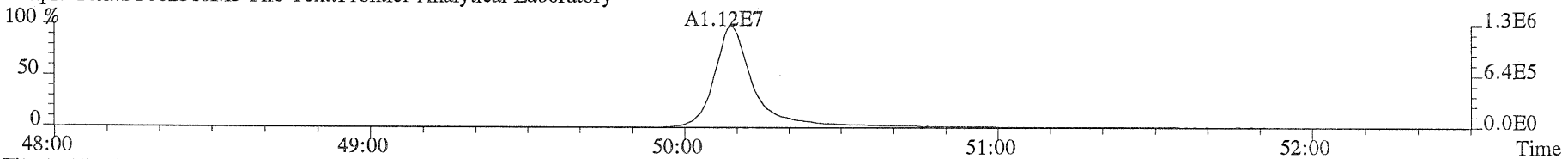
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



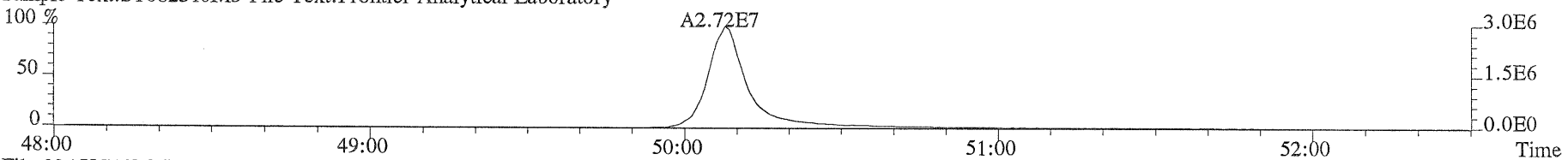
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



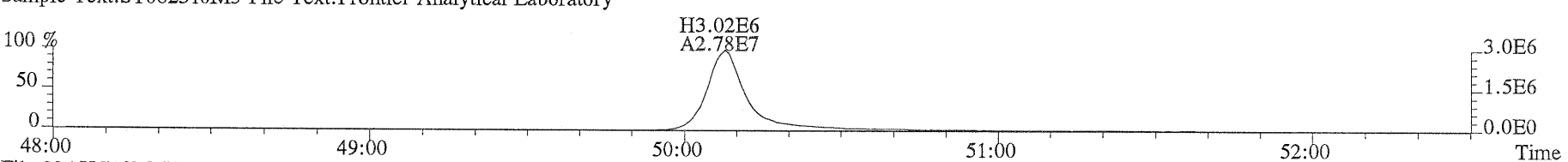
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



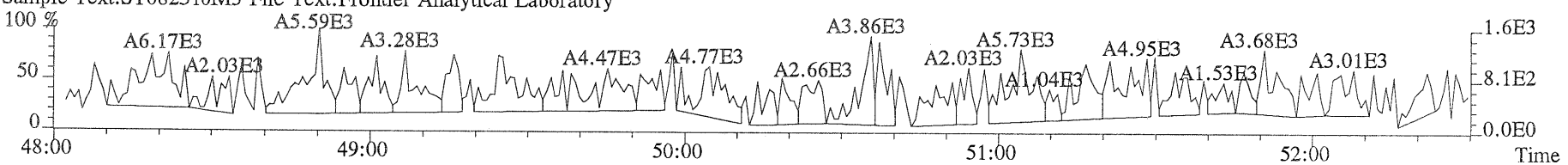
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



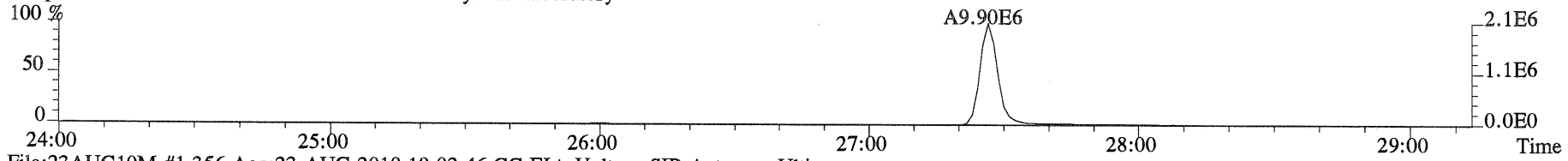
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



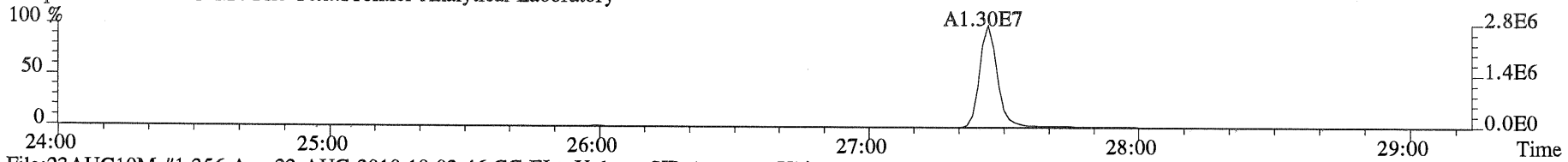
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



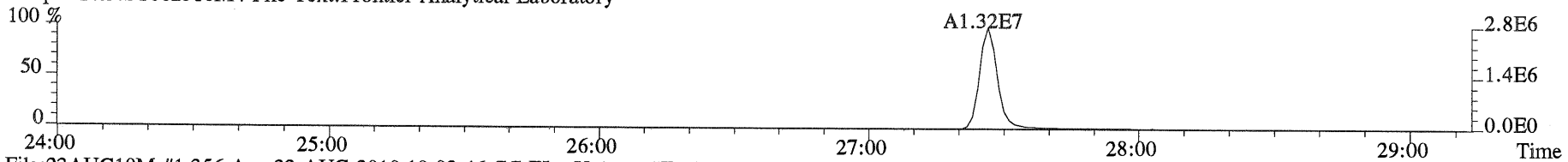
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



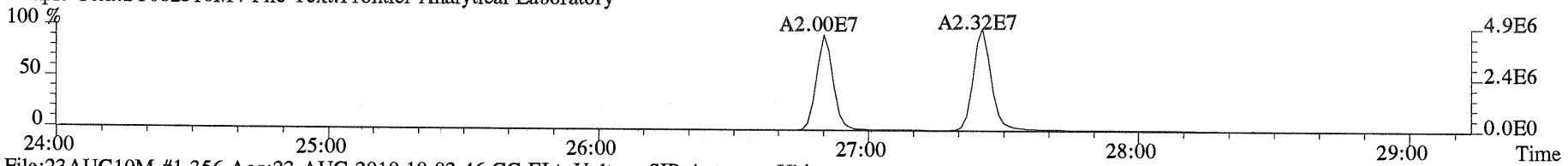
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



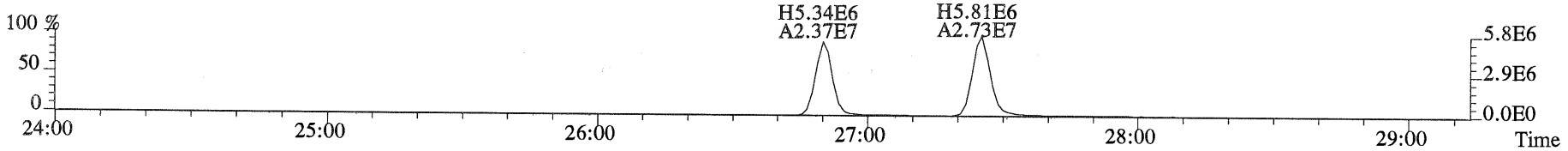
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



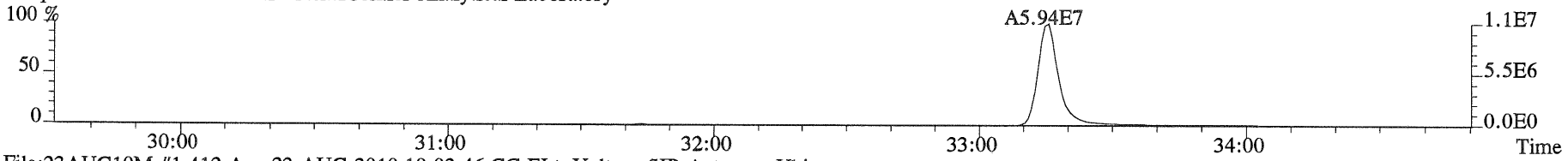
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



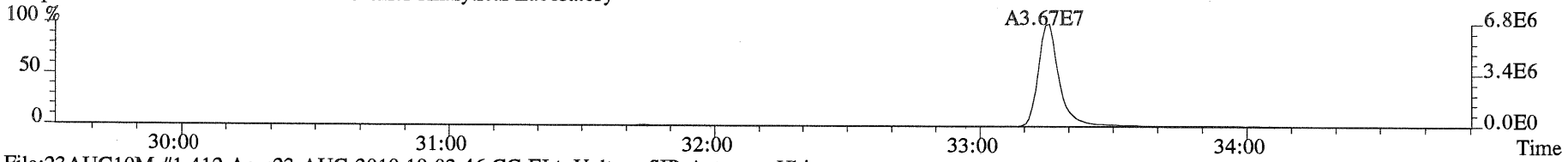
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



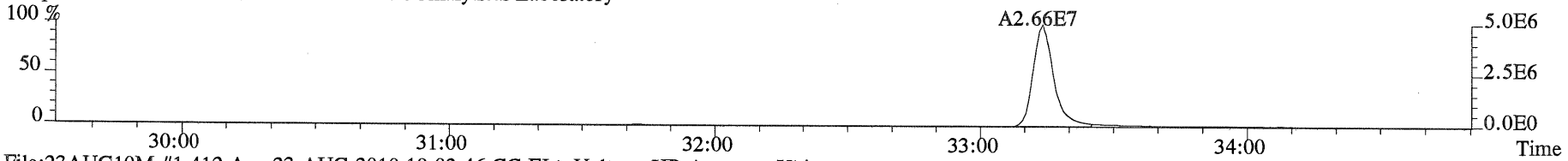
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



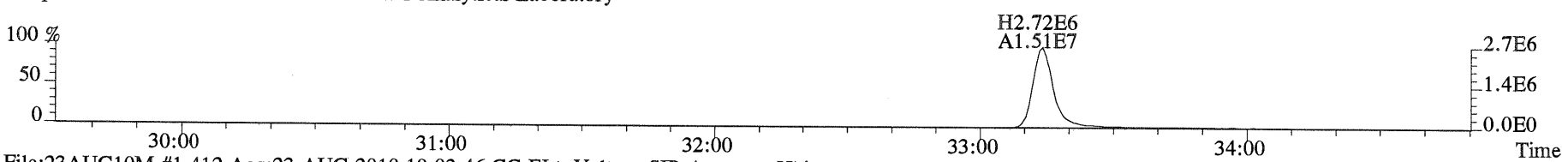
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



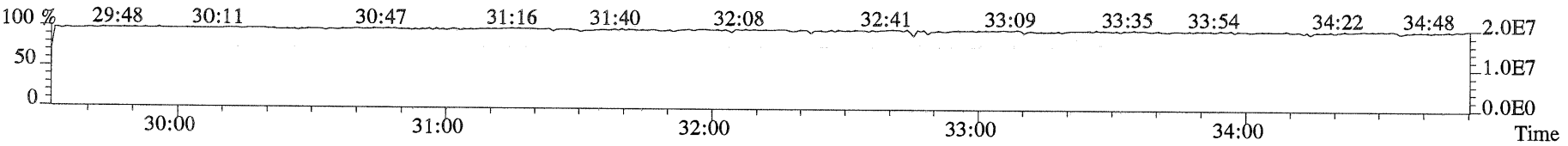
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



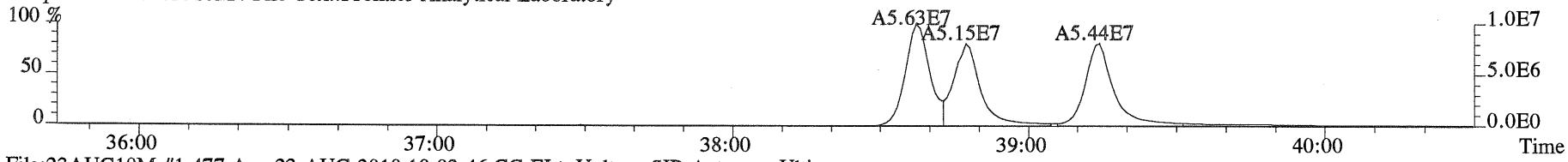
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



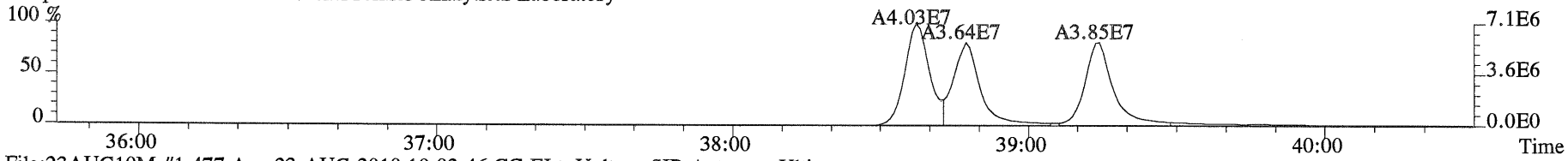
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



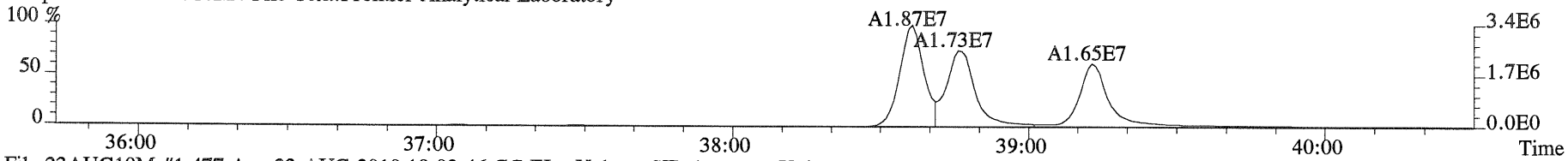
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



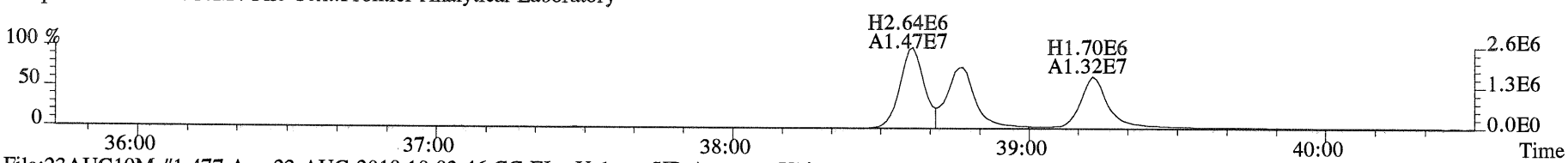
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



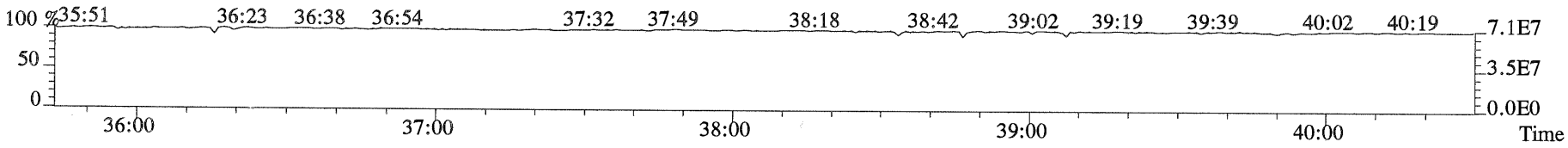
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



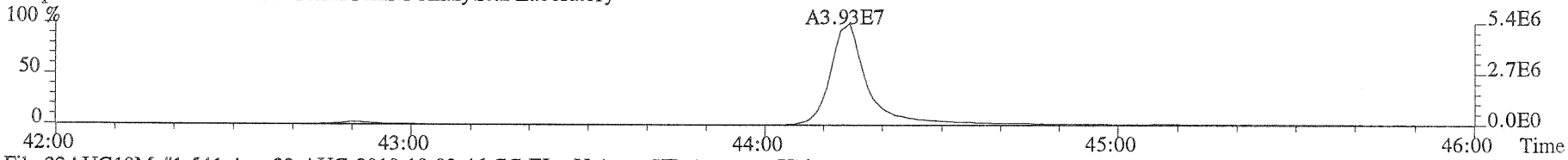
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



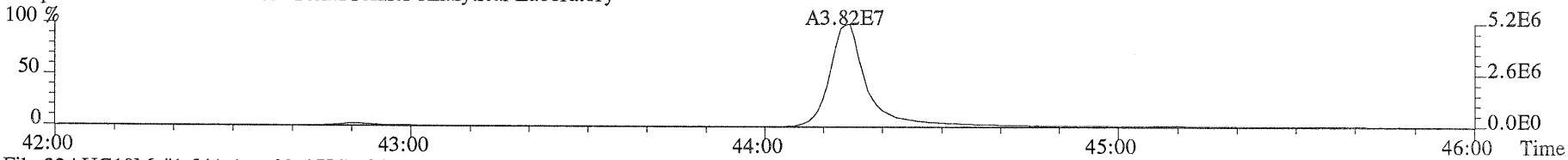
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



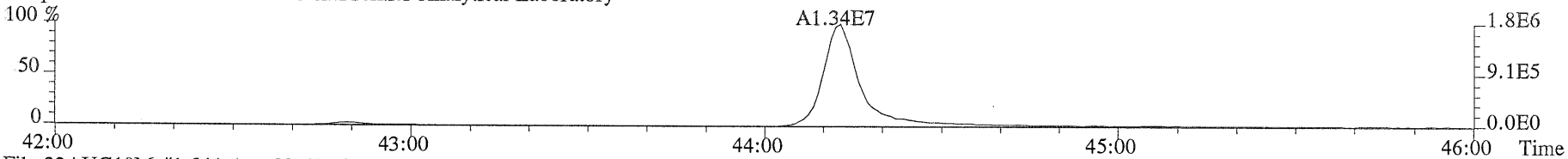
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



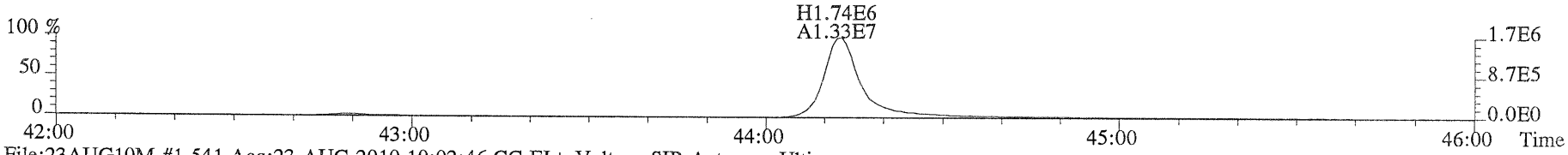
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



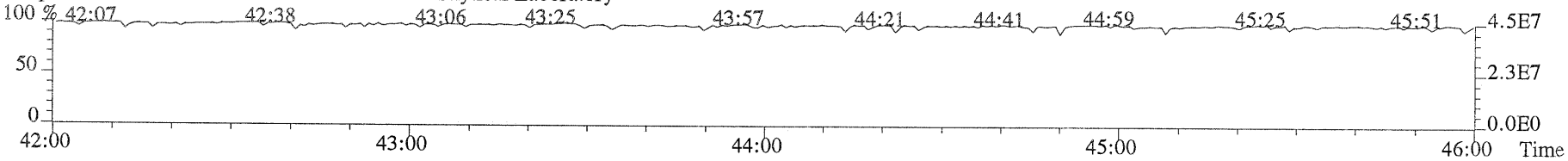
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



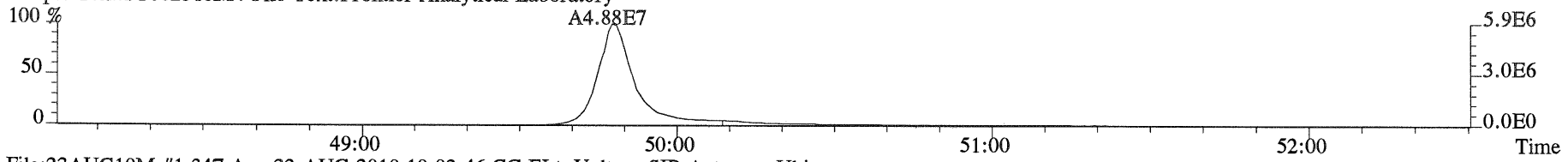
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



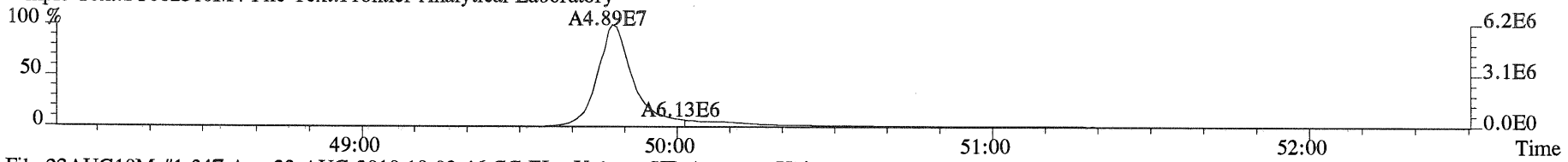
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



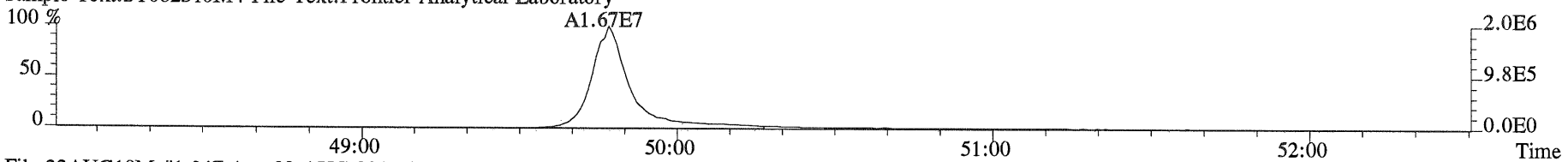
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



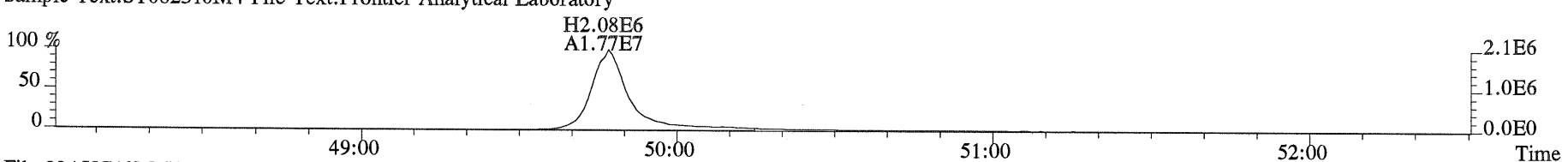
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



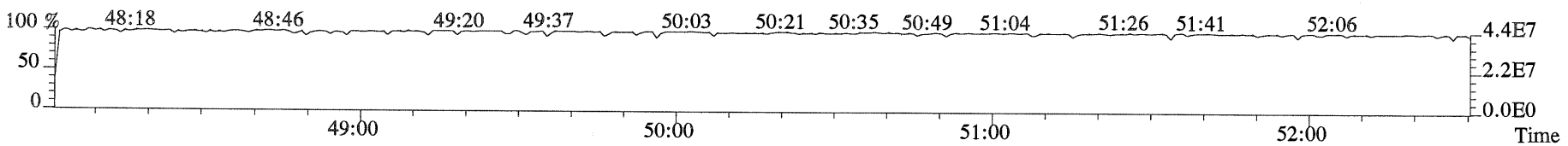
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



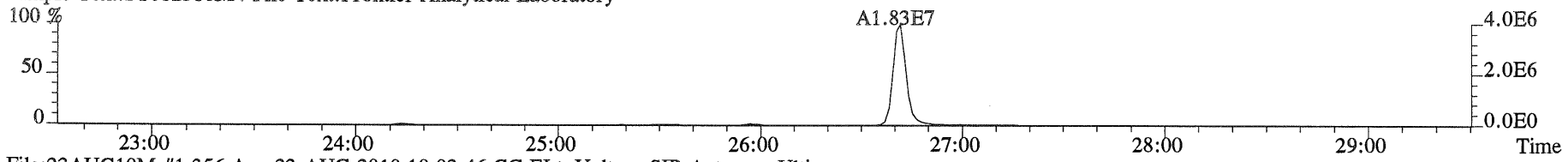
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



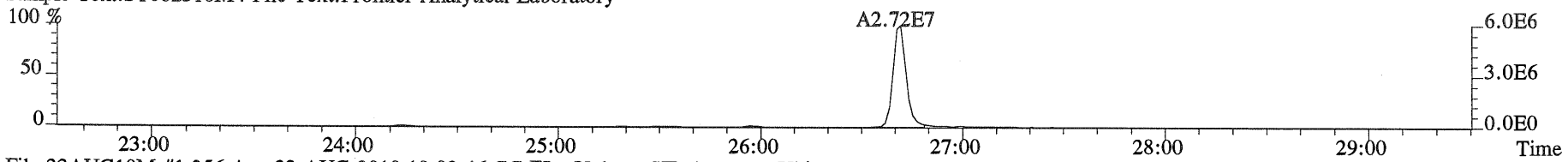
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



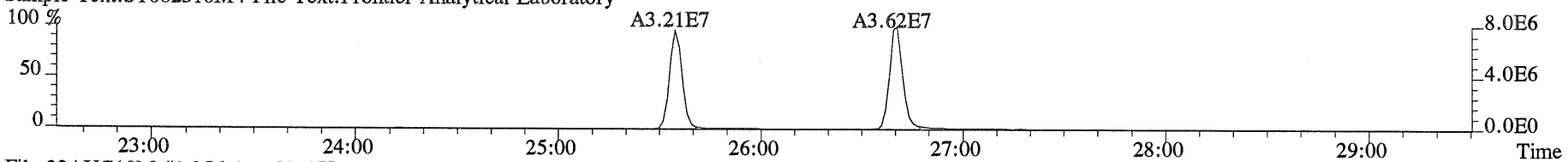
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



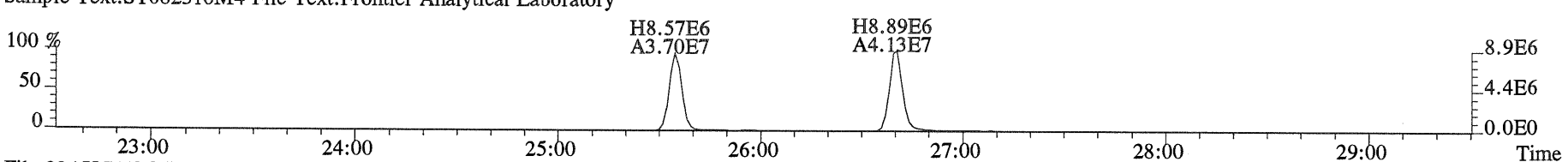
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



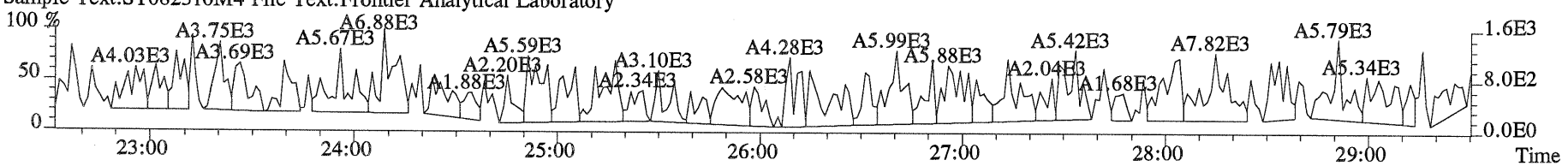
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



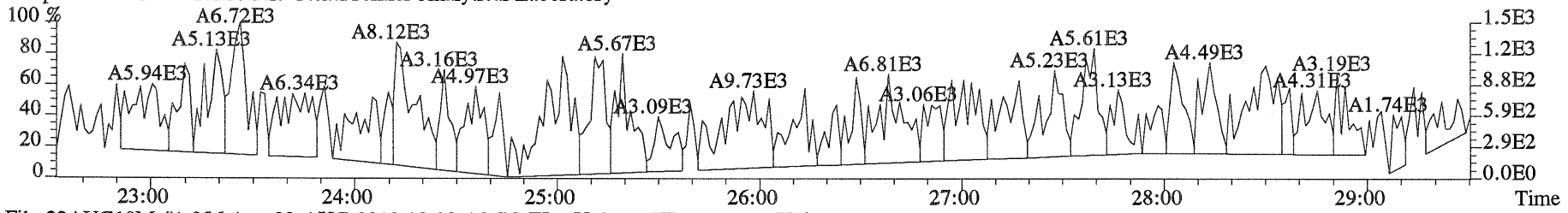
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



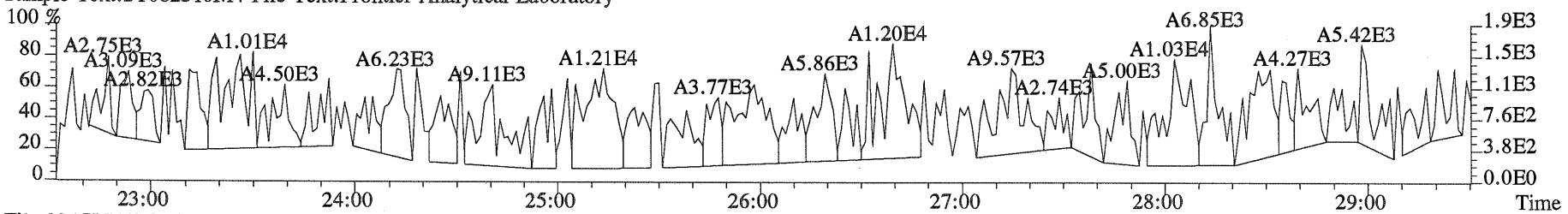
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



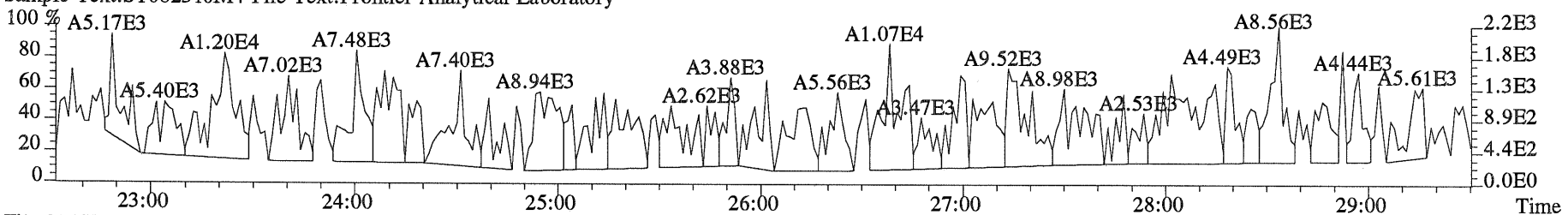
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



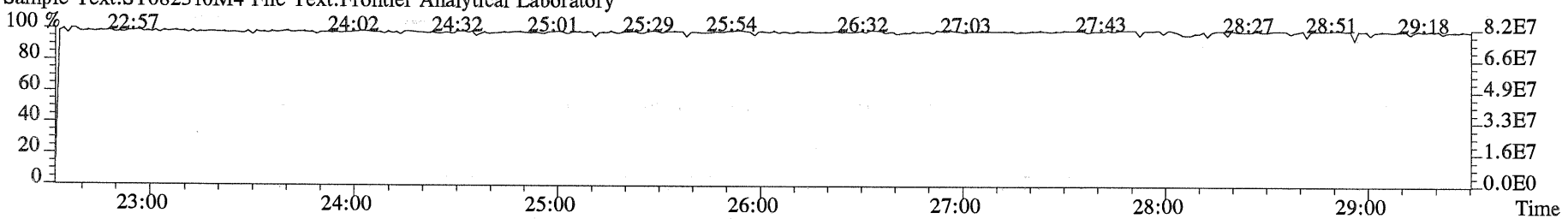
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



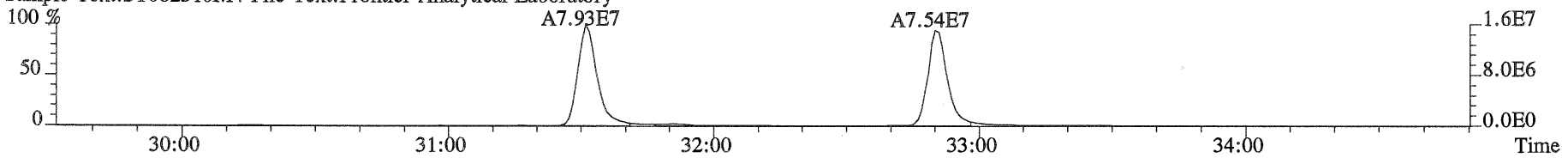
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



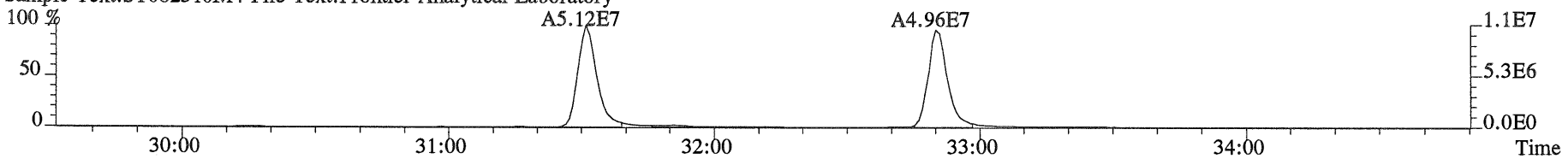
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
LOCK_MASS_CHECK S:6 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



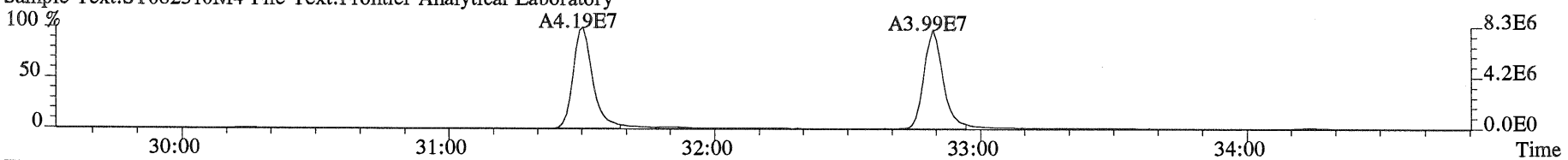
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



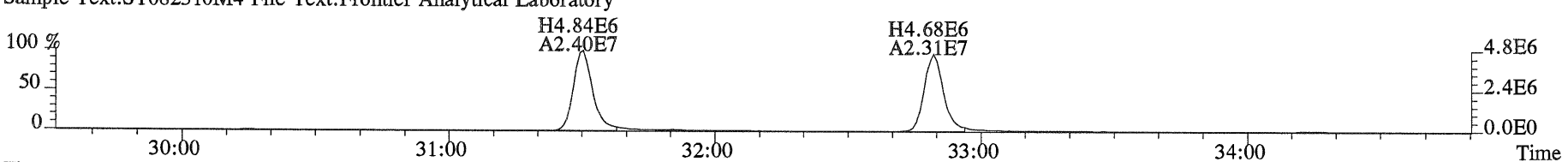
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



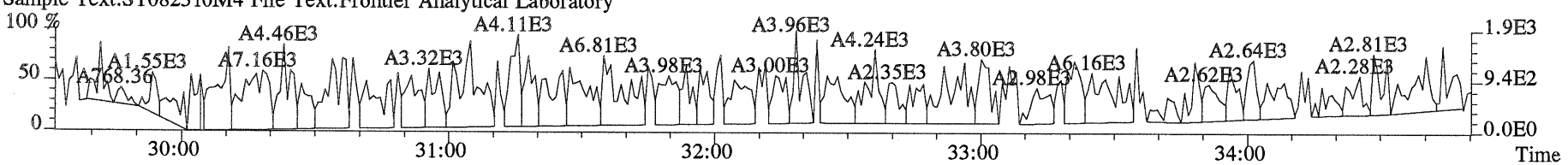
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



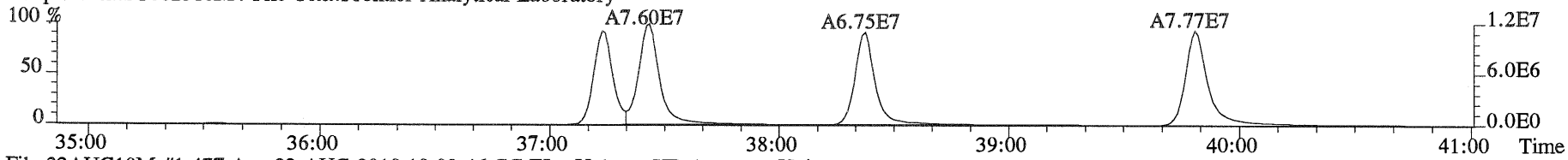
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



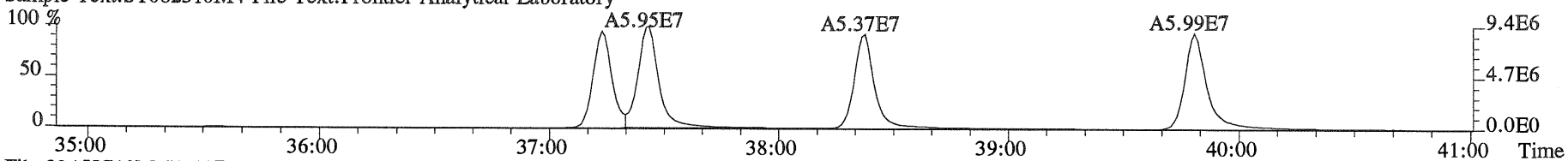
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



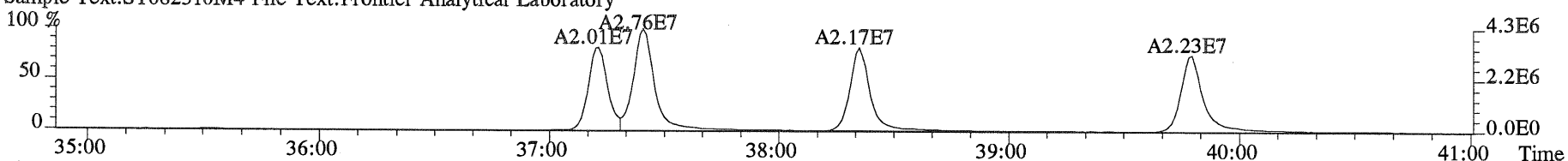
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



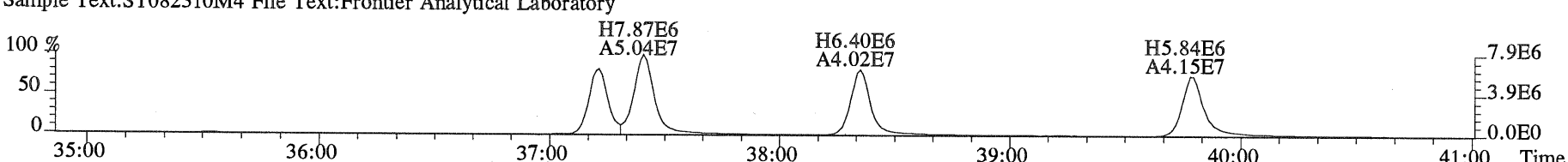
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



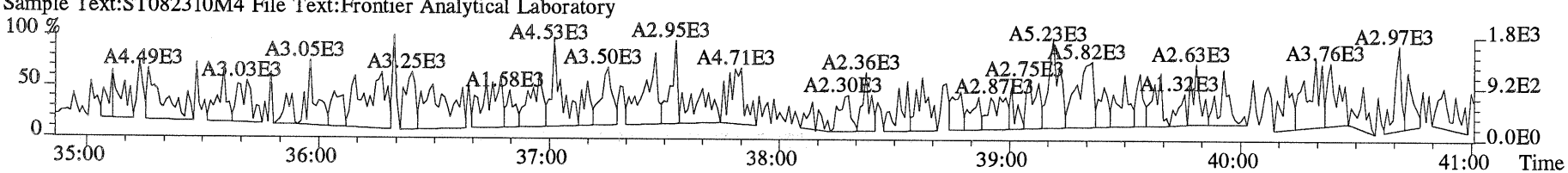
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



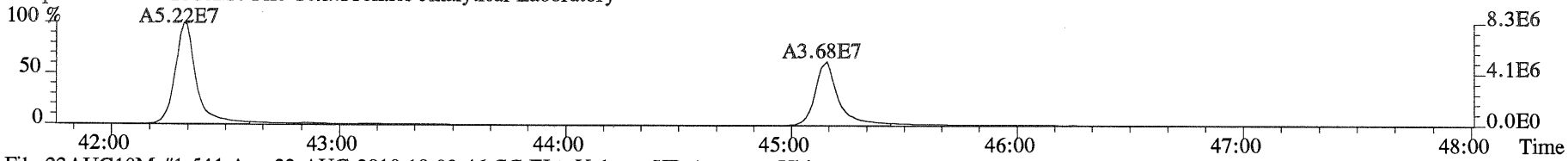
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



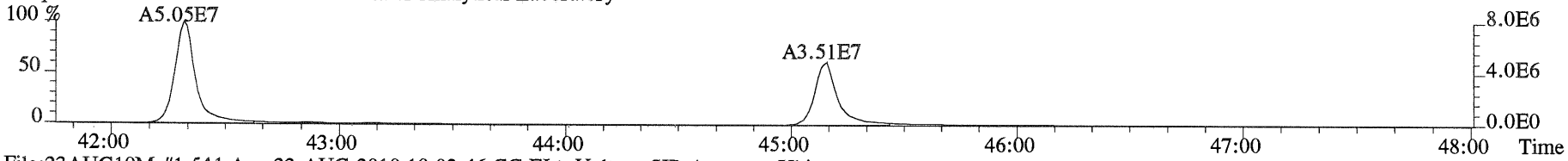
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



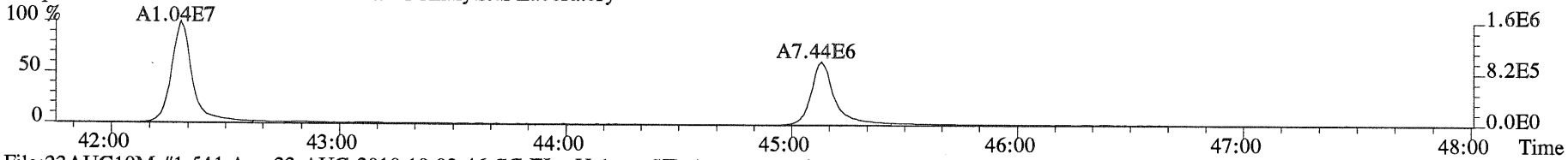
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



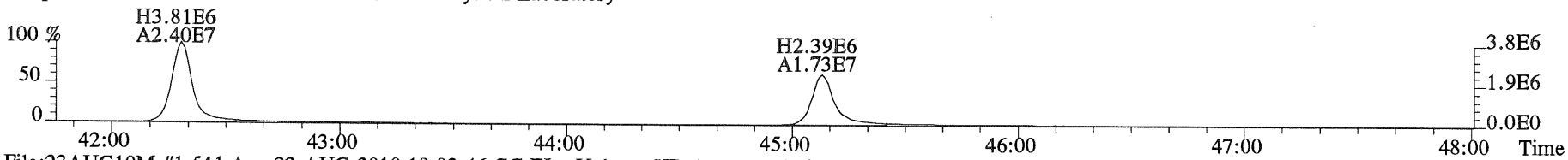
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



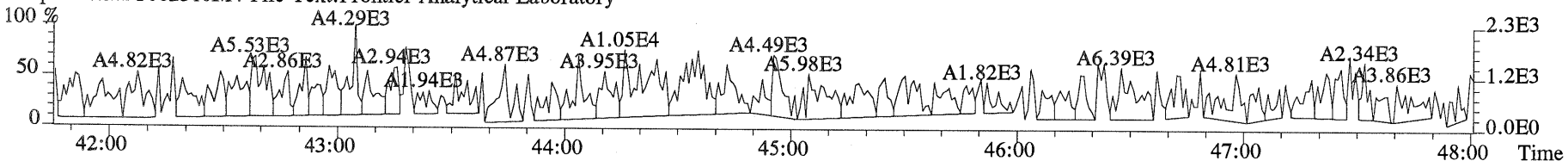
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



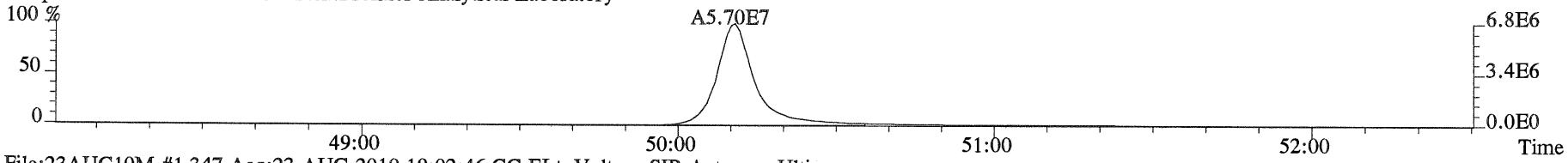
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



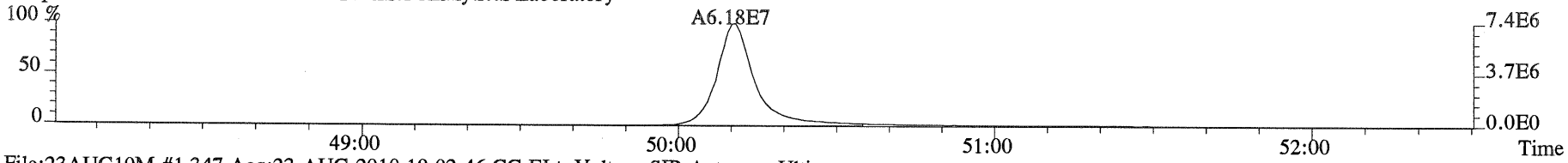
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



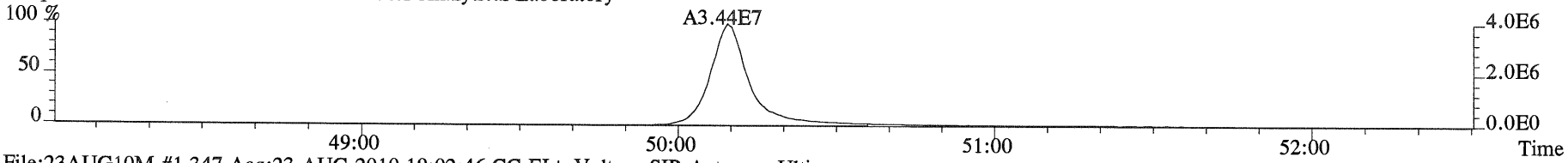
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



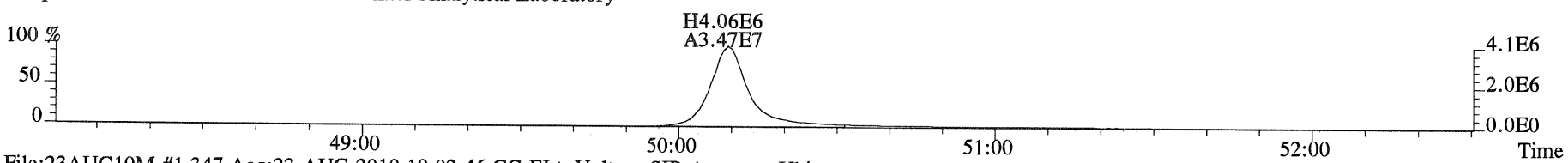
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



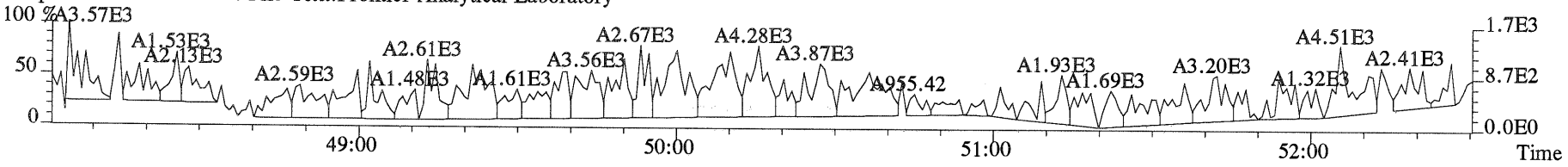
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



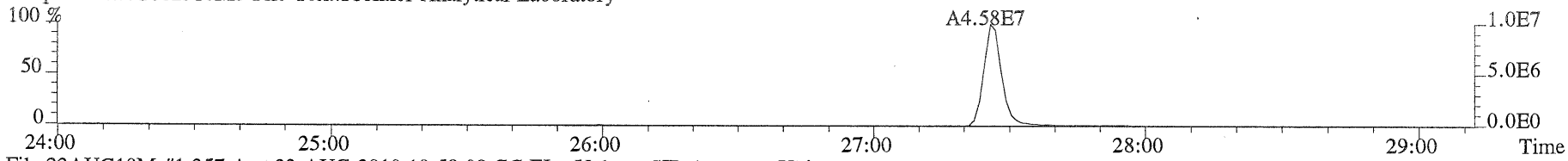
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



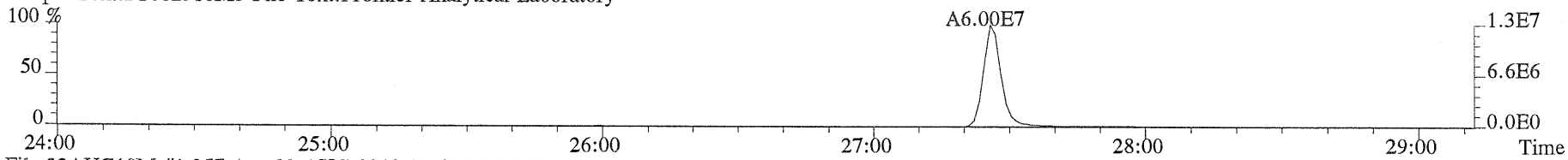
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



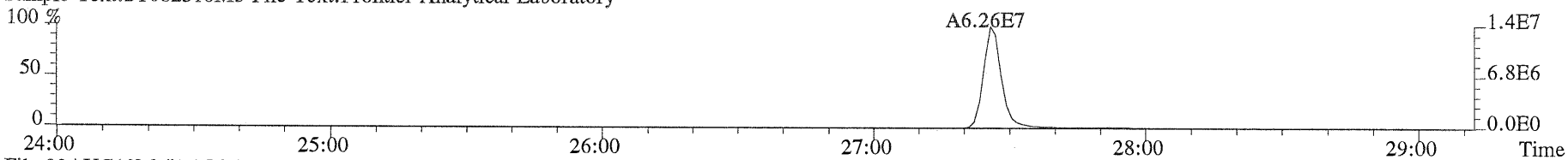
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



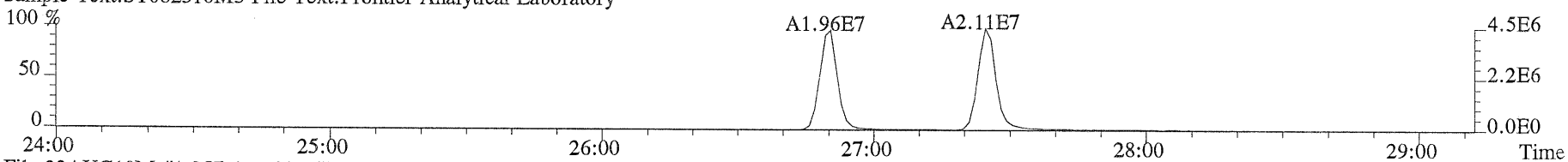
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



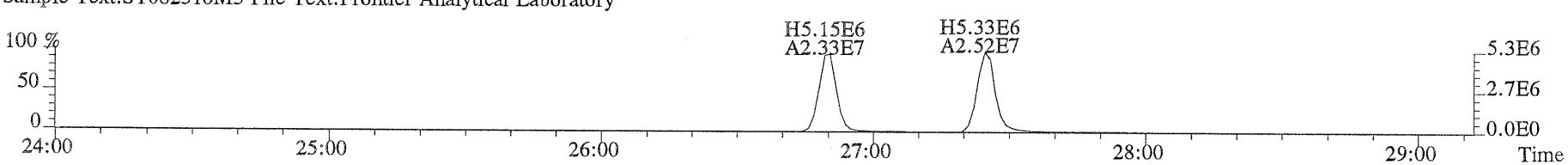
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



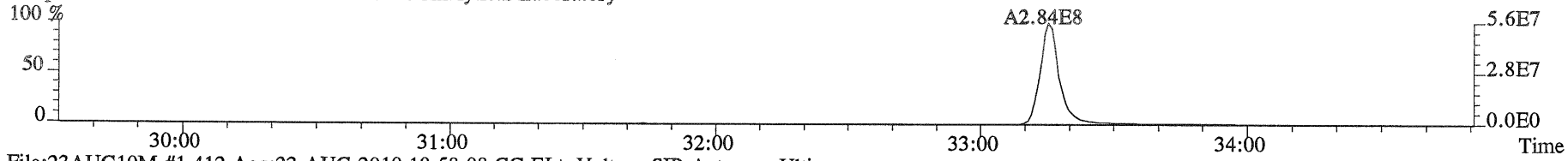
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



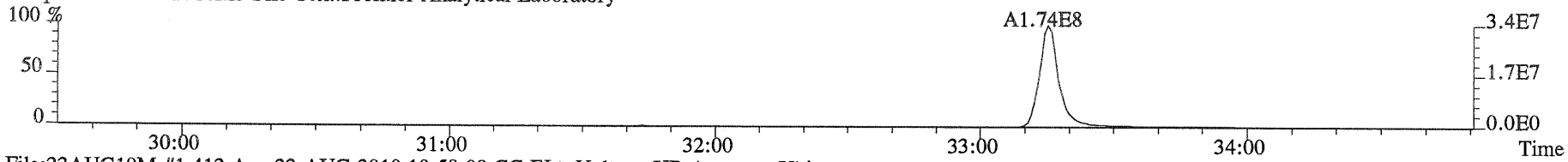
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



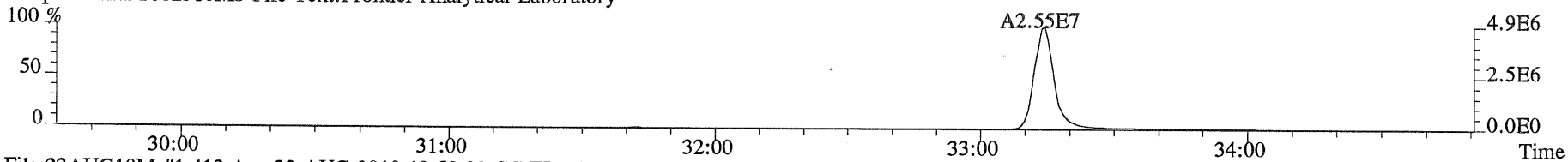
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



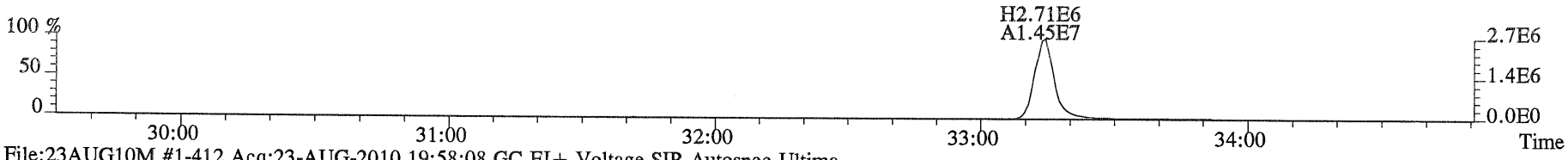
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



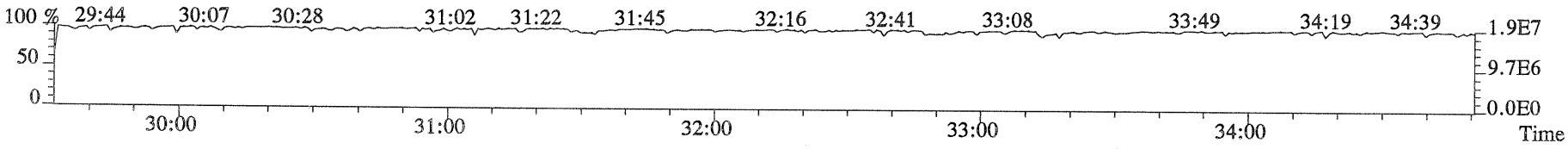
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



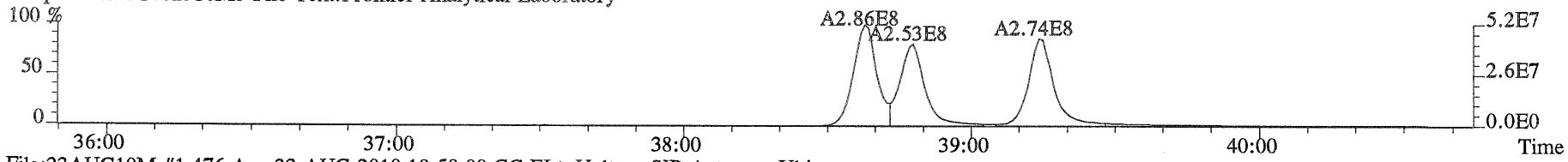
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



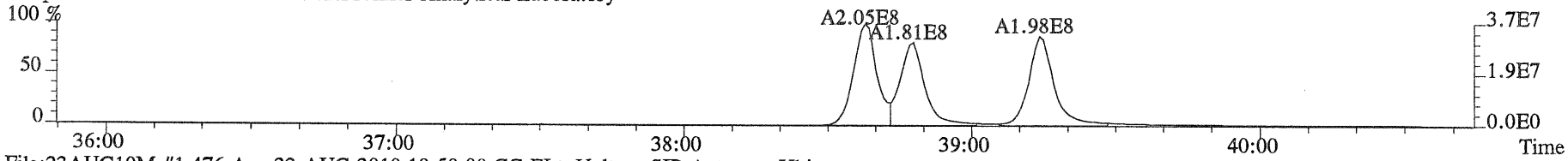
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:7 F:2 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



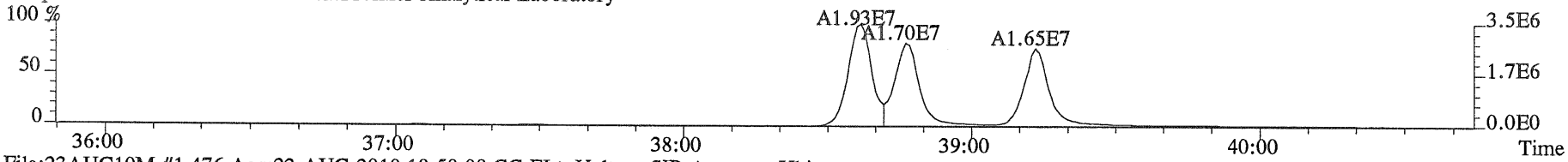
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



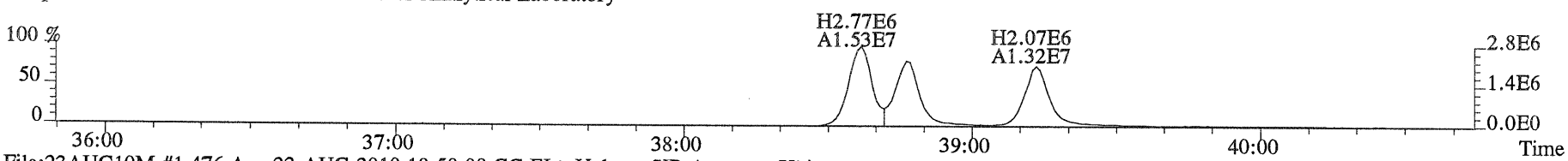
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



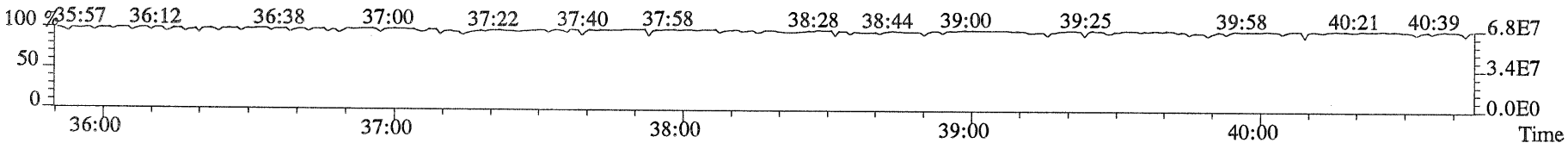
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



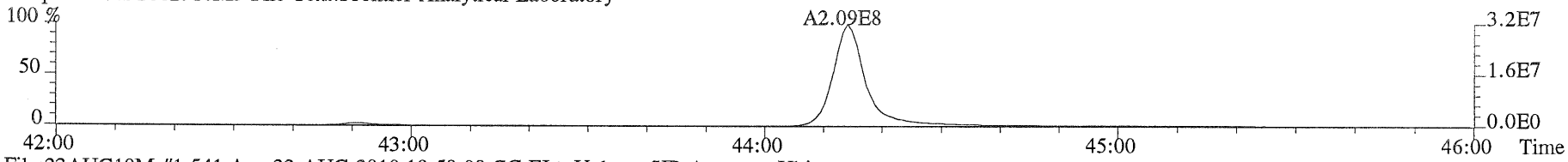
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



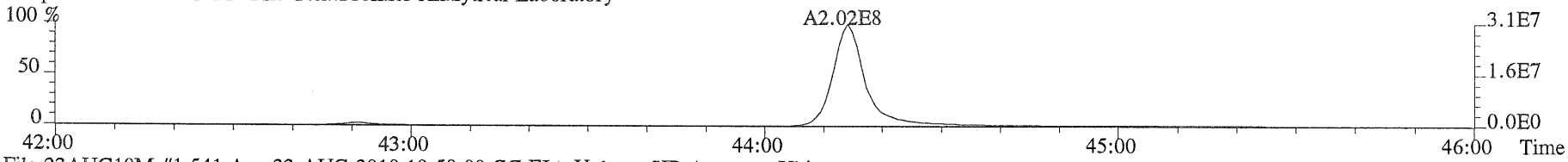
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:7 F:3 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



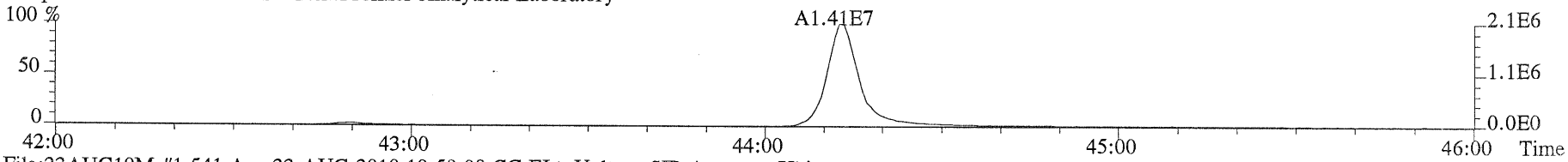
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



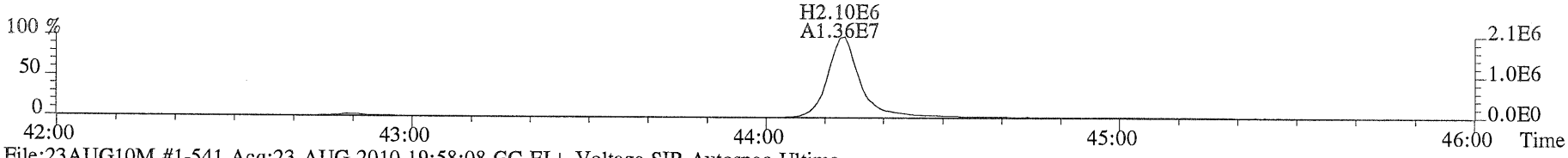
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



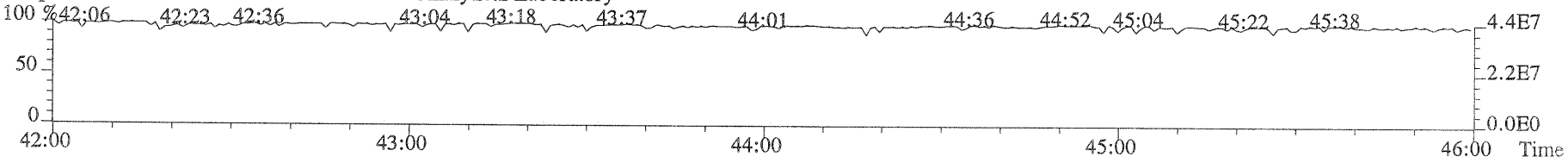
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



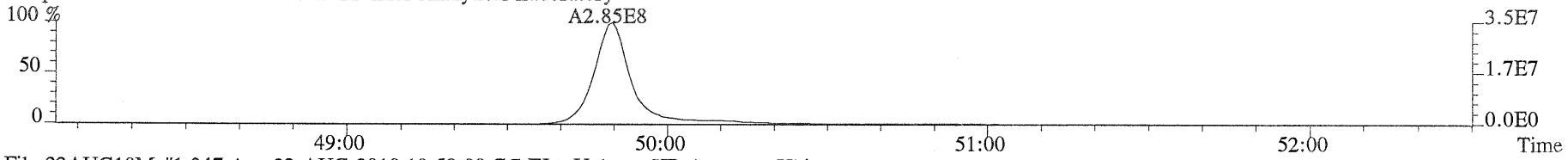
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



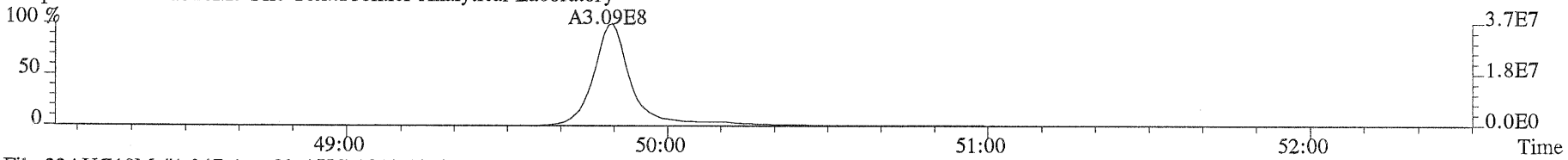
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:7 F:4 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

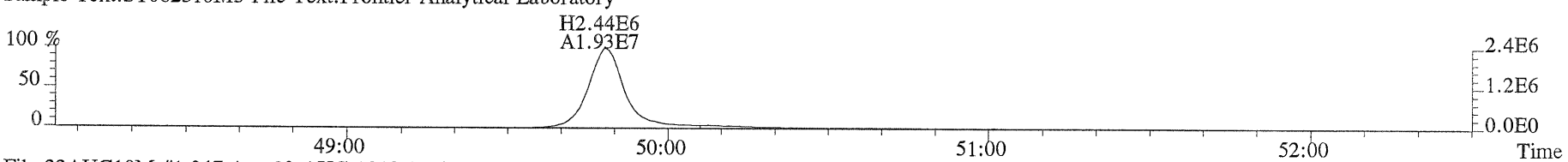


File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

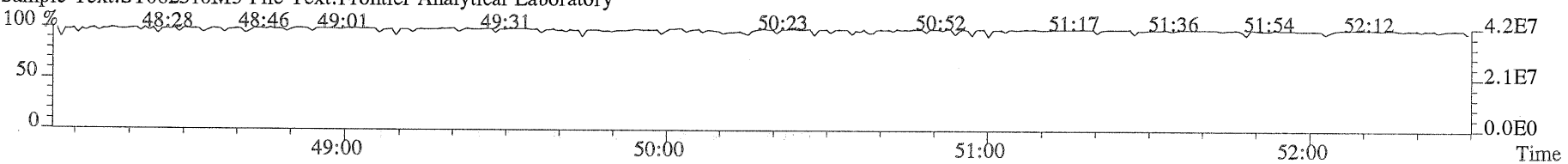


File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

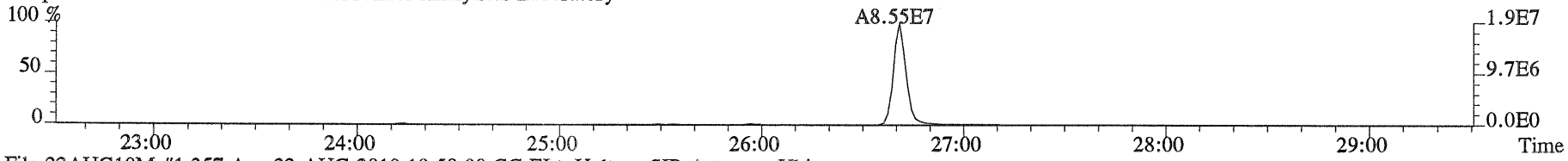
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



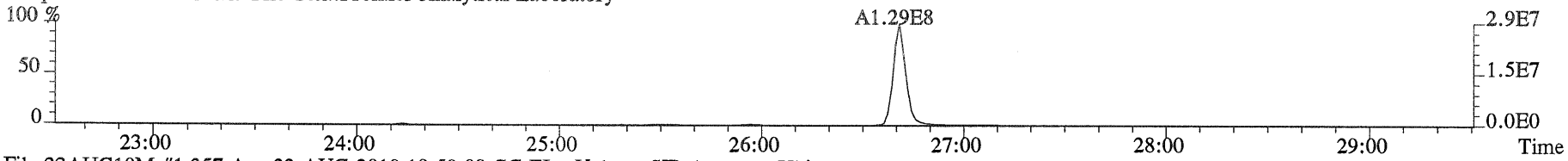
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:7 F:5 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



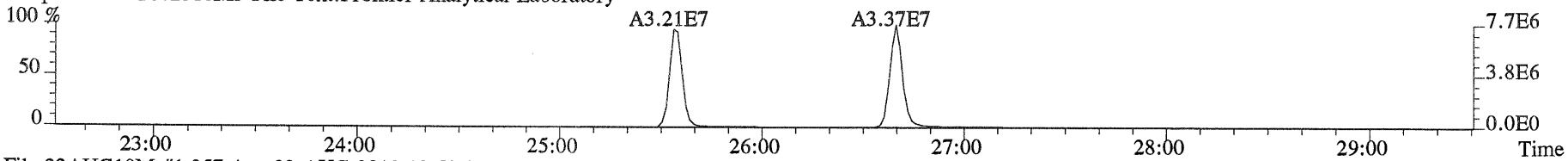
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



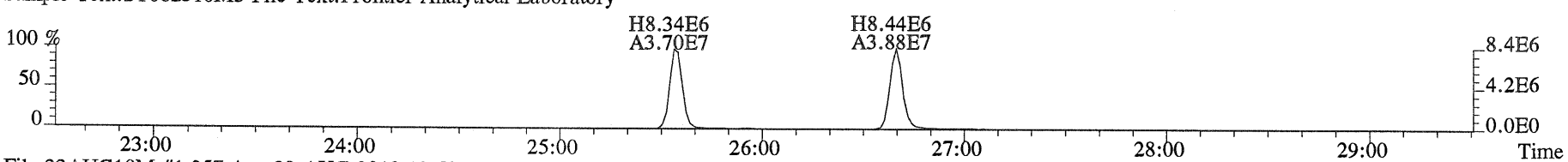
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



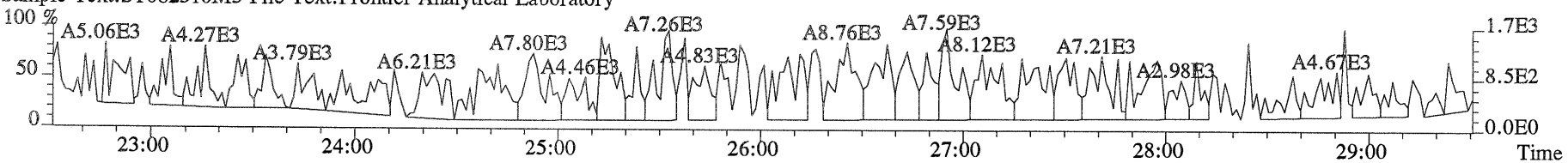
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



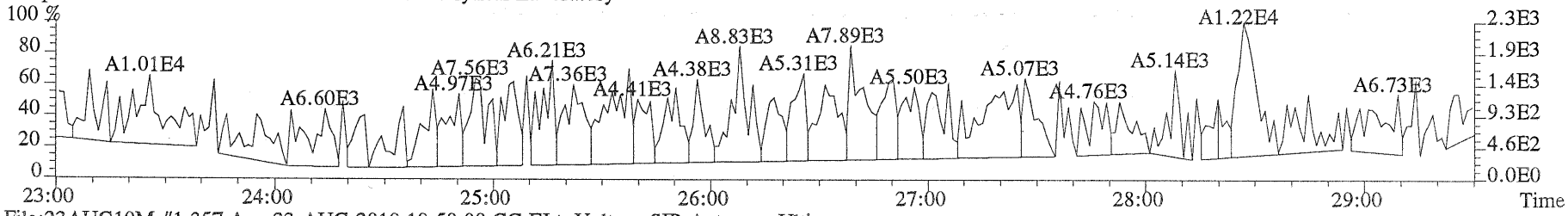
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



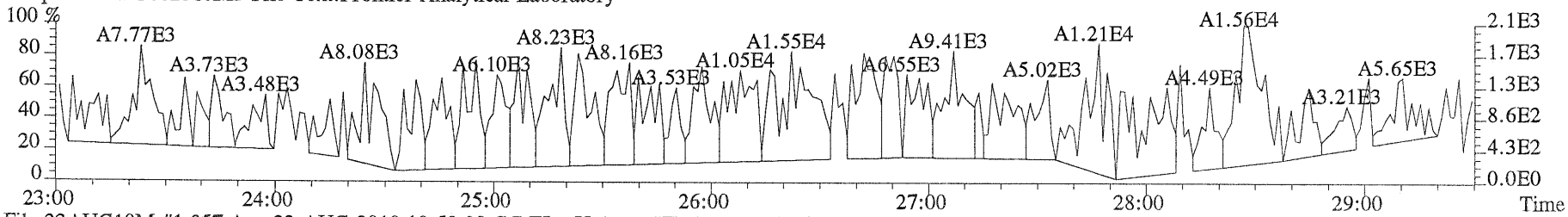
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



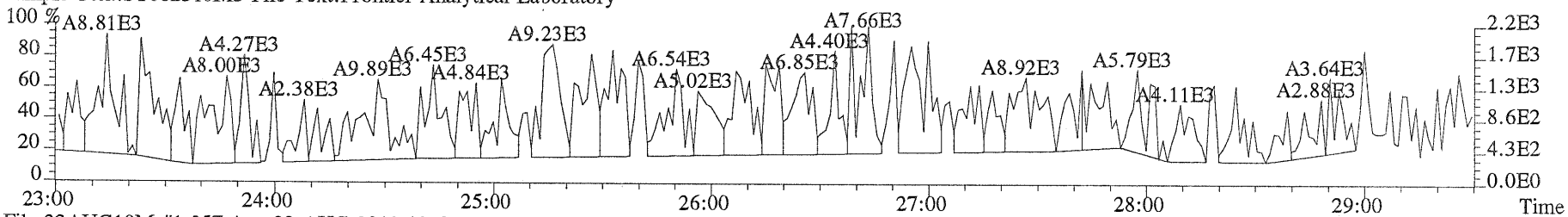
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



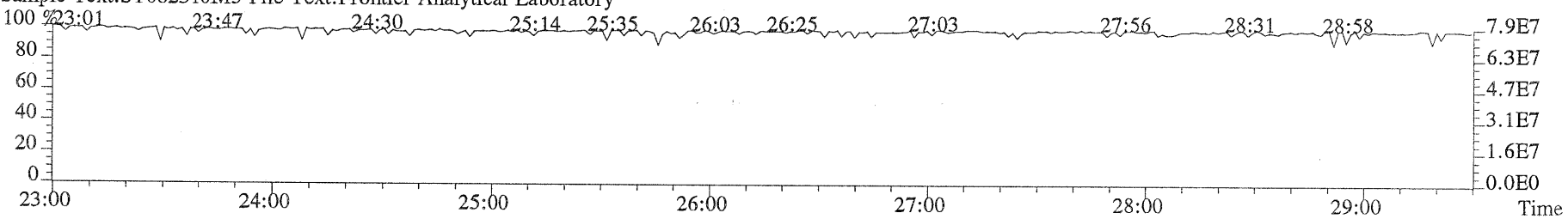
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



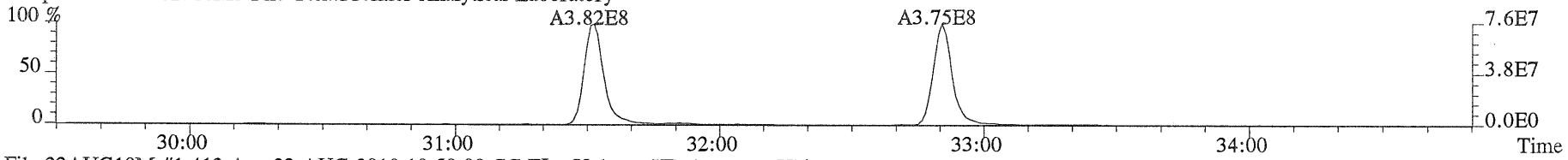
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



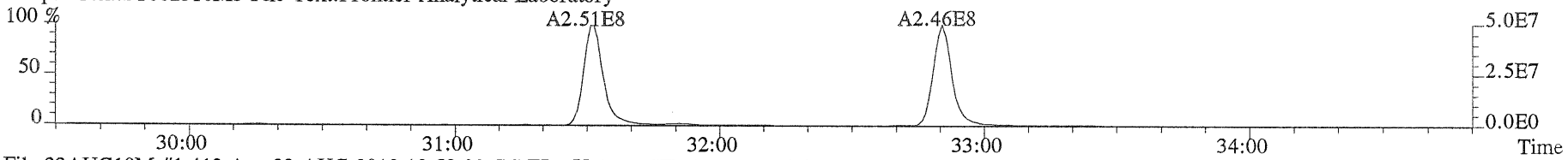
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:7 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



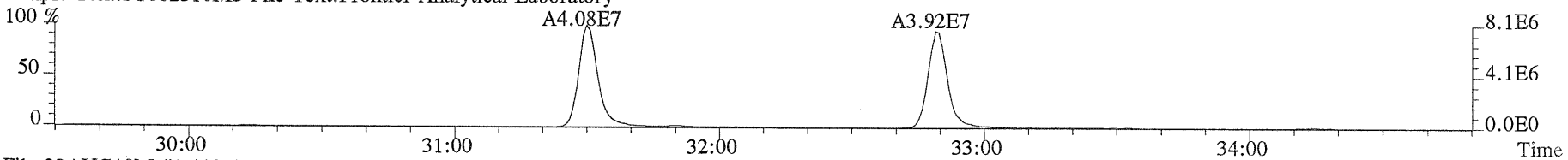
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



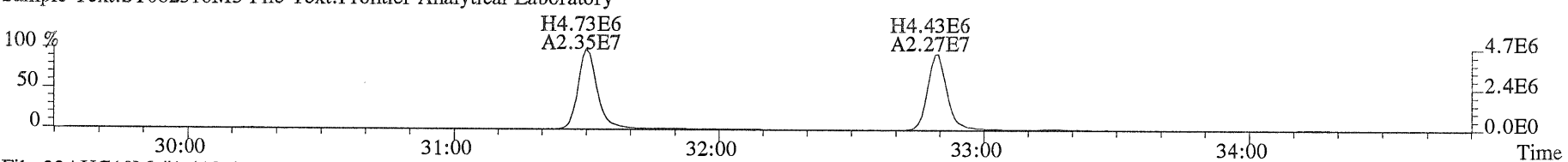
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



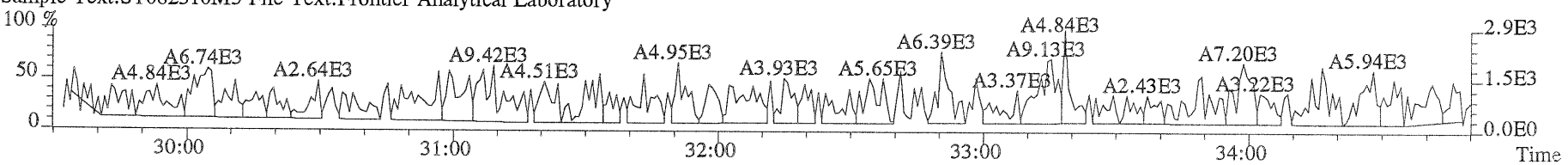
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



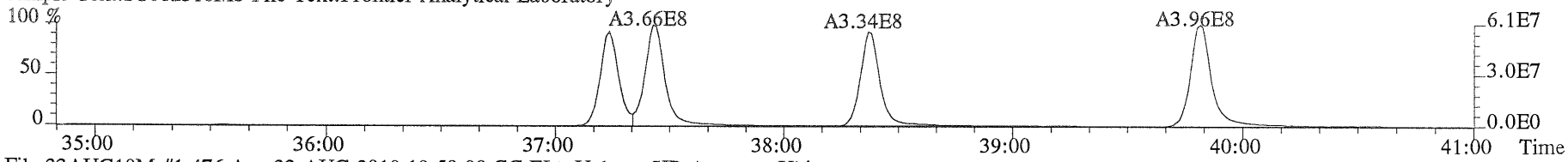
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



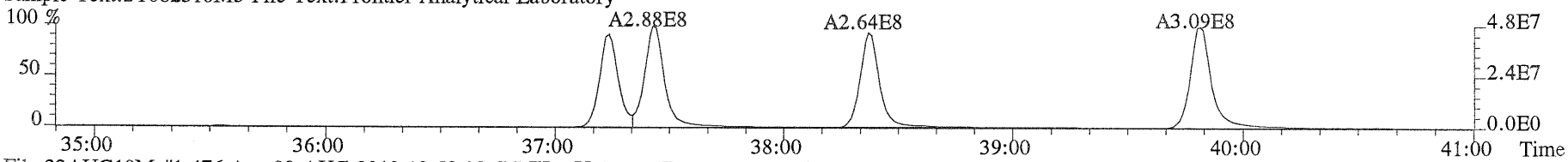
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



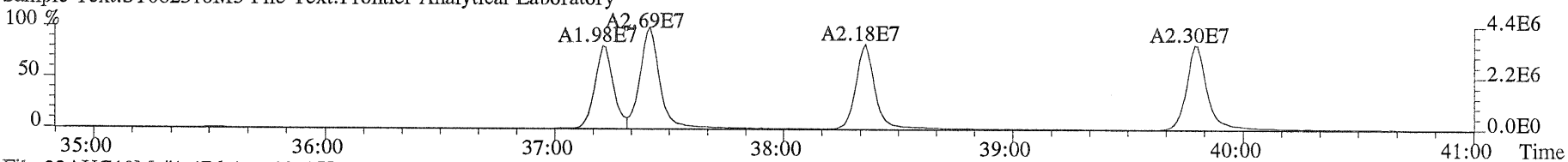
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



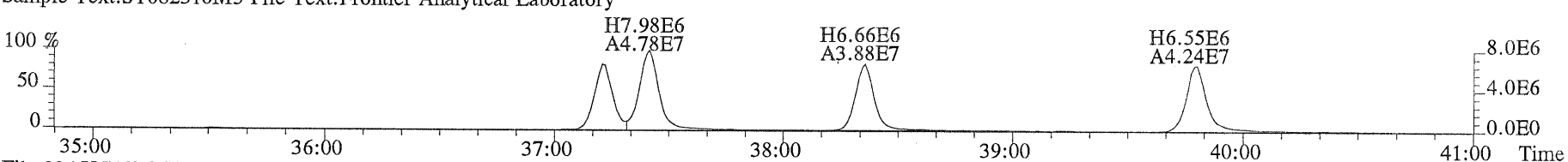
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



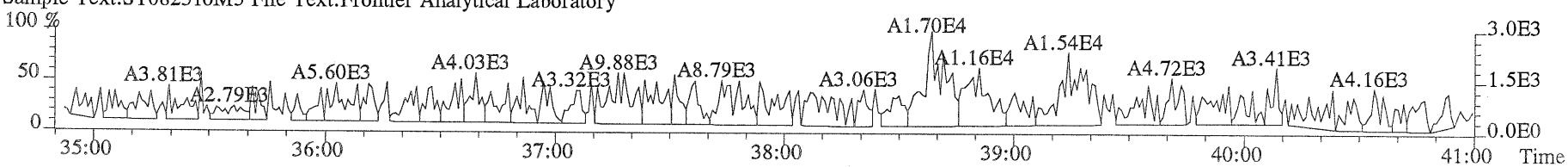
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



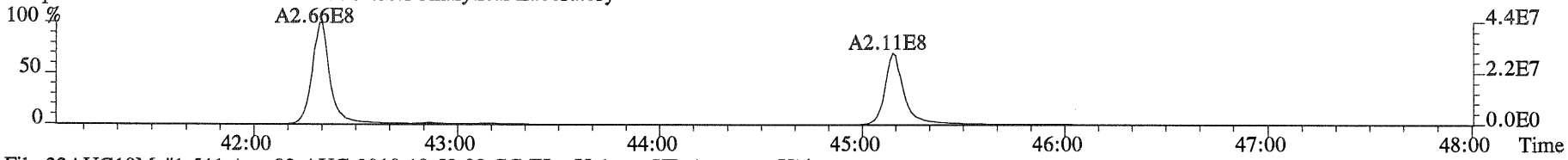
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



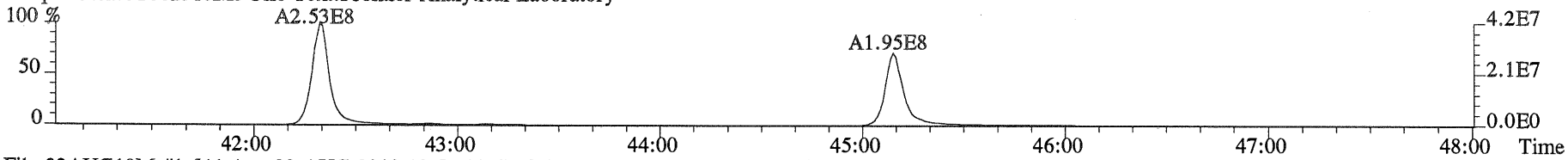
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



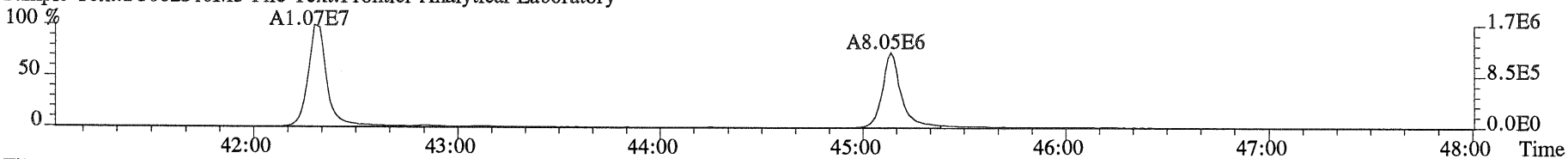
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



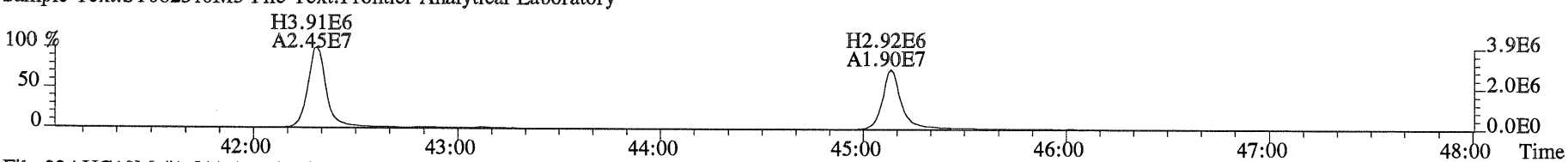
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



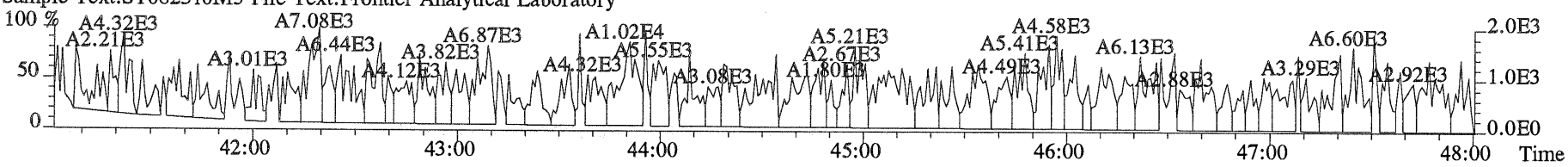
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



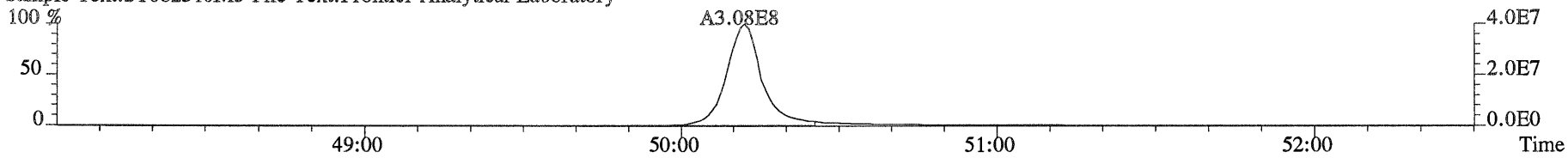
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



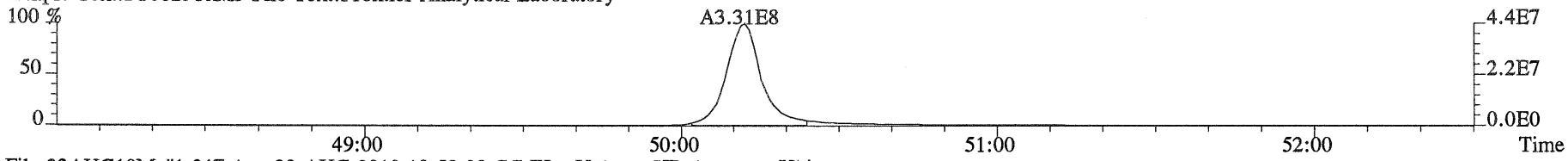
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



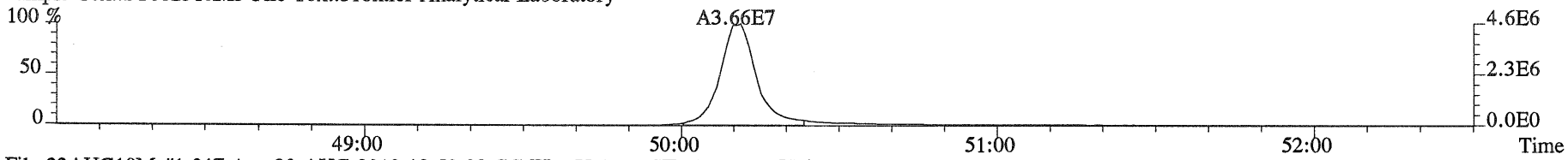
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



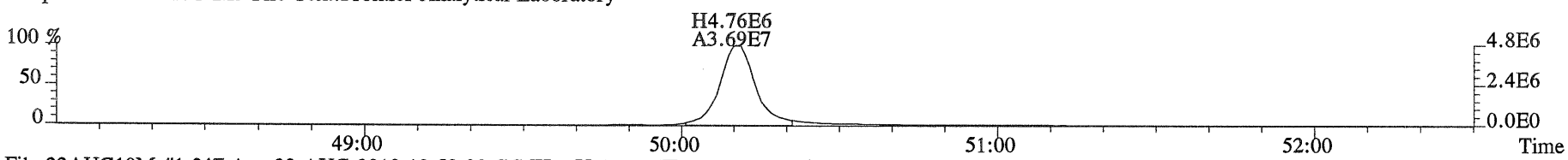
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



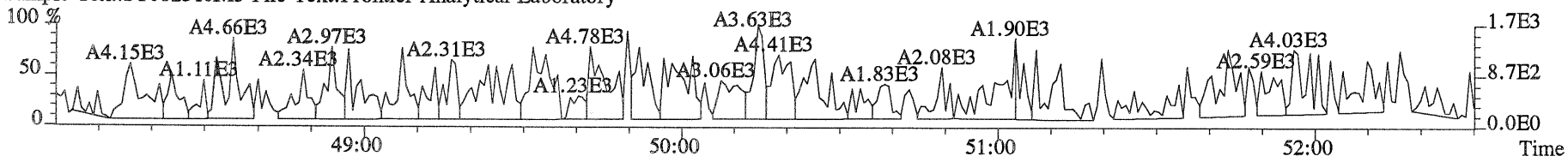
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



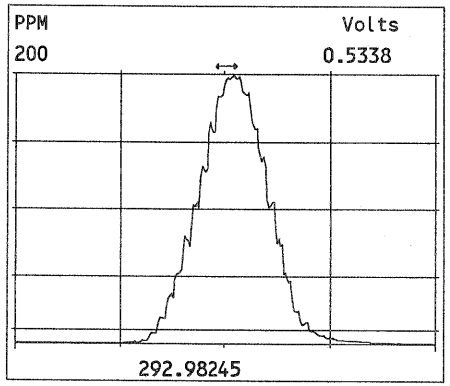
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

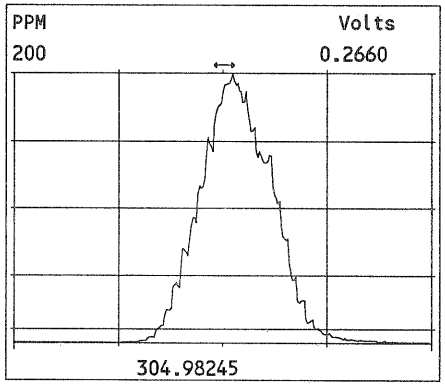


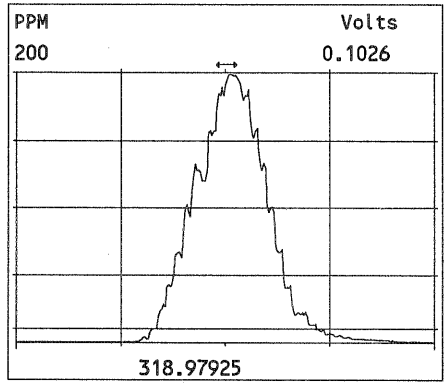
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

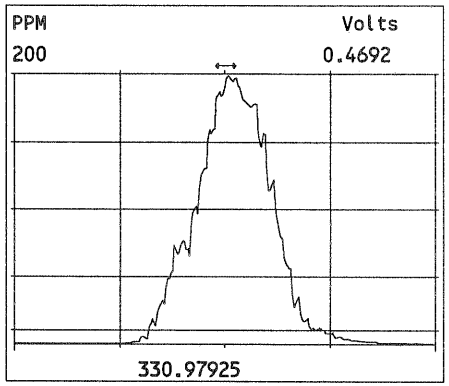


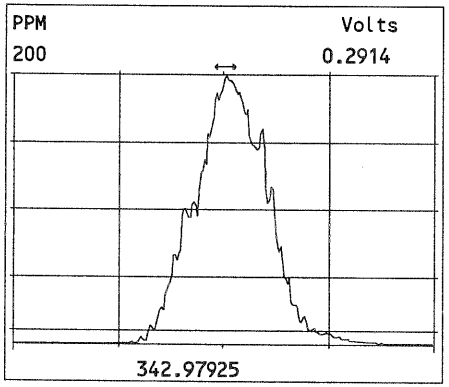
Peak Locate Examination:24-AUG-2010:09:50 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

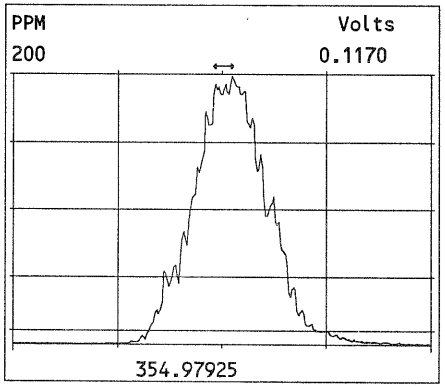


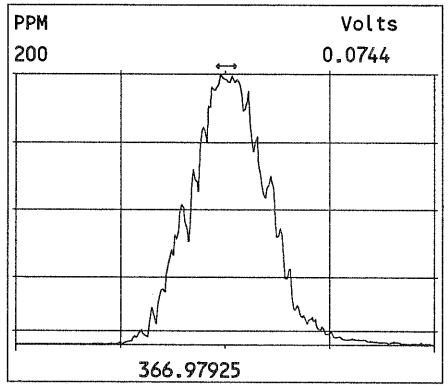


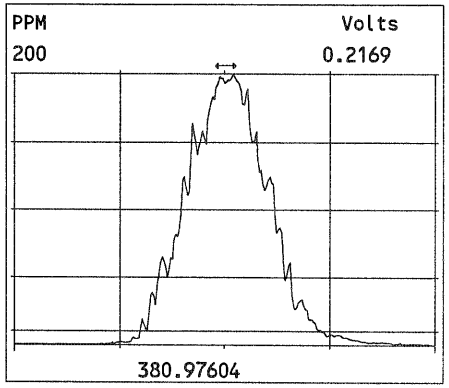


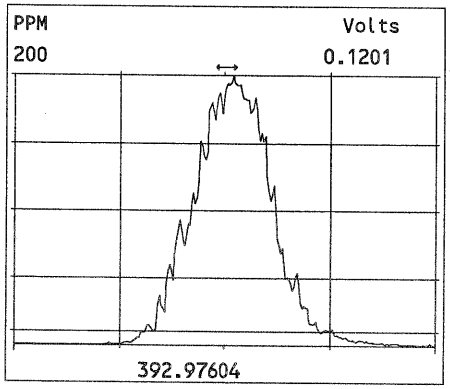


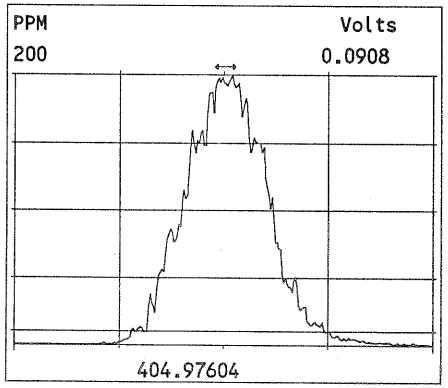


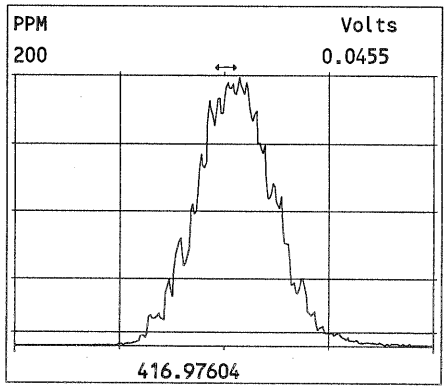




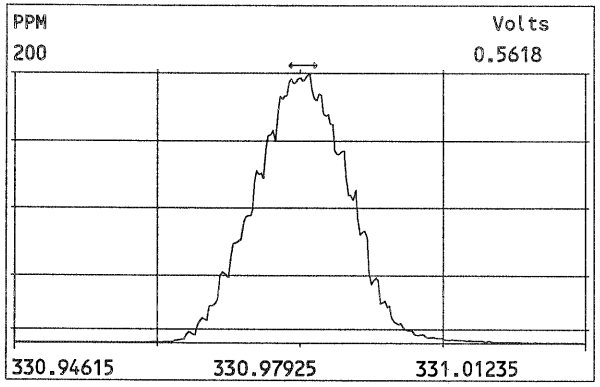


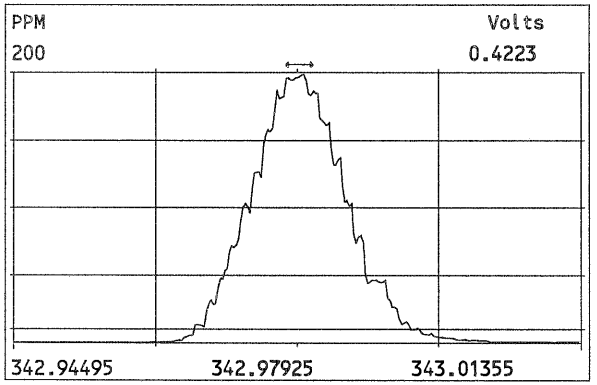


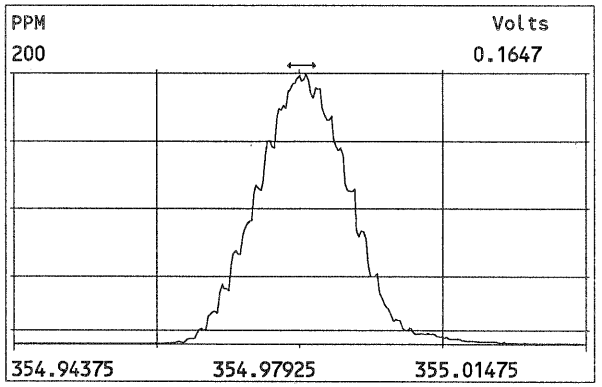


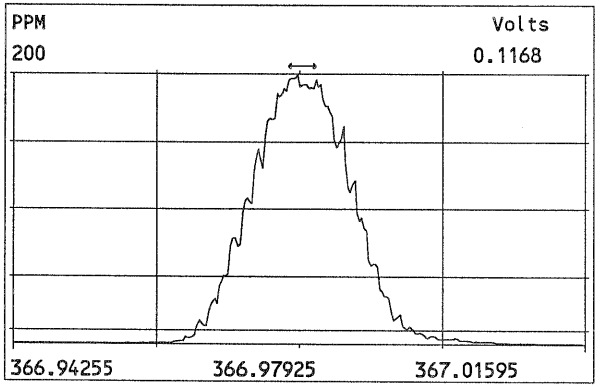


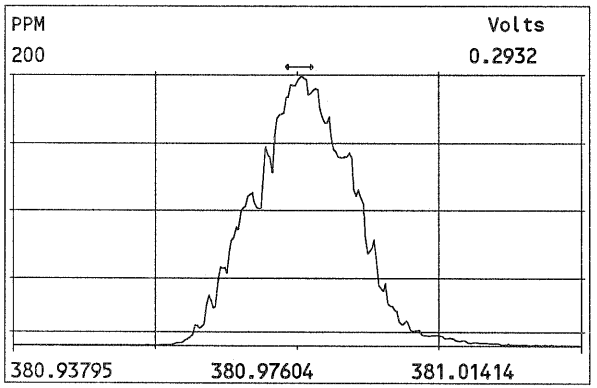
Peak Locate Examination:24-AUG-2010:09:52 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

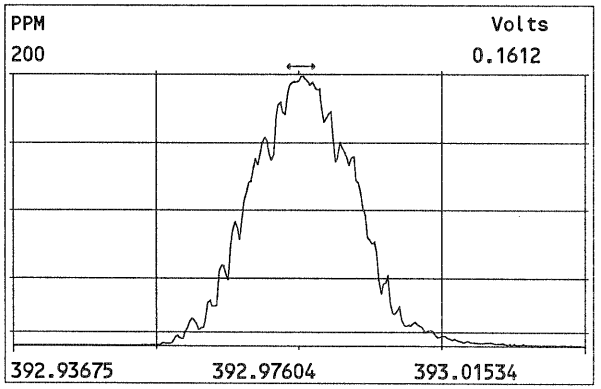


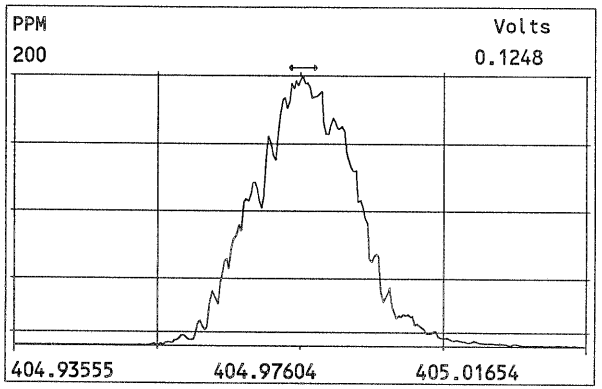


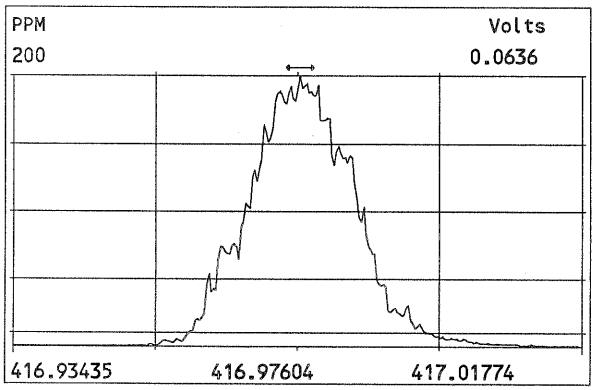




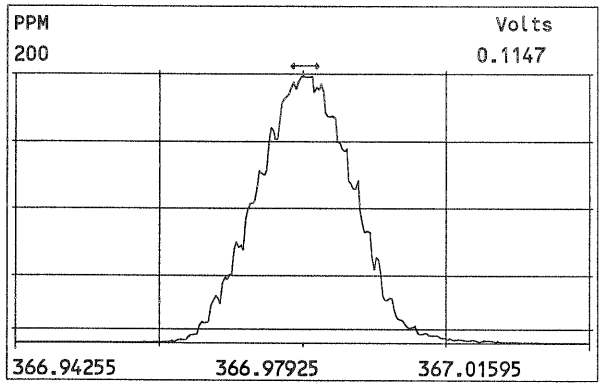


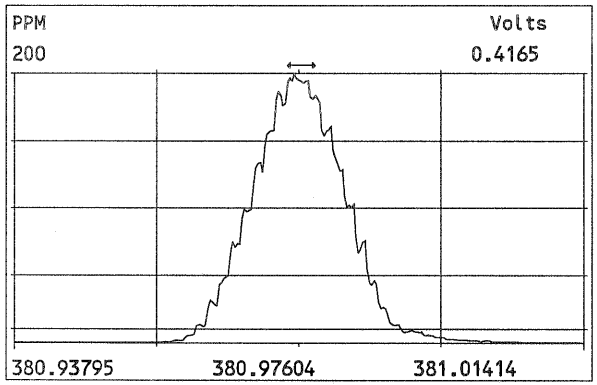


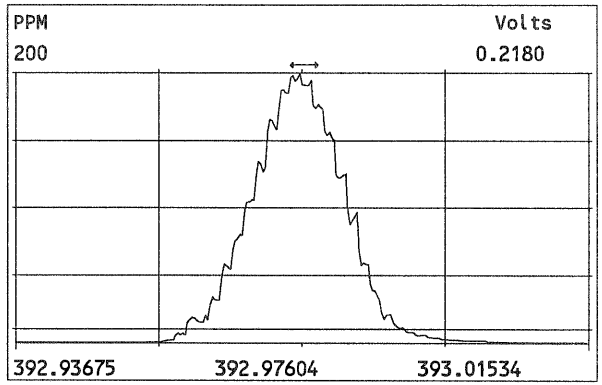


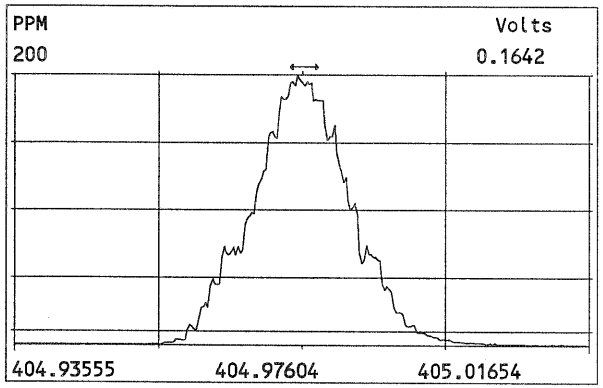


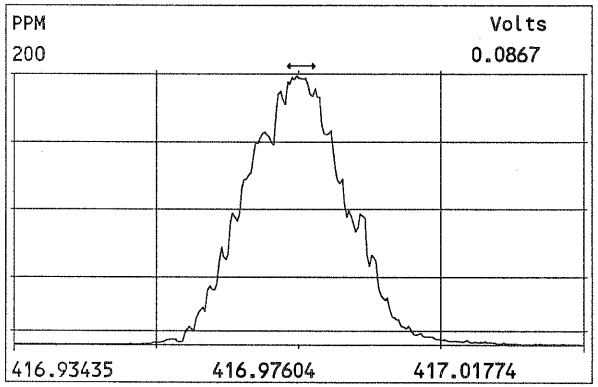
Peak Locate Examination:24-AUG-2010:09:54 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

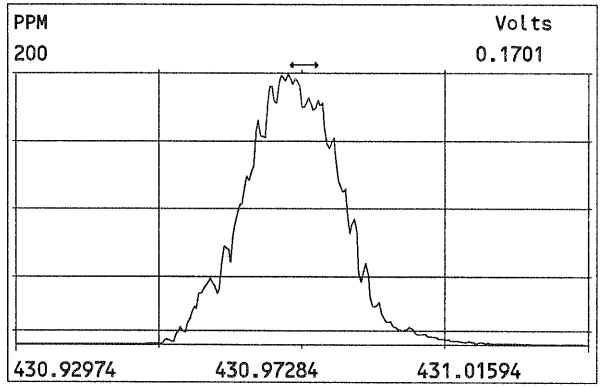


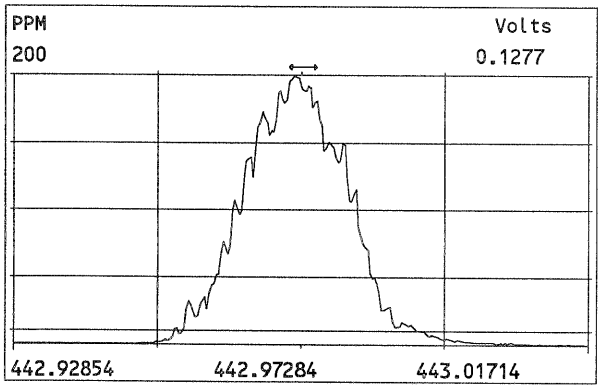


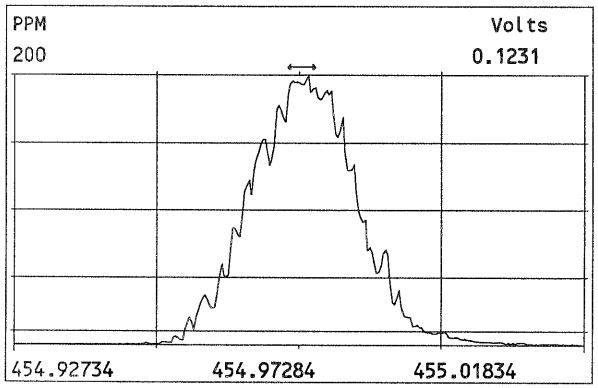




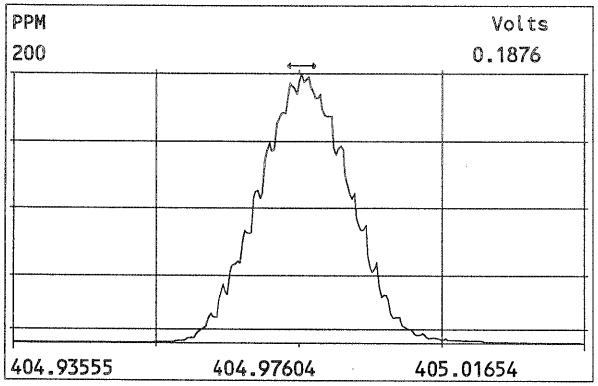


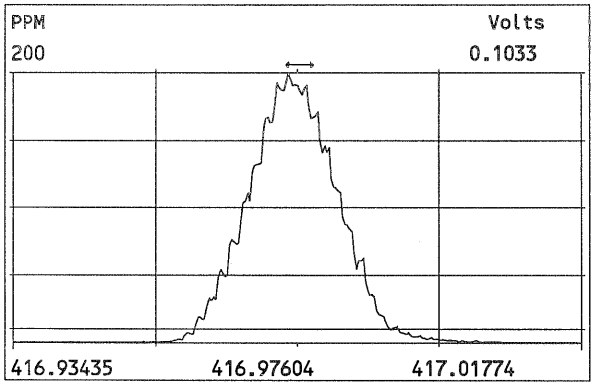


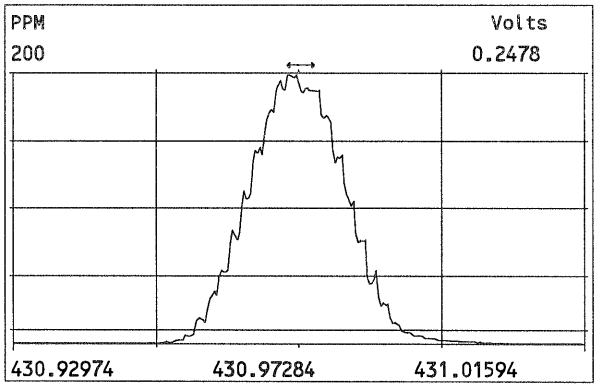


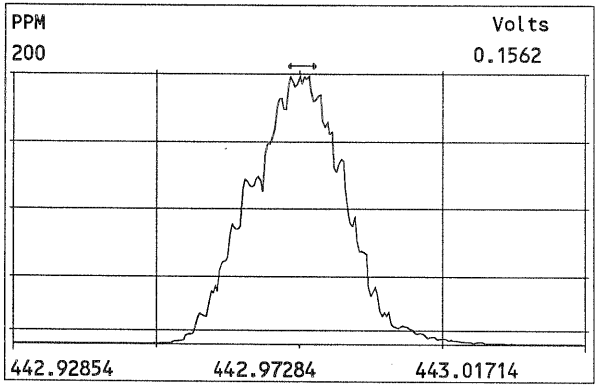


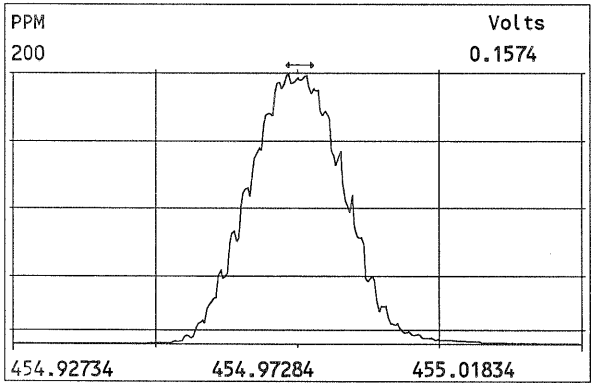
Peak Locate Examination:24-AUG-2010:09:56 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

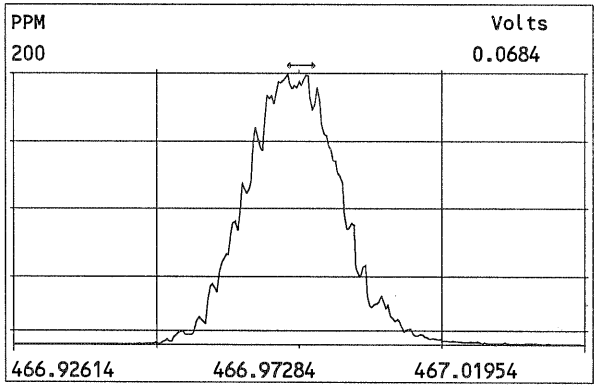


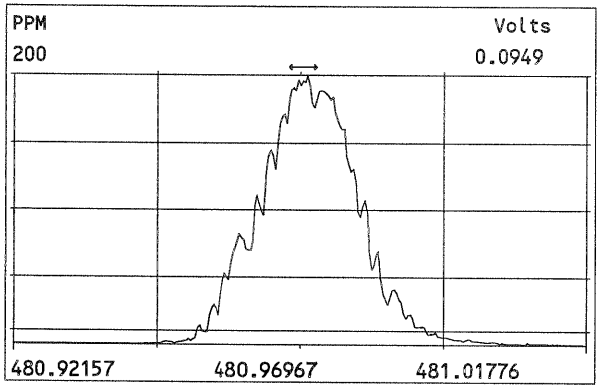




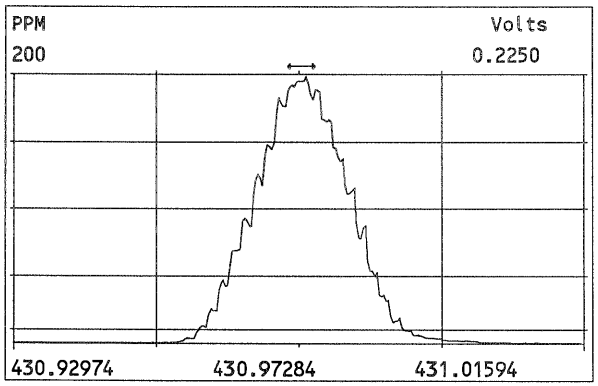


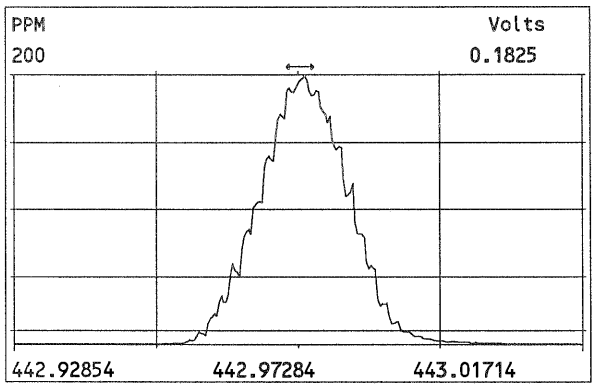


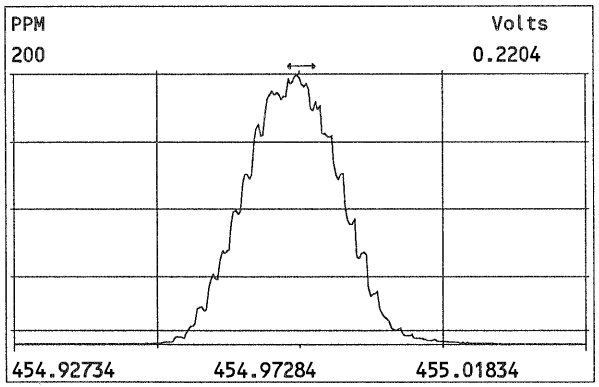


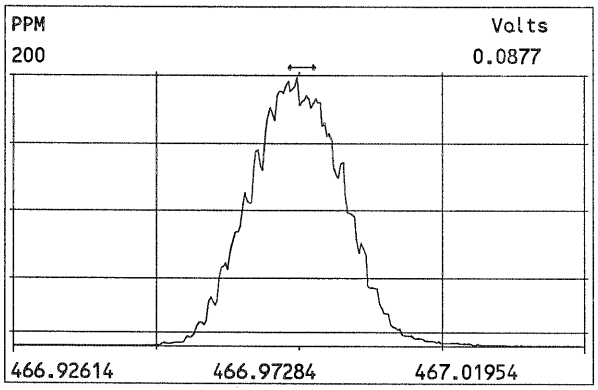


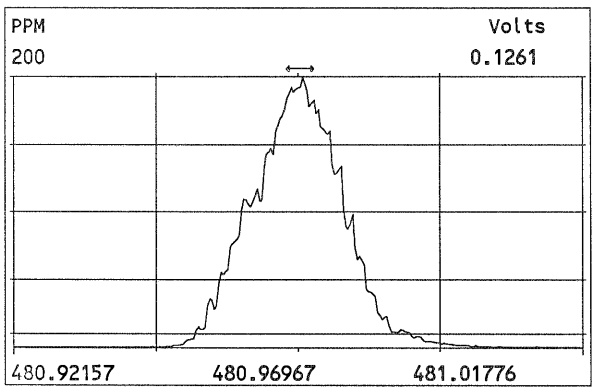
Peak Locate Examination:24-AUG-2010:09:58 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

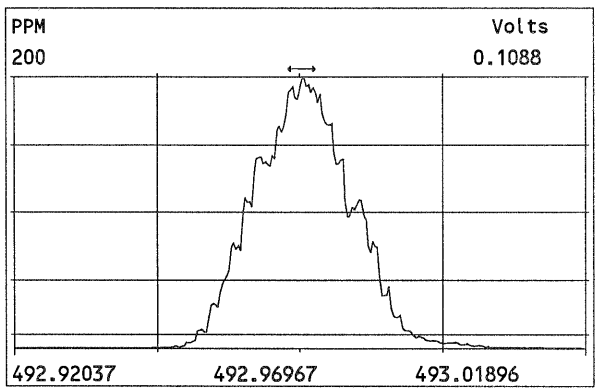


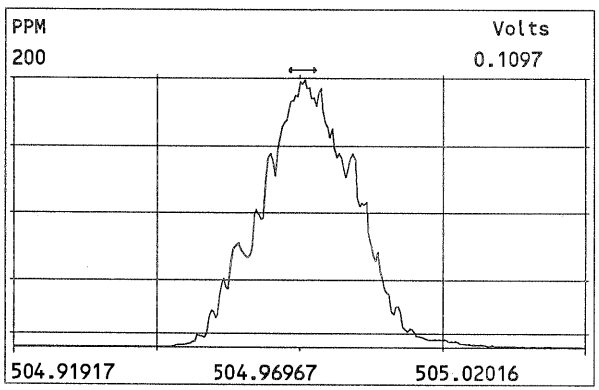


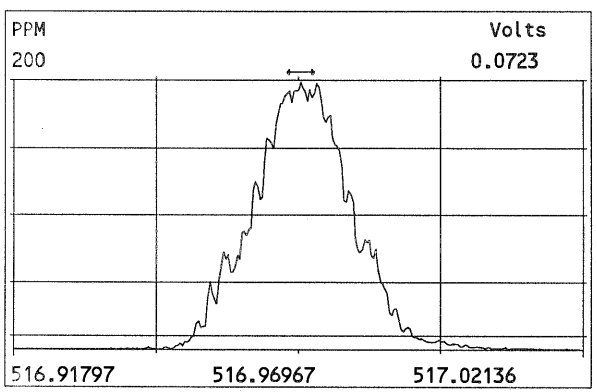












Frontier Analytical Laboratory

Data Filename: 16SEP10M

Analyte: TCDFFAL3-9-16-10 Cal: TCDFFAL3-9-16-10

Name	RRF	S. D.	%RSD	S1 RRF#1	S2 RRF#2	S3 RRF#3	S4 RRF#4	S5 RRF#5
2,3,7,8-TCDF	1.28	0.113	8.82 %	1.19	1.42	1.37	1.21	1.19
13C-2,3,7,8-TCDF	1.10	0.0824	7.52 %	1.06	1.03	1.05	1.24	1.10
13C-1,2,3,4-TCDF	-	-	- %	-	-	-	-	-

Analyst: _____ Date: 9/17/10

Run #2 Filename 16SEP10M S: 2 Acquired: 16-SEP-10 15:28:03 Cal: TCDFFAL3-9-16-10
Client ID: ST091610M1 Analyte: FAL ID: 1613 CS1 100511H

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDF	0.50	4.80e+05	0.66	y	19:29	-	1.42	y
2	IS	13C-2,3,7,8-TCDF	100.00	6.75e+07	0.86	y	19:28	-	1.03	y
3	RS	13C-1,2,3,4-TCDF	100.00	6.52e+07	0.88	y	16:49	6.52e+05	-	n

Analyst: _____ Date: 9/17/10

Run #3 Filename 16SEP10M S: 3 Acquired: 16-SEP-10 16:05:52 Cal: TCDFFAL3-9-16-10
Client ID: ST091610M2 Analyte: FAL ID: 1613 CS2 100511I

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDF	2.00	1.80e+06	0.66	y	19:28	-	1.37	y
2	IS	13C-2,3,7,8-TCDF	100.00	6.55e+07	0.86	y	19:26	-	1.05	y
3	RS	13C-1,2,3,4-TCDF	100.00	6.24e+07	0.88	y	16:47	6.24e+05	-	n

Analyst:  Date: 9/17/10

Run #1 Filename 16SEP10M S: 1 Acquired: 16-SEP-10 14:50:15 Cal: TCDFFAL3-9-16-10
Client ID: ST091610M3 Analyte: FAL ID: 1613 CS3 100511J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDF	10.00	8.19e+06	0.66 y	19:29	-	1.19	y
2	IS	13C-2,3,7,8-TCDF	100.00	6.90e+07	0.87 y	19:28	-	1.06	y
3	RS	13C-1,2,3,4-TCDF	100.00	6.53e+07	0.87 y	16:49	6.53e+05	-	n

Analyst: _____ Date: 9/17/10

Run #4 Filename 16SEP10M S: 4 Acquired: 16-SEP-10 16:43:45 Cal: TCDFFAL3-9-16-10
Client ID: ST091610M4 Analyte: FAL ID: 1613 CS4 100511K

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDF	40.00	3.66e+07	0.67 y	19:28	-	1.21	y
2	IS	13C-2,3,7,8-TCDF	100.00	7.58e+07	0.87 y	19:26	-	1.24	y
3	RS	13C-1,2,3,4-TCDF	100.00	6.14e+07	0.87 y	16:48	6.14e+05	-	n

Analyst: _____ Date: 9/17/10

Run #5 Filename 16SEP10M S: 5 Acquired: 16-SEP-10 17:21:38 Cal: TCDFFAL3-9-16-10
Client ID: ST091610M5 Analyte: FAL ID: 1613 CS5 100511L

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDF	200.00	1.59e+08	0.66	y	19:27	-	1.19	y
2	IS	13C-2,3,7,8-TCDF	100.00	6.66e+07	0.87	y	19:25	-	1.10	y
3	RS	13C-1,2,3,4-TCDF	100.00	6.05e+07	0.88	y	16:47	6.05e+05	-	n

Analyst: _____ Date: 9/17/10

USEPA - ITD

FORM 3A
TCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 9/16/10

Instrument ID: FAL1 GC Column ID: DB225

CS1 Data Filename: 16SEP10M S1 CS4 Data Filename: 16SEP10M S4

CS2 Data Filename: 16SEP10M S2 CS5 Data Filename: 16SEP10M S5

CS3 Data Filename: 16SEP10M S3

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5		
NATIVE ANALYTES							
2,3,7,8-TCDF	1.19	1.42	1.37	1.21	1.19	1.28	8.82
LABELED COMPOUNDS							
13C-2,3,7,8-TCDF	1.06	1.03	1.05	1.24	1.10	1.10	7.52

Analyst: _____ Date: 9/17/10

USEPA - ITD

FORM 4A
TCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 9/16/10

Instrument ID: FAL1 GC Column ID: DB225

VER Data Filename: 16SEP10M Sam:1 Analysis Date: 16-SEP-10 Time: 14:50:15

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-TCDF	M/M+2	0.66	0.65-0.89	y	9.31	8.40 - 12.0
LABELED COMPOUNDS						
13C-2,3,7,8-TCDF	M/M+2	0.87	0.65-0.89	y	96.4	71.0 - 140

(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

Analyst: _____ Date: 9/17/10

TCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL1 Initial Calibration Date: 9/16/10

RT Window Data Filename: 16SEP10M Sam:1 Analysis Date: 16-SEP-10 Time: 14:50:15

DB-5 IS Date Filename: Analysis Date: Time:

DB-225 IS Data Filename: 16SEP10M Sam:1 Analysis Date: 16-SEP-10 Time: 14:50:15

DB-225 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT
1,3,6,8-TCDF (F)	13:25
1,2,8,9-TCDF (L)	22:03

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25%.

Analyst: _____ Date: 9/17/10

FAL ID: ST091610M3 Filename: 16SEP10M Sam:1 Acquired: 16-SEP-10 14:50:15 ICal: TCDFFAL3-9-16-10
Client ID: 1613 CS3 100511J ConCal: ST091610M3 EndCal: ST091610M6
Results: GC Column: DB225 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	#Hom	Rec
2,3,7,8-TCDF	8.19e+06	0.66 y	19:29	1.28	9.31		2.50	-	-	1	
13C-2,3,7,8-TCDF	6.90e+07	0.87 y	19:28	1.10	96.4						96.4
13C-1,2,3,4-TCDF	6.53e+07	0.87 y	16:49	-	104						

Analyst: _____ Date: 9/17/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:16SEP10M Instrument: FAL3 GC: DB225 Experiment:TCDF

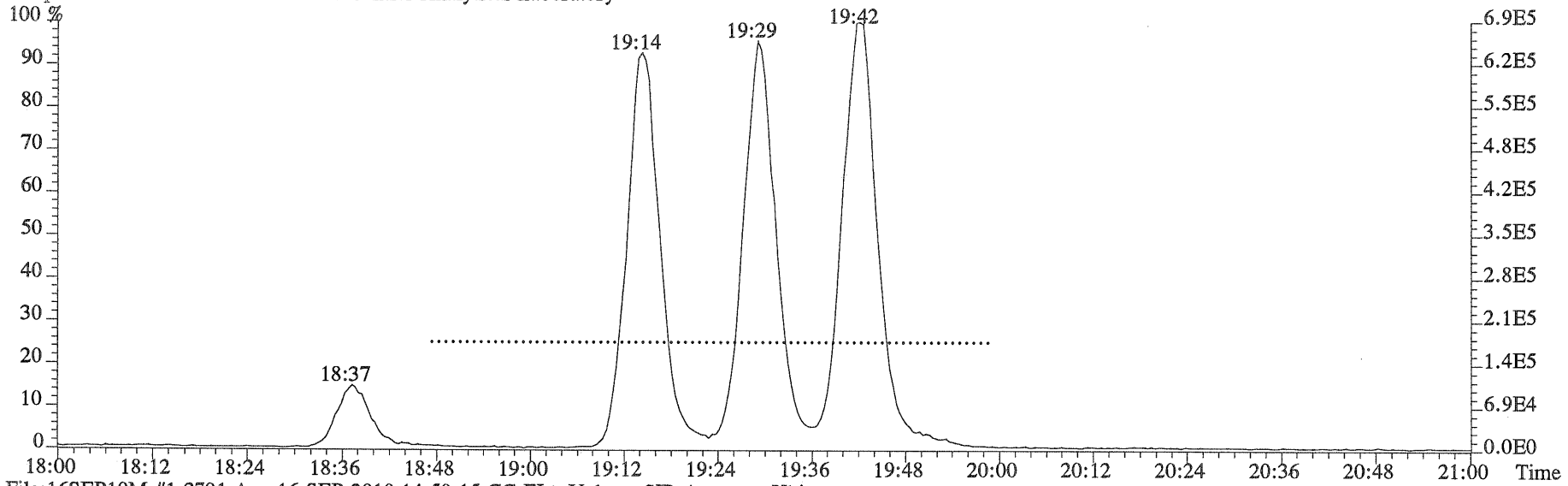
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
16SEP10M	1	ST091610M3	1613 CS3 100511J	16-SEP-10 14:50:15	ST091610M3	ST091610M6	TC
16SEP10M	2	ST091610M1	1613 CS1 100511H	16-SEP-10 15:28:03	NA	NA	TC
16SEP10M	3	ST091610M2	1613 CS2 100511I	16-SEP-10 16:05:52	NA	NA	TC
16SEP10M	4	ST091610M4	1613 CS4 100511K	16-SEP-10 16:43:45	NA	NA	TC
16SEP10M	5	ST091610M5	1613 CS5 100511L	16-SEP-10 17:21:38	NA	NA	TC
16SEP10M	6	SB091610M1	Solvent Blank	16-SEP-10 17:59:27	NA	NA	TC
16SEP10M	7	6327-003-0001-SA	MW-28	16-SEP-10 18:37:16	ST091610M3	ST091610M6	TC
16SEP10M	8	6327-004-0001-SA	MW-29	16-SEP-10 19:15:04	ST091610M3	ST091610M6	TC
16SEP10M	9	6327-006-0001-SA	MW-51	16-SEP-10 19:52:53	ST091610M3	ST091610M6	TC
16SEP10M	10	6329-011-0001-SA	PZ-2	16-SEP-10 20:30:43	ST091610M3	ST091610M6	TC
16SEP10M	11	6331-006-0001-SA	PSB16-0-0.5-082510	16-SEP-10 21:08:31	ST091610M3	ST091610M6	TC
16SEP10M	12	6332-003-0001-SA	PSB18-0-0.5-082610	16-SEP-10 21:46:20	ST091610M3	ST091610M6	TC
16SEP10M	13	SB091610M2	Solvent Blank	16-SEP-10 22:24:09	ST091610M3	ST091610M6	TC
16SEP10M	14	ST091610M6	1613 CS3 100511J	16-SEP-10 23:01:57	ST091610M3	ST091610M6	TC

9/17/10

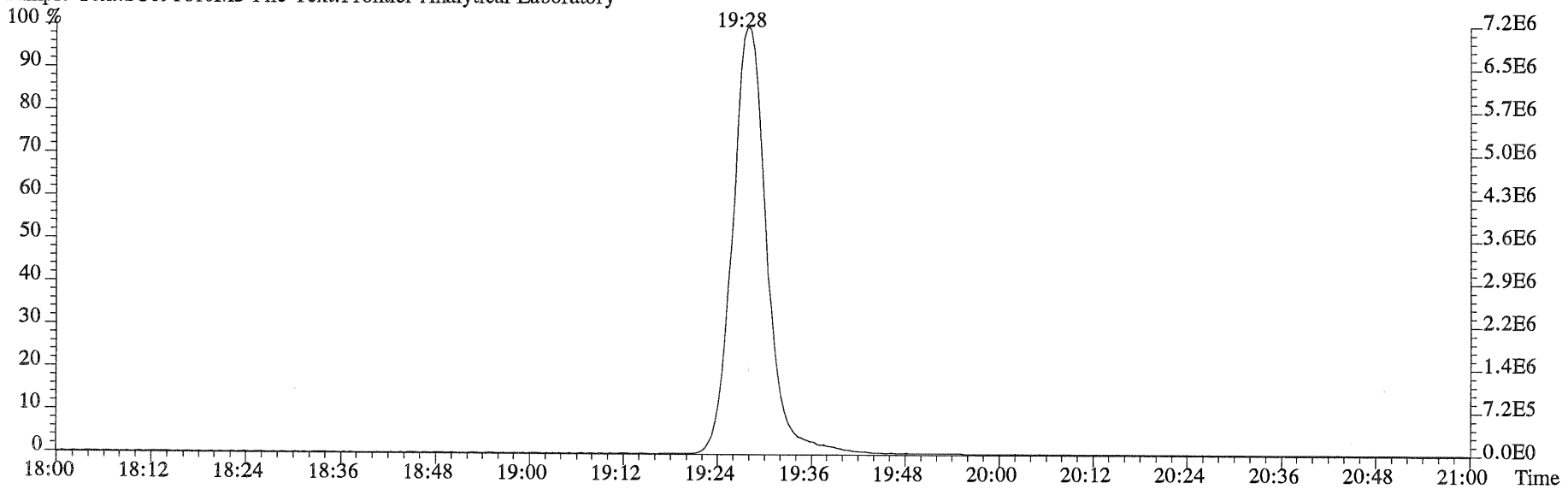
Data Backed Up:_____

Date:_____

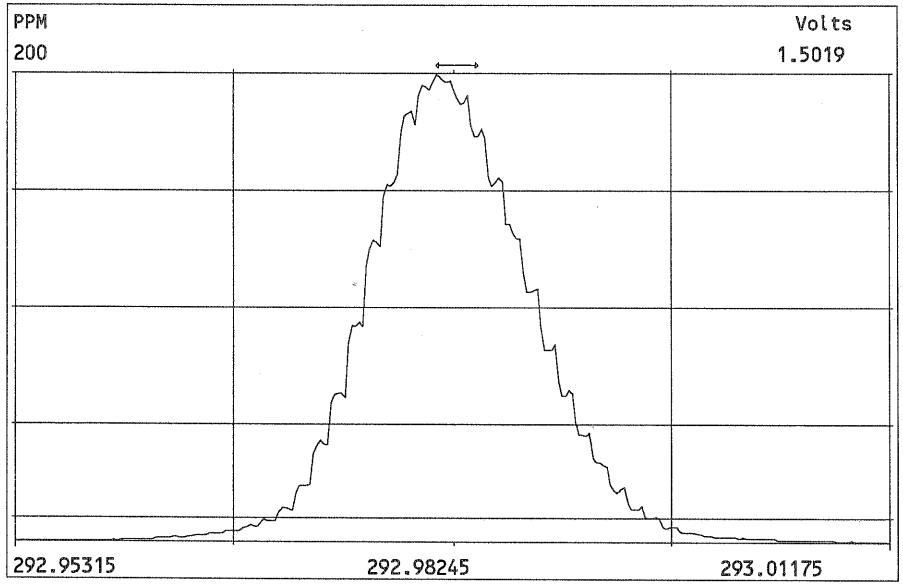
File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
303.9016 Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory

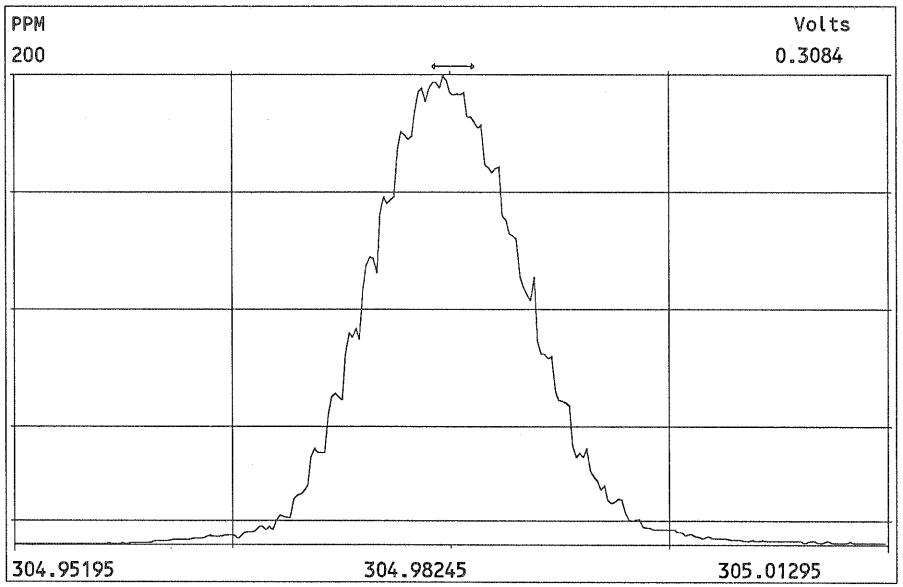


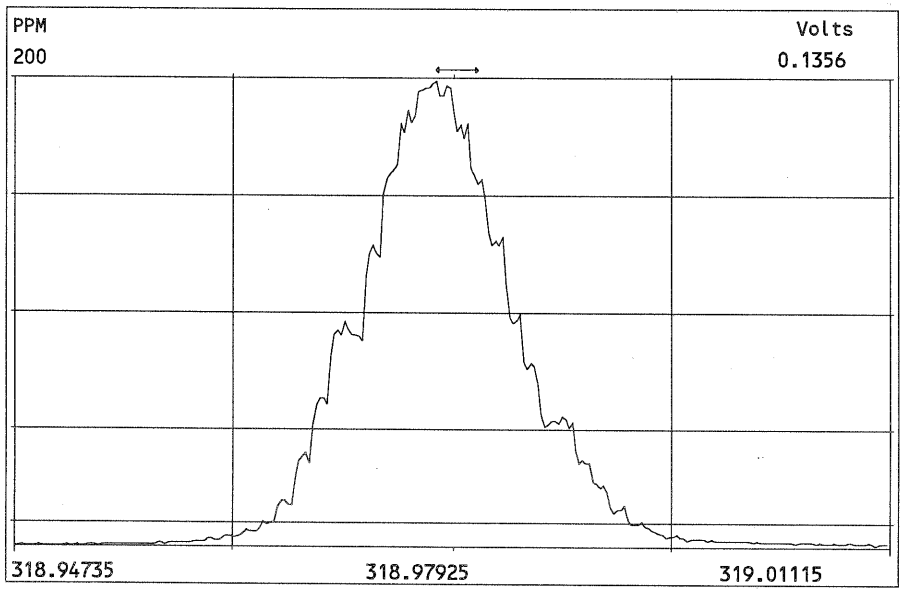
File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
317.9389 Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory

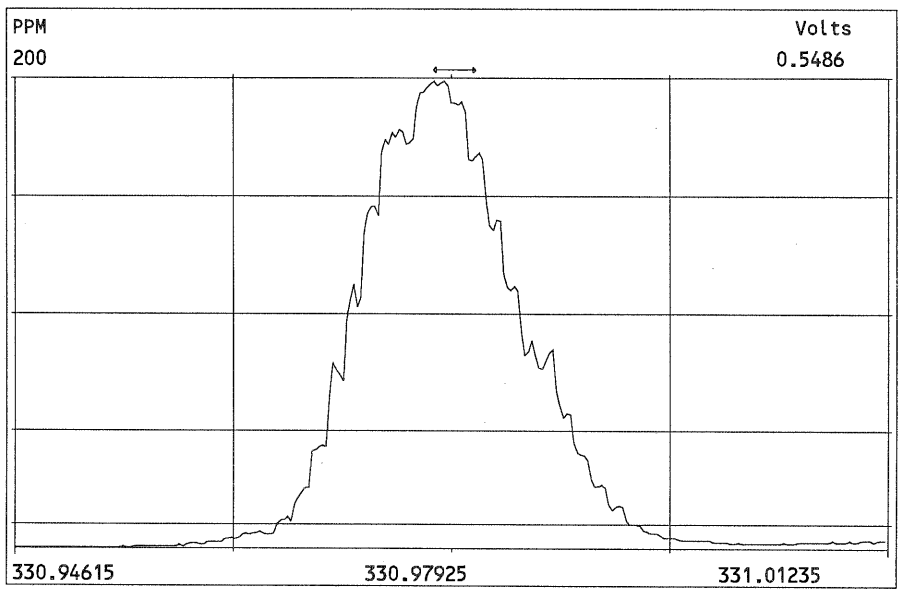


Peak Locate Examination:16-SEP-2010:14:50 File:16SEP10M
Experiment:TCDF Function:1 Reference:PFK

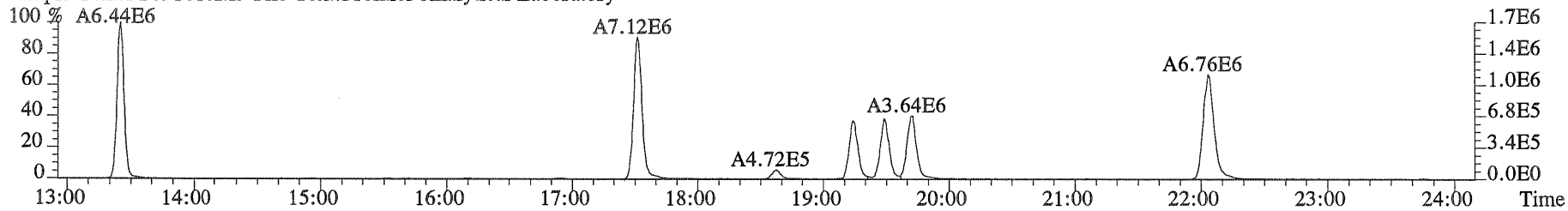




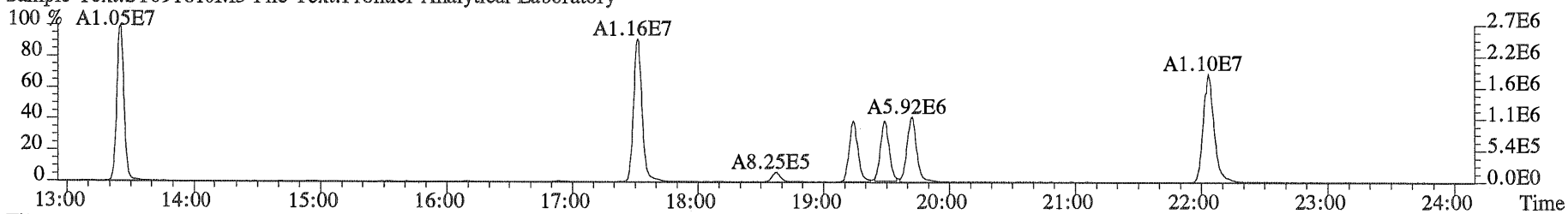




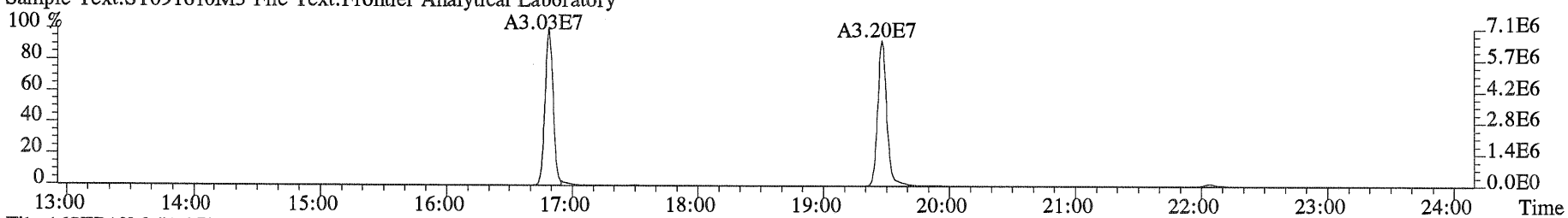
File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
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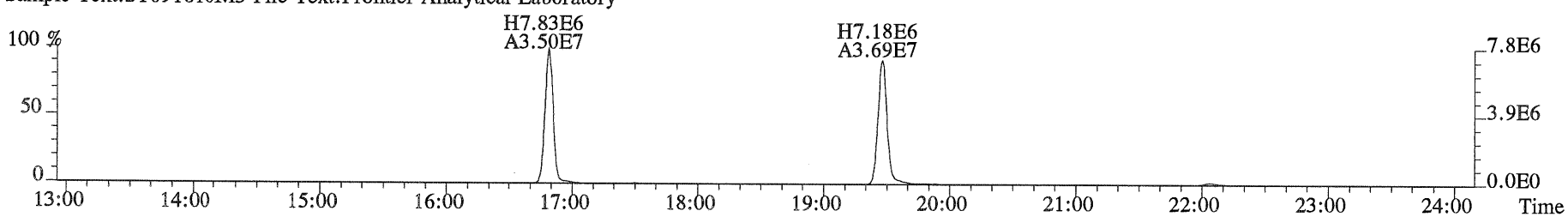
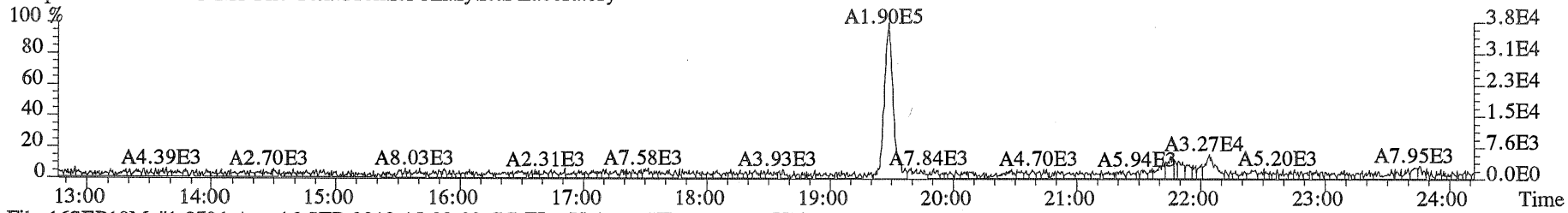
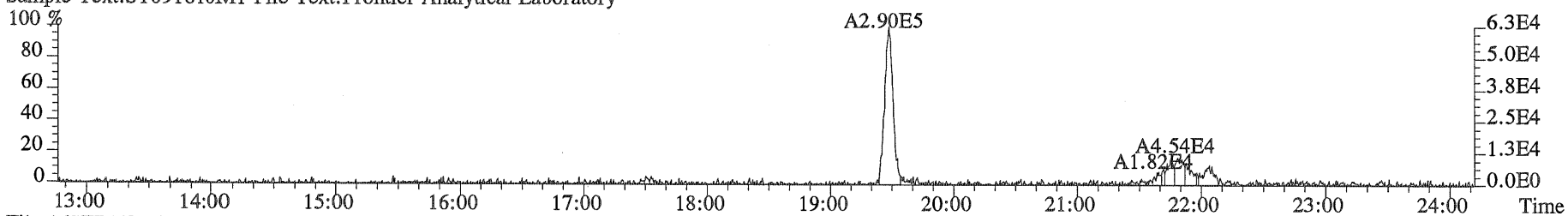
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



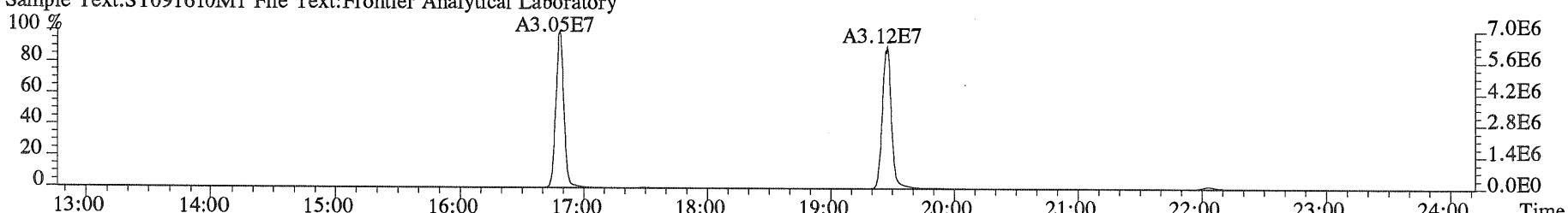
File:16SEP10M #1-2701 Acq:16-SEP-2010 15:28:03 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M1 File Text:Frontier Analytical Laboratory



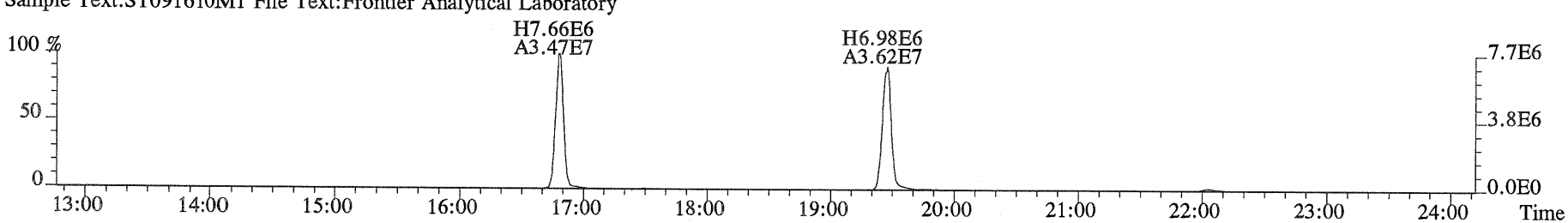
File:16SEP10M #1-2701 Acq:16-SEP-2010 15:28:03 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,0.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M1 File Text:Frontier Analytical Laboratory



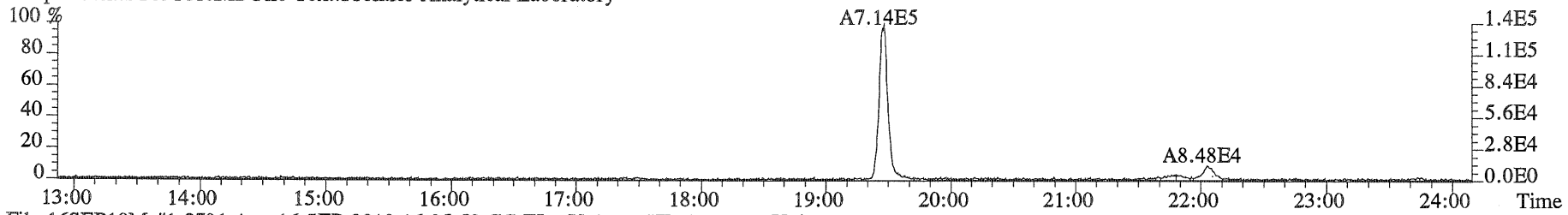
File:16SEP10M #1-2701 Acq:16-SEP-2010 15:28:03 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M1 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 15:28:03 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M1 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 16:05:52 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M2 File Text:Frontier Analytical Laboratory



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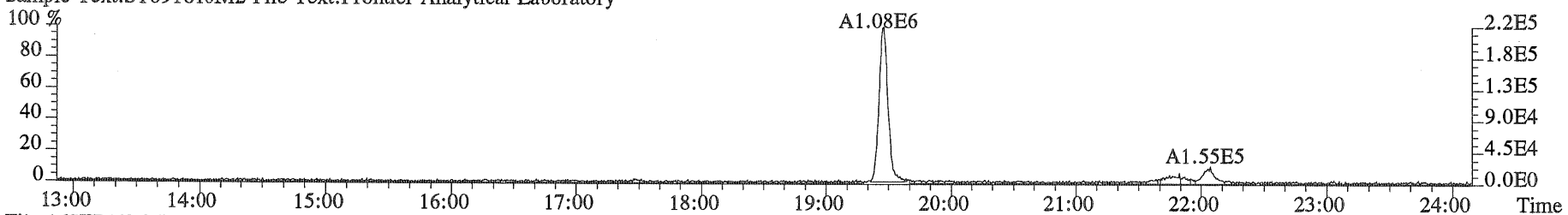
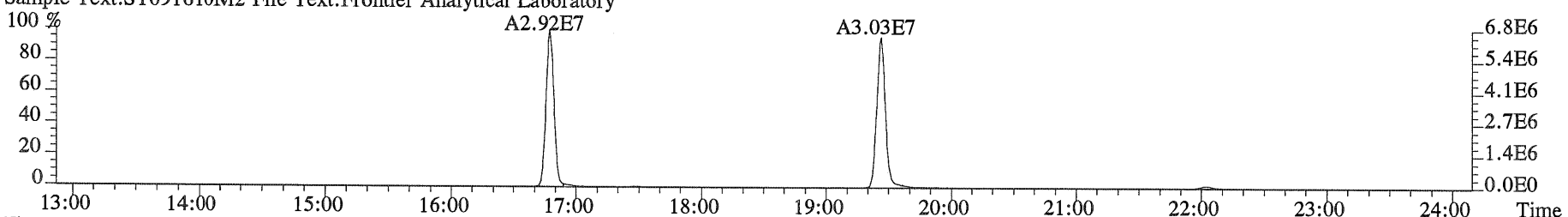
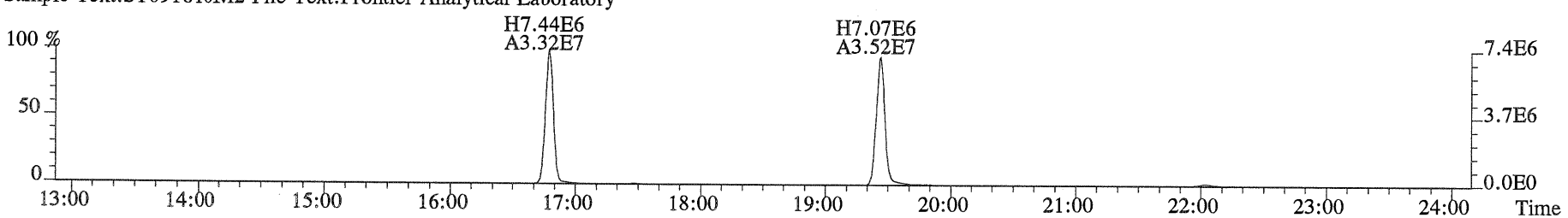
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M2 File Text:Frontier Analytical Laboratory



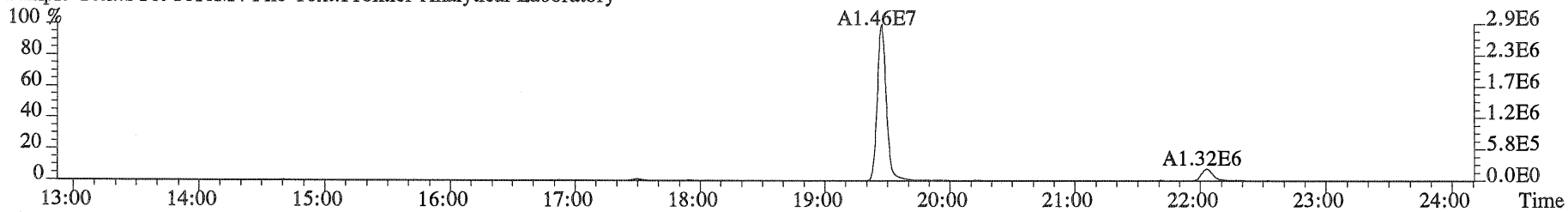
File:16SEP10M #1-2701 Acq:16-SEP-2010 16:05:52 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M2 File Text:Frontier Analytical Laboratory



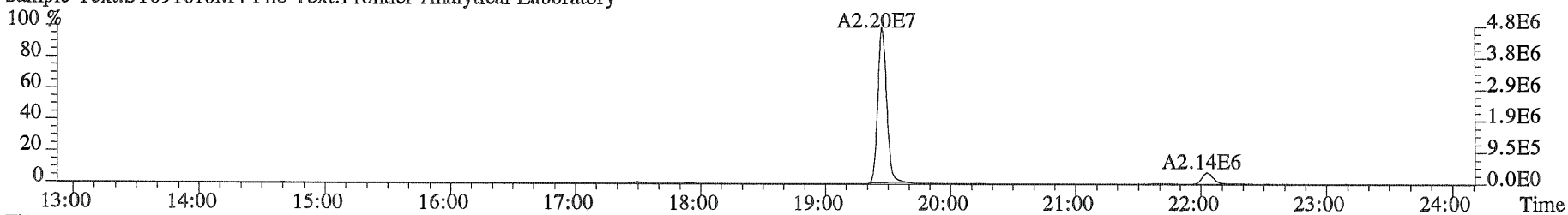
File:16SEP10M #1-2701 Acq:16-SEP-2010 16:05:52 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M2 File Text:Frontier Analytical Laboratory



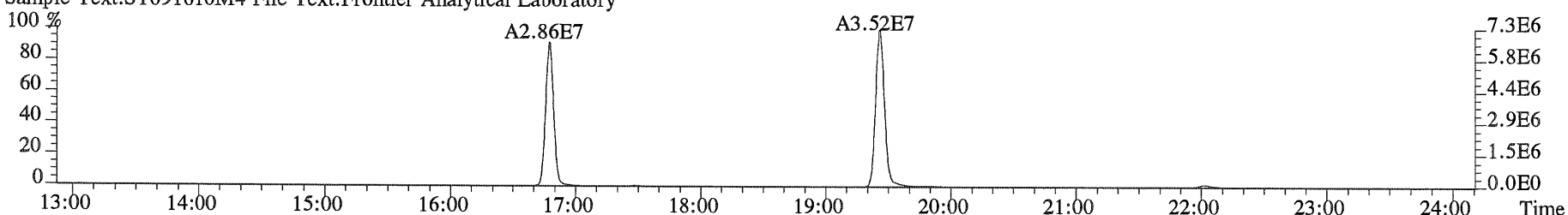
File:16SEP10M #1-2701 Acq:16-SEP-2010 16:43:45 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M4 File Text:Frontier Analytical Laboratory



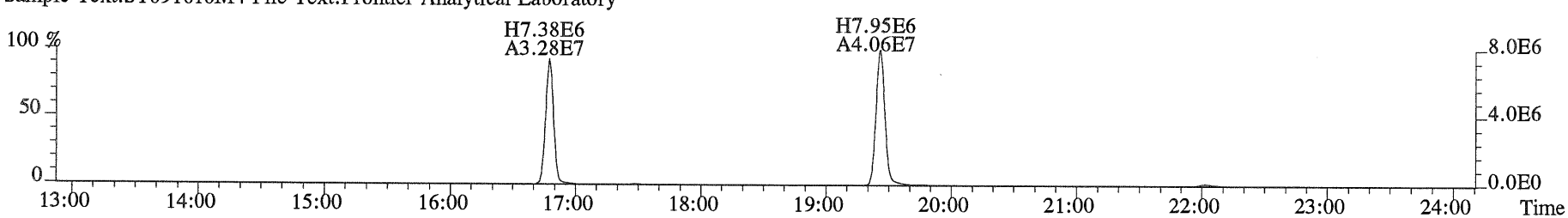
File:16SEP10M #1-2701 Acq:16-SEP-2010 16:43:45 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M4 File Text:Frontier Analytical Laboratory



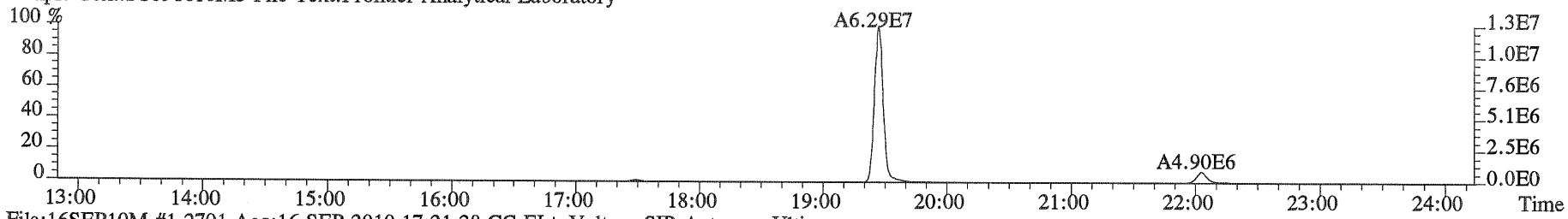
File:16SEP10M #1-2701 Acq:16-SEP-2010 16:43:45 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M4 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 16:43:45 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M4 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 17:21:38 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M5 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 17:21:38 GC EI+ Voltage SIR Autospec-Ultima
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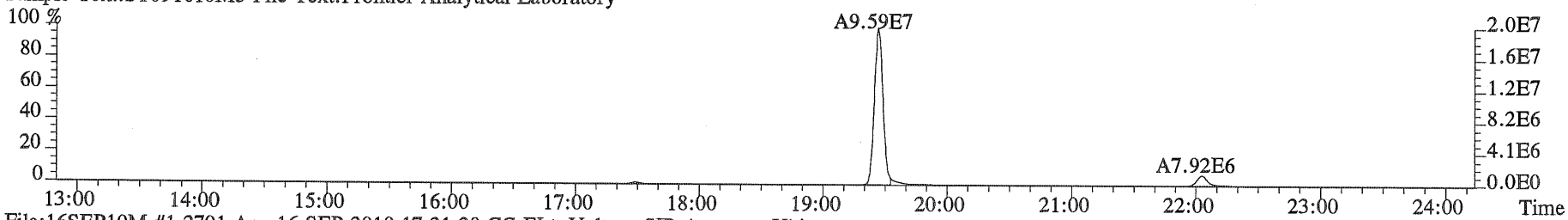
Sample Text:ST091610M5 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 17:21:38 GC EI+ Voltage SIR Autospec-Ultima
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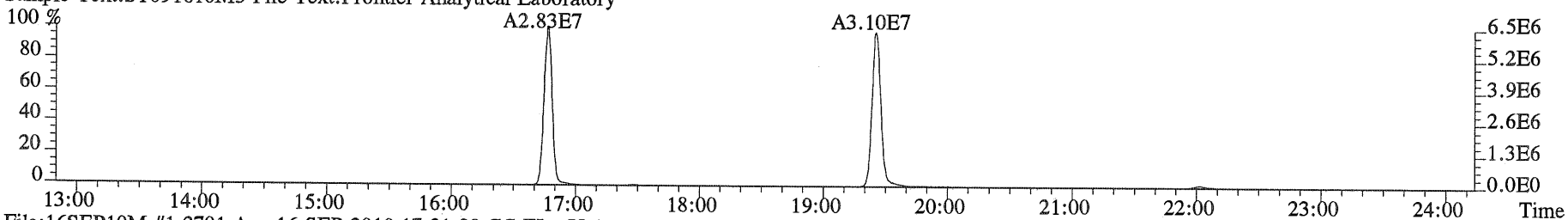
Sample Text:ST091610M5 File Text:Frontier Analytical Laboratory



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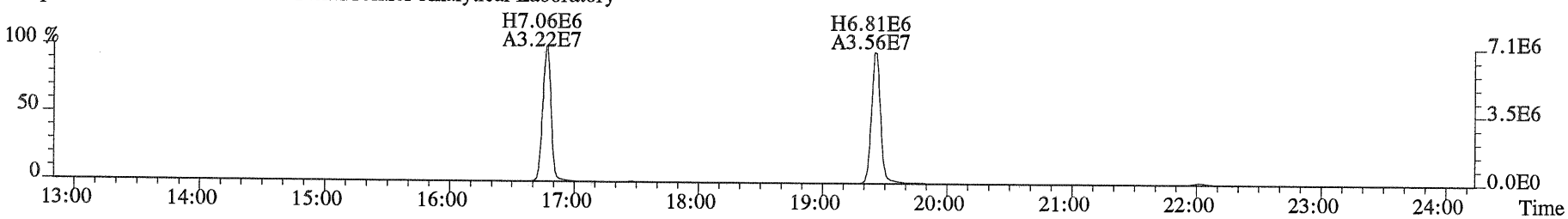
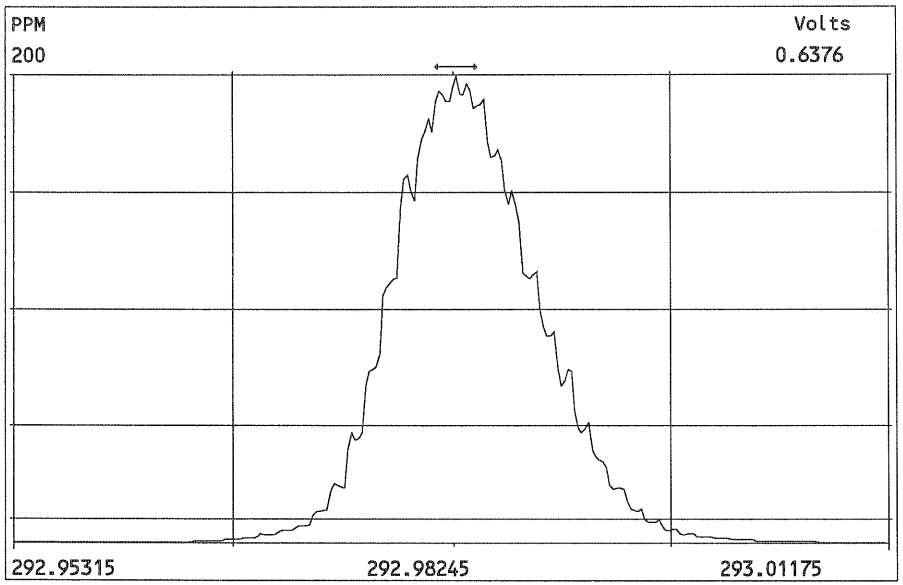
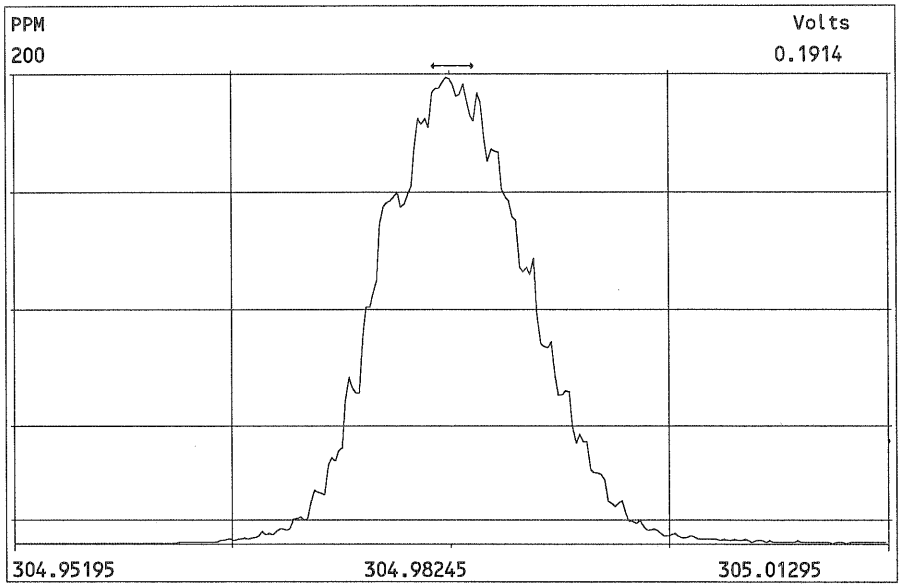
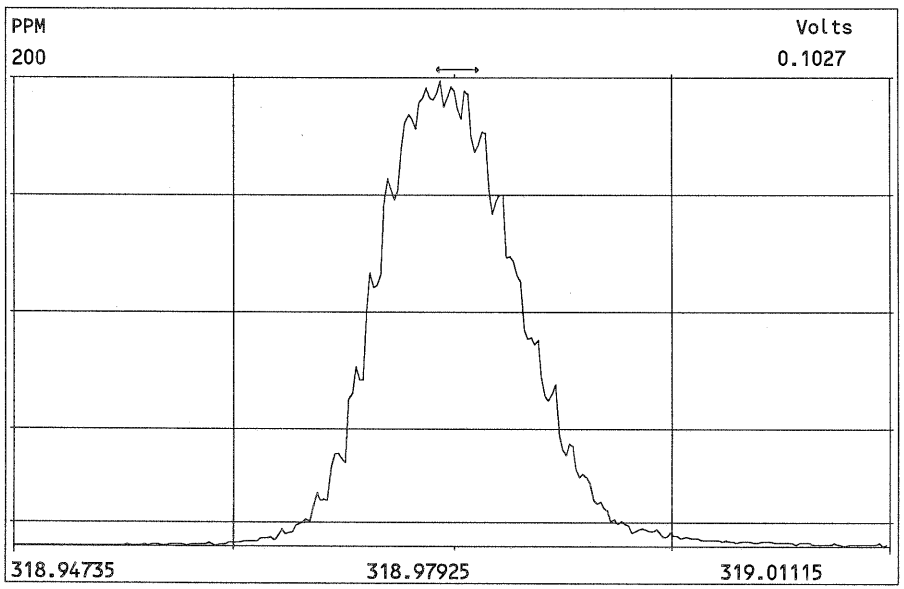
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M5 File Text:Frontier Analytical Laboratory

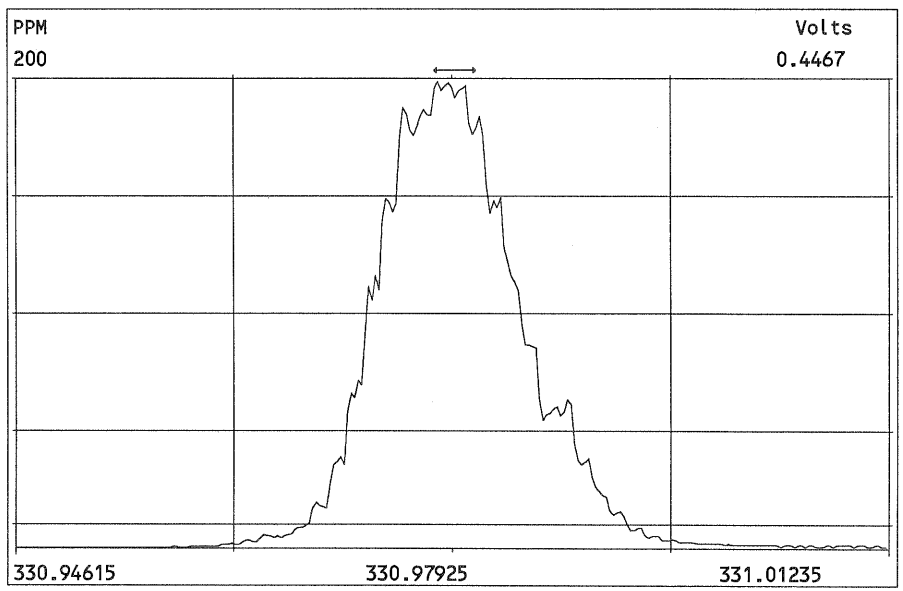


Peak Locate Examination:16-SEP-2010:23:33 File:16SEP10M_RES_CHECK
Experiment:TCDF Function:1 Reference:PFK









USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 14SEP10M Sam:1 Analysis Date: 14-SEP-10 19:17:53

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	11.2	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.50	1.32-1.78	y	49.7	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.36	1.05-1.43	y	46.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.38	1.05-1.43	y	46.3	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.39	1.05-1.43	y	49.4	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.92	0.88-1.20	y	44.4	43.0 - 58.0
OCDD	M+2/M+4	0.97	0.76-1.02	y	98.3	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.66	0.65-0.89	y	9.00	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	47.4	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	y	46.3	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.18	1.05-1.43	y	45.8	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.16	1.05-1.43	y	44.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.17	1.05-1.43	y	45.0	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.19	1.05-1.43	y	45.5	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	45.3	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.88-1.20	y	45.9	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	89.6	63.0 - 159

(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.

Analyst: _____ Date: 9/15/10

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 14SEP10M Sam:1 Analysis Date: 14-SEP-10 19:17:53

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.85	0.65-0.89	y	94.0	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.77	1.32-1.78	y	121	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	97.9	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	101	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.90	0.88-1.20	y	105	72.0 - 138
13C-OCDD	M+2/M+4	0.96	0.76-1.02	y	210	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.88	0.65-0.89	y	102	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.74	1.32-1.78	y	110	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.72	1.32-1.78	y	113	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.46	0.43-0.59	y	81.2	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	87.6	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	86.5	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.48	0.43-0.59	y	88.6	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	83.9	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	86.6	77.0 - 129
13C-OCDF	M+2/M+4	0.98	0.76-1.02	y	195	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.23	7.80 - 12.8

(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) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 9/15/10

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: 623032 SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 8/23/10

RT Window Data Filename: 14SEP10M Sam:1 Analysis Date: 14-SEP-10 Time: 19:17:53

DB-5 IS Data Filename: 14SEP10M Sam:1 Analysis Date: 14-SEP-10 Time: 19:17:53

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:29	1,3,6,8-TCDF (F)	23:08
1,2,8,9-TCDD (L)	28:25	1,2,8,9-TCDF (L)	28:40
1,2,4,7,9-PeCDD (F)	30:20	1,3,4,6,8-PeCDF (F)	28:30
1,2,3,8,9-PeCDD (L)	33:53	1,2,3,8,9-PeCDF (L)	34:19
1,2,4,6,7,9-HxCDD (F)	36:13	1,2,3,4,6,8-HxCDF (F)	35:21
1,2,3,7,8,9-HxCDD (L)	39:17	1,2,3,7,8,9-HxCDF (L)	39:53
1,2,3,4,6,7,9-HpCDD (F)	42:54	1,2,3,4,6,7,8-HpCDF (F)	42:23
1,2,3,4,6,7,8-HpCDD (L)	44:18	1,2,3,4,7,8,9-HpCDF (L)	45:13

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature] Date: 9/15/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 14-SEP-10 19:17:53 CS3 or VER Data Filename: 14SEP10M Sam:1

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
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
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			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.238	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.173	0.923-1.203
13C-2,3,4,7,8-PeCDF		1.222	0.923-1.303

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 9/15/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 14-SEP-10 19:17:53 CS3 or VER Data Filename: 14SEP10M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
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-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
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	1.001	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
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.269	1.032-1.311
13C-OCDF		1.279	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 9/15/10

FAL ID: ST091410M1 Filename: 14SEP10M Sam:1 Acquired: 14-SEP-10 19:17:53 ICal: PCDDFAL3-8-23-10
Client ID: 1613 CS3 (100511J) ConCal: ST091410M1 EndCal: ST091410M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 96.4
WHO 1998 Tox: 121 WHO 2005 Tox: 111

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	3.56e+06	0.76 y	27:30	1.11	11.2		2.50	-	-	*
1,2,3,7,8-PeCDD	1.66e+07	1.50 y	33:19	1.10	49.7		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.45e+07	1.36 y	38:41	1.37	46.9		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.39e+07	1.38 y	38:51	1.37	46.3		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.49e+07	1.39 y	39:17	1.36	49.4		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	1.23e+07	0.92 y	44:18	1.45	44.4		2.50	-	-	*
OCDD	1.73e+07	0.97 y	49:52	1.43	98.3		2.50	-	-	*
2,3,7,8-TCDF	6.17e+06	0.66 y	26:44	1.50	9.00		2.50	-	-	*
1,2,3,7,8-PeCDF	1.85e+07	1.57 y	31:35	0.94	47.4		2.50	-	-	*
2,3,4,7,8-PeCDF	1.79e+07	1.54 y	32:54	0.94	46.3		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.37e+07	1.18 y	37:18	0.93	45.8		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.73e+07	1.16 y	37:29	0.82	44.4		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.54e+07	1.17 y	38:26	0.92	45.0		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.75e+07	1.19 y	39:53	1.00	45.5		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.25e+07	1.01 y	42:23	1.39	45.3		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	9.28e+06	1.00 y	45:13	1.36	45.9		2.50	-	-	*
OCDF	1.59e+07	0.90 y	50:16	0.79	89.6		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.86e+07	0.85 y	27:28	1.02	94.0					94.0
13C-1,2,3,7,8-PeCDD	3.03e+07	1.77 y	33:17	0.84	121					121
13C-1,2,3,4,7,8-HxCDD	2.25e+07	1.25 y	38:40	1.07	97.9					97.9
13C-1,2,3,6,7,8-HxCDD	2.19e+07	1.26 y	38:49	1.01	101					101
13C-1,2,3,4,6,7,8-HpCDD	1.92e+07	0.90 y	44:16	0.86	105					105
13C-OCDD	2.46e+07	0.96 y	49:51	0.55	210					105
13C-2,3,7,8-TCDF	4.57e+07	0.88 y	26:43	0.99	102					102
13C-1,2,3,7,8-PeCDF	4.13e+07	1.74 y	31:34	0.84	110					110
13C-2,3,4,7,8-PeCDF	4.12e+07	1.72 y	32:53	0.81	113					113
13C-1,2,3,4,7,8-HxCDF	3.22e+07	0.46 y	37:16	1.85	81.2					81.2
13C-1,2,3,6,7,8-HxCDF	4.75e+07	0.48 y	37:28	2.54	87.6					87.6
13C-2,3,4,6,7,8-HxCDF	3.73e+07	0.48 y	38:24	2.01	86.5					86.5
13C-1,2,3,7,8,9-HxCDF	3.85e+07	0.48 y	39:51	2.03	88.6					88.6
13C-1,2,3,4,6,7,8-HpCDF	1.99e+07	0.44 y	42:22	1.11	83.9					83.9
13C-1,2,3,4,7,8,9-HpCDF	1.49e+07	0.44 y	45:12	0.80	86.6					86.6
13C-OCDF	4.53e+07	0.98 y	50:14	1.08	195					97.6
37Cl-2,3,7,8-TCDD	1.88e+06		27:29	0.69	9.23					92.3
13C-1,2,3,4-TCDD	2.97e+07	0.84 y	26:54	-	66.1					
13C-1,2,3,4-TCDF	4.48e+07	0.87 y	25:37	-	62.0					
13C-1,2,3,7,8,9-HxCDD	2.14e+07	1.22 y	39:17	-	77.6					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.76e+07		22:55	1.11	55.5	2.50	-	-	*		16
Total Penta-Dioxins	3.56e+07		30:20	1.10	107	2.50	-	-	*		10
Total Hexa-Dioxins	4.96e+07		36:13	1.37	163	2.50	-	-	*		20
Total Hepta-Dioxins	2.56e+07		42:54	1.45	92.0	2.50	-	-	*		22
Total Tetra-Furans	2.45e+07		23:08	1.50	35.7	2.50	-	-	*		18
1st Fn. Tot Penta-Furans	2.08e+07		28:30	0.94	53.6	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.31e+07		30:17	0.94	137	2.50	-	-	*	191	16
Total Hexa-Furans	7.42e+07		35:20	0.91	210	2.50	-	-	*		7
Total Hepta-Furans	2.29e+07		42:23	1.38	95.8	2.50	-	-	*		26

Analyst: _____ Date: 9/15/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:14SEP10M Instrument: FAL3 GC: DB5 Experiment:PCDD

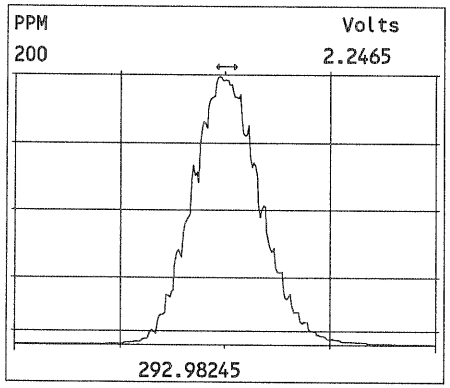
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
14SEP10M	1	ST091410M1	1613 CS3 (100511J)	14-SEP-10 19:17:53	ST091410M1	ST091410M2	TC
14SEP10M	2	2106-001-0001-OPR	OPR	14-SEP-10 20:13:14	ST091410M1	ST091410M2	TC
14SEP10M	3	2106-001-0001-MB	Method Blank	14-SEP-10 21:08:33	ST091410M1	ST091410M2	TC
14SEP10M	4	6331-001-0001-SA	PSB20-0-0.5-082510	14-SEP-10 22:03:52	ST091410M1	ST091410M2	TC
14SEP10M	5	6331-002-0001-SA	PSB20-2-4-082510	14-SEP-10 22:59:10	ST091410M1	ST091410M2	TC
14SEP10M	6	6331-003-0001-SA	PSB20-1.5-2-082510	14-SEP-10 23:54:29	ST091410M1	ST091410M2	TC
14SEP10M	7	6331-004-0001-SA	PSB20-2-4-082510-DUP	15-SEP-10 00:49:48	ST091410M1	ST091410M2	TC
14SEP10M	8	6331-005-0001-SA	PSB16-2-4-082510	15-SEP-10 01:45:07	ST091410M1	ST091410M2	TC
14SEP10M	9	6331-006-0001-SA	PSB16-0-0.5-082510	15-SEP-10 02:40:26	ST091410M1	ST091410M2	TC
14SEP10M	10	6331-008-0001-SA	PSB16-4-6-082510	15-SEP-10 03:35:44	ST091410M1	ST091410M2	TC
14SEP10M	11	6331-009-0001-SA	PSB16-13-15-082510	15-SEP-10 04:31:07	ST091410M1	ST091410M2	TC
14SEP10M	12	6331-007-0001-SA	PSB16-1-2-082510	15-SEP-10 05:26:26	ST091410M1	ST091410M2	TC
14SEP10M	13	6323-001-0001-SA	0081001-01	15-SEP-10 06:21:44	ST091410M1	ST091410M2	TC
14SEP10M	14	SB091410M1	Solvent Blank	15-SEP-10 07:17:02	ST091410M1	ST091410M2	TC
14SEP10M	15	ST091410M2	1613 CS3 (100511J)	15-SEP-10 08:12:21	ST091410M1	ST091410M2	TC

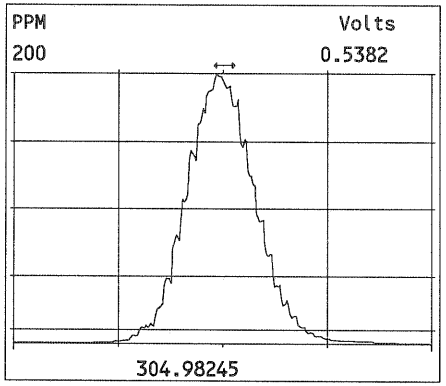
9/15/10

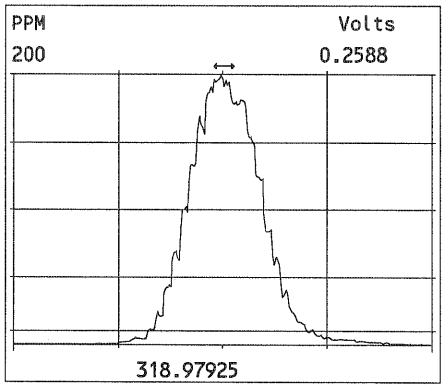
Data Backed Up:_____

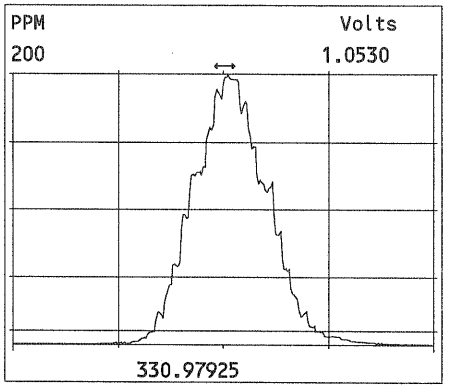
Date:_____

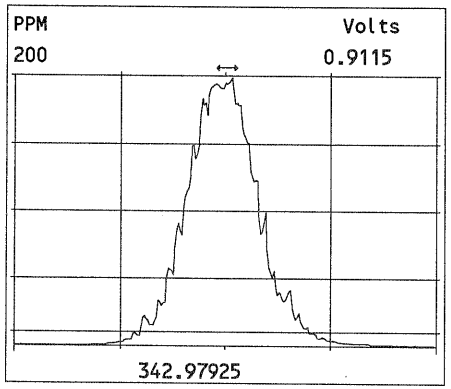
Peak Locate Examination:14-SEP-2010:19:16 File:14SEP10M
Experiment:PCDD Function:1 Reference:PFK

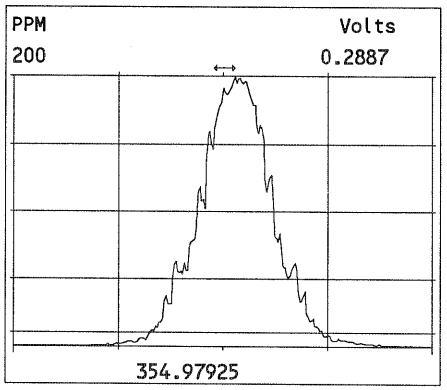


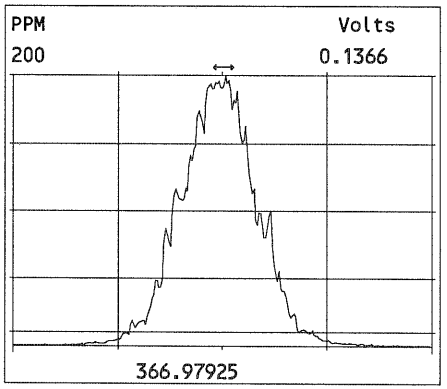


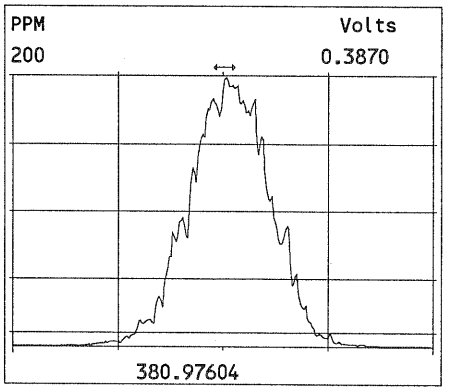


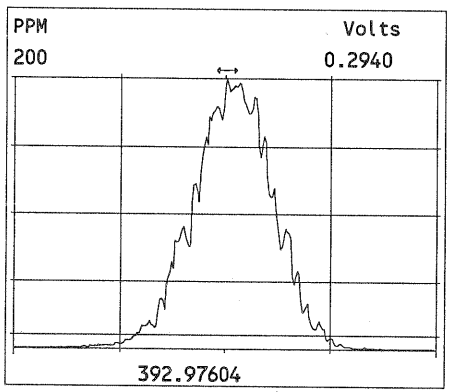


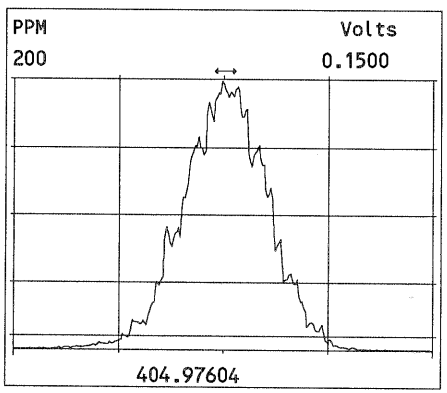


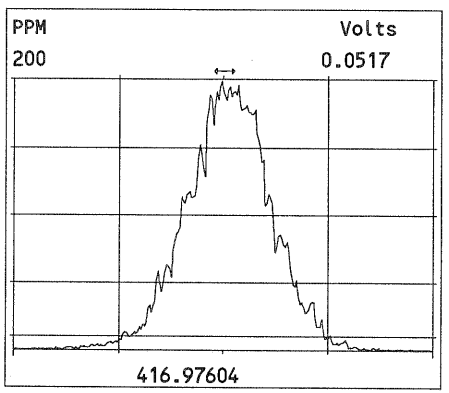




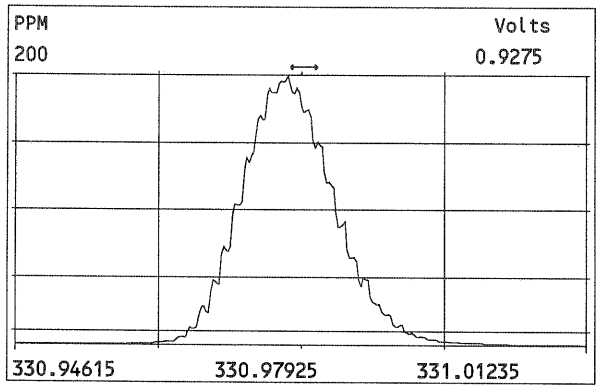


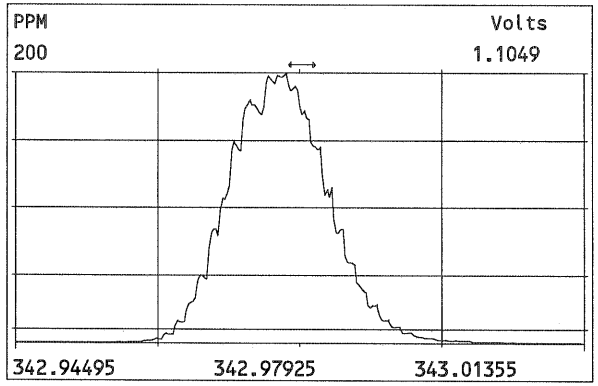


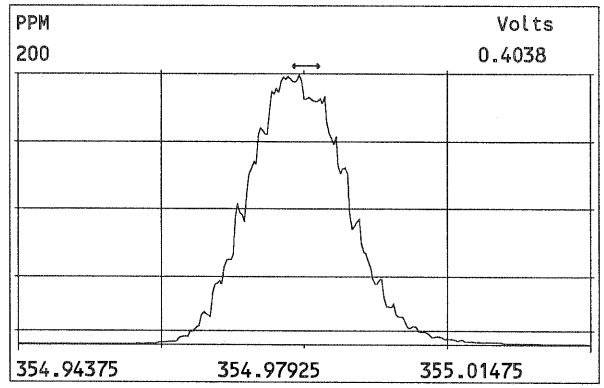


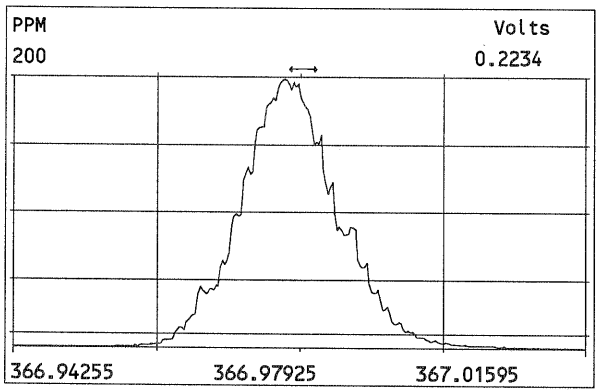


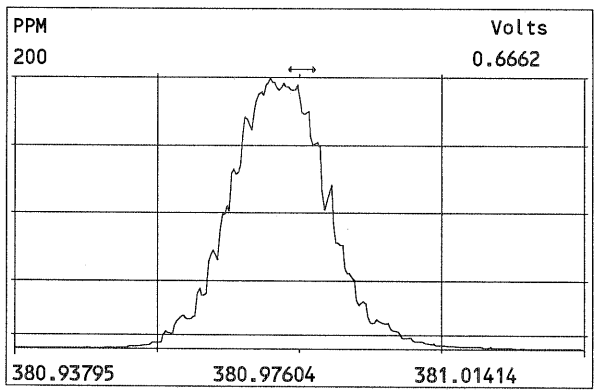
Peak Locate Examination:14-SEP-2010:19:16 File:14SEP10M
Experiment:PCDD Function:2 Reference:PFK

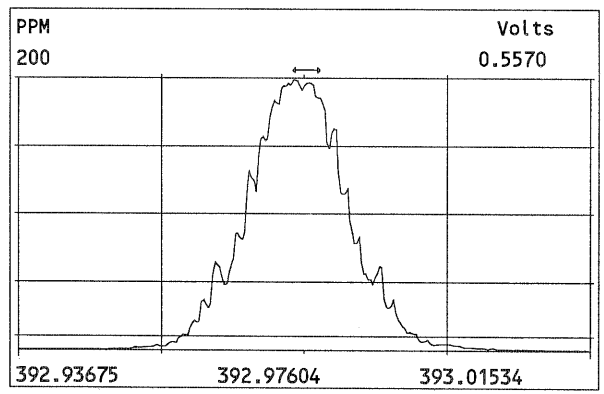


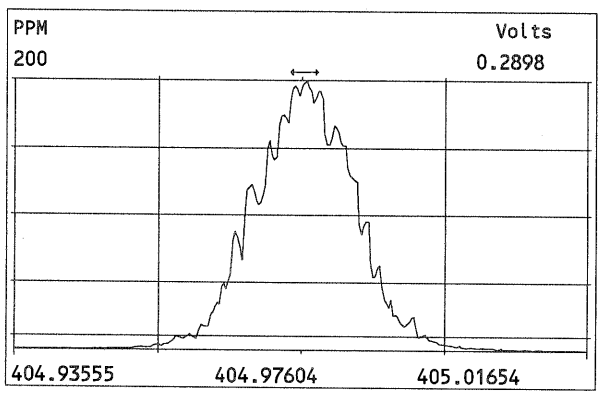


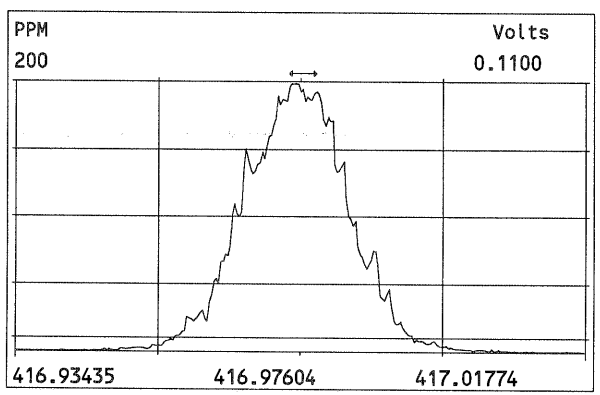




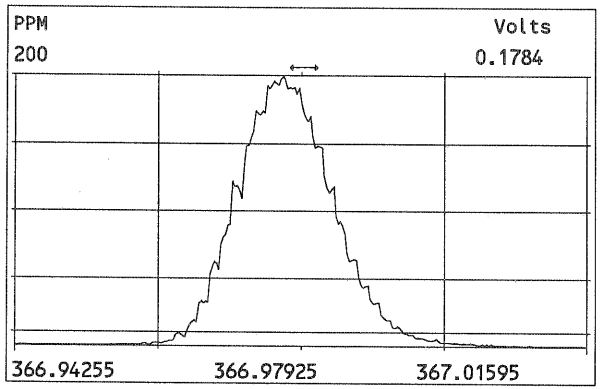


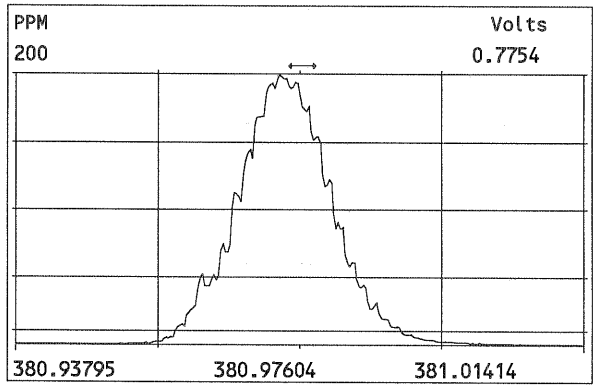


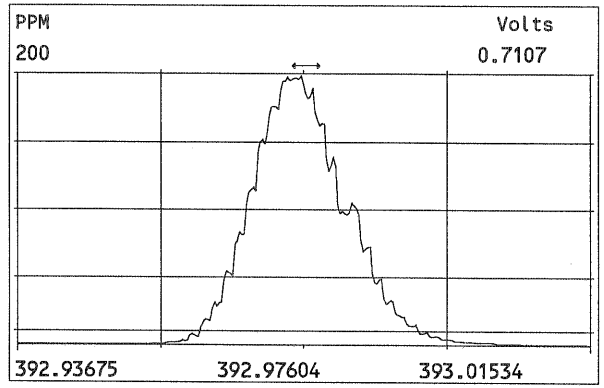


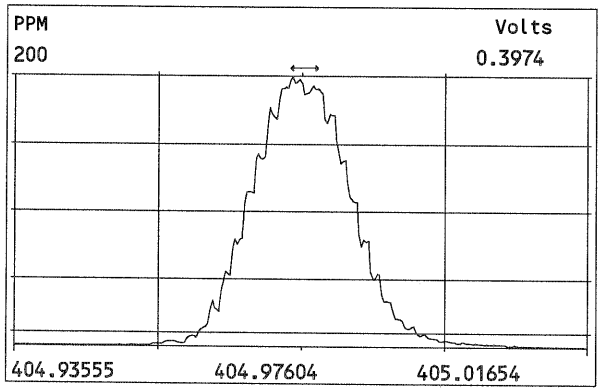


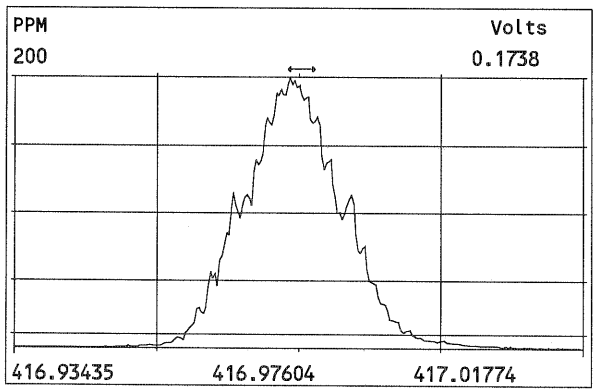
Peak Locate Examination:14-SEP-2010:19:16 File:14SEP10M
Experiment:PCDD Function:3 Reference:PFK

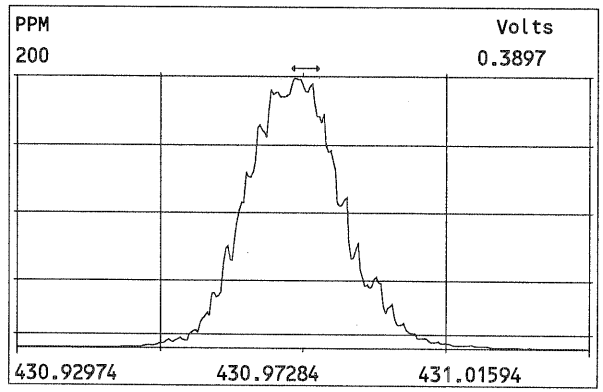


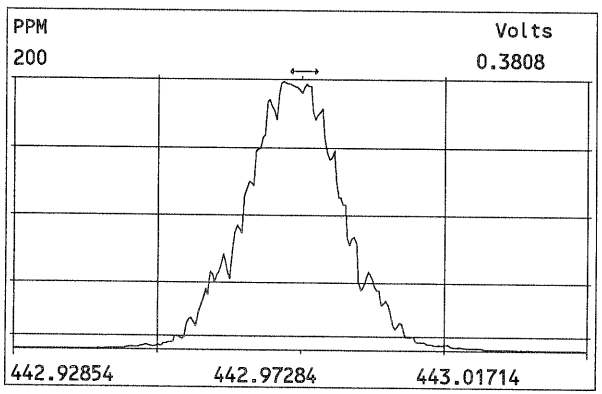


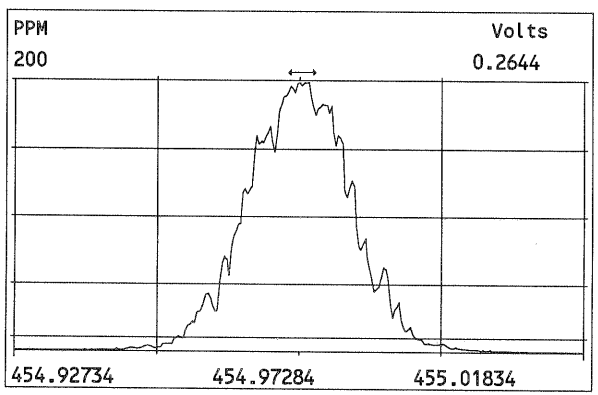




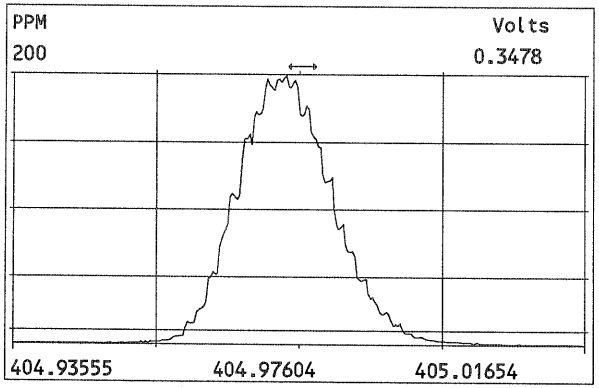


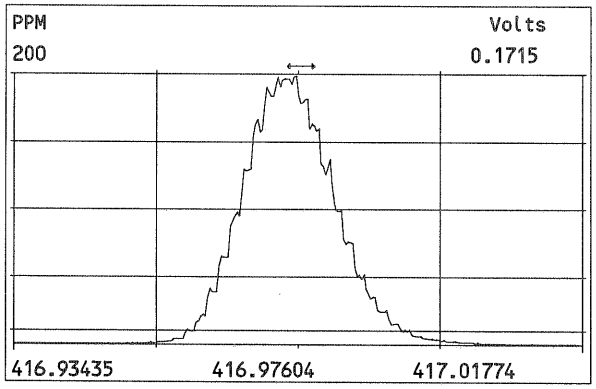


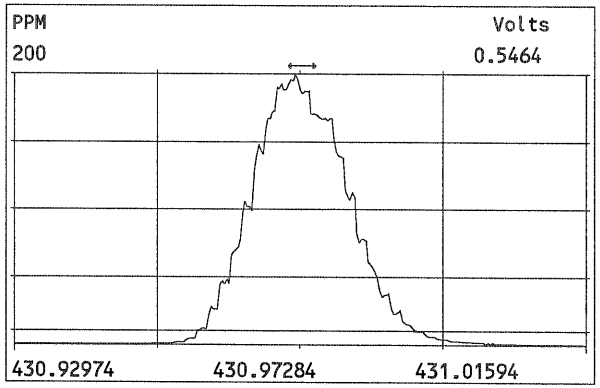


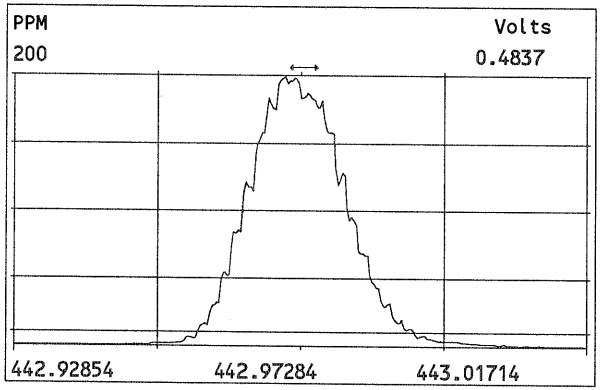


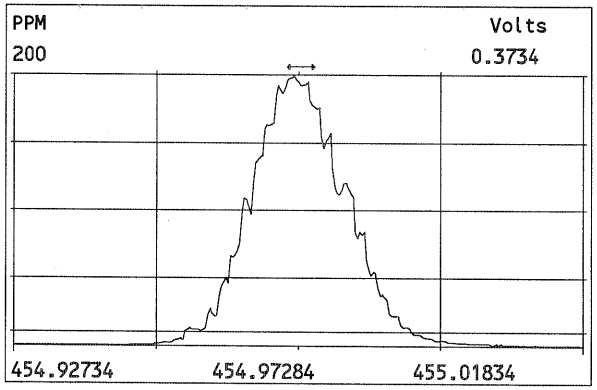
Peak Locate Examination:14-SEP-2010:19:17 File:14SEP10M
Experiment:PCDD Function:4 Reference:PFK

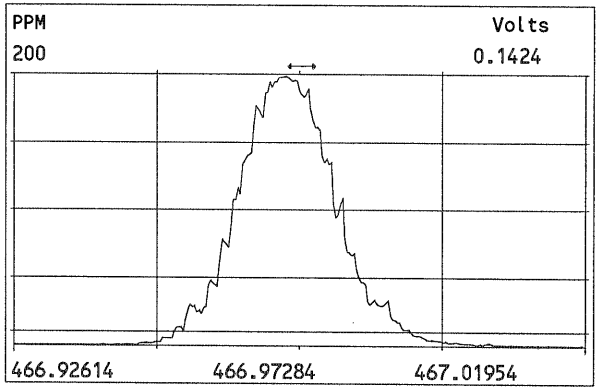


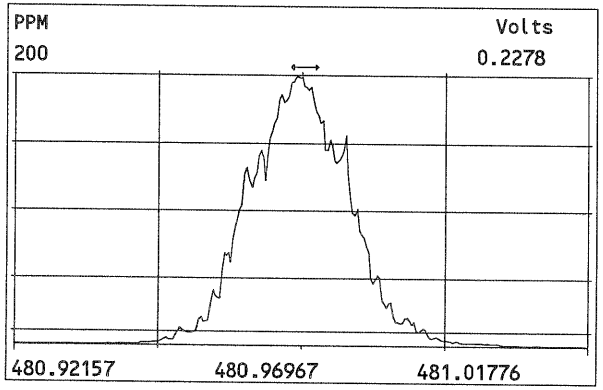




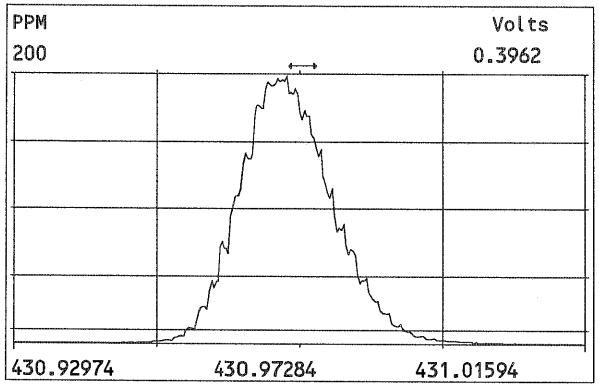


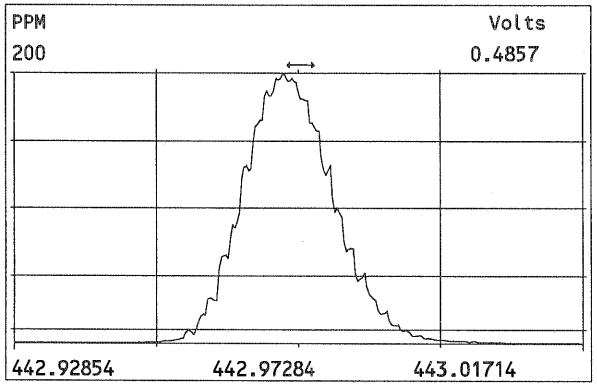


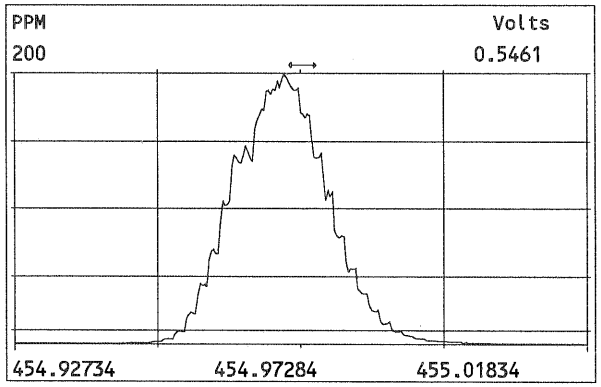


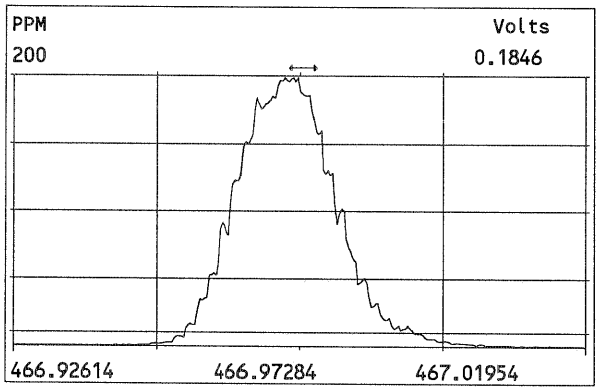


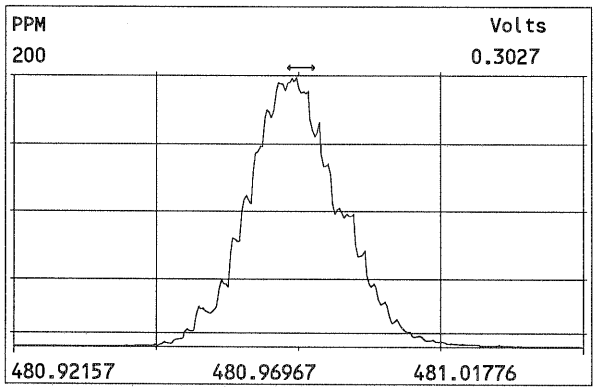
Peak Locate Examination:14-SEP-2010:19:17 File:14SEP10M
Experiment:PCDD Function:5 Reference:PFK

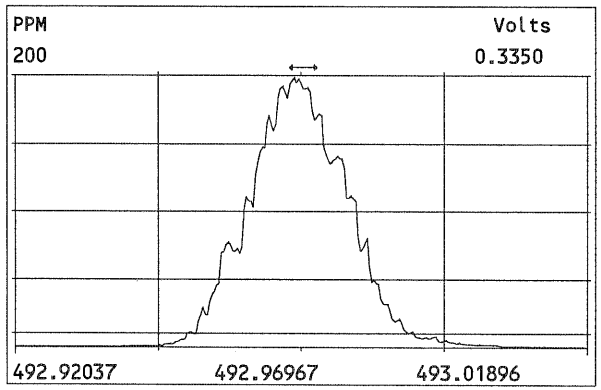


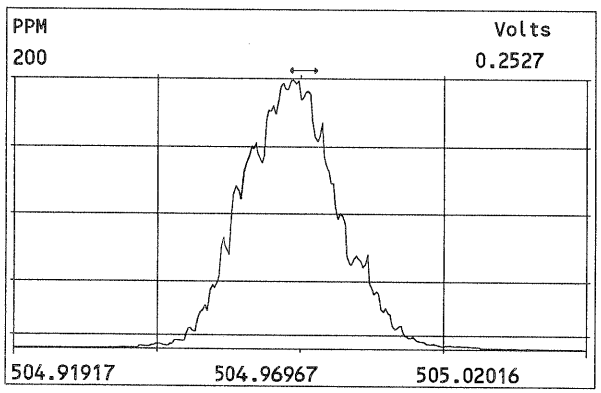


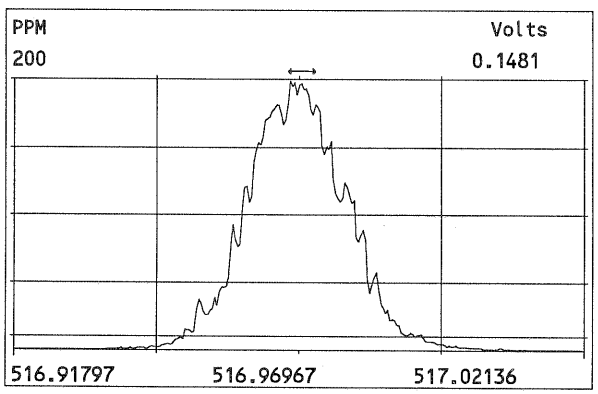




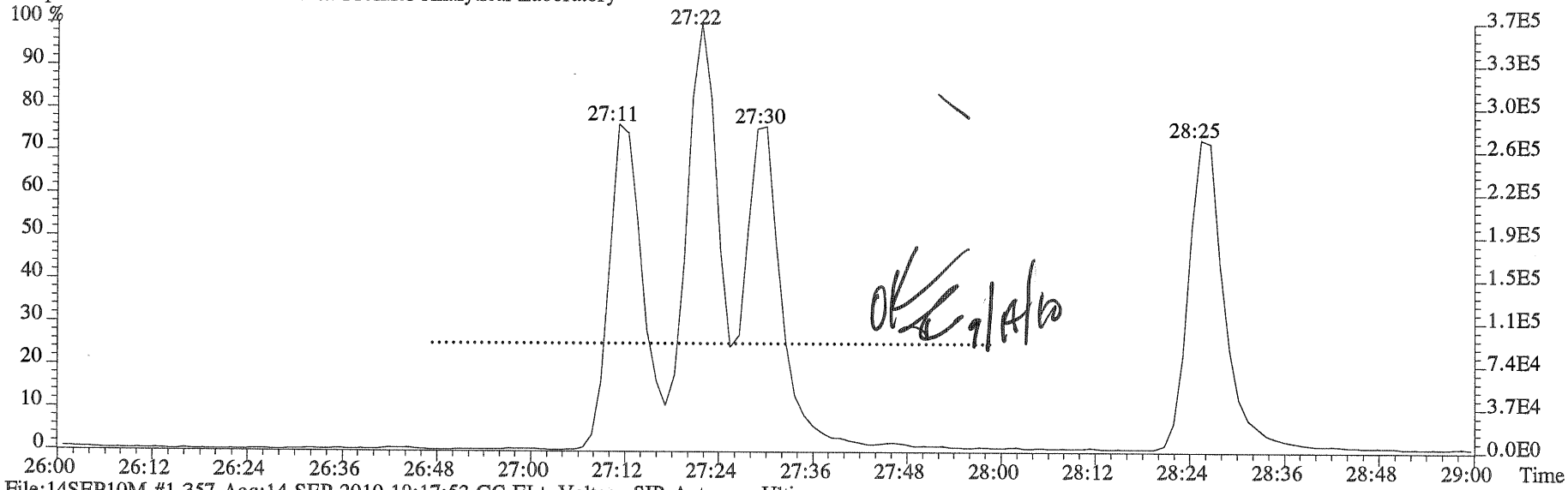






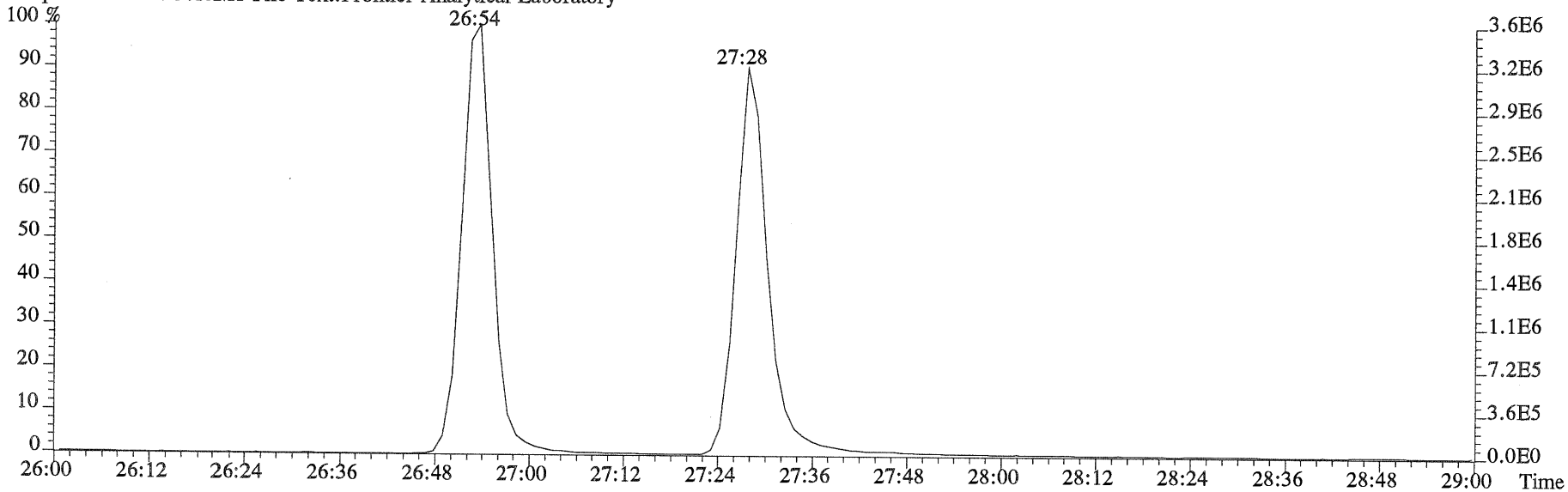


File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory

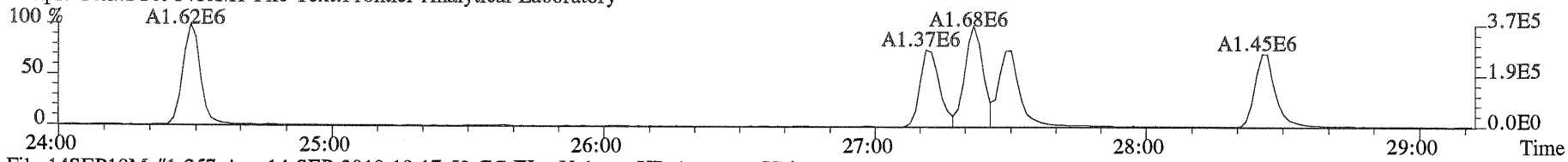


OK 9/14/10

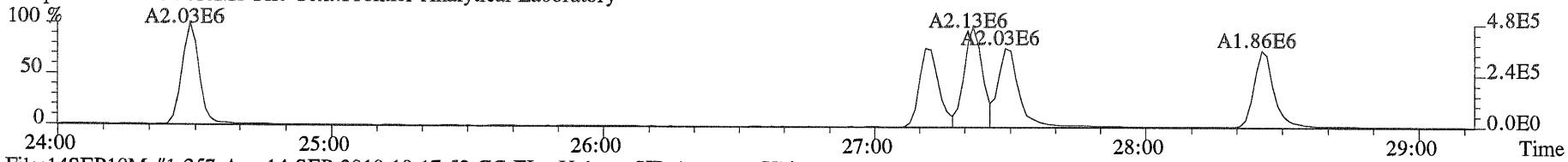
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



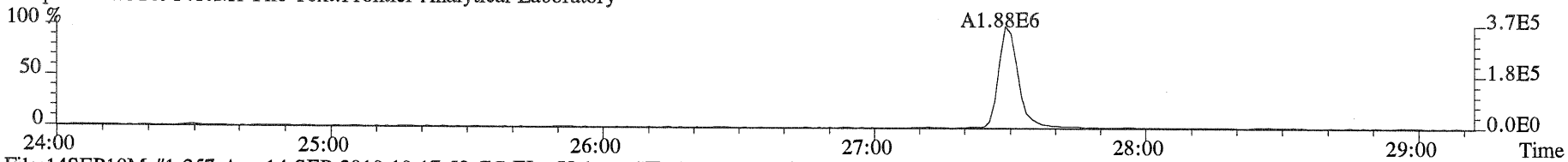
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



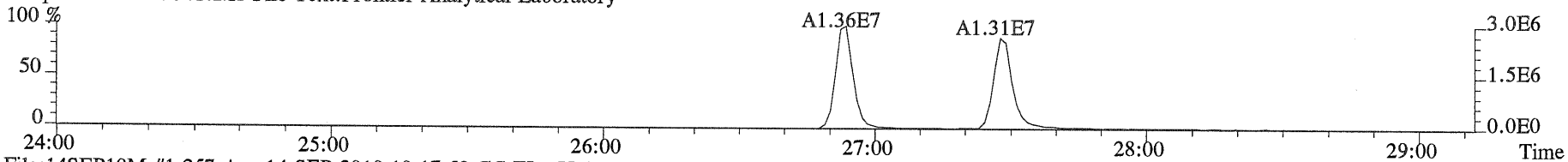
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



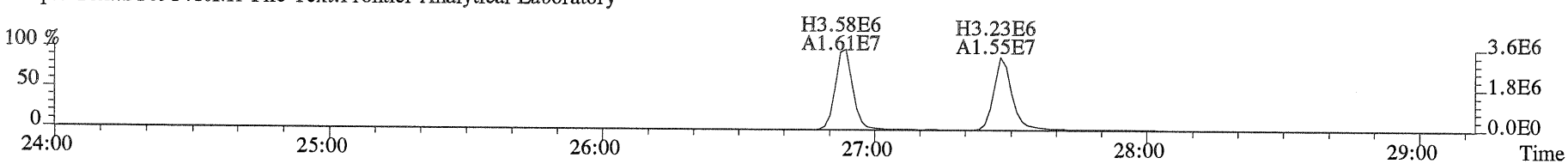
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



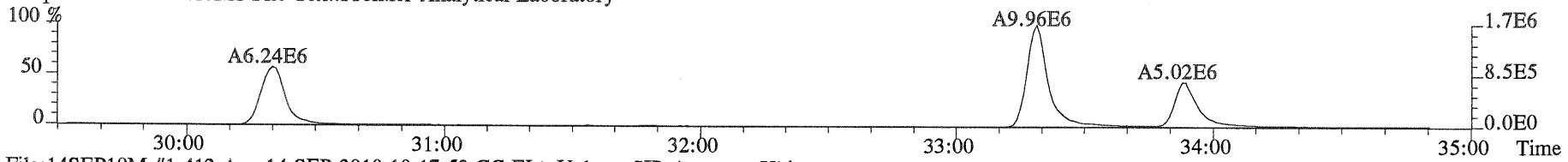
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



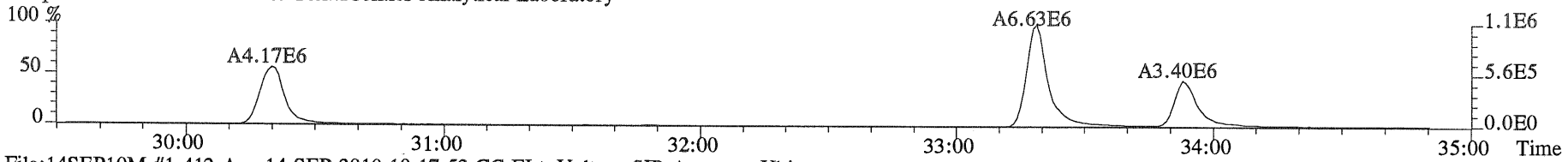
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



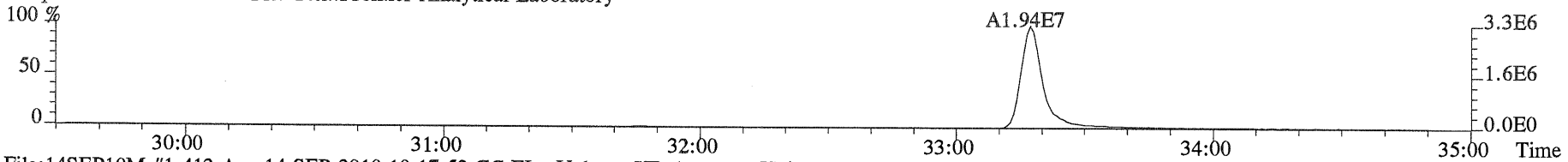
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



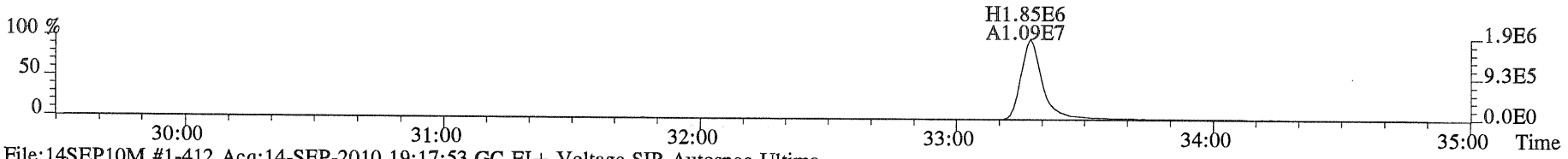
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



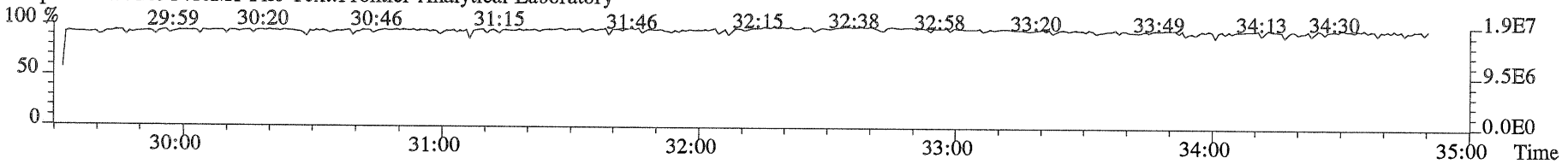
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



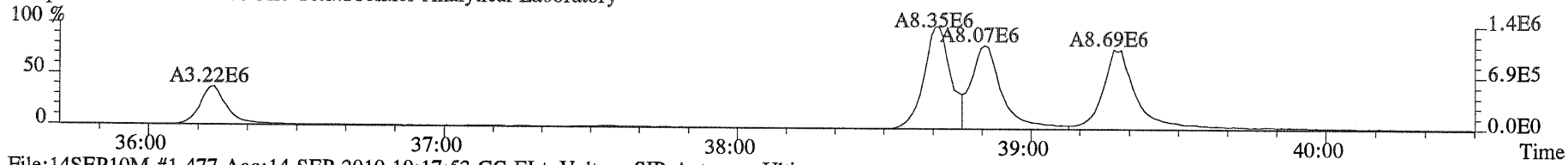
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



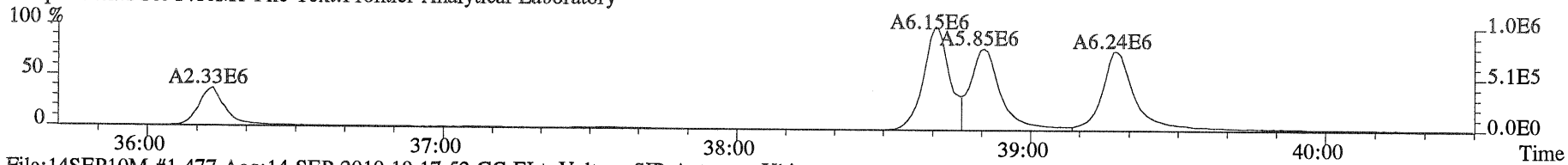
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



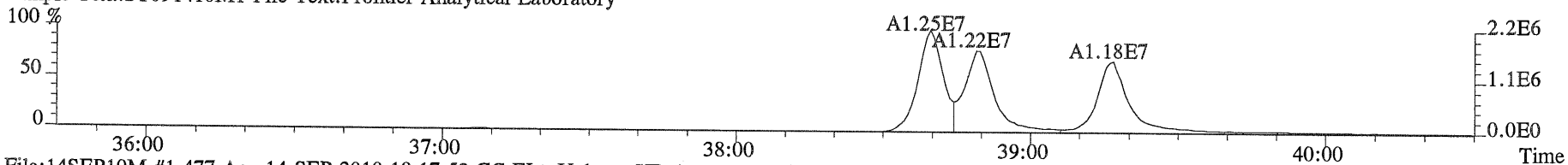
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



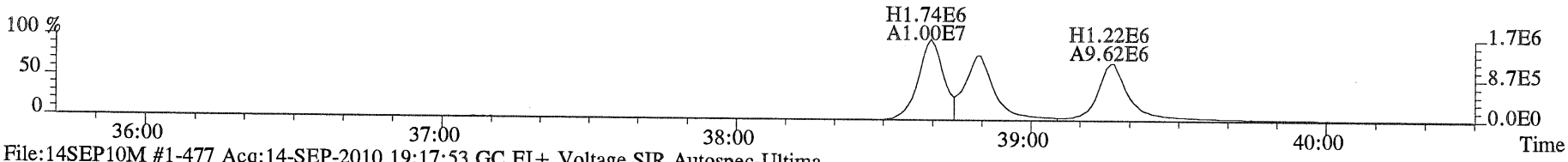
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



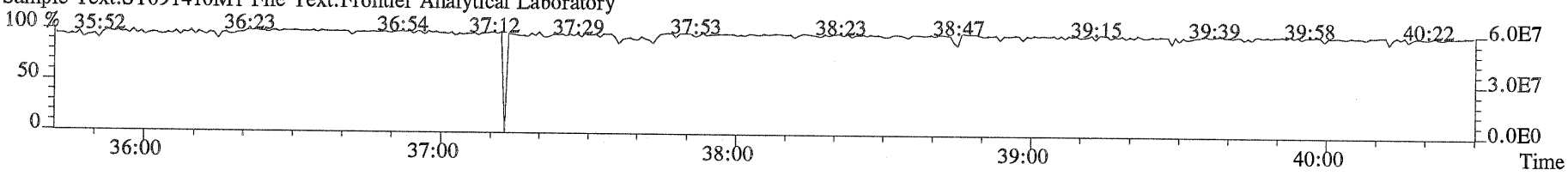
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



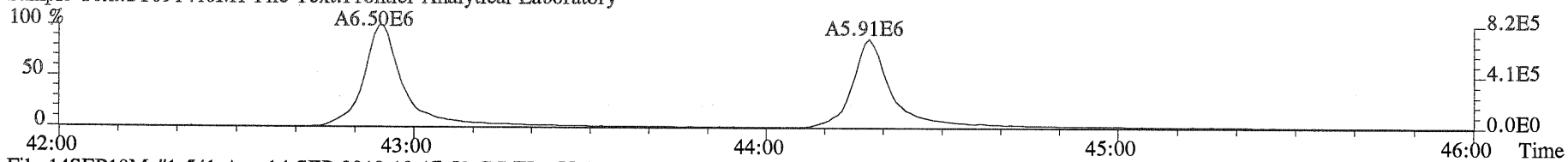
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



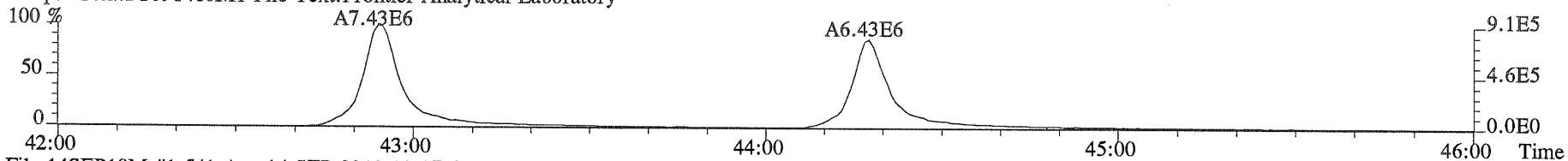
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



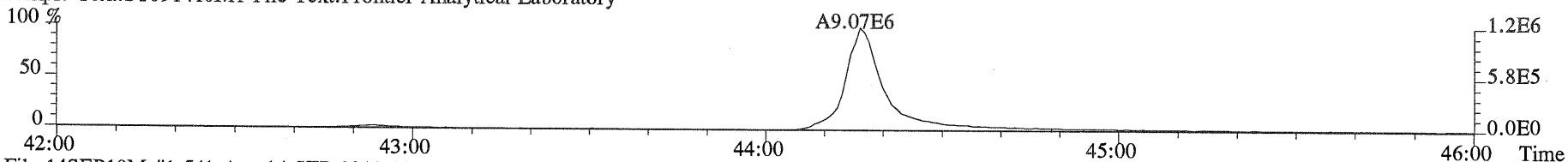
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



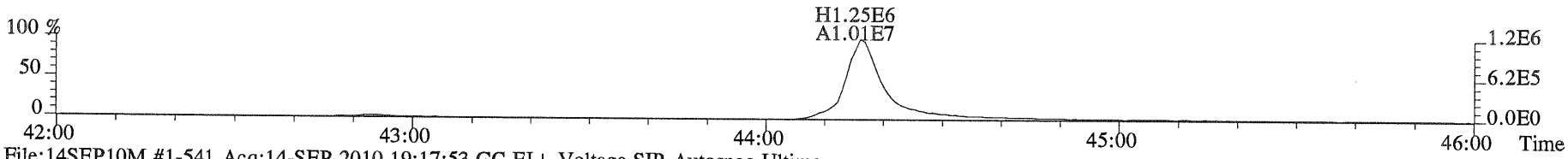
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



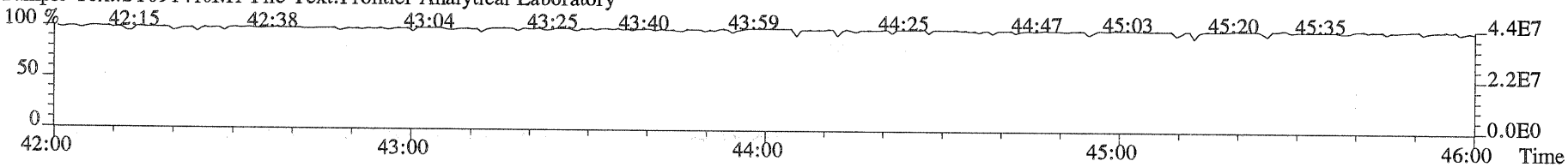
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



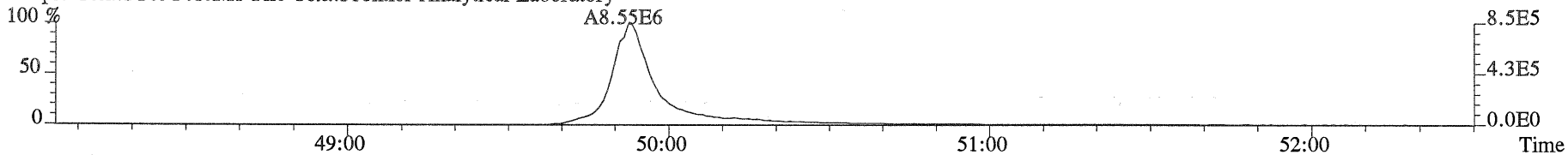
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



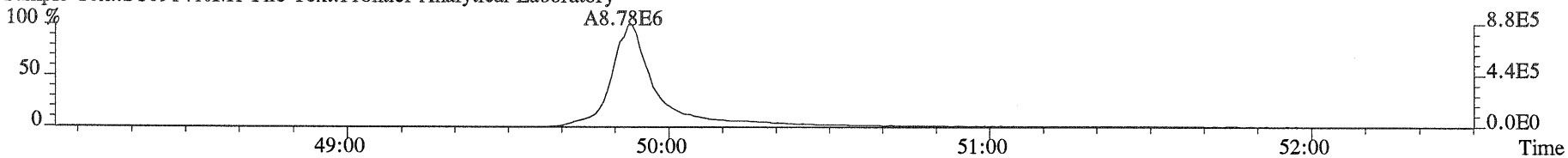
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



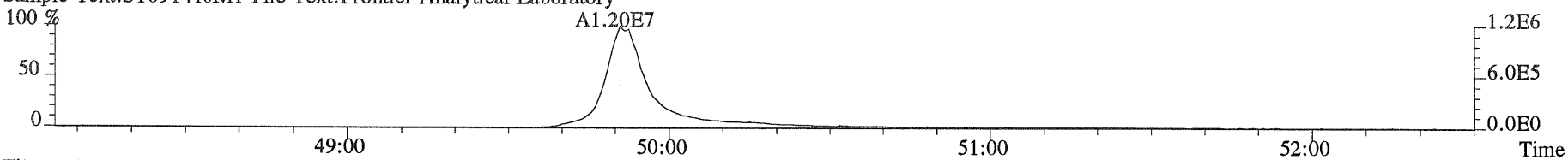
File:14SEP10M #1-347 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



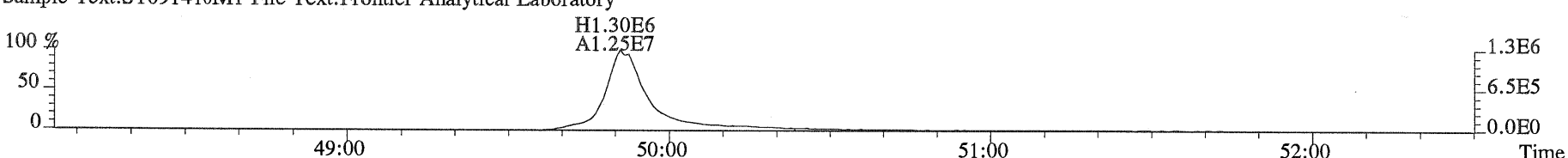
File:14SEP10M #1-347 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



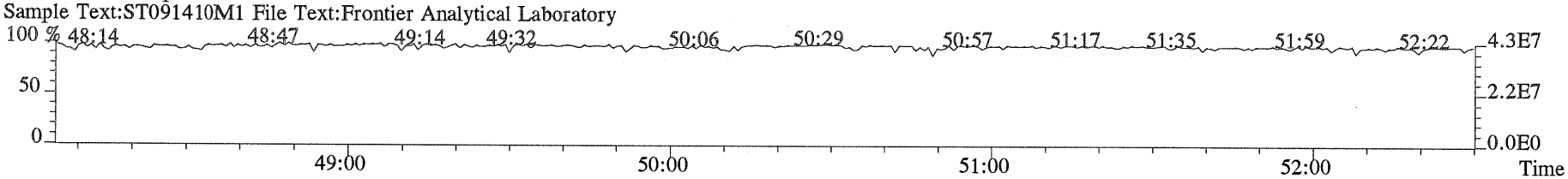
File:14SEP10M #1-347 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



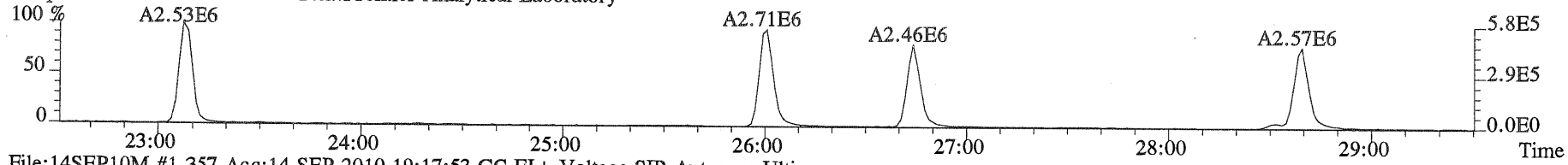
File:14SEP10M #1-347 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



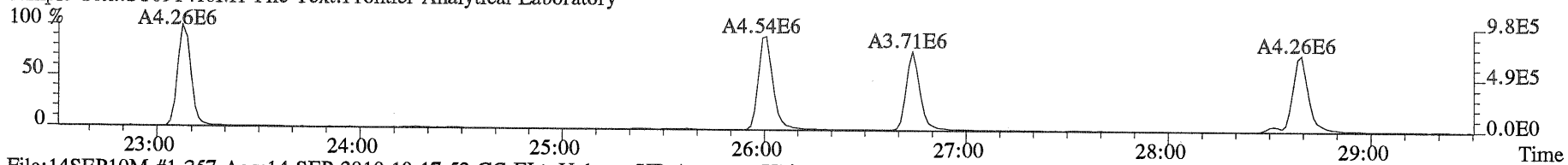
File:14SEP10M #1-347 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



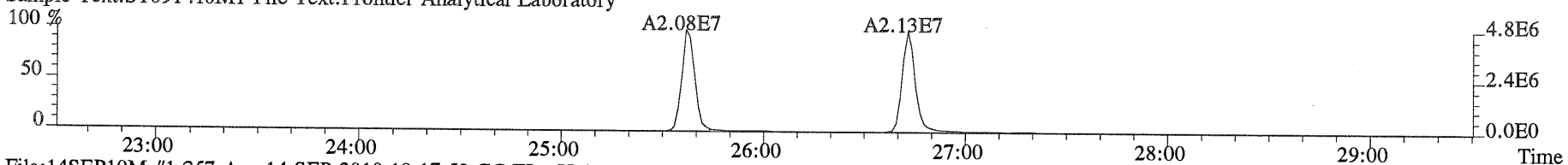
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



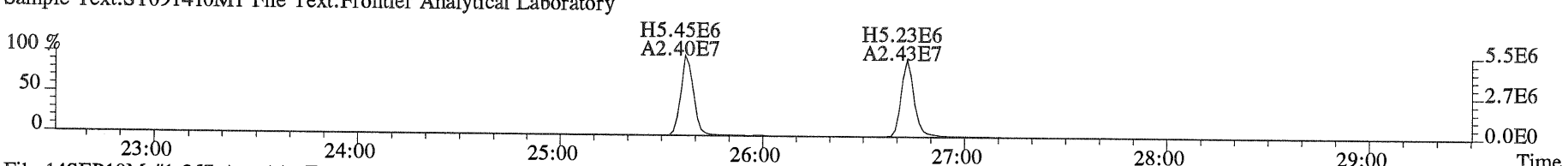
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



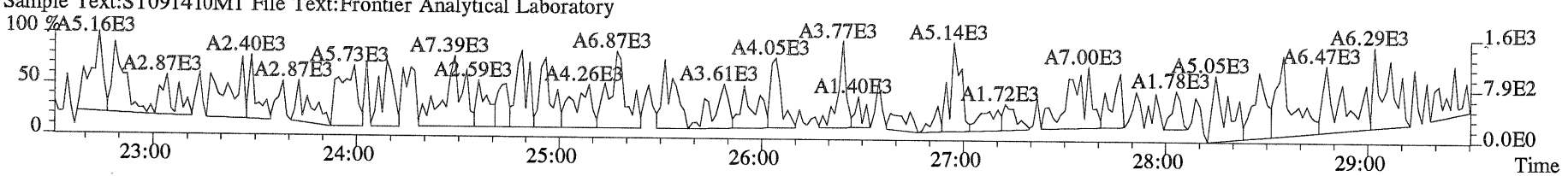
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



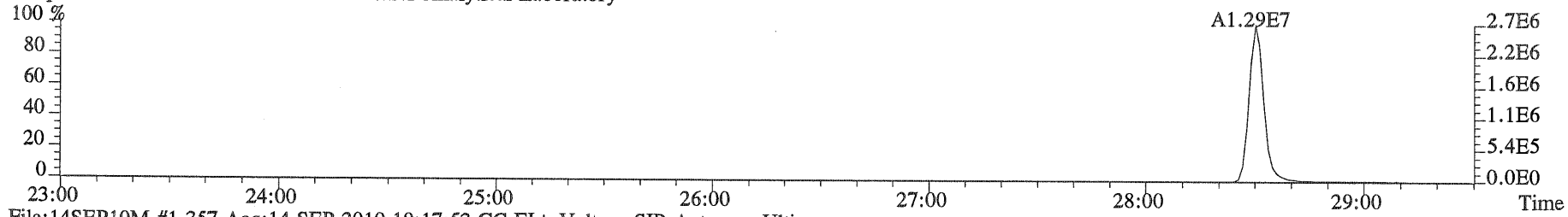
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



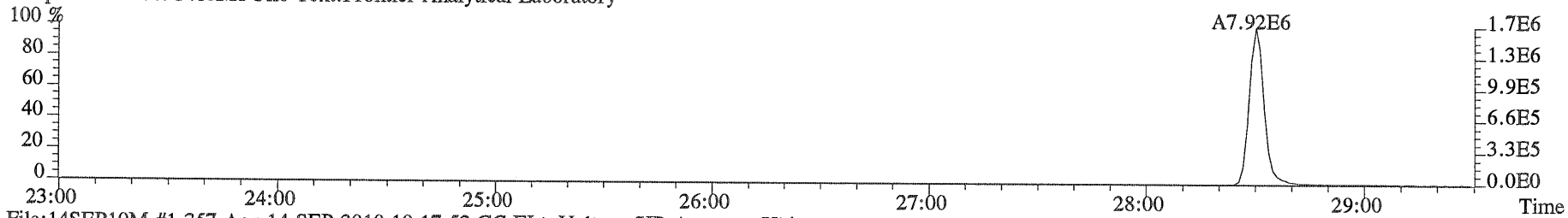
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



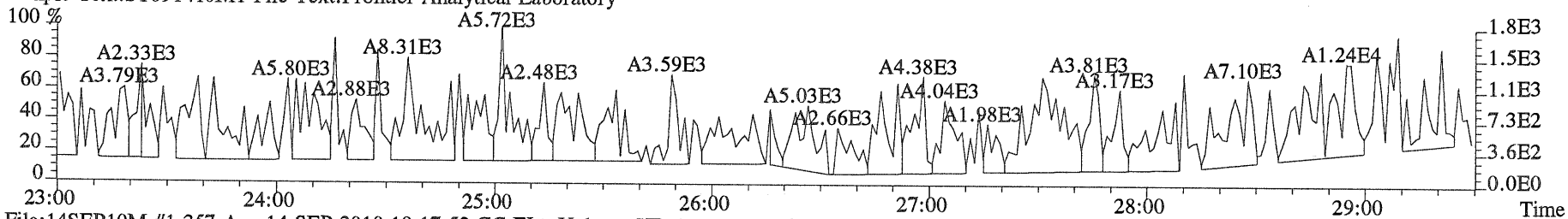
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



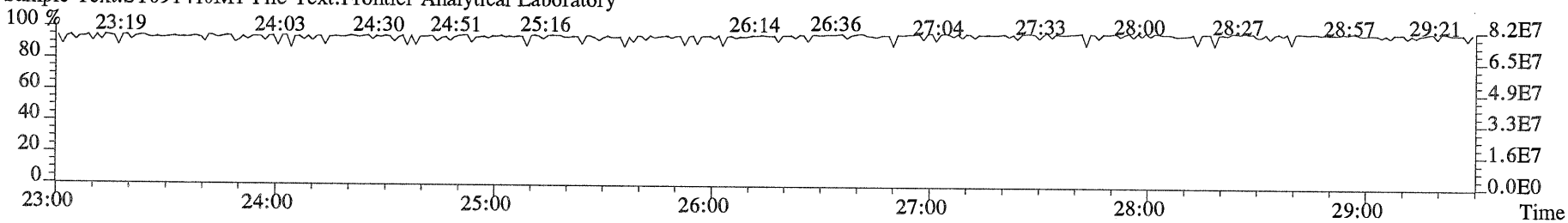
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



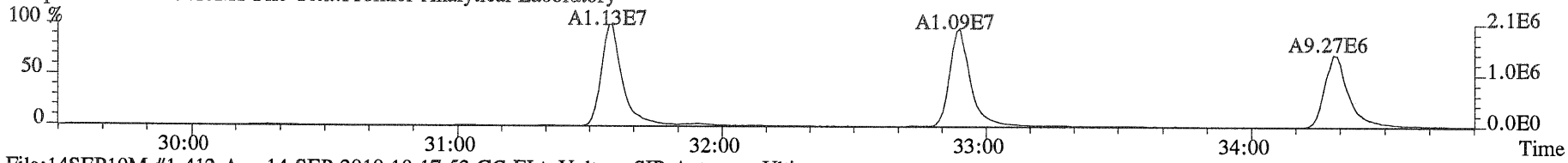
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



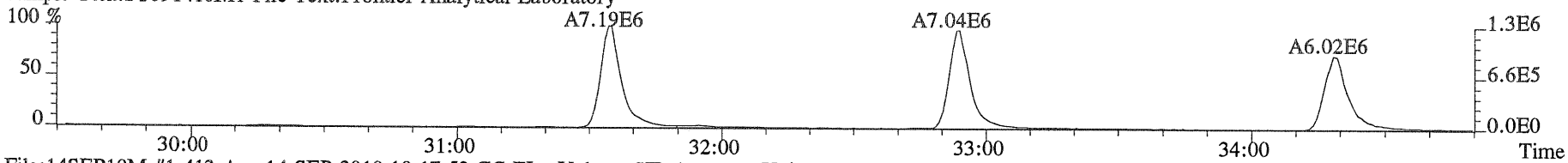
File:14SEP10M #1-357 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



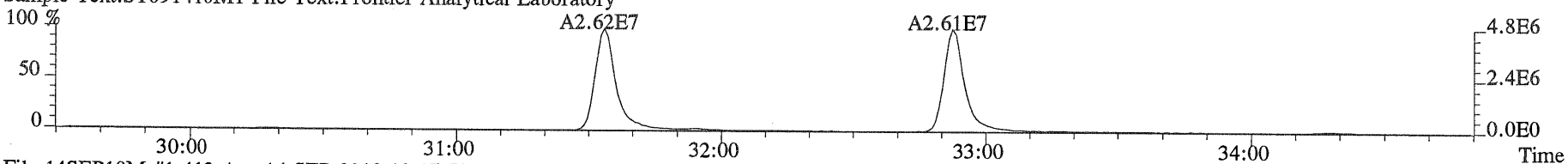
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



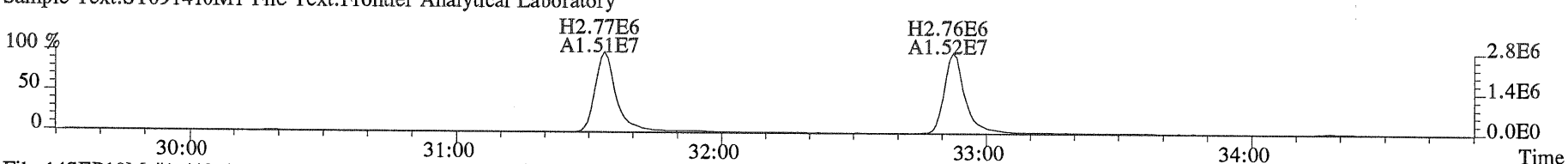
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



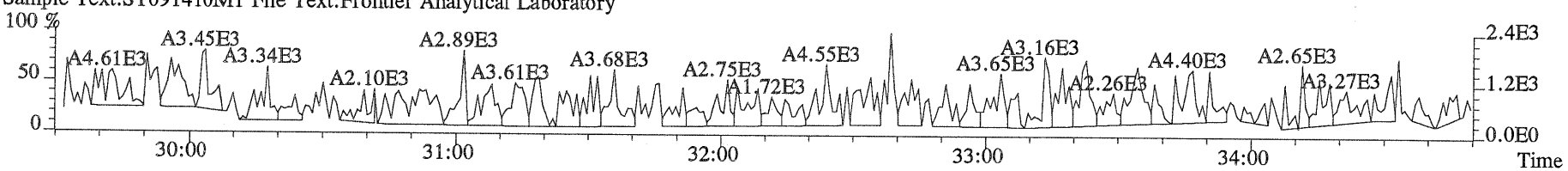
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



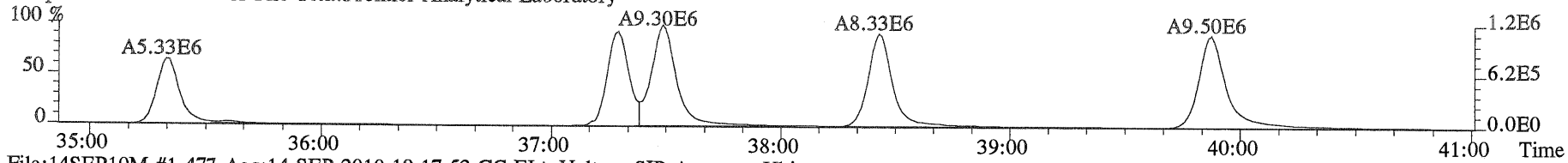
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



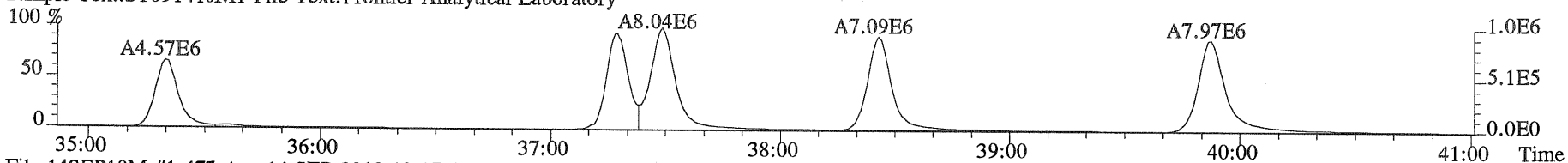
File:14SEP10M #1-412 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



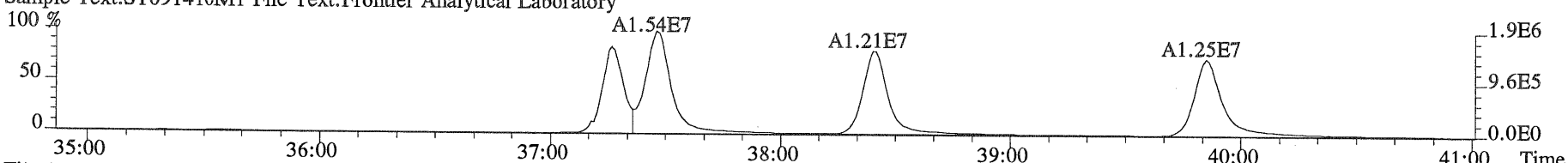
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 SMO(1,5) BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



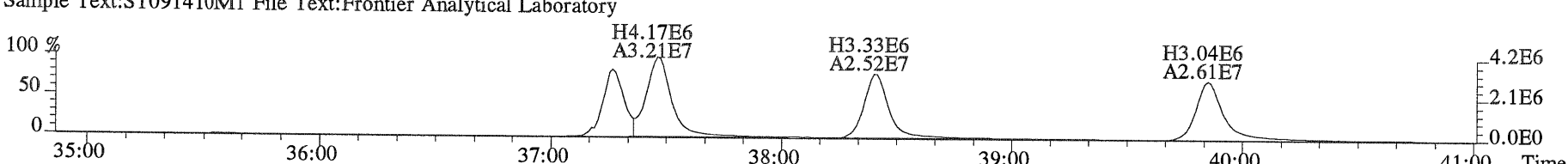
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 SMO(1,5) BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



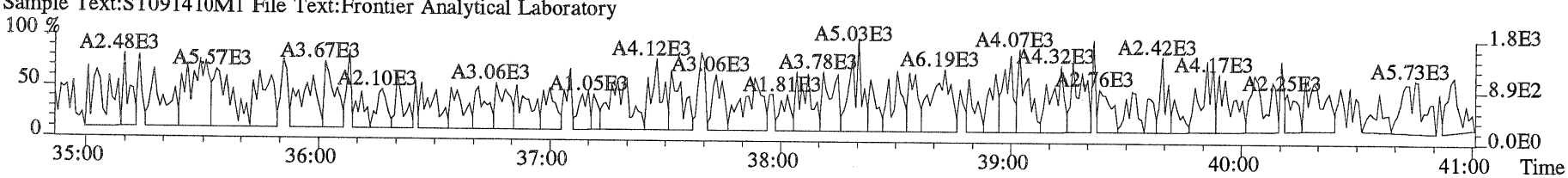
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 SMO(1,5) BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



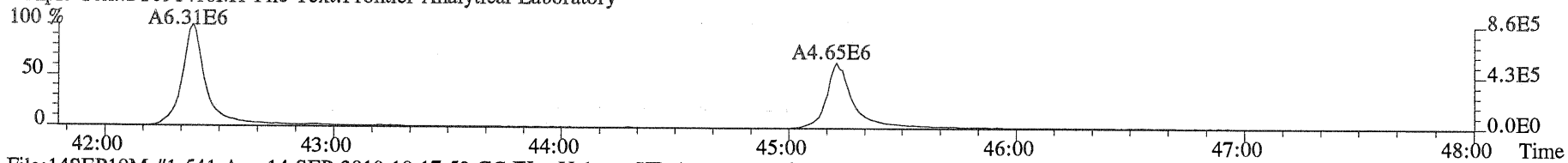
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 SMO(1,5) BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



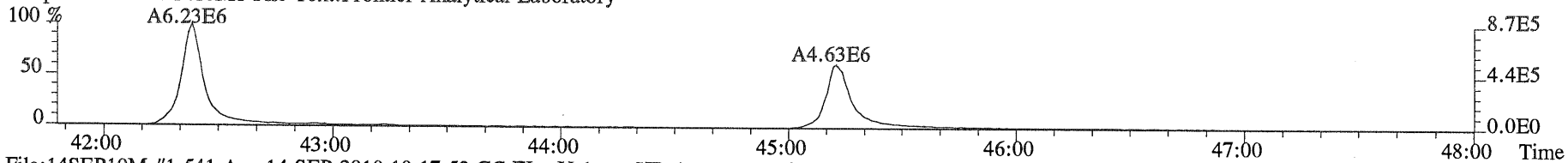
File:14SEP10M #1-477 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



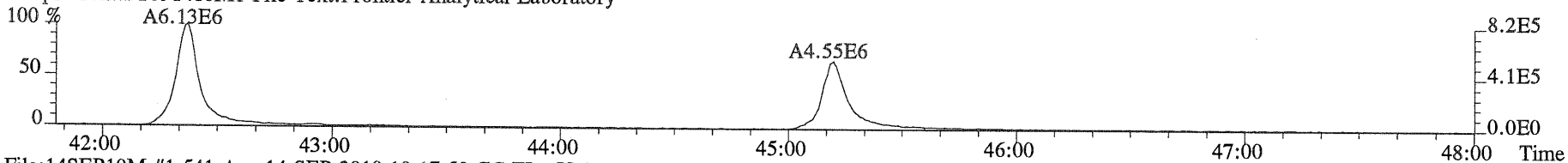
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



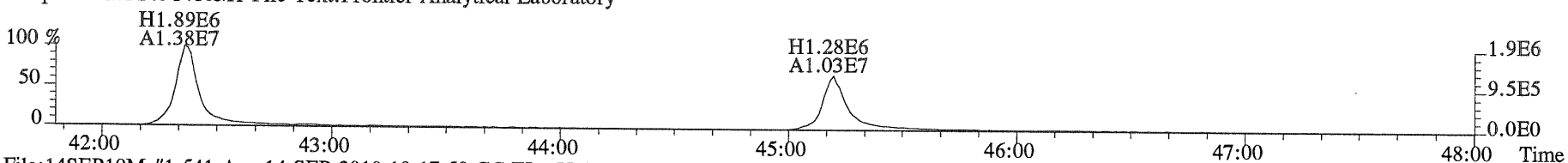
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



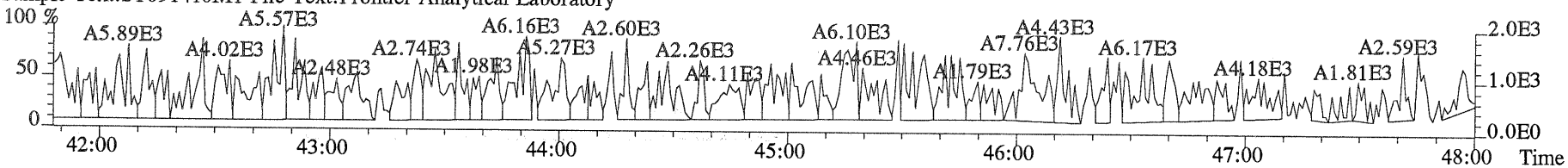
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



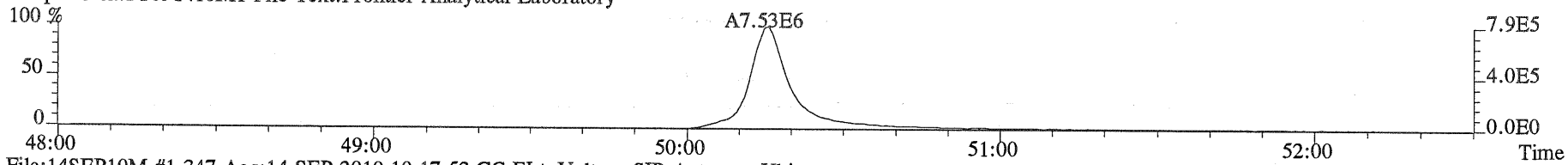
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



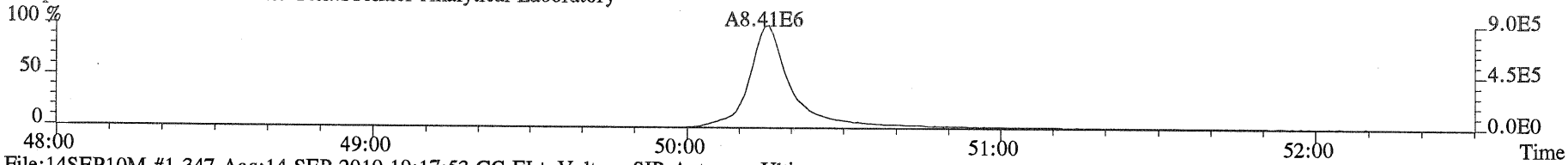
File:14SEP10M #1-541 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



File:14SEP10M #1-347 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



File:14SEP10M #1-347 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



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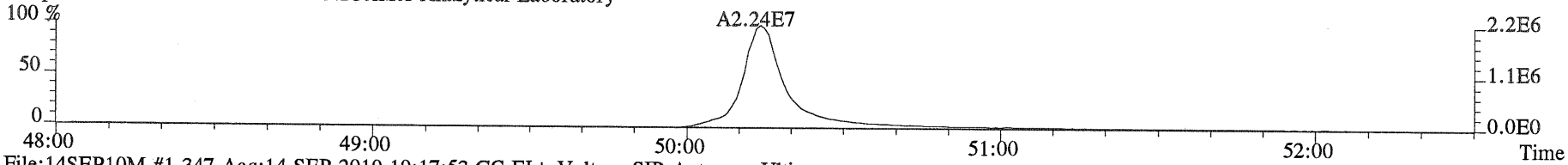
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory



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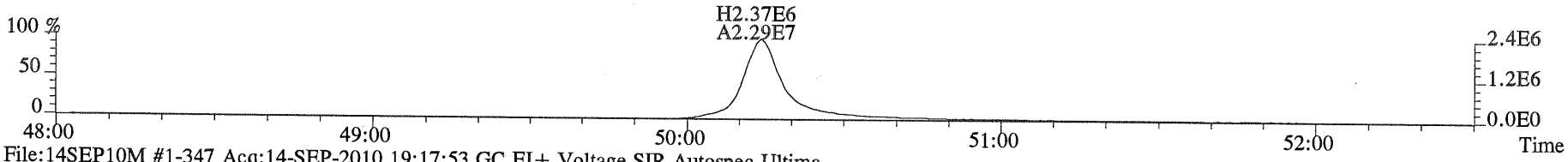
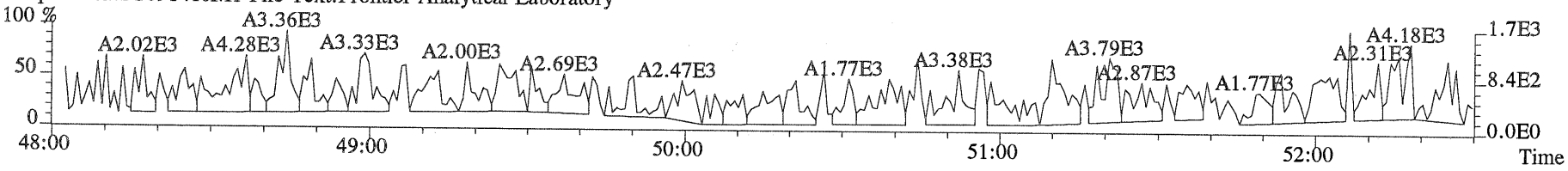
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory

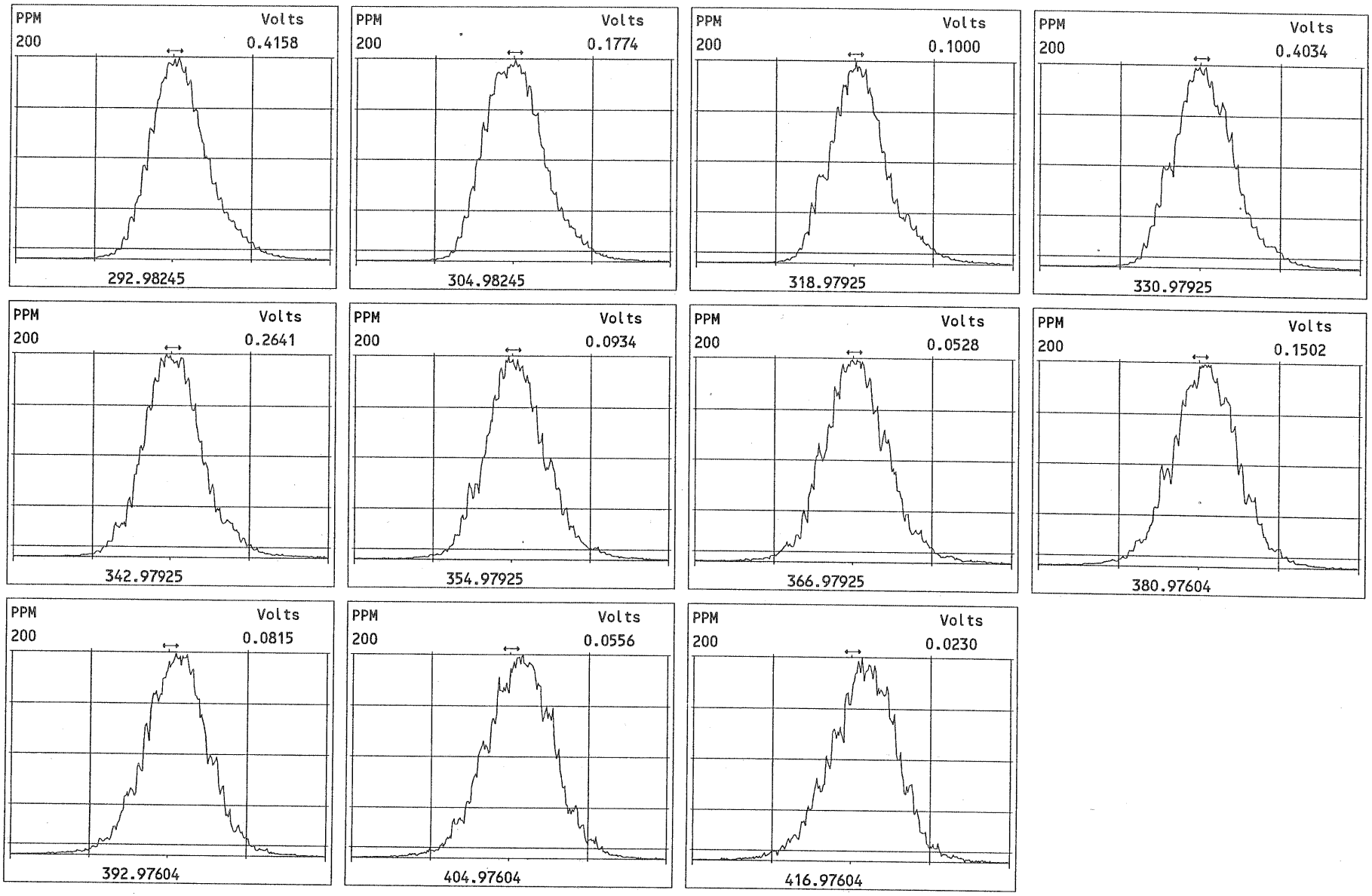


File:14SEP10M #1-347 Acq:14-SEP-2010 19:17:53 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M1 File Text:Frontier Analytical Laboratory

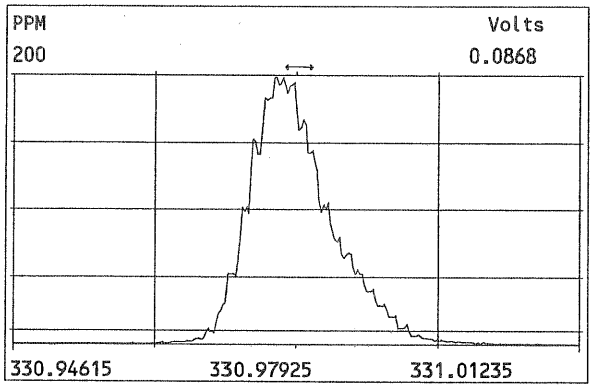


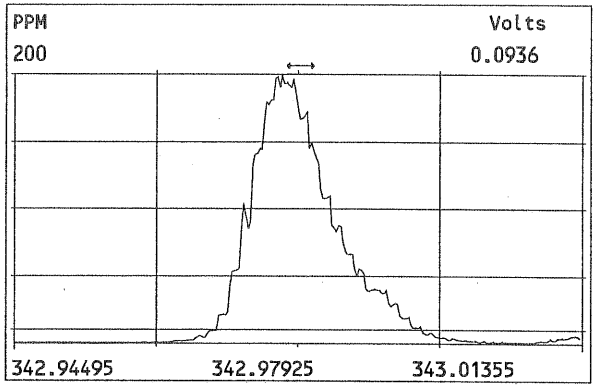
Peak Locate Examination:15-SEP-2010:09:09 File:14SEP10M_RES_CHECK

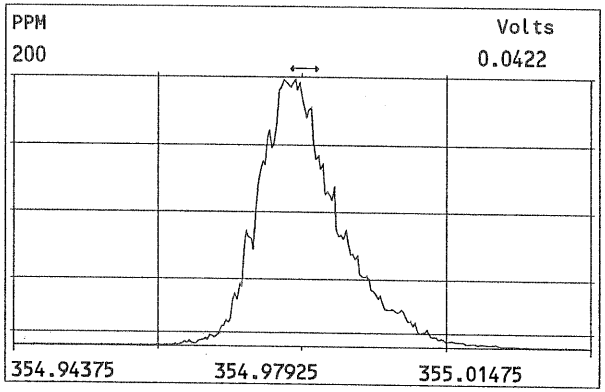
Experiment:PCDD Function:1 Reference:PFK

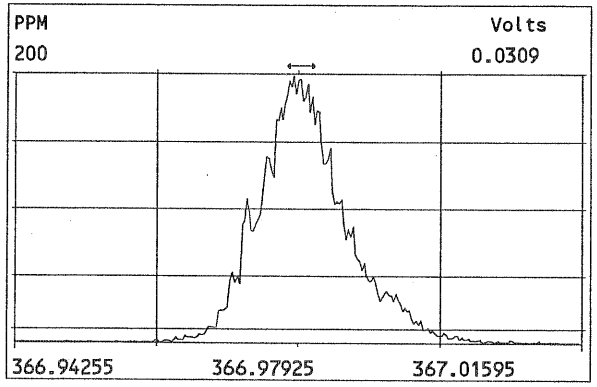


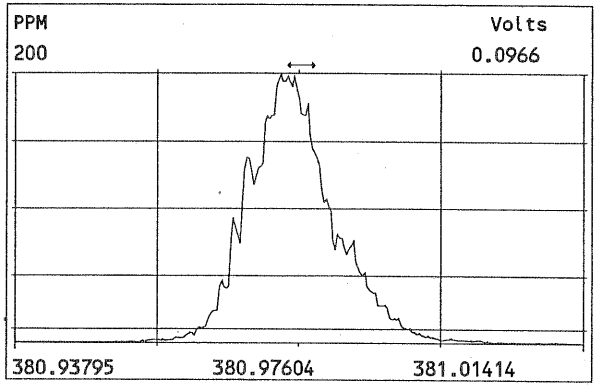
Peak Locate Examination:15-SEP-2010:09:11 File:14SEP10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

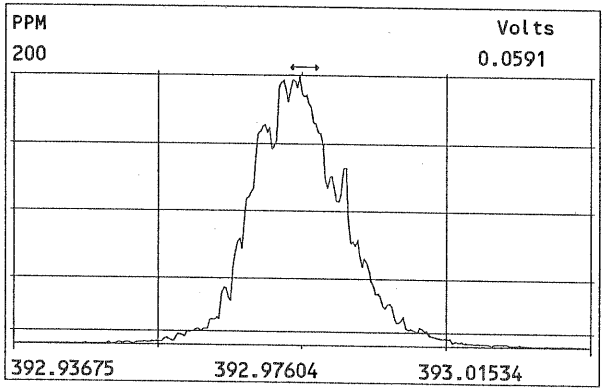


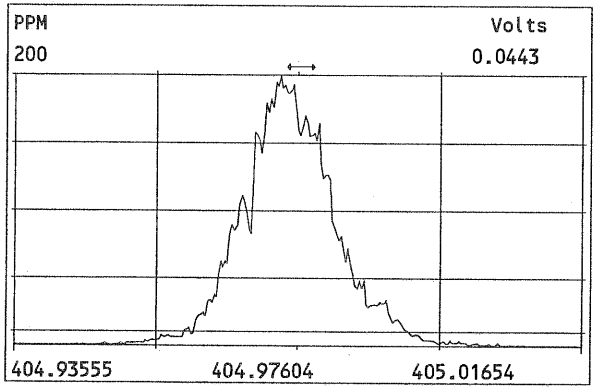


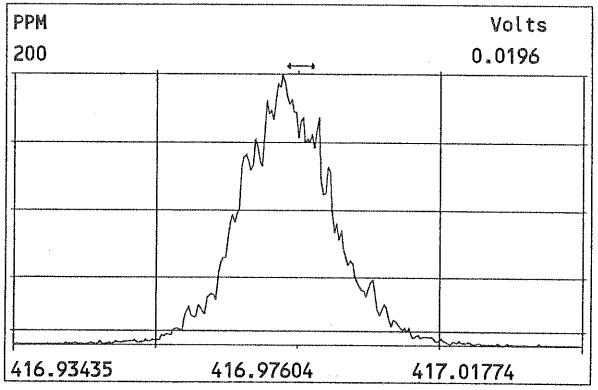




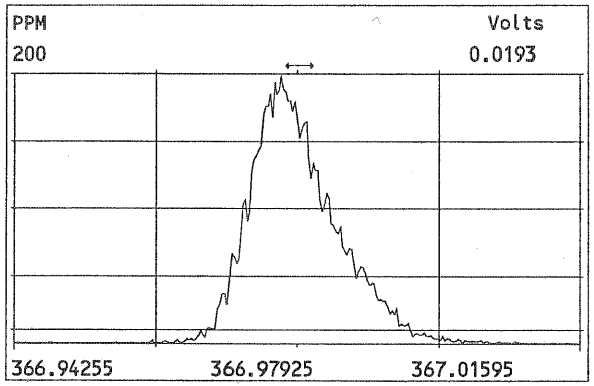


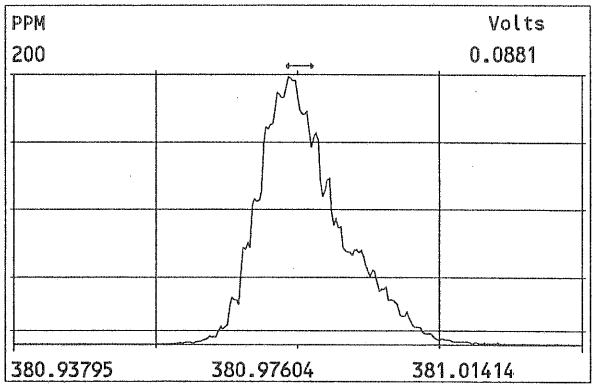


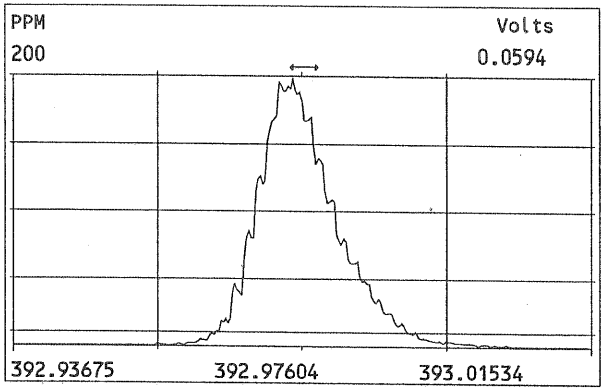


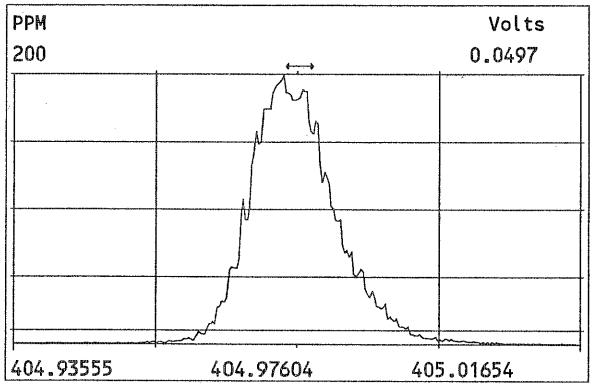


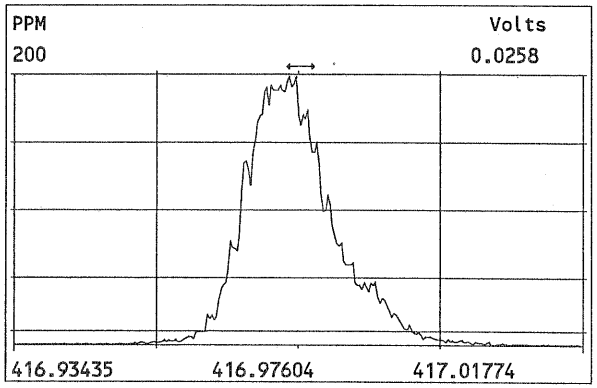
Peak Locate Examination:15-SEP-2010:09:13 File:14SEP10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

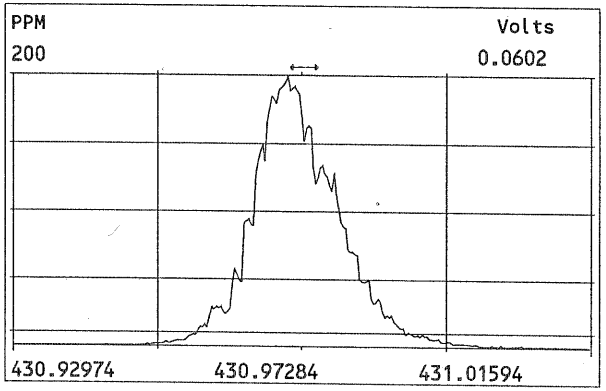


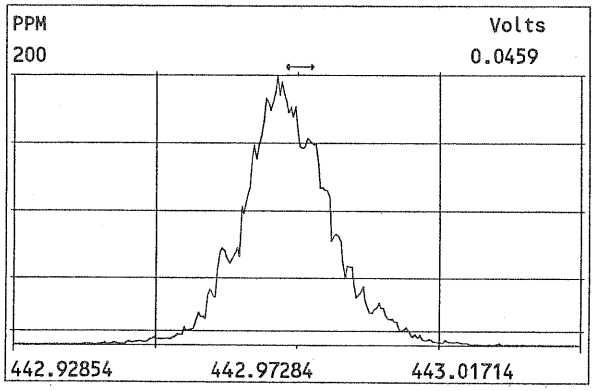


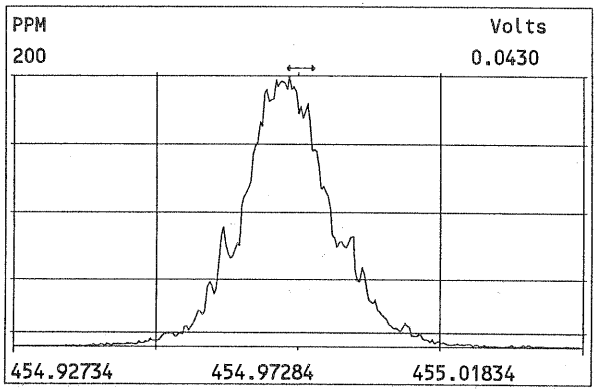






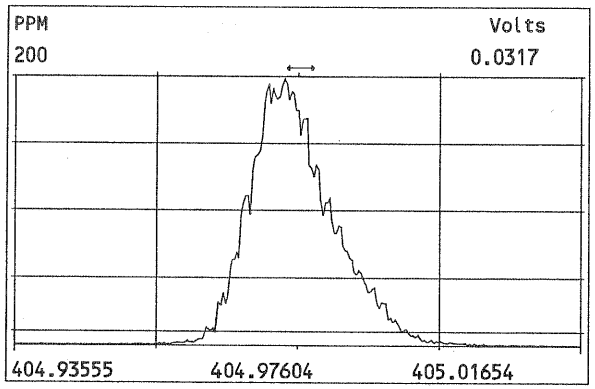


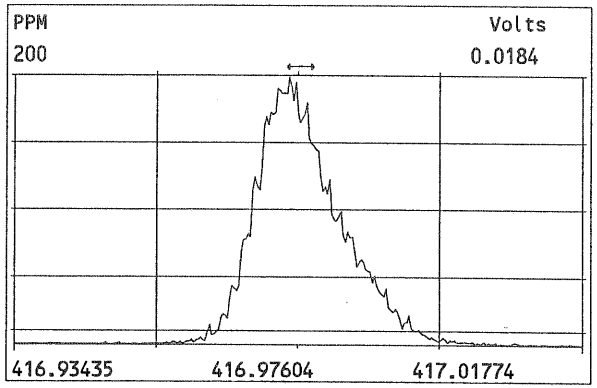


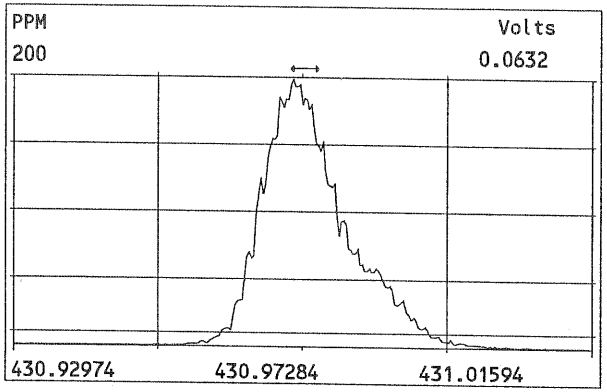


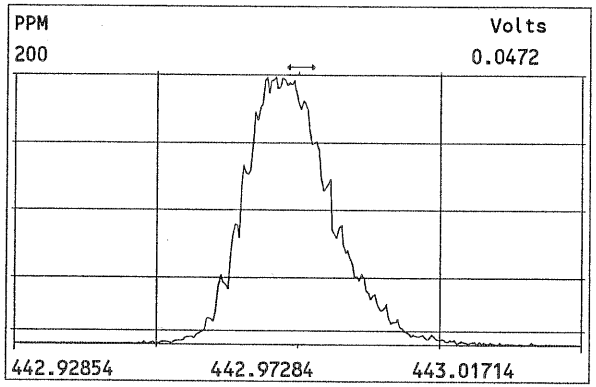
Peak Locate Examination:15-SEP-2010:09:15 File:14SEP10M_RES_CHECK

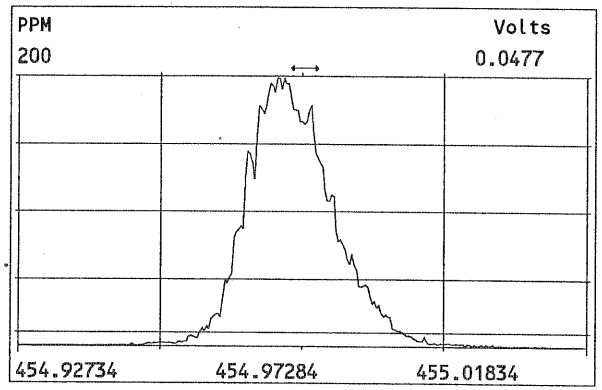
Experiment:PCDD Function:4 Reference:PFK

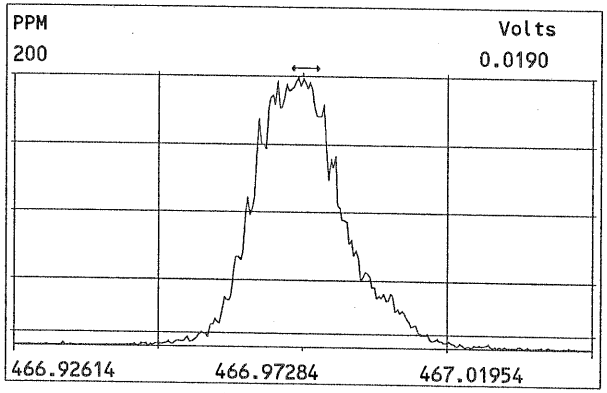


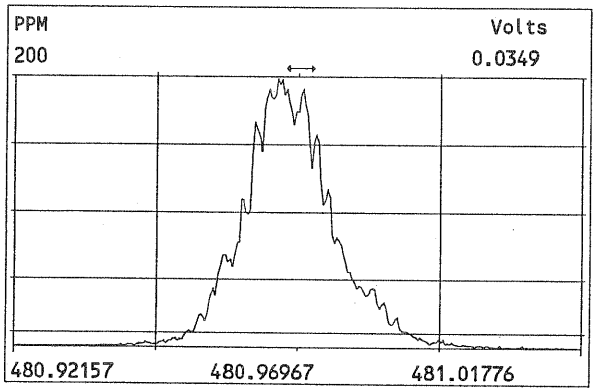






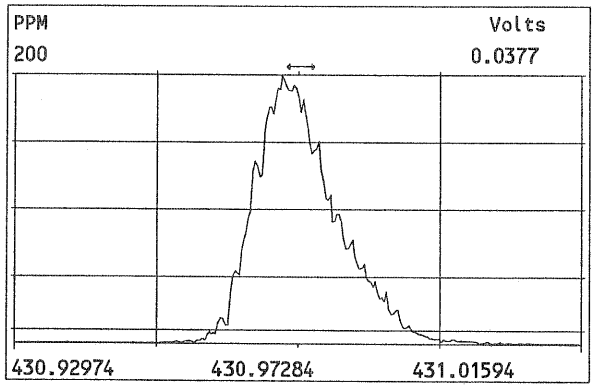


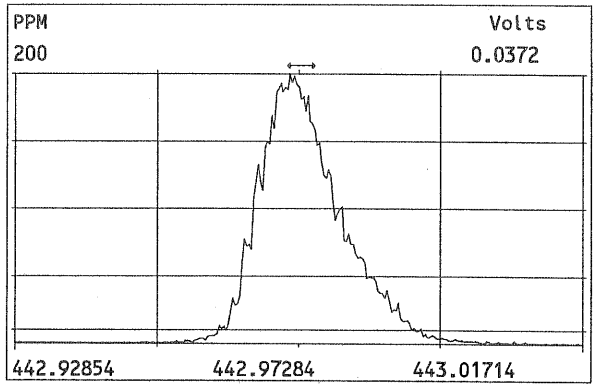


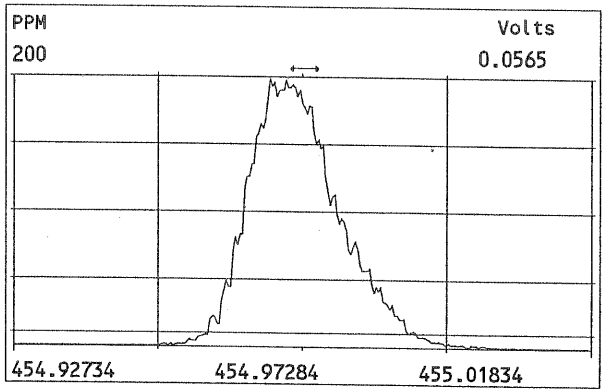


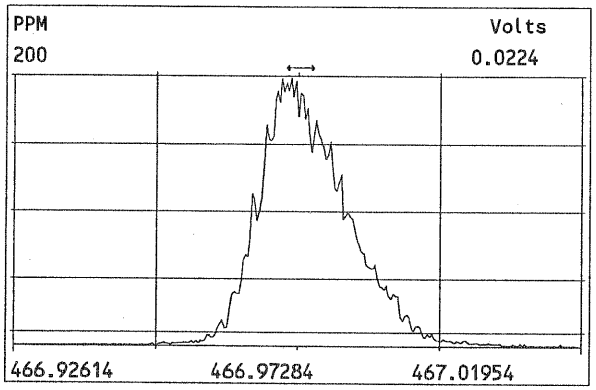
Peak Locate Examination:15-SEP-2010:09:17 File:14SEP10M_RES_CHECK

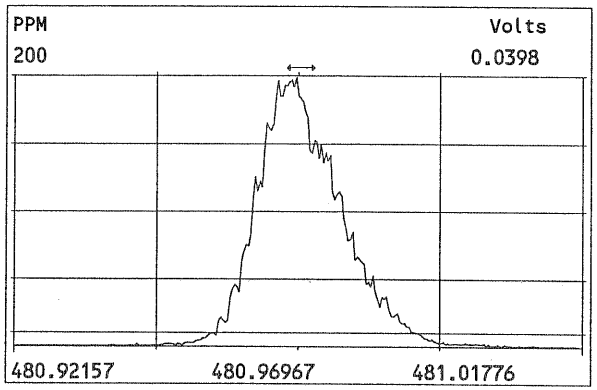
Experiment:PCDD Function:5 Reference:PFK

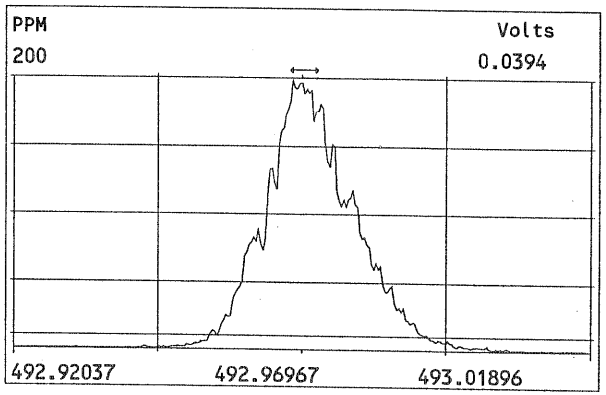


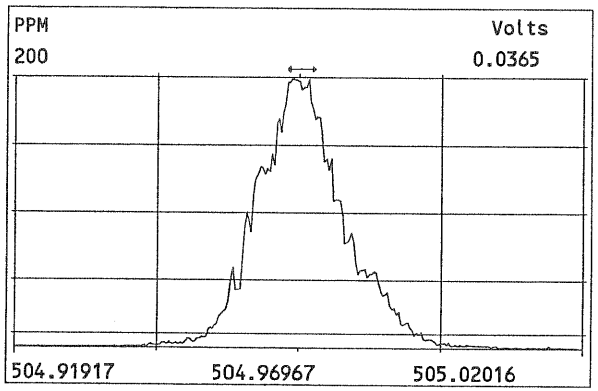


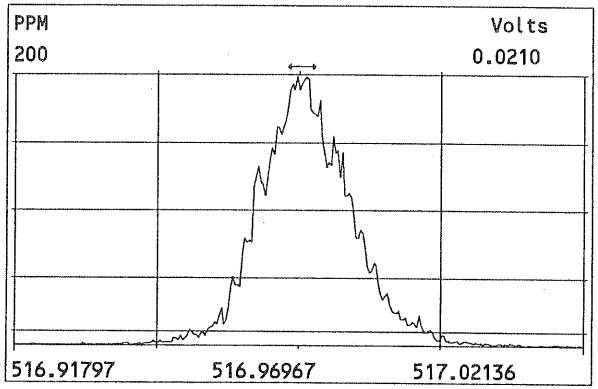












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 14SEP10M Sam:15 Analysis Date: 15-SEP-10 08:12:21

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	10.1	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.53	1.32-1.78	y	50.1	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.37	1.05-1.43	y	49.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.38	1.05-1.43	y	57.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.37	1.05-1.43	y	58.4	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.89	0.88-1.20	y	43.4	43.0 - 58.0
OCDD	M+2/M+4	0.99	0.76-1.02	y	96.8	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.66	0.65-0.89	y	8.92	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	48.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	y	47.2	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	45.0	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.19	1.05-1.43	y	45.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.16	1.05-1.43	y	45.2	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.20	1.05-1.43	y	45.5	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.00	0.88-1.20	y	45.6	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.88-1.20	y	45.8	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	90.8	63.0 - 159

(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.

Analyst: _____ Date: 9/15/10

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 14SEP10M Sam:15 Analysis Date: 15-SEP-10 08:12:21

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.87	0.65-0.89	y	98.4	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.74	1.32-1.78	y	120	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	112	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	94.0	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.91	0.88-1.20	y	111	72.0 - 138
13C-OCDD	M+2/M+4	0.97	0.76-1.02	y	173	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.87	0.65-0.89	y	101	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.75	1.32-1.78	y	108	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.73	1.32-1.78	y	111	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.47	0.43-0.59	y	112	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.46	0.43-0.59	y	105	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.44	0.43-0.59	y	104	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.46	0.43-0.59	y	102	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	y	93.6	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	85.9	77.0 - 129
13C-OCDF	M+2/M+4	0.96	0.76-1.02	y	144	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.67	7.80 - 12.8

(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) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 9/15/10

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: 623032 SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 8/23/10

RT Window Data Filename: 14SEP10M Sam:15 Analysis Date: 15-SEP-10 Time: 08:12:21

DB-5 IS Data Filename: 14SEP10M Sam:15 Analysis Date: 15-SEP-10 Time: 08:12:21

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:30	1,3,6,8-TCDF (F)	23:09
1,2,8,9-TCDD (L)	28:27	1,2,8,9-TCDF (L)	28:40
1,2,4,7,9-PeCDD (F)	30:21	1,3,4,6,8-PeCDF (F)	28:31
1,2,3,8,9-PeCDD (L)	33:54	1,2,3,8,9-PeCDF (L)	34:20
1,2,4,6,7,9-HxCDD (F)	36:14	1,2,3,4,6,8-HxCDF (F)	35:21
1,2,3,7,8,9-HxCDD (L)	39:18	1,2,3,7,8,9-HxCDF (L)	39:53
1,2,3,4,6,7,9-HpCDD (F)	42:55	1,2,3,4,6,7,8-HpCDF (F)	42:24
1,2,3,4,6,7,8-HpCDD (L)	44:19	1,2,3,4,7,8,9-HpCDF (L)	45:14

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 9/15/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 15-SEP-10 08:12:21 CS3 or VER Data Filename: 14SEP10M Sam:15

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
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
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			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052
13C-2,3,7,8-TCDD		1.022	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.238	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	0.923-1.203
13C-2,3,4,7,8-PeCDF		1.223	0.923-1.303

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 9/15/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 15-SEP-10 08:12:21 CS3 or VER Data Filename: 14SEP10M Sam:15

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
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-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
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
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-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-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.269	1.032-1.311
13C-OCDF		1.279	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 9/15/10

FAL ID: ST091410M2 Filename: 14SEP10M Sam:15 Acquired: 15-SEP-10 08:12:21 ICal: PCDDFAL3-8-23-10
Client ID: 1613 CS3 (100511J) ConCal: ST091410M1 EndCal: ST091410M2
Results: 2106 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 98.2
WHO 1998 Tox: 123 WHO 2005 Tox: 113

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.85e+06	0.79 y	27:31	1.11	10.1		2.50	-	-	*
1,2,3,7,8-PeCDD	1.40e+07	1.53 y	33:19	1.10	50.1		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.19e+07	1.37 y	38:42	1.37	49.9		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.08e+07	1.38 y	38:51	1.37	57.2		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.23e+07	1.37 y	39:18	1.36	58.4		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	8.60e+06	0.89 y	44:19	1.45	43.4		2.50	-	-	*
OCDD	9.44e+06	0.99 y	49:53	1.43	96.8		2.50	-	-	*
2,3,7,8-TCDF	5.27e+06	0.66 y	26:46	1.50	8.92		2.50	-	-	*
1,2,3,7,8-PeCDF	1.61e+07	1.55 y	31:35	0.94	48.1		2.50	-	-	*
2,3,4,7,8-PeCDF	1.57e+07	1.53 y	32:54	0.94	47.2		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.25e+07	1.20 y	37:18	0.93	45.0		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.43e+07	1.19 y	37:30	0.82	45.4		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.25e+07	1.16 y	38:27	0.92	45.2		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.35e+07	1.20 y	39:53	1.00	45.5		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	9.49e+06	1.00 y	42:24	1.39	45.6		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	6.18e+06	1.00 y	45:14	1.36	45.8		2.50	-	-	*
OCDF	8.00e+06	0.90 y	50:16	0.79	90.8		2.50	-	-	*

						Rec
13C-2,3,7,8-TCDD	2.54e+07	0.87 y	27:29	1.02	98.4	98.4
13C-1,2,3,7,8-PeCDD	2.54e+07	1.74 y	33:18	0.84	120	120
13C-1,2,3,4,7,8-HxCDD	1.74e+07	1.28 y	38:40	1.07	112	112
13C-1,2,3,6,7,8-HxCDD	1.37e+07	1.29 y	38:51	1.01	94.0	94.0
13C-1,2,3,4,6,7,8-HpCDD	1.36e+07	0.91 y	44:17	0.86	111	111
13C-OCDD	1.36e+07	0.97 y	49:52	0.55	173	86.3
13C-2,3,7,8-TCDF	3.94e+07	0.87 y	26:45	0.99	101	101
13C-1,2,3,7,8-PeCDF	3.55e+07	1.75 y	31:35	0.84	108	108
13C-2,3,4,7,8-PeCDF	3.55e+07	1.73 y	32:54	0.81	111	111
13C-1,2,3,4,7,8-HxCDF	3.00e+07	0.47 y	37:17	1.85	112	112
13C-1,2,3,6,7,8-HxCDF	3.83e+07	0.46 y	37:29	2.54	105	105
13C-2,3,4,6,7,8-HxCDF	3.01e+07	0.44 y	38:25	2.01	104	104
13C-1,2,3,7,8,9-HxCDF	2.98e+07	0.46 y	39:52	2.03	102	102
13C-1,2,3,4,6,7,8-HpCDF	1.50e+07	0.43 y	42:23	1.11	93.6	93.6
13C-1,2,3,4,7,8,9-HpCDF	9.95e+06	0.45 y	45:13	0.80	85.9	85.9
13C-OCDF	2.24e+07	0.96 y	50:15	1.08	144	71.9
37Cl-2,3,7,8-TCDD	1.67e+06		27:31	0.69	9.67	96.7
13C-1,2,3,4-TCDD	2.53e+07	0.88 y	26:54	-	56.2	
13C-1,2,3,4-TCDF	3.94e+07	0.88 y	25:39	-	54.4	
13C-1,2,3,7,8,9-HxCDD	1.44e+07	1.31 y	39:17	-	52.3	

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.53e+07		23:55	1.11	54.1	2.50	-	-	*		23
Total Penta-Dioxins	2.99e+07		30:21	1.10	107	2.50	-	-	*		10
Total Hexa-Dioxins	4.01e+07		36:14	1.37	189	2.50	-	-	*		12
Total Hepta-Dioxins	1.92e+07		42:55	1.45	96.8	2.50	-	-	*		26
Total Tetra-Furans	2.13e+07		23:09	1.50	36.0	2.50	-	-	*		12
1st Fn. Tot Penta-Furans	1.78e+07		28:31	0.94	53.5	2.50	-	-	*	PeCDF	1
Total Penta-Furans	4.60e+07		30:17	0.94	138	2.50	-	-	*	192	14
Total Hexa-Furans	6.17e+07		35:21	0.91	212	2.50	-	-	*		15
Total Hepta-Furans	1.64e+07		42:24	1.38	95.9	2.50	-	-	*		31

Analyst: _____ Date: 9/15/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:14SEP10M Instrument: FAL3 GC: DB5 Experiment:PCDD

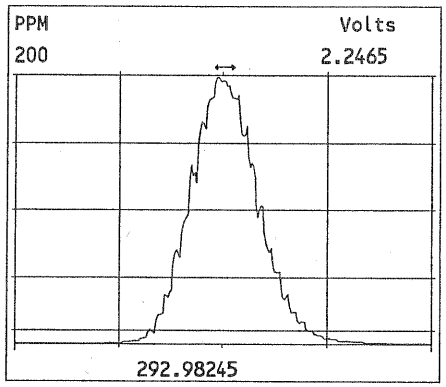
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
14SEP10M	1	ST091410M1	1613 CS3 (100511J)	14-SEP-10 19:17:53	ST091410M1	ST091410M2	TC
14SEP10M	2	2106-001-0001-OPR	OPR	14-SEP-10 20:13:14	ST091410M1	ST091410M2	TC
14SEP10M	3	2106-001-0001-MB	Method Blank	14-SEP-10 21:08:33	ST091410M1	ST091410M2	TC
14SEP10M	4	6331-001-0001-SA	PSB20-0-0.5-082510	14-SEP-10 22:03:52	ST091410M1	ST091410M2	TC
14SEP10M	5	6331-002-0001-SA	PSB20-2-4-082510	14-SEP-10 22:59:10	ST091410M1	ST091410M2	TC
14SEP10M	6	6331-003-0001-SA	PSB20-1.5-2-082510	14-SEP-10 23:54:29	ST091410M1	ST091410M2	TC
14SEP10M	7	6331-004-0001-SA	PSB20-2-4-082510-DUP	15-SEP-10 00:49:48	ST091410M1	ST091410M2	TC
14SEP10M	8	6331-005-0001-SA	PSB16-2-4-082510	15-SEP-10 01:45:07	ST091410M1	ST091410M2	TC
14SEP10M	9	6331-006-0001-SA	PSB16-0-0.5-082510	15-SEP-10 02:40:26	ST091410M1	ST091410M2	TC
14SEP10M	10	6331-008-0001-SA	PSB16-4-6-082510	15-SEP-10 03:35:44	ST091410M1	ST091410M2	TC
14SEP10M	11	6331-009-0001-SA	PSB16-13-15-082510	15-SEP-10 04:31:07	ST091410M1	ST091410M2	TC
14SEP10M	12	6331-007-0001-SA	PSB16-1-2-082510	15-SEP-10 05:26:26	ST091410M1	ST091410M2	TC
14SEP10M	13	6323-001-0001-SA	0081001-01	15-SEP-10 06:21:44	ST091410M1	ST091410M2	TC
14SEP10M	14	SB091410M1	Solvent Blank	15-SEP-10 07:17:02	ST091410M1	ST091410M2	TC
14SEP10M	15	ST091410M2	1613 CS3 (100511J)	15-SEP-10 08:12:21	ST091410M1	ST091410M2	TC

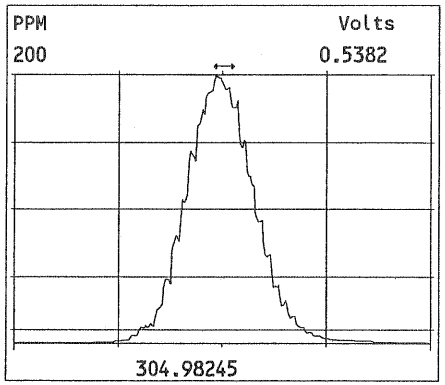
9/15/10

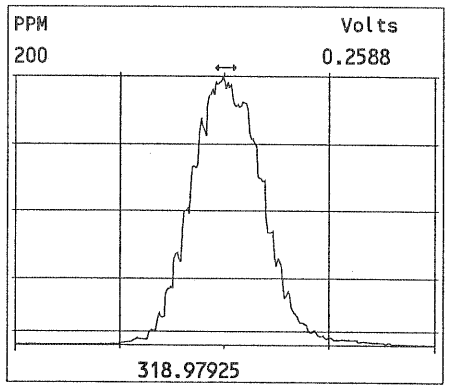
Data Backed Up:_____

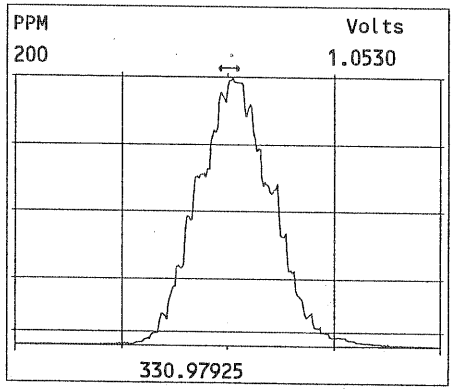
Date:_____

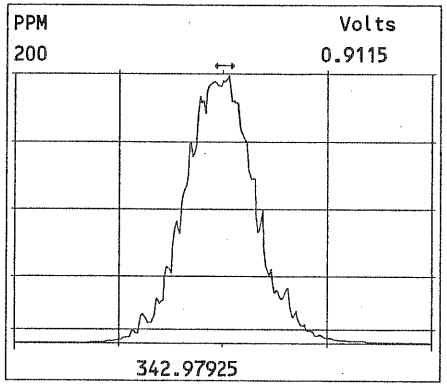
Peak Locate Examination:14-SEP-2010:19:16 File:14SEP10M
Experiment:PCDD Function:1 Reference:PFK

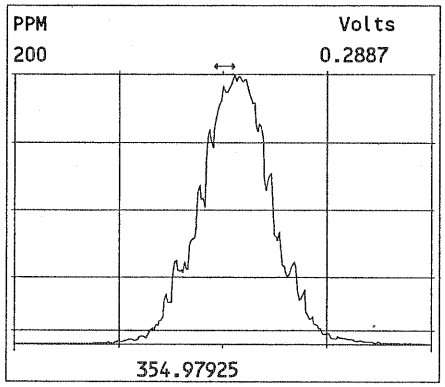


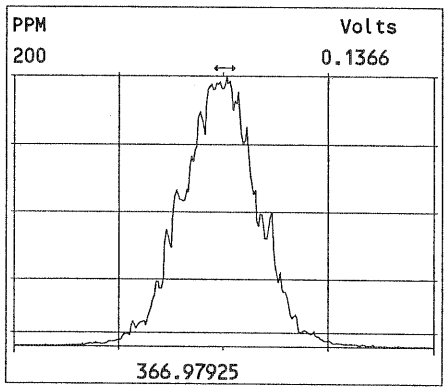


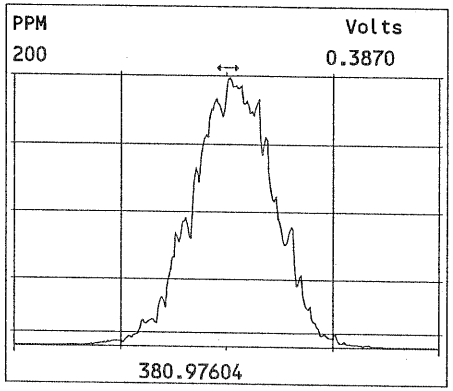


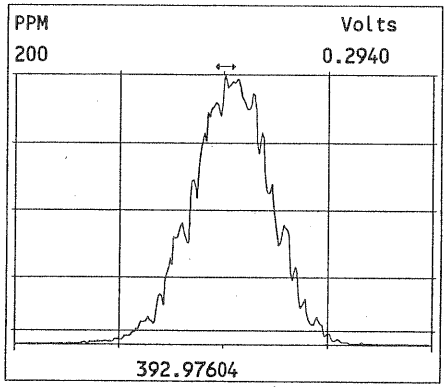


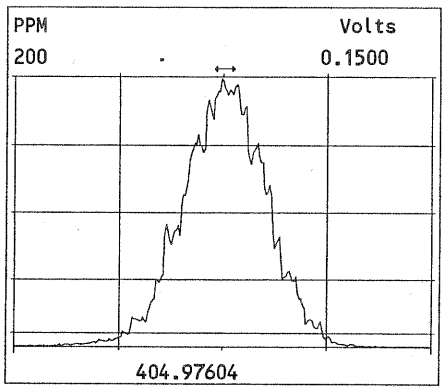


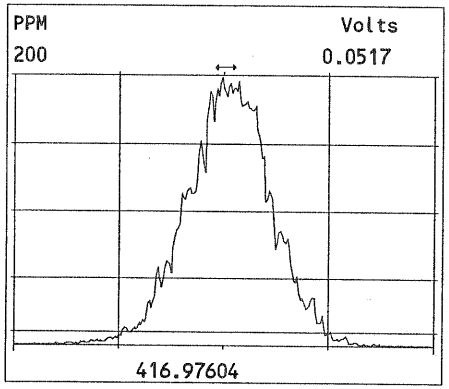






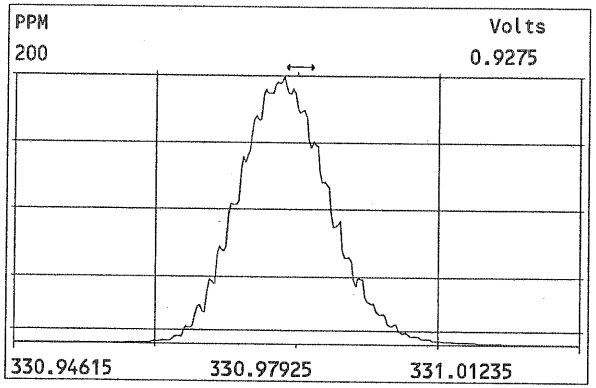


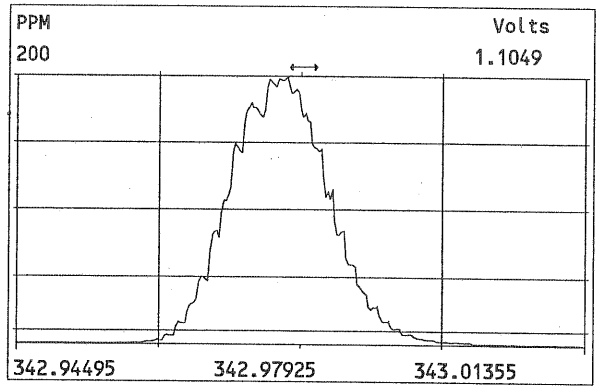


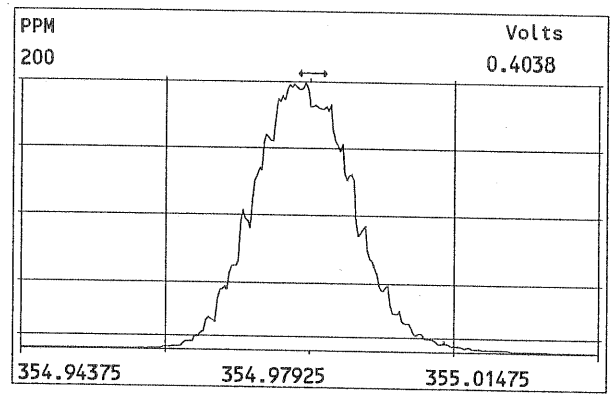


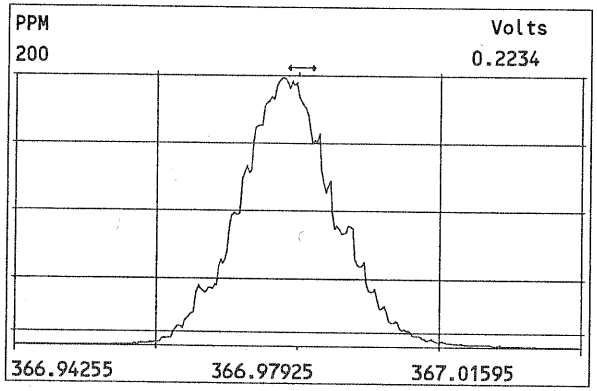
Peak Locate Examination:14-SEP-2010:19:16 File:14SEP10M

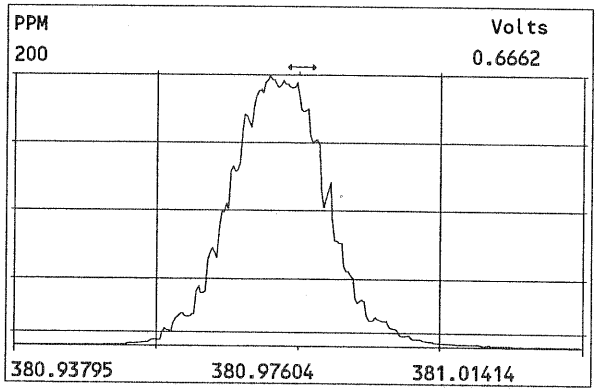
Experiment:PCDD Function:2. Reference:PFK

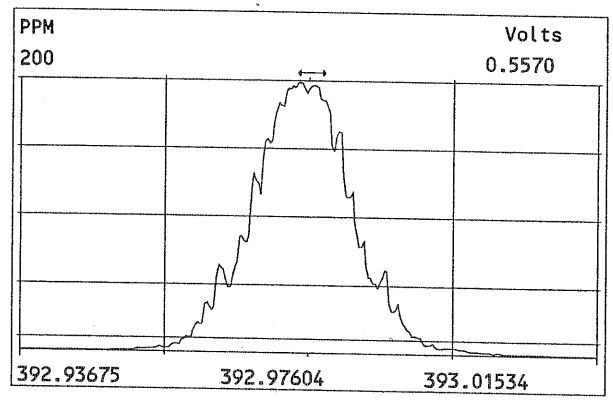


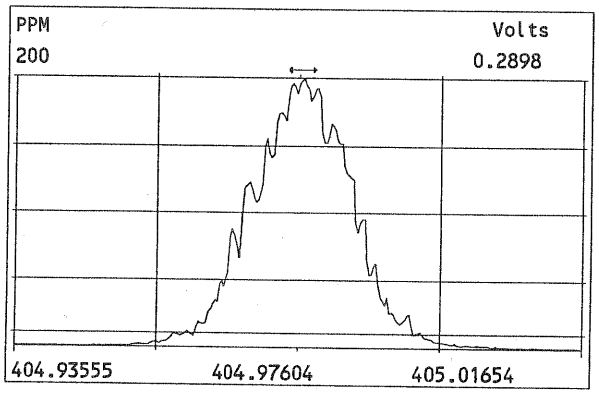


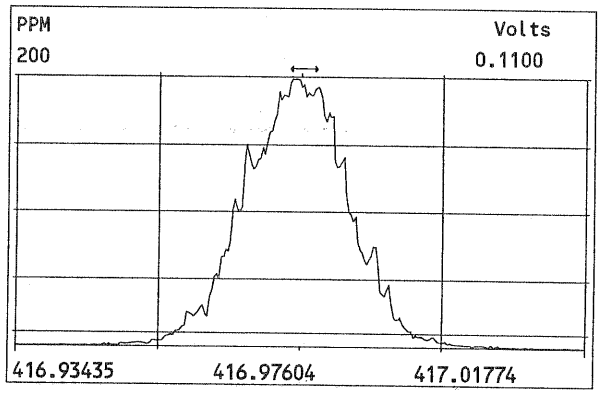




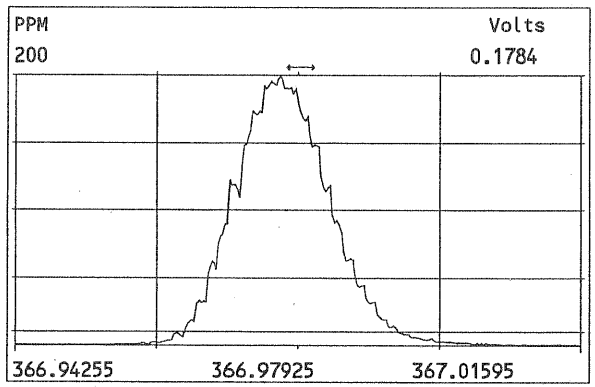


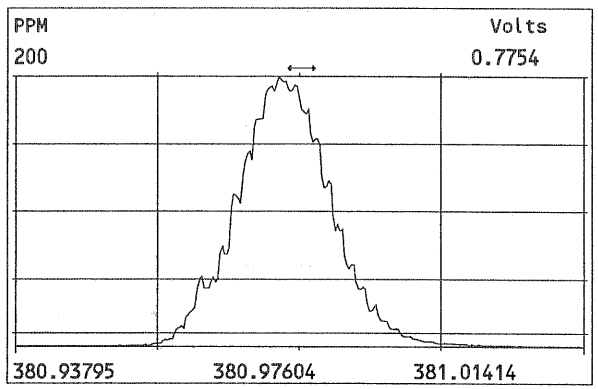


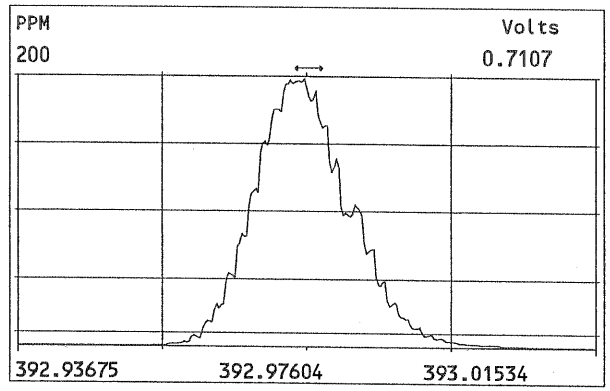


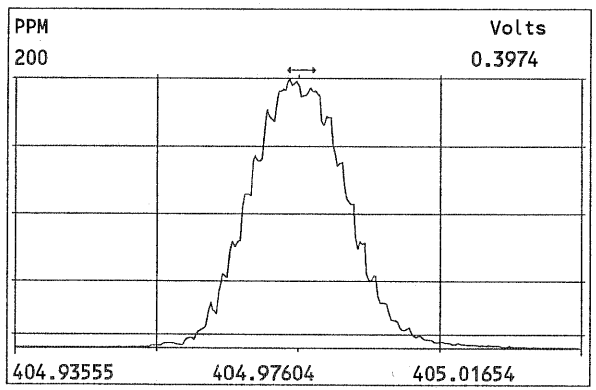


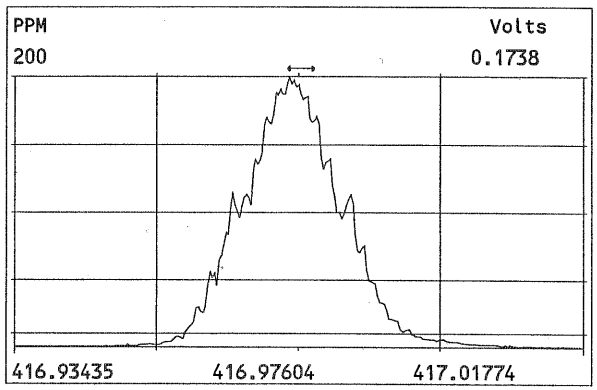
Peak Locate Examination:14-SEP-2010:19:16 File:14SEP10M
Experiment:PCDD Function:3 Reference:PFK

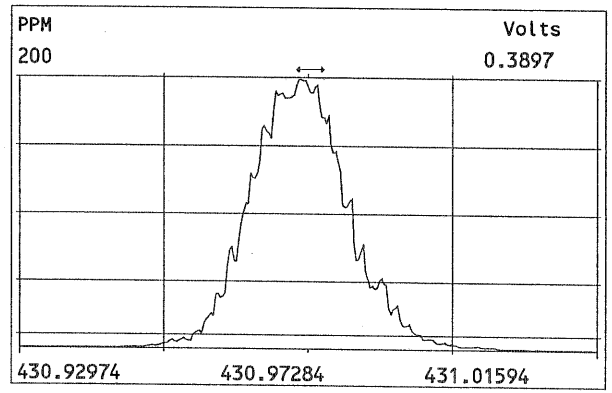


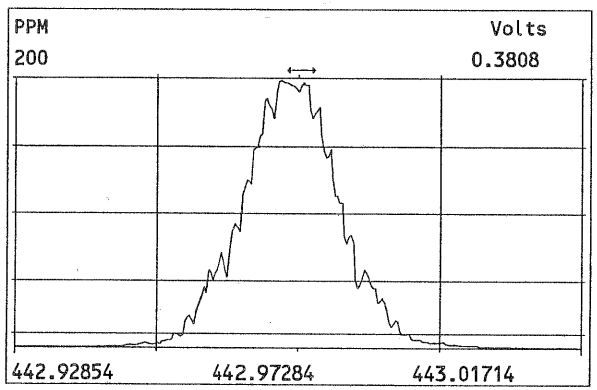


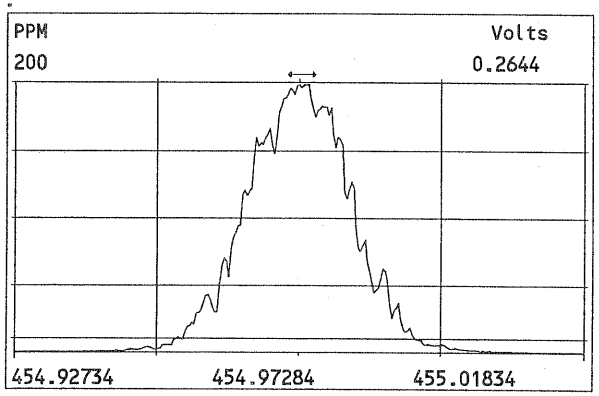






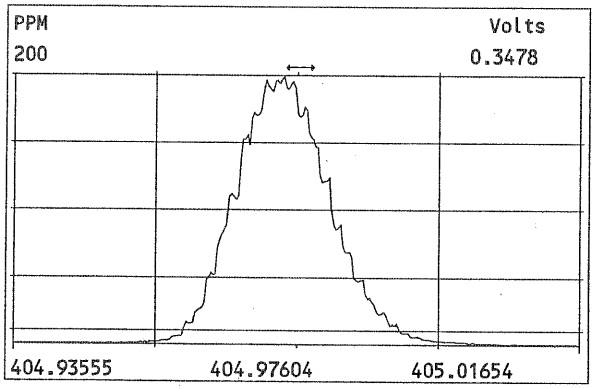


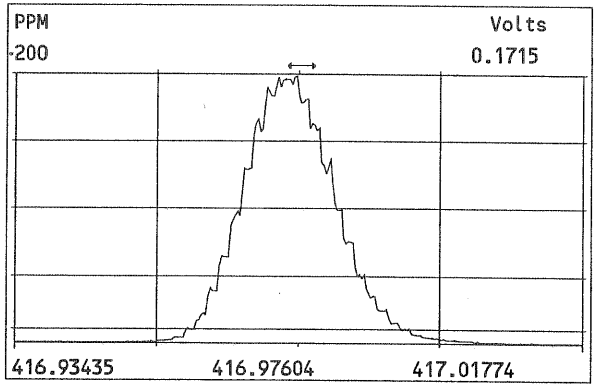


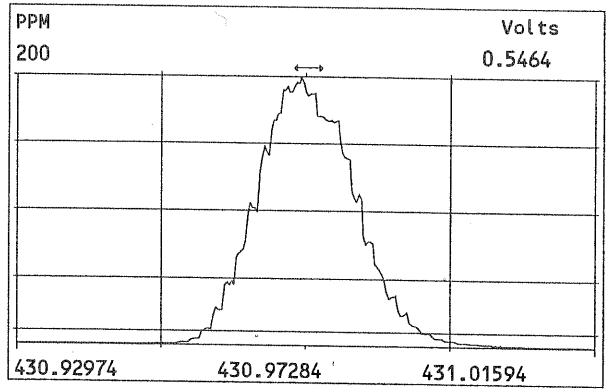


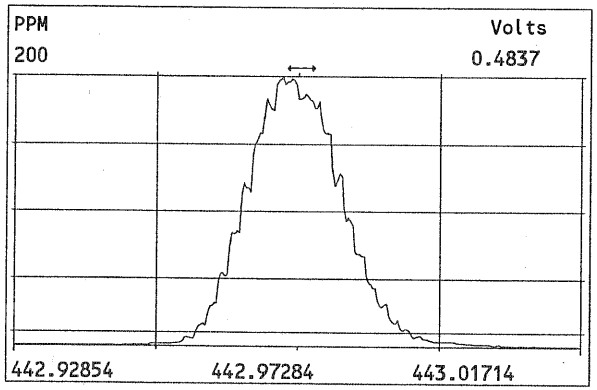
Peak Locate Examination:14-SEP-2010:19:17 File:14SEP10M

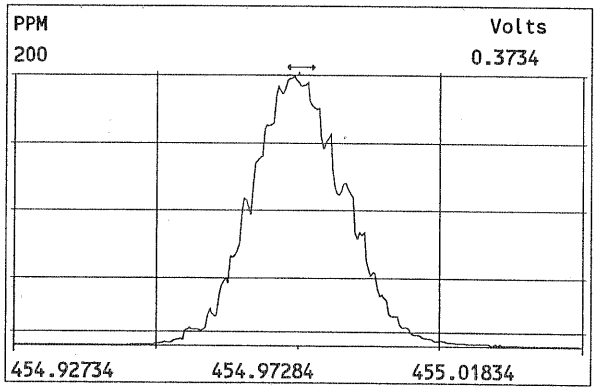
Experiment:PCDD Function:4 Reference:PFK

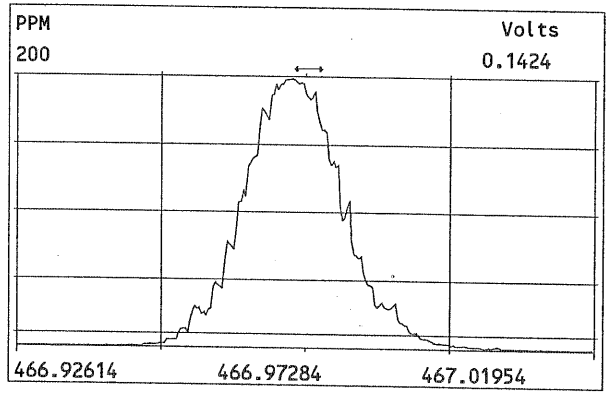


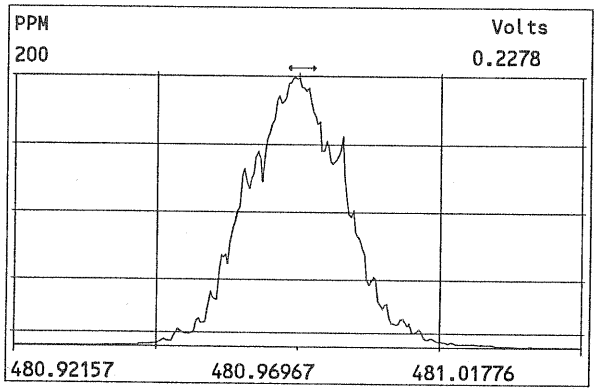




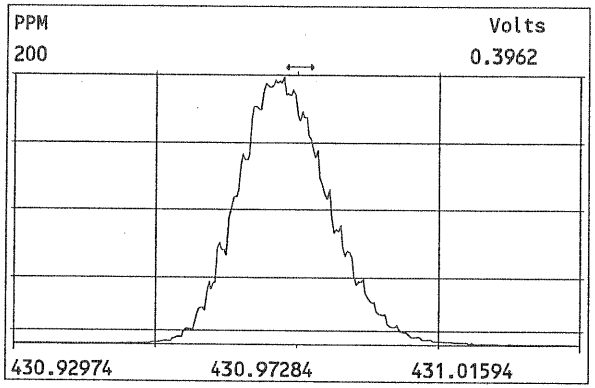


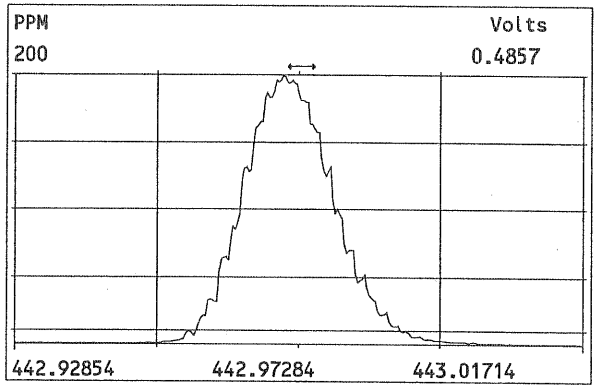


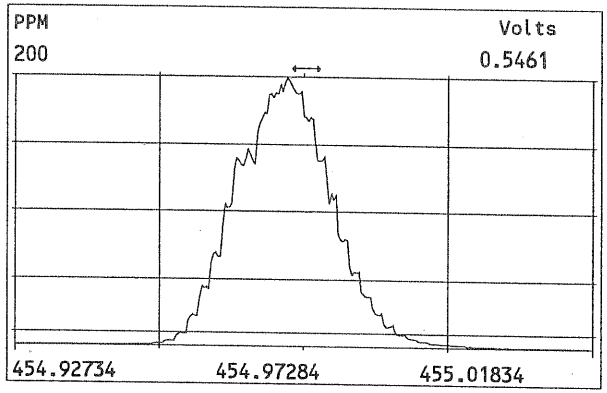


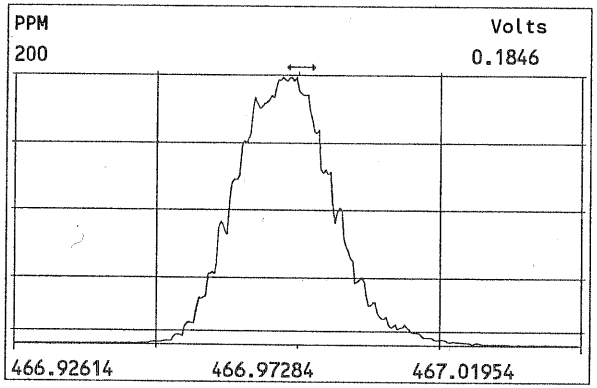


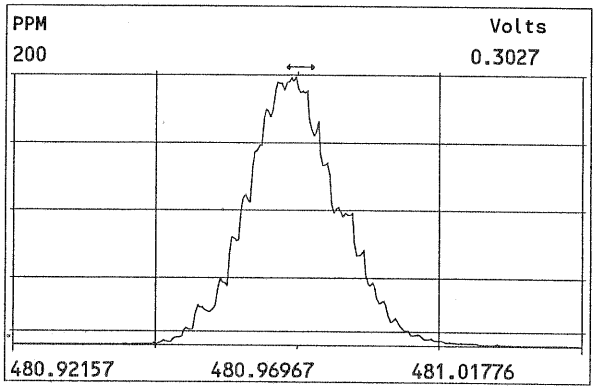
Peak Locate Examination:14-SEP-2010:19:17 File:14SEP10M
Experiment:PCDD Function:5 Reference:PFK

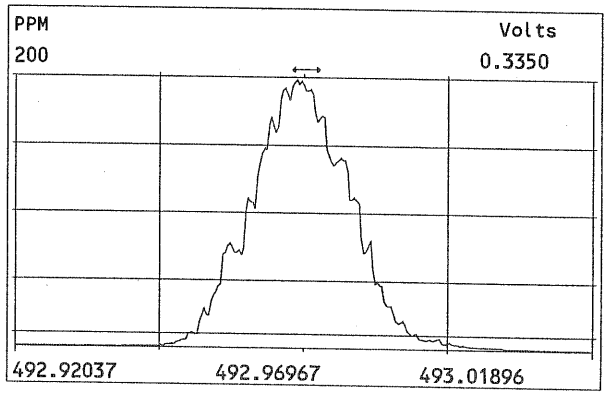


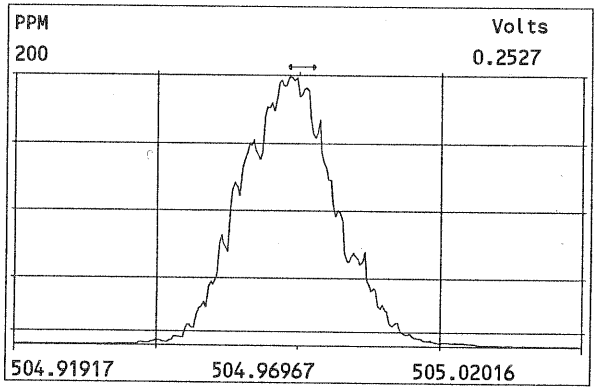


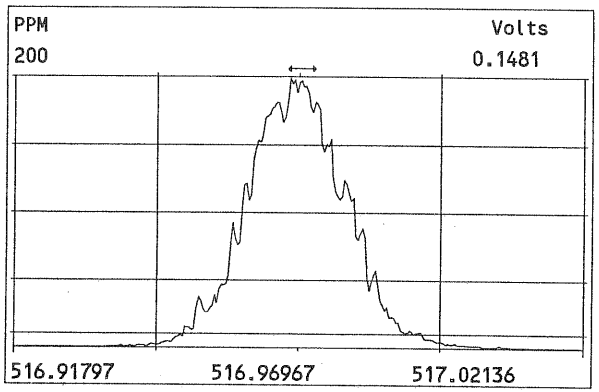




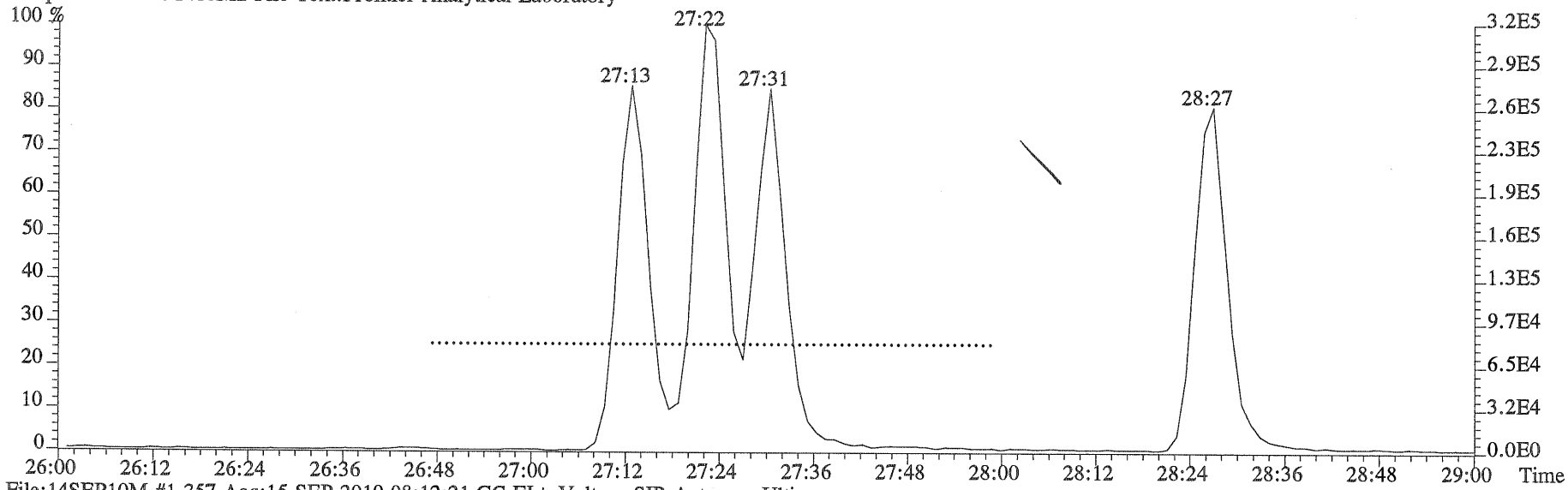




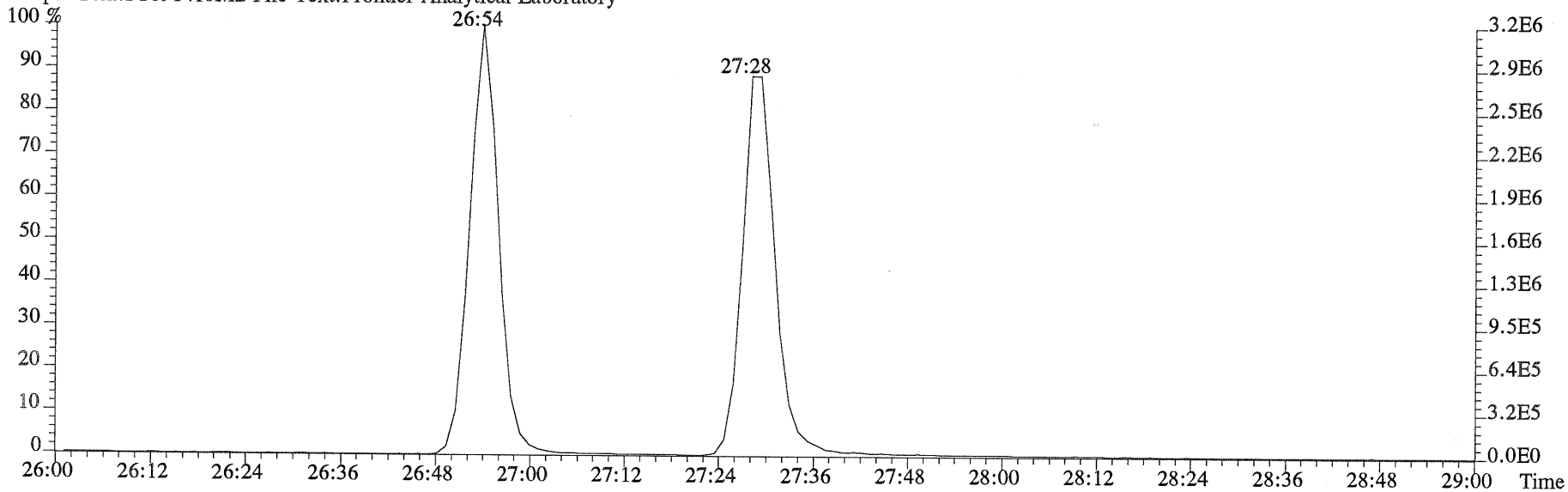




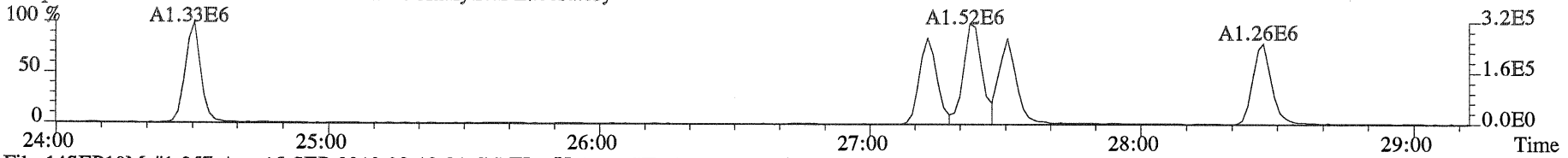
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:15 Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



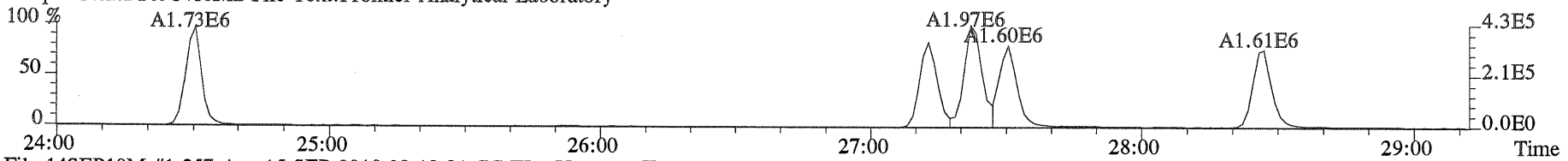
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:15 Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



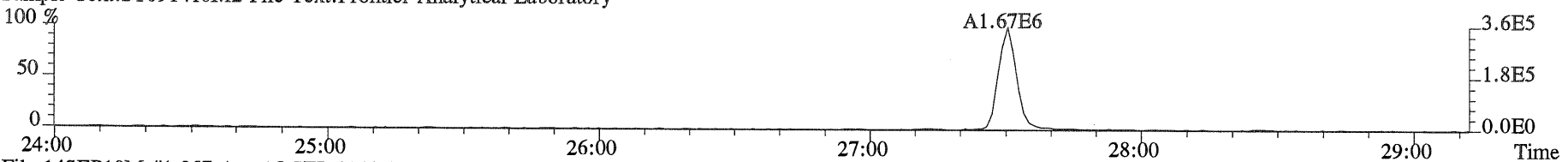
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



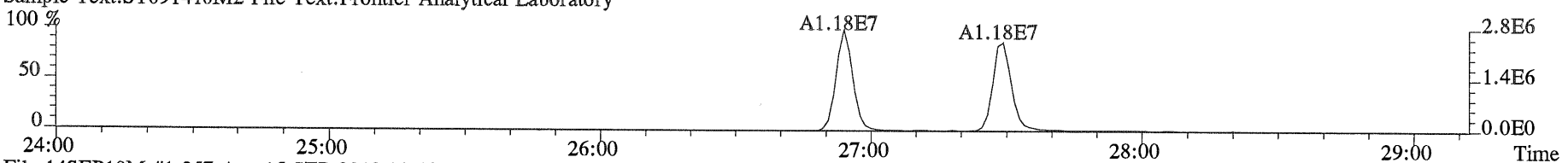
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



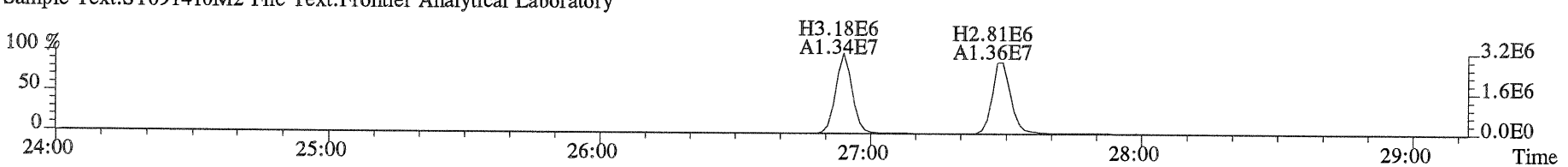
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



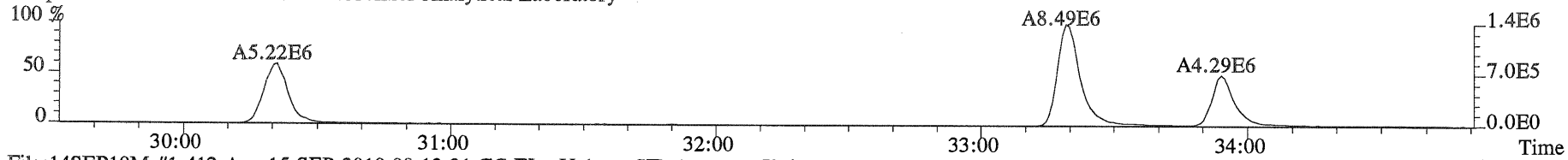
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



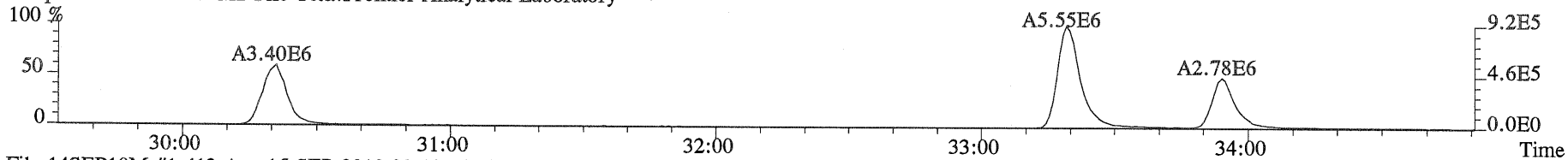
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



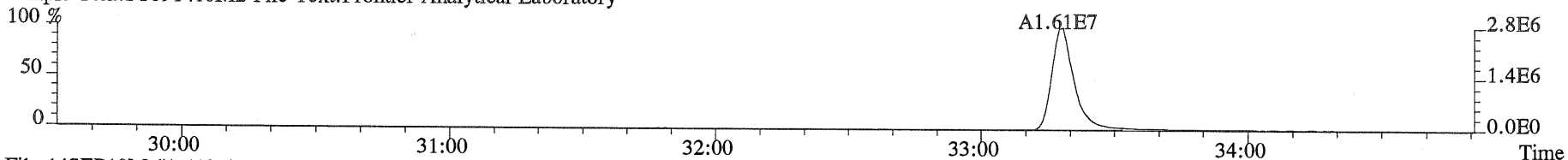
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



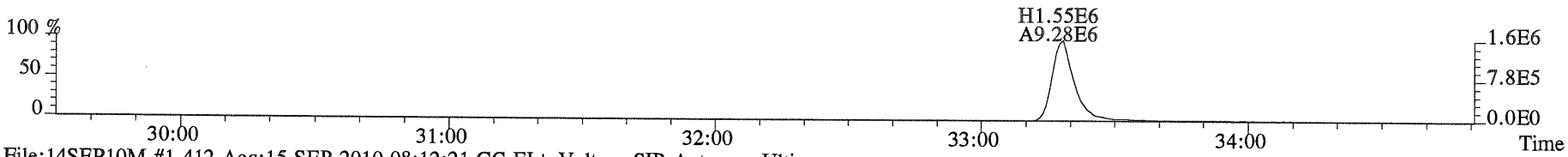
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



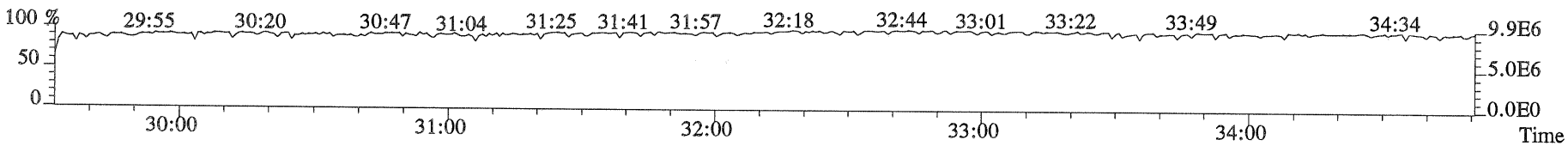
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



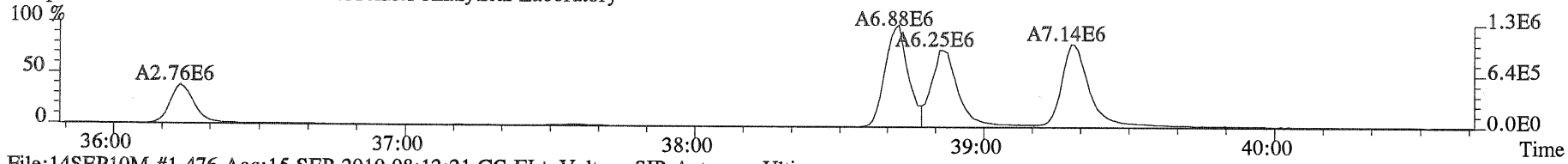
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



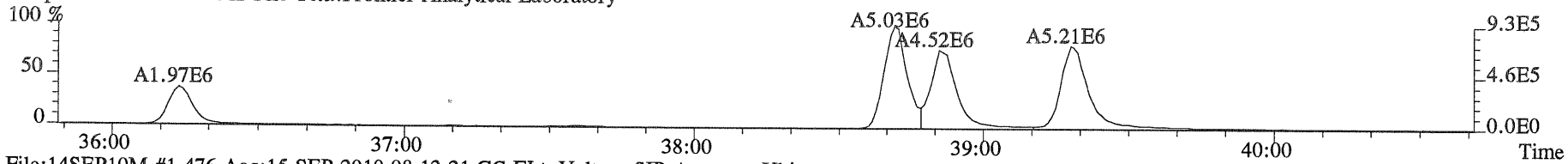
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:15 F:2 Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



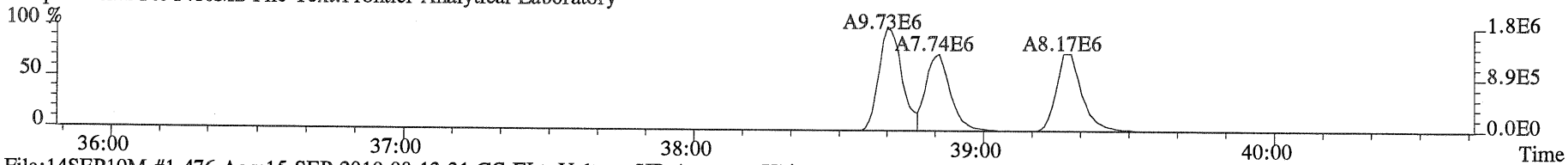
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



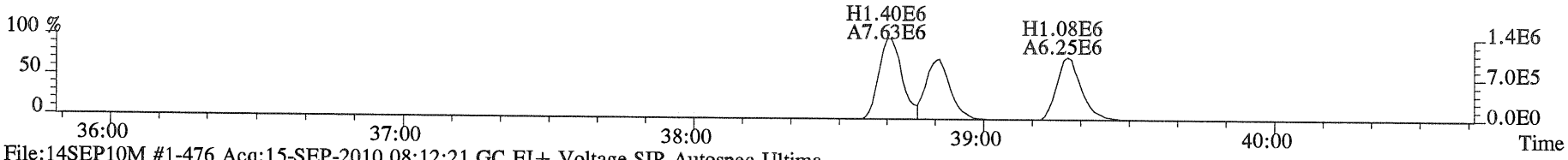
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



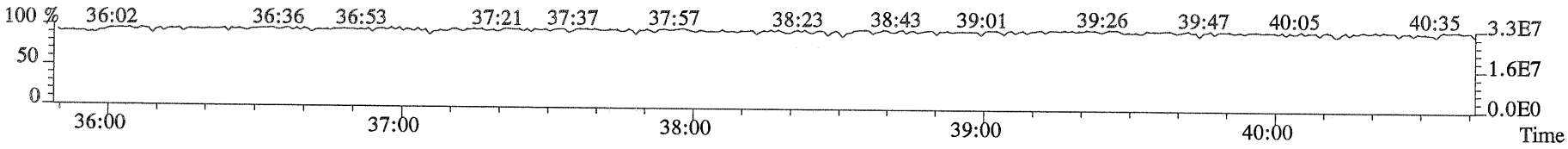
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:15 F:3 BSUB(10000,15,200.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



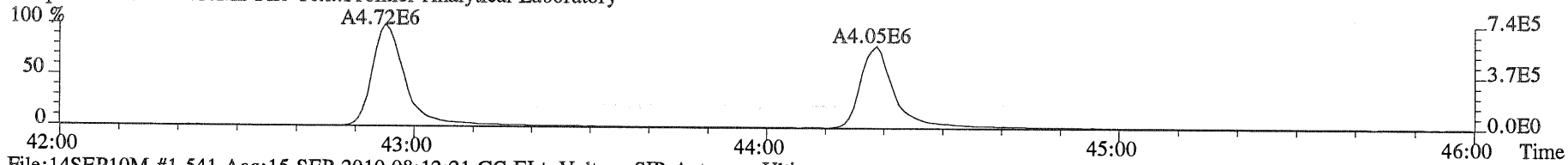
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:15 F:3 BSUB(10000,15,200.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



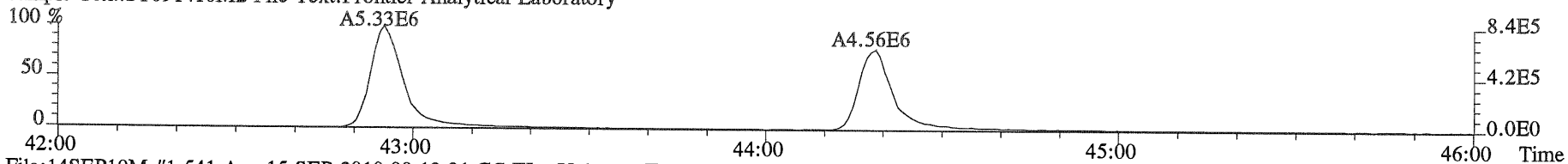
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:15 F:3 Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



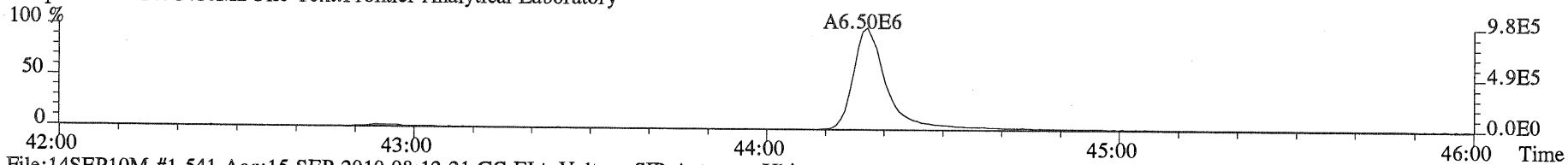
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



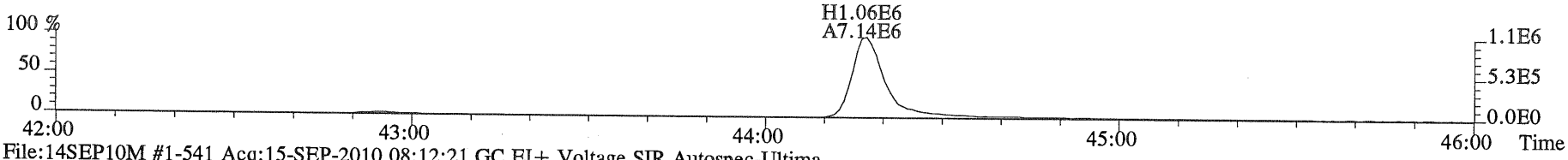
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



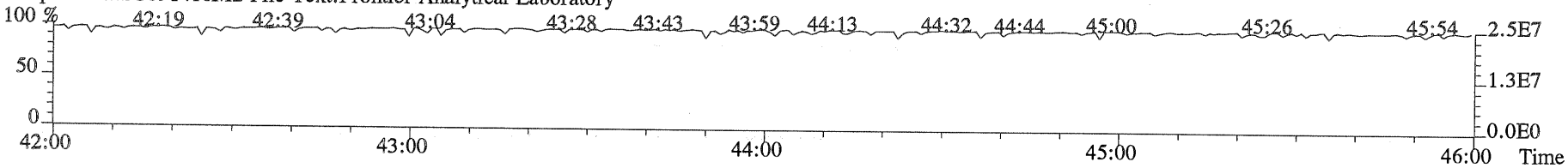
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



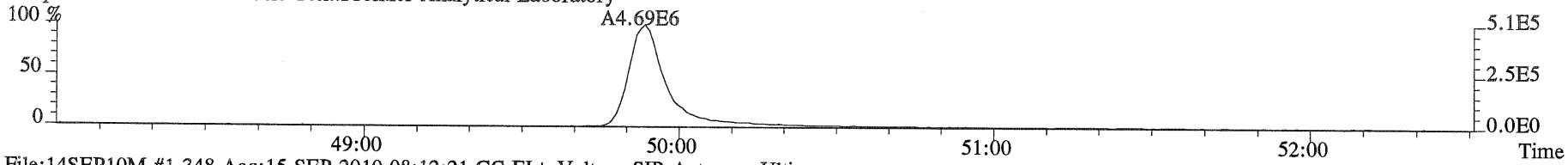
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



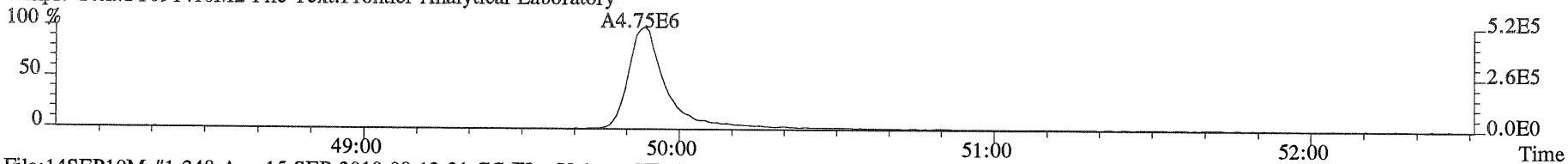
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:15 F:4 Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



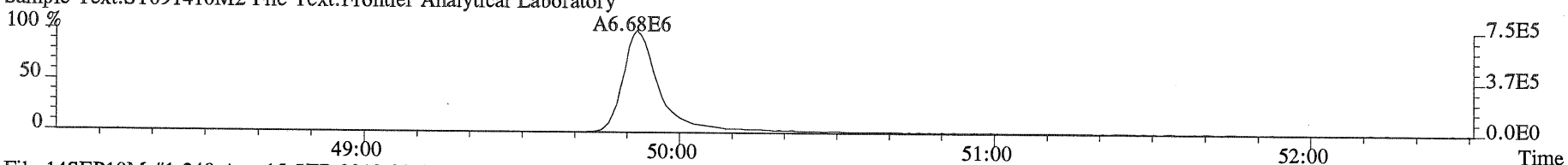
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



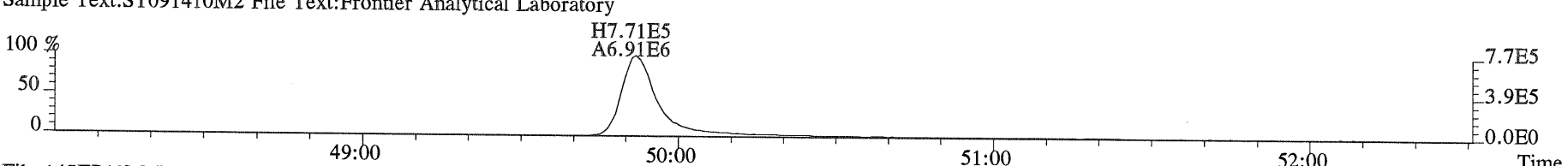
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



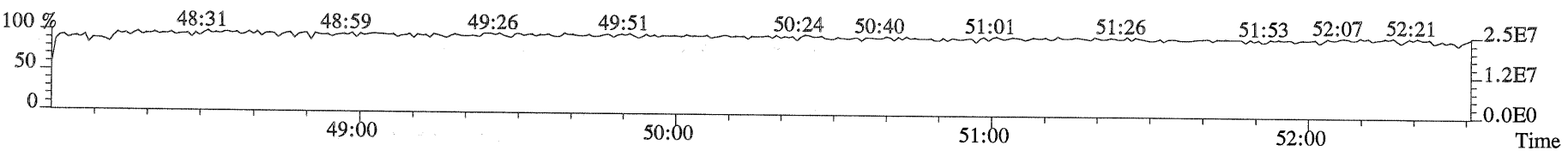
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



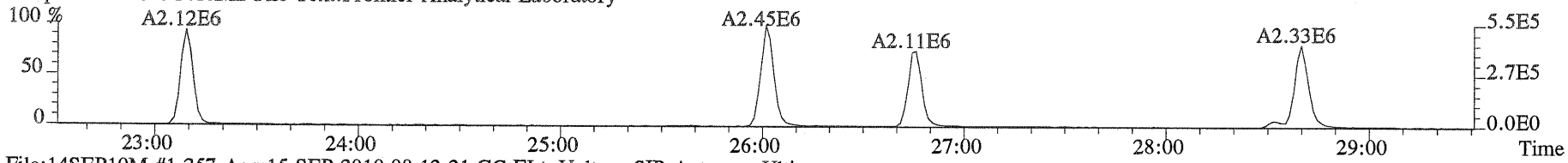
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



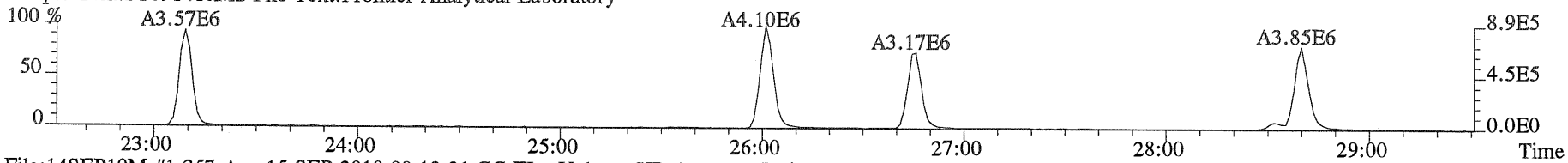
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:15 F:5 Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



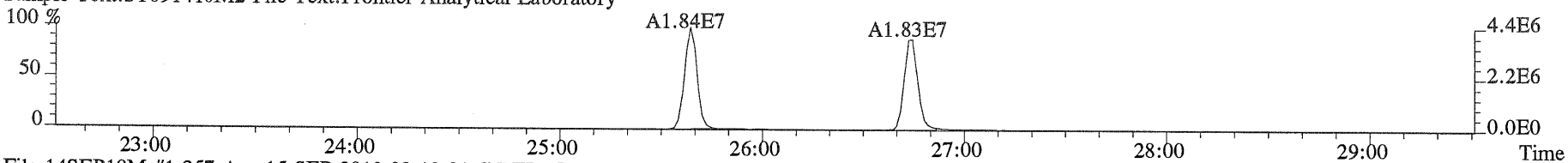
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:15 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



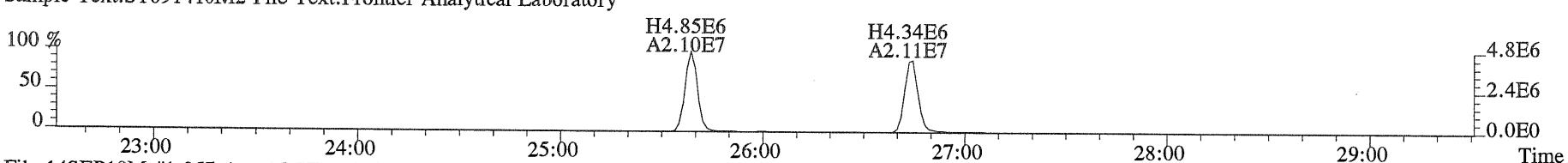
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



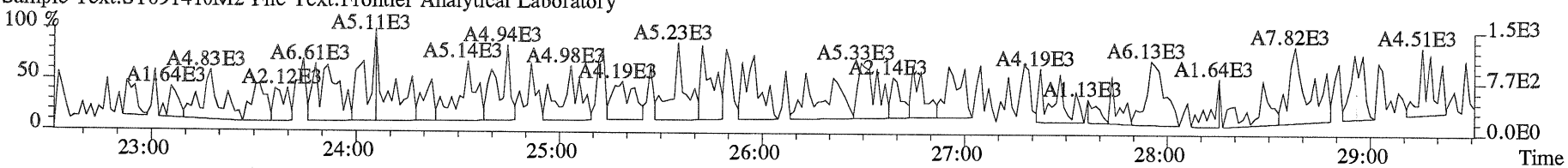
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



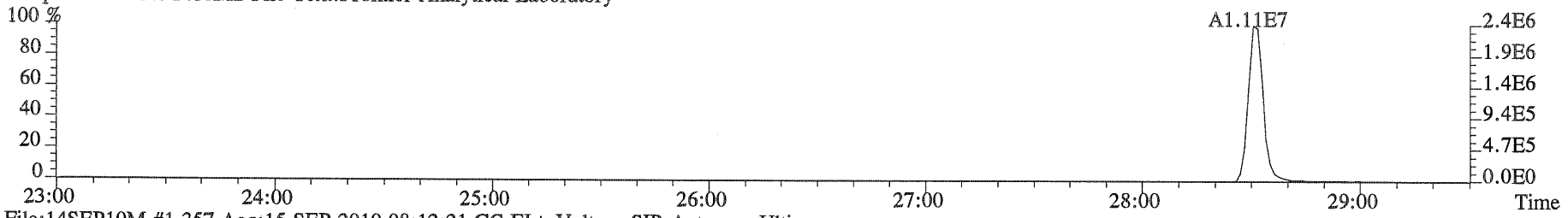
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



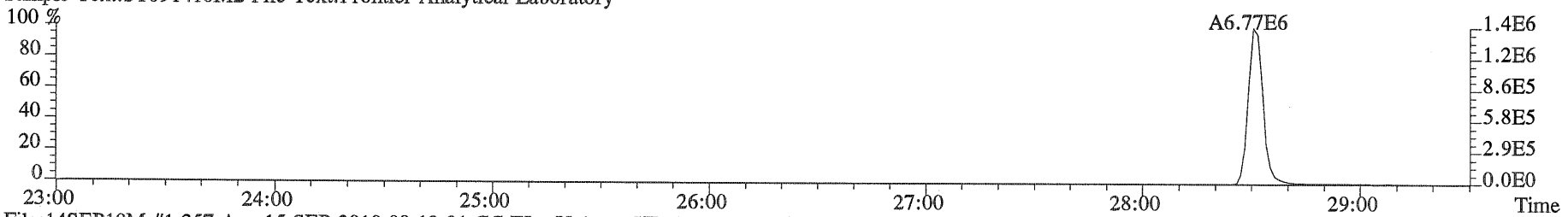
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



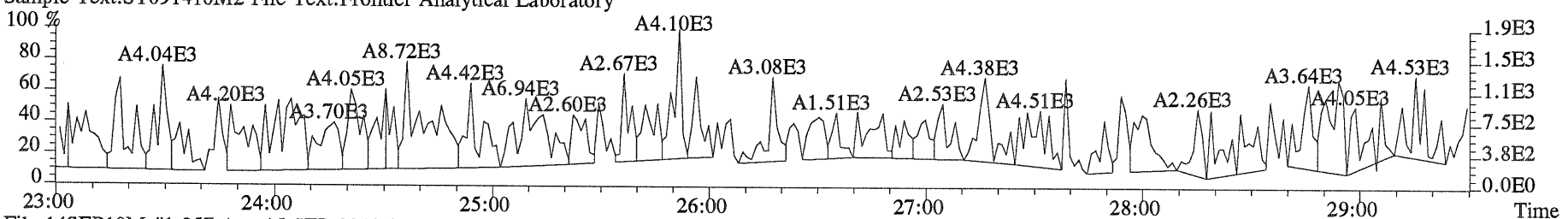
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



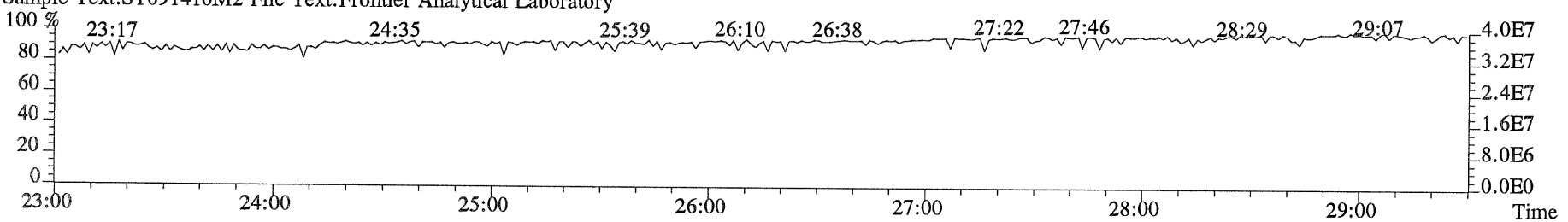
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



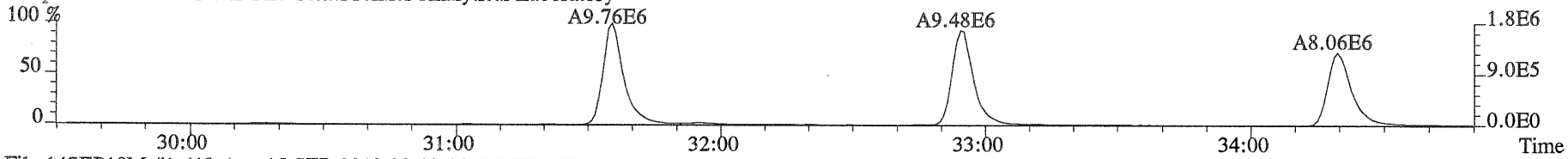
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



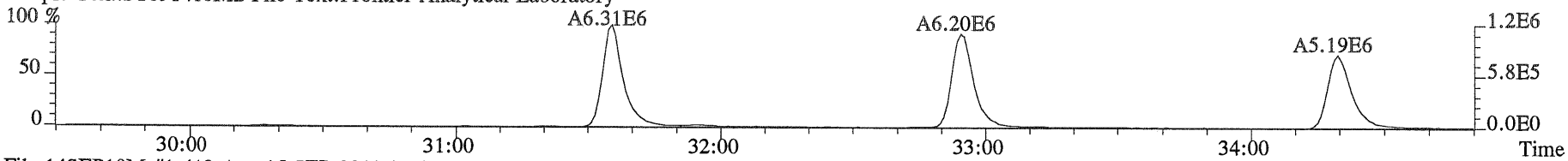
File:14SEP10M #1-357 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:15 Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



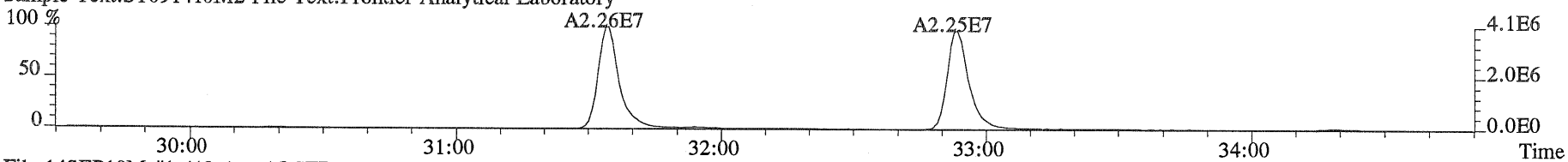
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



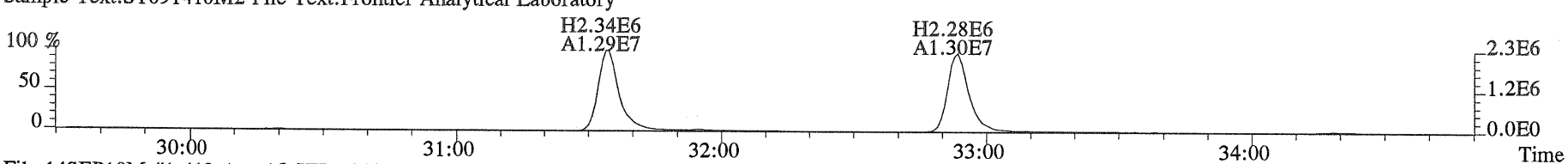
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



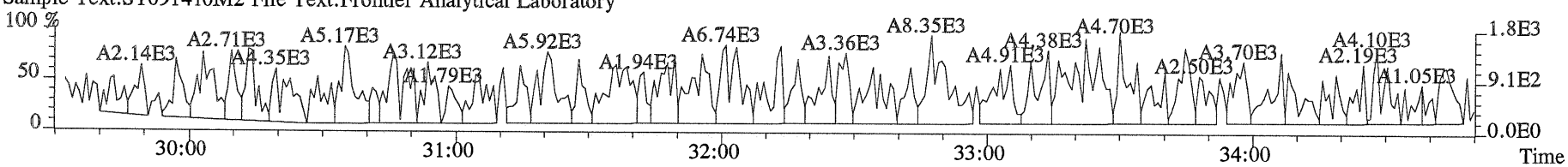
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



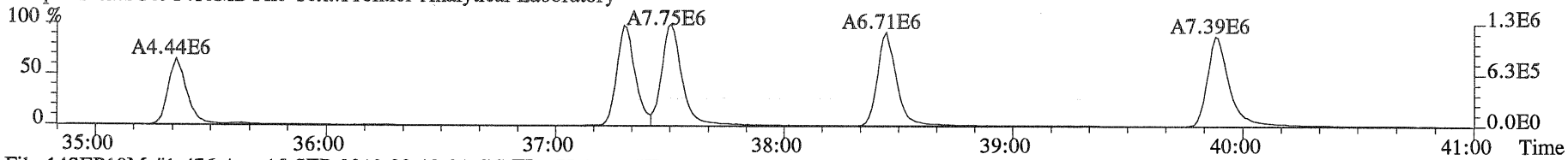
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



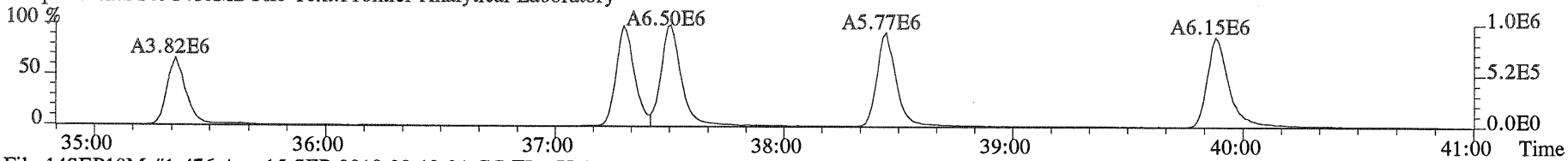
File:14SEP10M #1-412 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



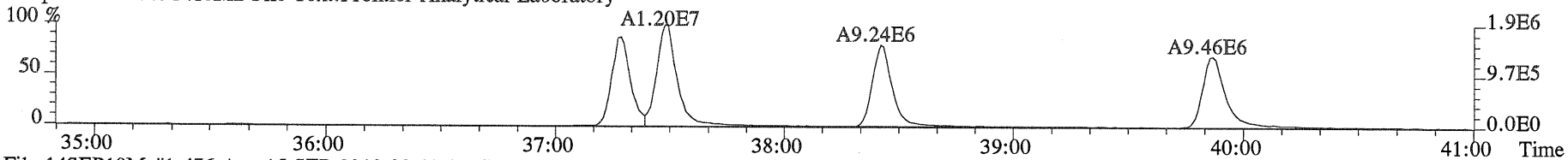
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



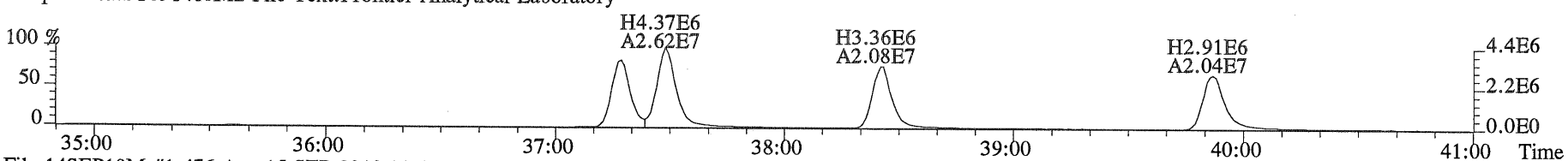
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



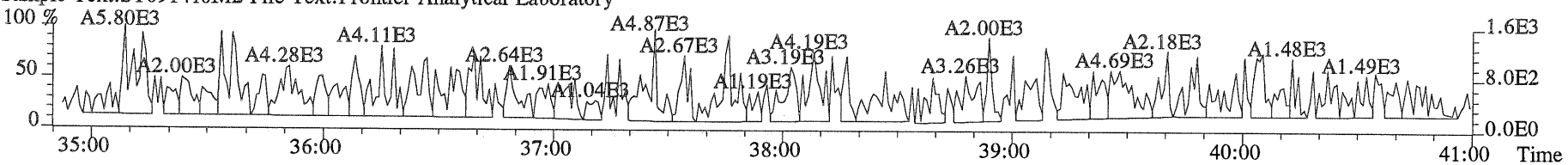
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



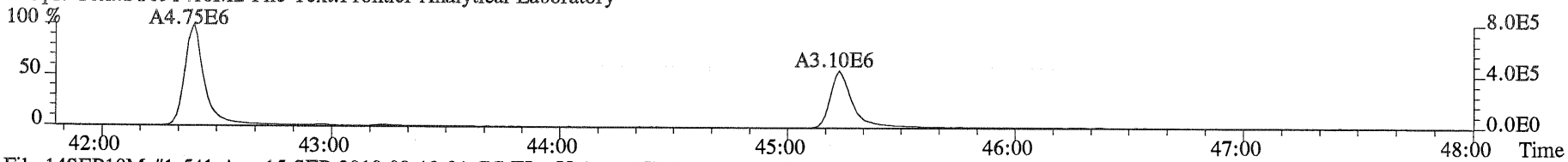
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



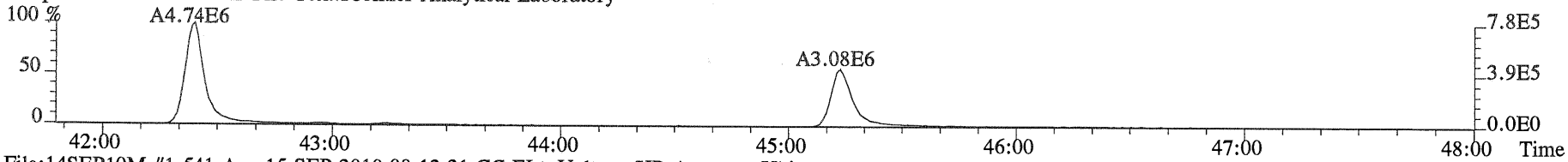
File:14SEP10M #1-476 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



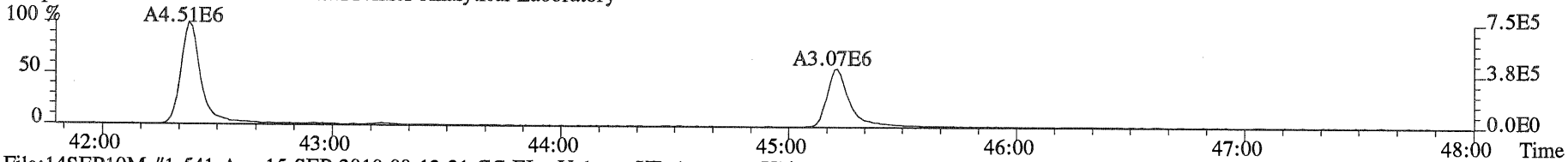
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



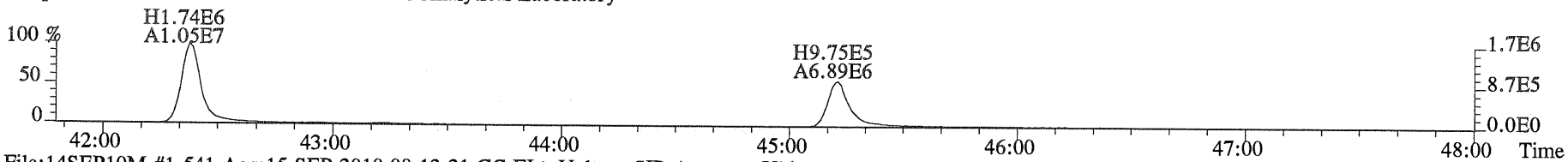
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



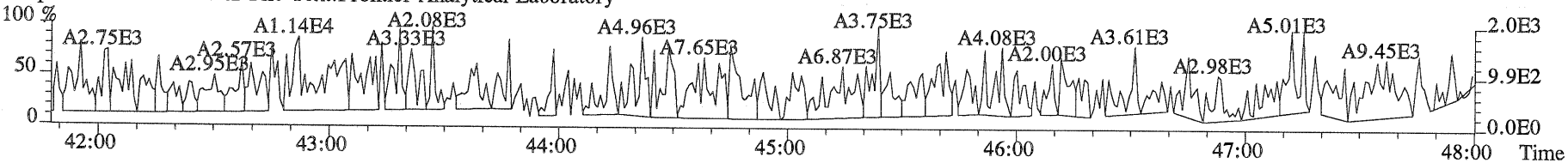
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



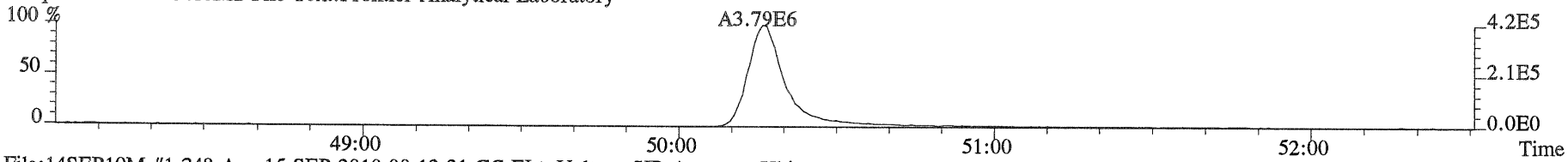
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



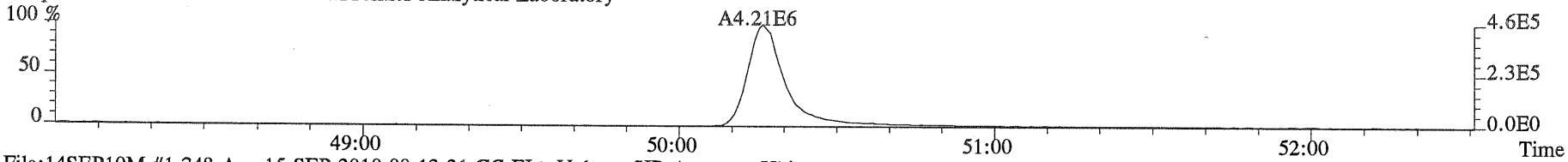
File:14SEP10M #1-541 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



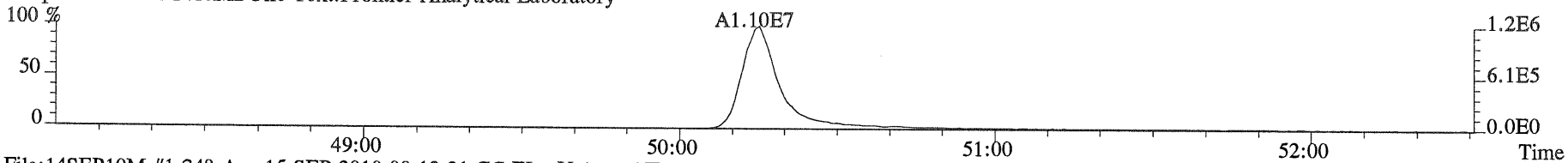
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



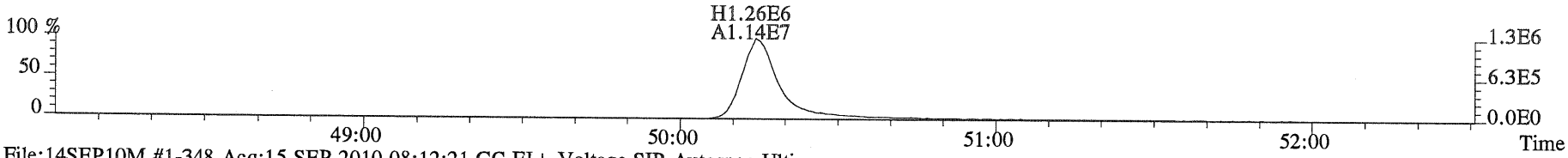
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



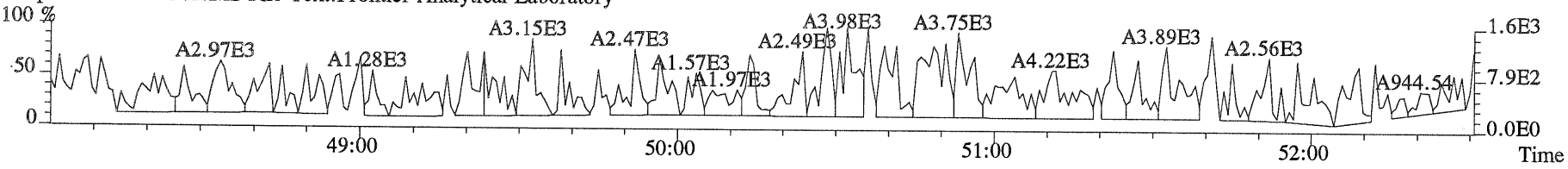
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory



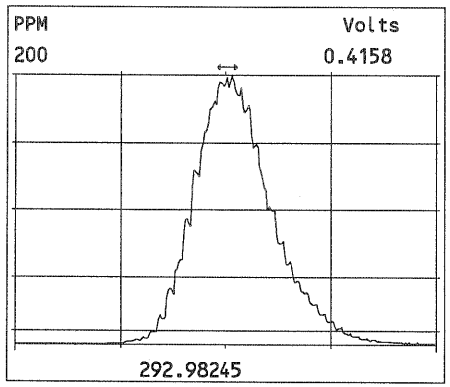
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory

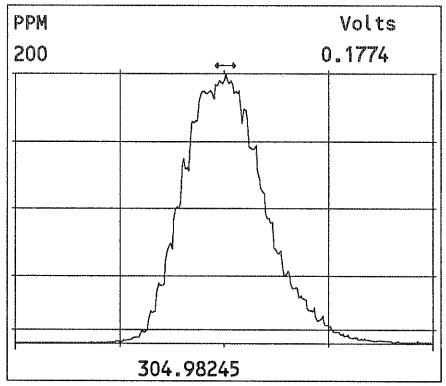


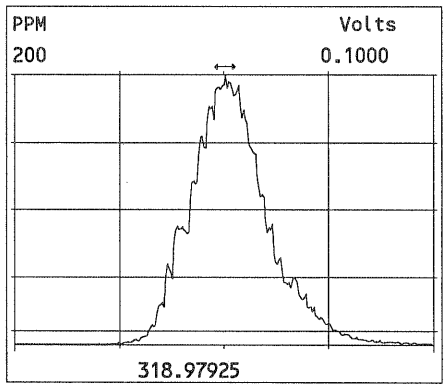
File:14SEP10M #1-348 Acq:15-SEP-2010 08:12:21 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST091410M2 File Text:Frontier Analytical Laboratory

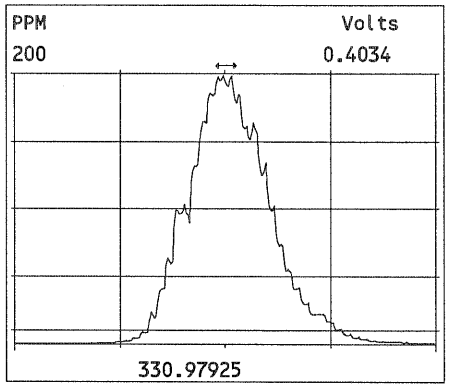


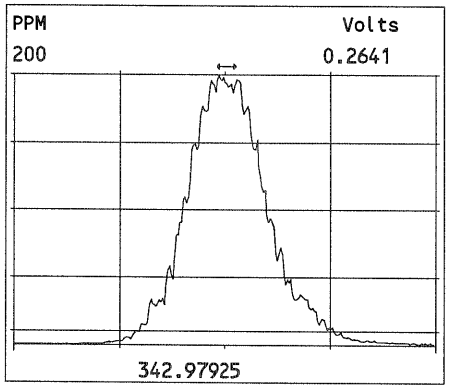
Peak Locate Examination:15-SEP-2010:09:09 File:14SEP10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

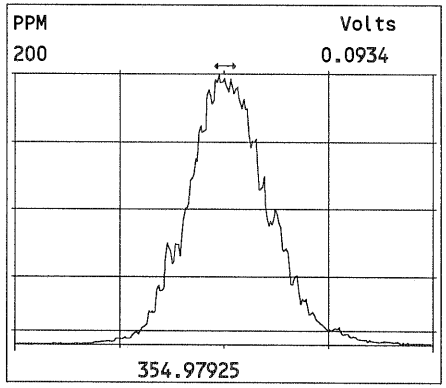


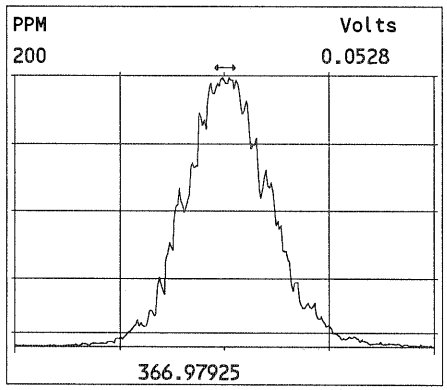


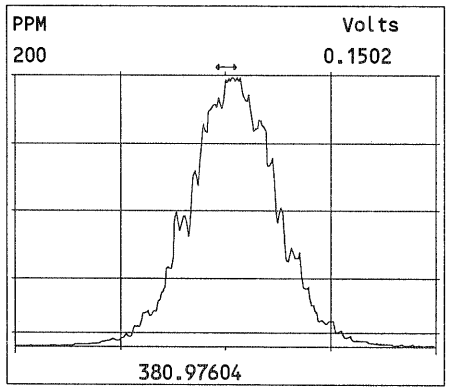


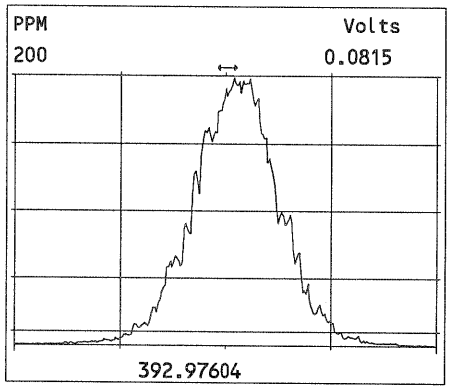


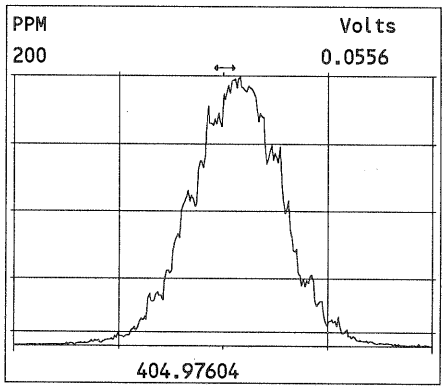


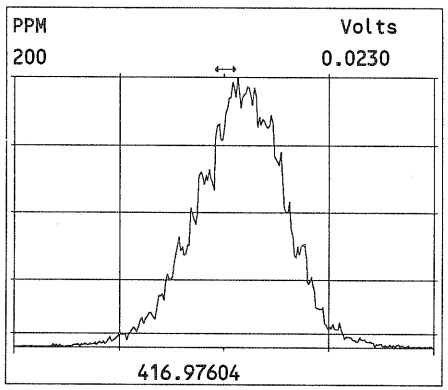




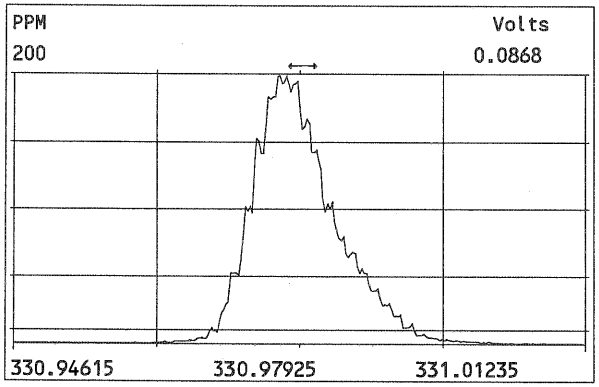


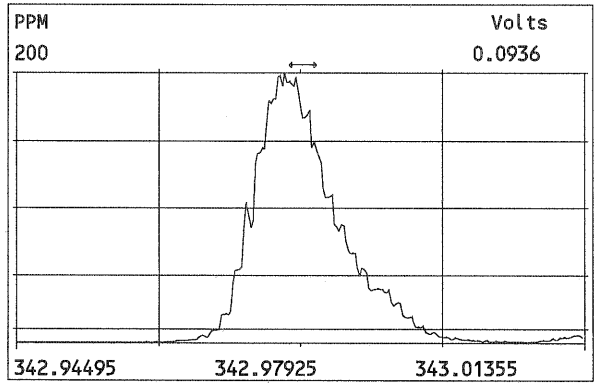


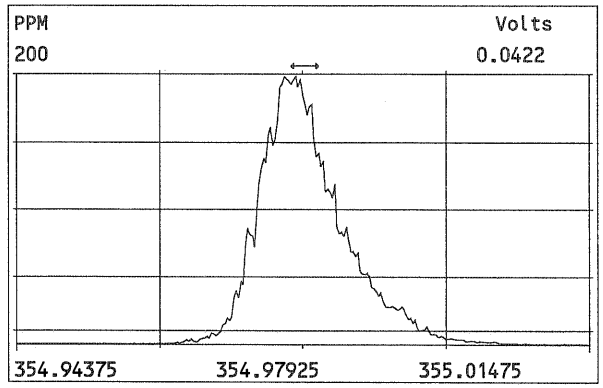


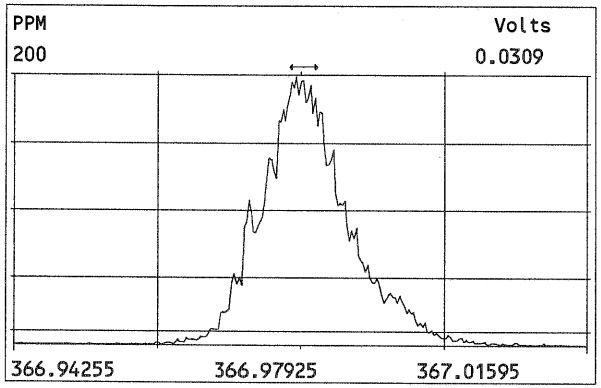


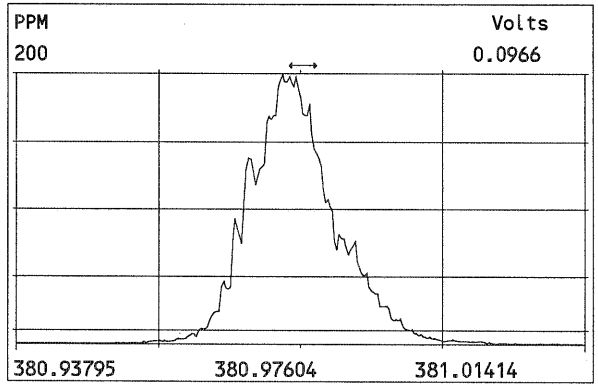
Peak Locate Examination:15-SEP-2010:09:11 File:14SEP10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

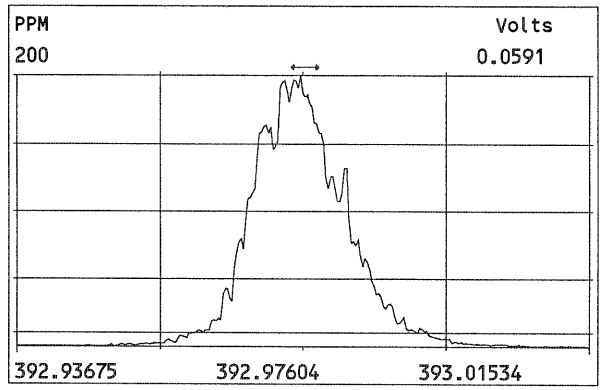


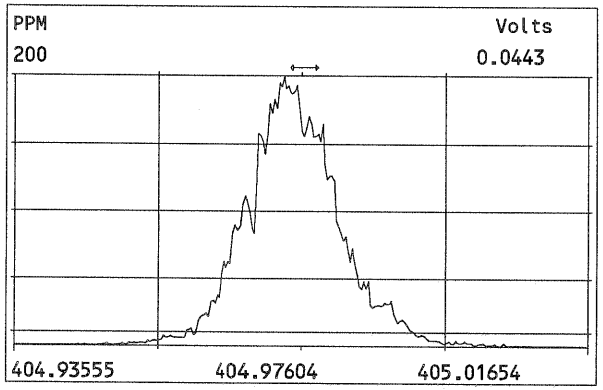


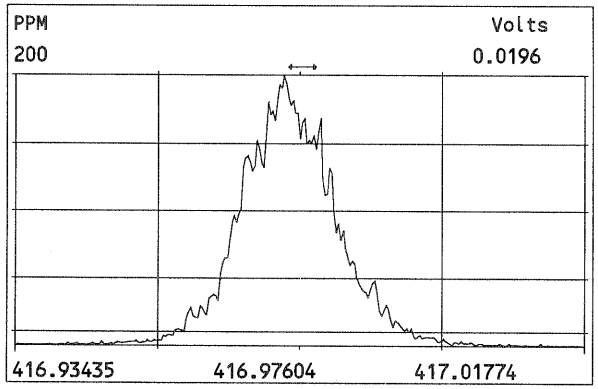




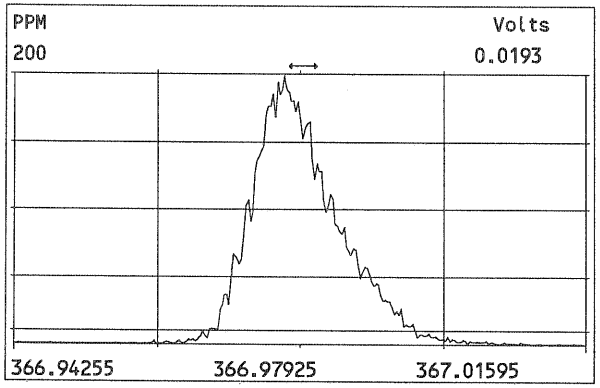


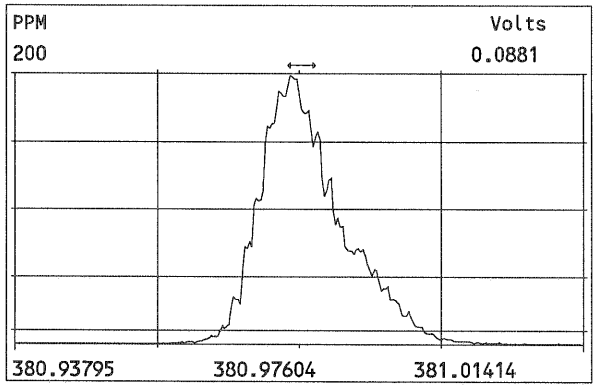


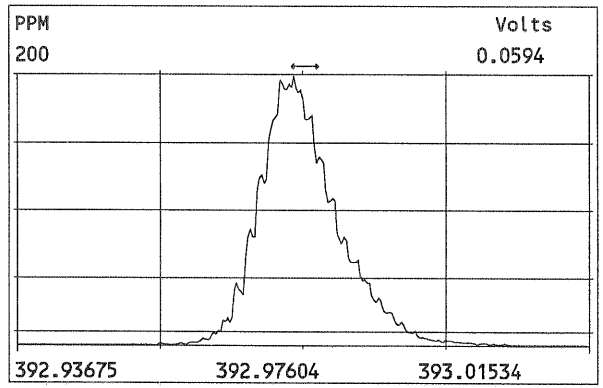


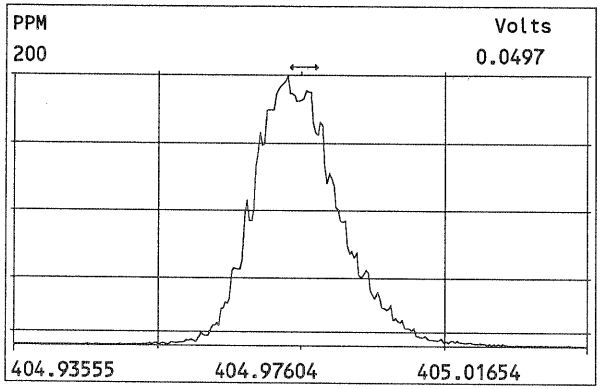


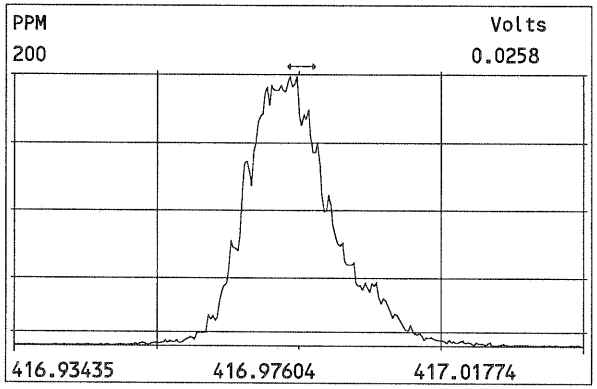
Peak Locate Examination:15-SEP-2010:09:13 File:14SEP10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

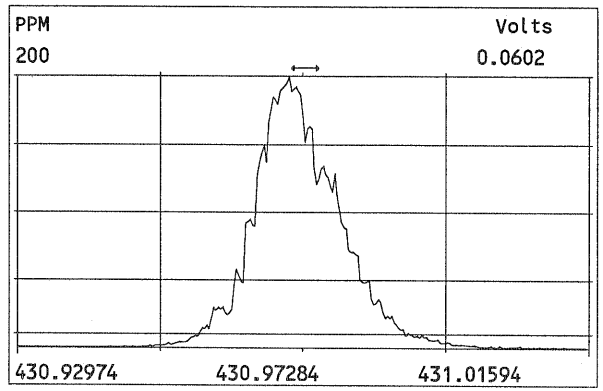


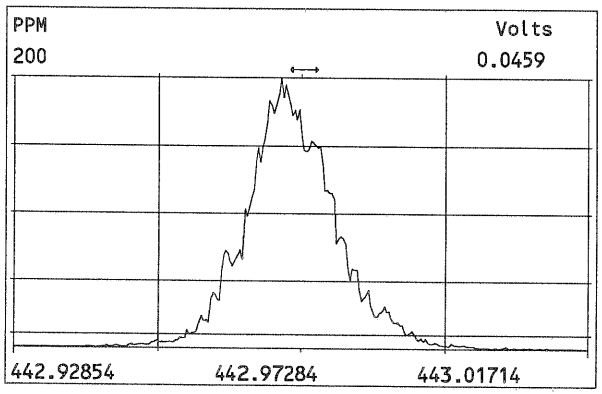


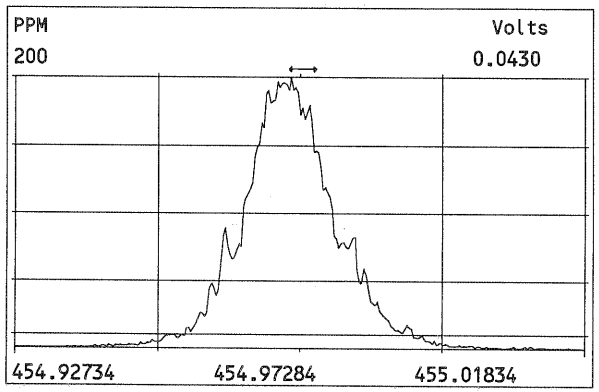




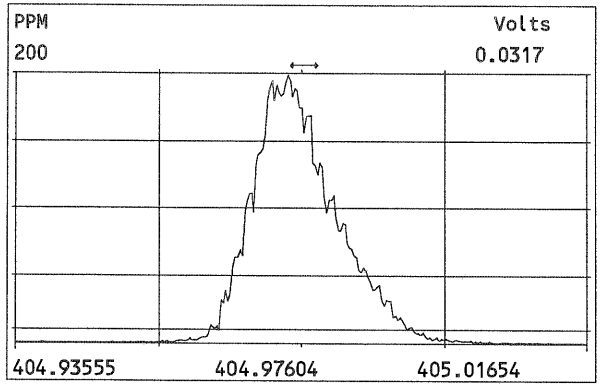


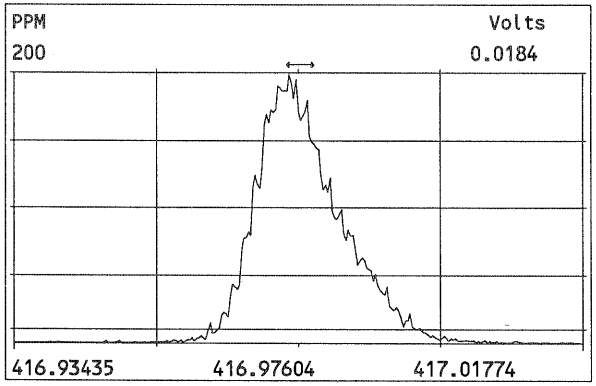


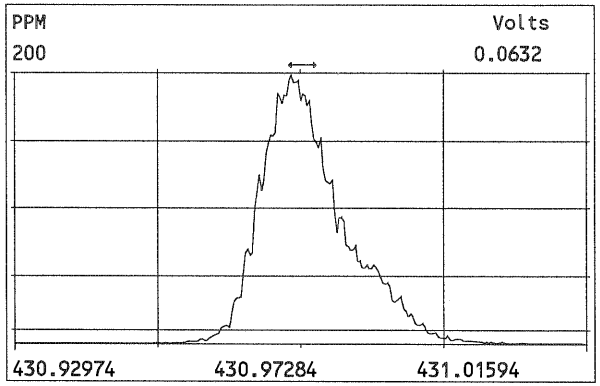


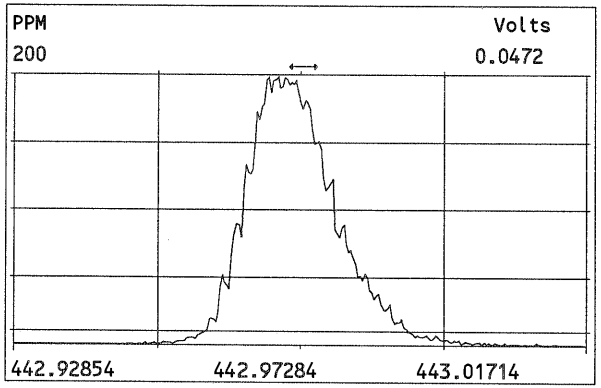


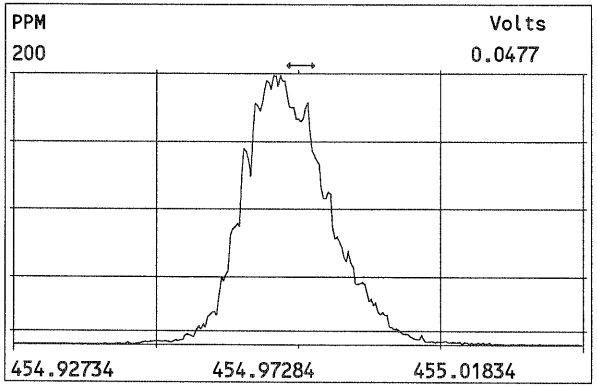
Peak Locate Examination:15-SEP-2010:09:15 File:14SEP10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

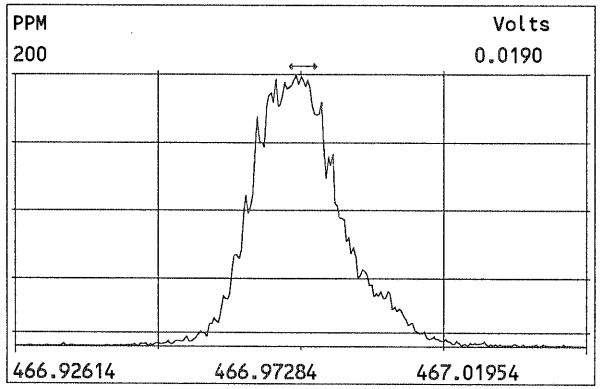


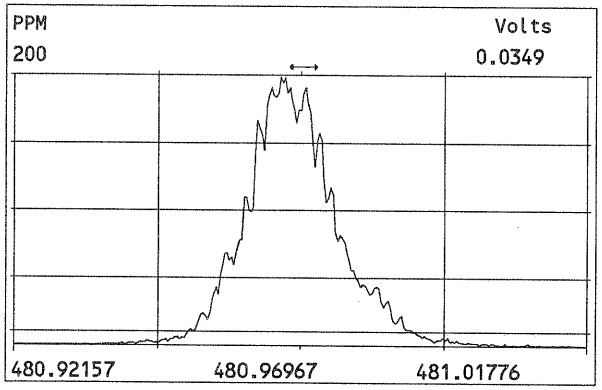




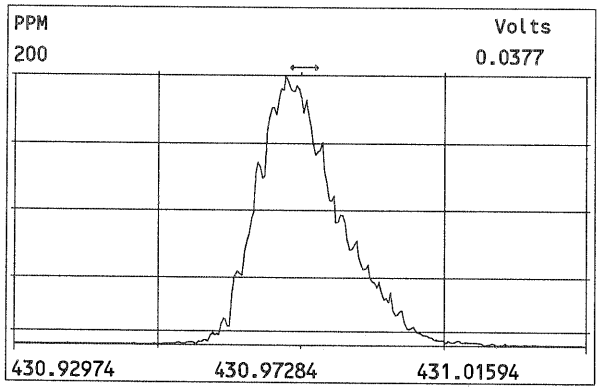


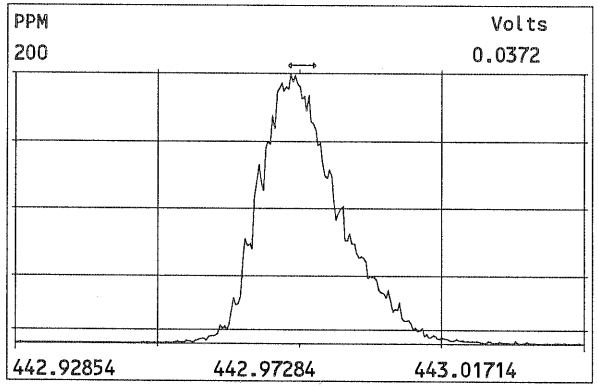


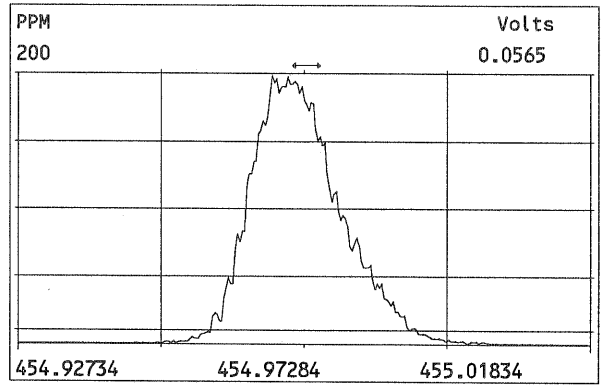


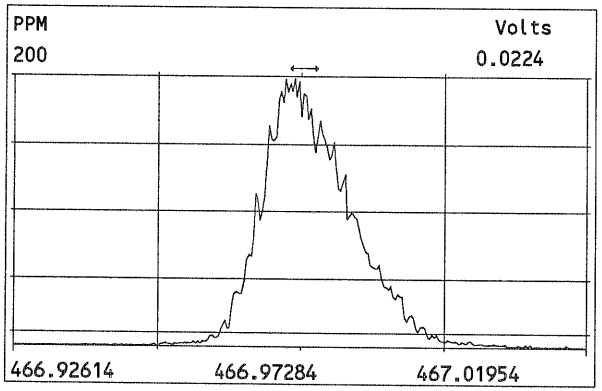


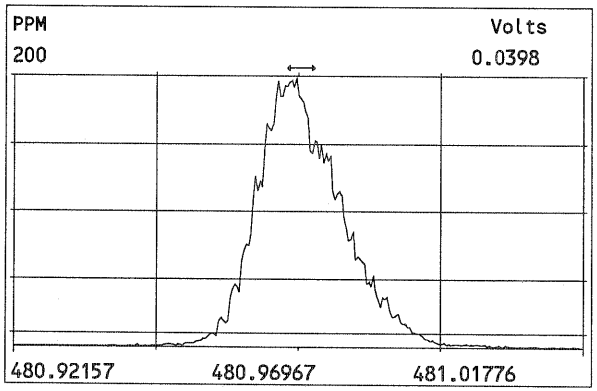
Peak Locate Examination:15-SEP-2010:09:17 File:14SEP10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

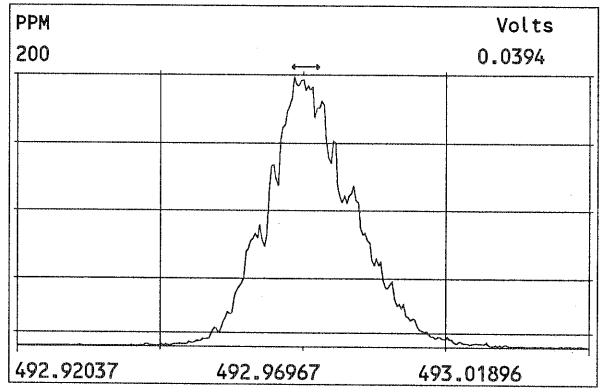


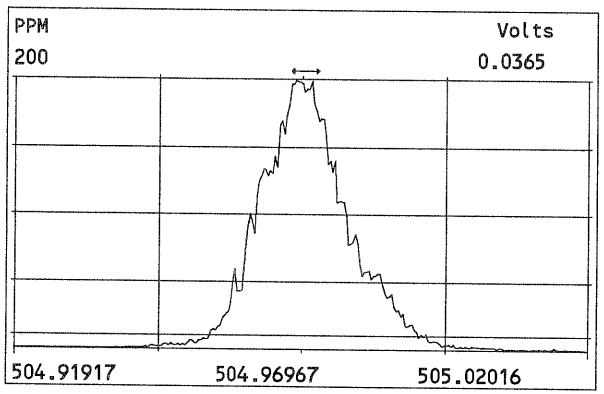


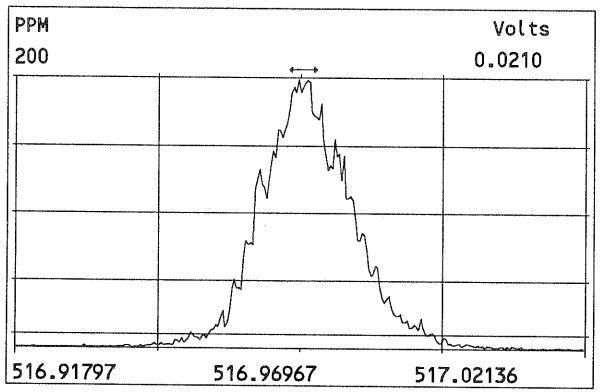












USEPA - ITD

FORM 4A
TCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 9/16/10

Instrument ID: FAL1 GC Column ID: DB225

VER Data Filename: 16SEP10M Sam:1 Analysis Date: 16-SEP-10 Time: 14:50:15

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-TCDF	M/M+2	0.66	0.65-0.89	y	9.31	8.40 - 12.0
LABELED COMPOUNDS						
13C-2,3,7,8-TCDF	M/M+2	0.87	0.65-0.89	y	96.4	71.0 - 140

(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

Analyst: _____ Date: 9/17/10

FAL ID: ST091610M3 Filename: 16SEP10M Sam:1 Acquired: 16-SEP-10 14:50:15 ICal: TCDFFAL3-9-16-10
Client ID: 1613 CS3 100511J ConCal: ST091610M3 EndCal: ST091610M6
Results: GC Column: DB225 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	#Hom	Rec
2,3,7,8-TCDF	8.19e+06	0.66 y	19:29	1.28	9.31		2.50	-	-	1	
13C-2,3,7,8-TCDF	6.90e+07	0.87 y	19:28	1.10	96.4						96.4
13C-1,2,3,4-TCDF	6.53e+07	0.87 y	16:49	-	104						

Analyst: _____ Date: 9/17/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:16SEP10M Instrument: FAL3 GC: DB225 Experiment:TCDF

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
16SEP10M	1	ST091610M3	1613 CS3 100511J	16-SEP-10 14:50:15	ST091610M3	ST091610M6	TC
16SEP10M	2	ST091610M1	1613 CS1 100511H	16-SEP-10 15:28:03	NA	NA	TC
16SEP10M	3	ST091610M2	1613 CS2 100511I	16-SEP-10 16:05:52	NA	NA	TC
16SEP10M	4	ST091610M4	1613 CS4 100511K	16-SEP-10 16:43:45	NA	NA	TC
16SEP10M	5	ST091610M5	1613 CS5 100511L	16-SEP-10 17:21:38	NA	NA	TC
16SEP10M	6	SB091610M1	Solvent Blank	16-SEP-10 17:59:27	NA	NA	TC
16SEP10M	7	6327-003-0001-SA	MW-28	16-SEP-10 18:37:16	ST091610M3	ST091610M6	TC
16SEP10M	8	6327-004-0001-SA	MW-29	16-SEP-10 19:15:04	ST091610M3	ST091610M6	TC
16SEP10M	9	6327-006-0001-SA	MW-51	16-SEP-10 19:52:53	ST091610M3	ST091610M6	TC
~~16SEP10M~~	~~10~~	~~6329-011-0001-SA~~	~~PZ-2~~	~~16-SEP-10 20:30:43~~	~~ST091610M3~~	~~ST091610M6~~	~~TC~~
16SEP10M	11	6331-006-0001-SA	PSB16-0-0.5-082510	16-SEP-10 21:08:31	ST091610M3	ST091610M6	TC
16SEP10M	12	6332-003-0001-SA	PSB18-0-0.5-082610	16-SEP-10 21:46:20	ST091610M3	ST091610M6	TC
16SEP10M	13	SB091610M2	Solvent Blank	16-SEP-10 22:24:09	ST091610M3	ST091610M6	TC
16SEP10M	14	ST091610M6	1613 CS3 100511J	16-SEP-10 23:01:57	ST091610M3	ST091610M6	TC

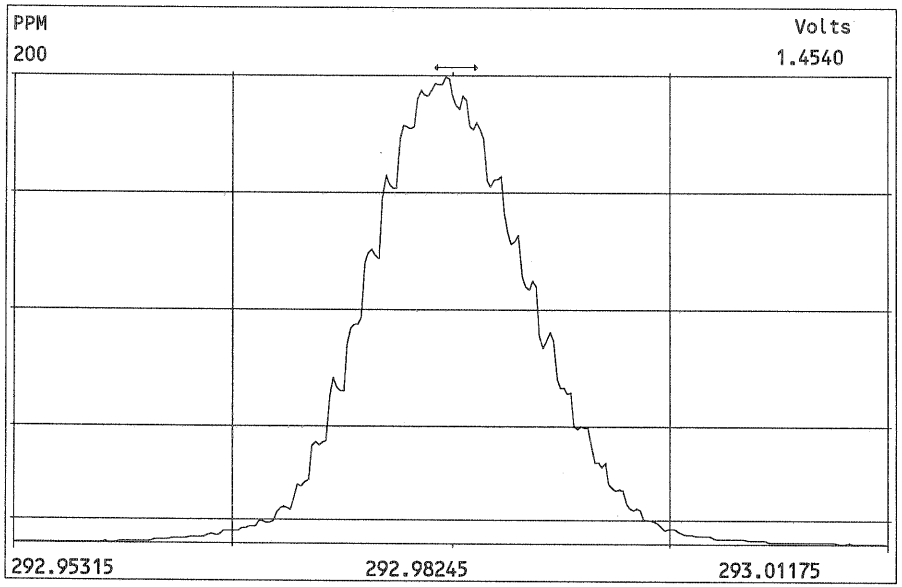
TC 9/17/10

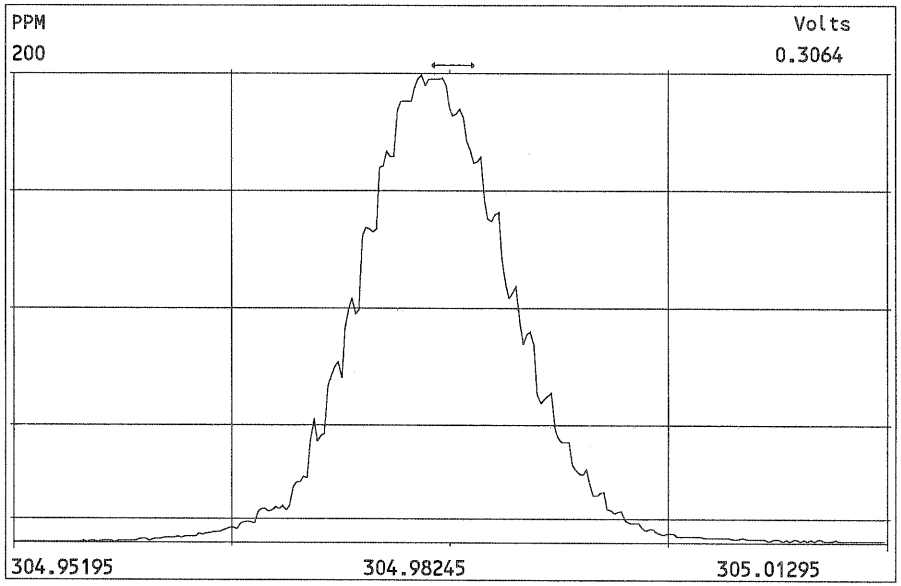
Bad Injection Reshoot TC 9/17/10

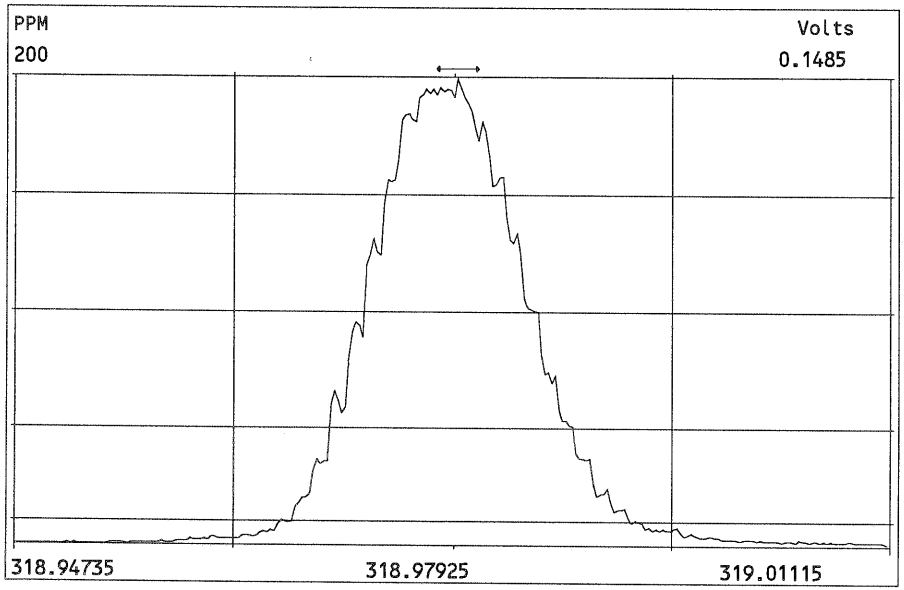
Data Backed Up:_____

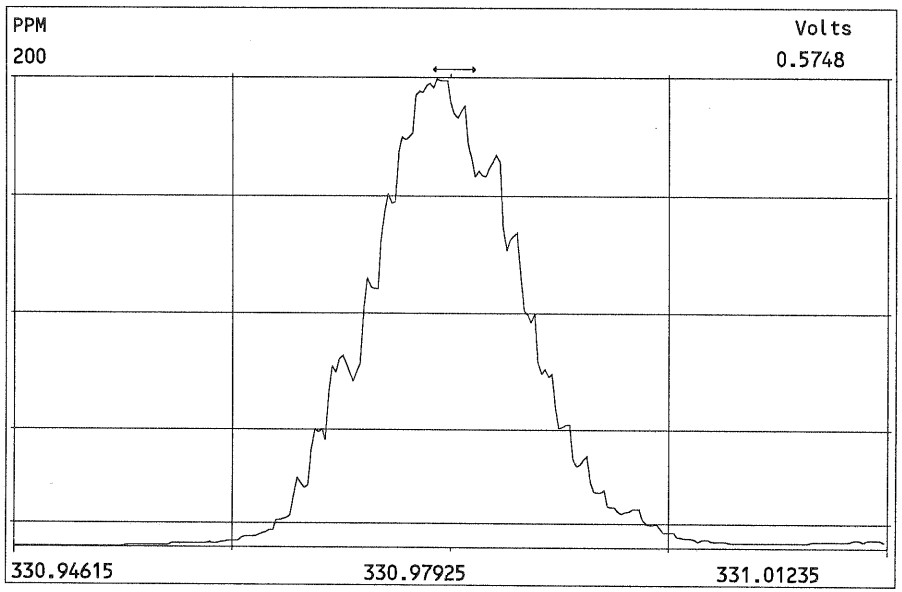
Date:_____

Peak Locate Examination:16-SEP-2010:14:49 File:16SEP10M
Experiment:TCDF Function:1 Reference:PFK

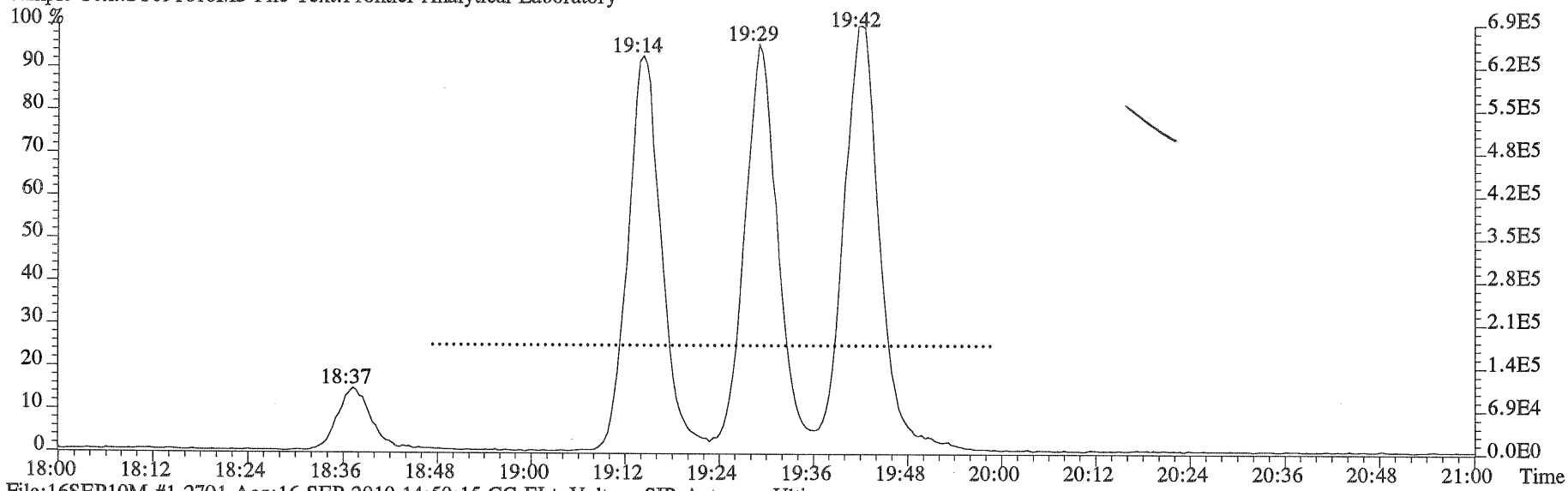




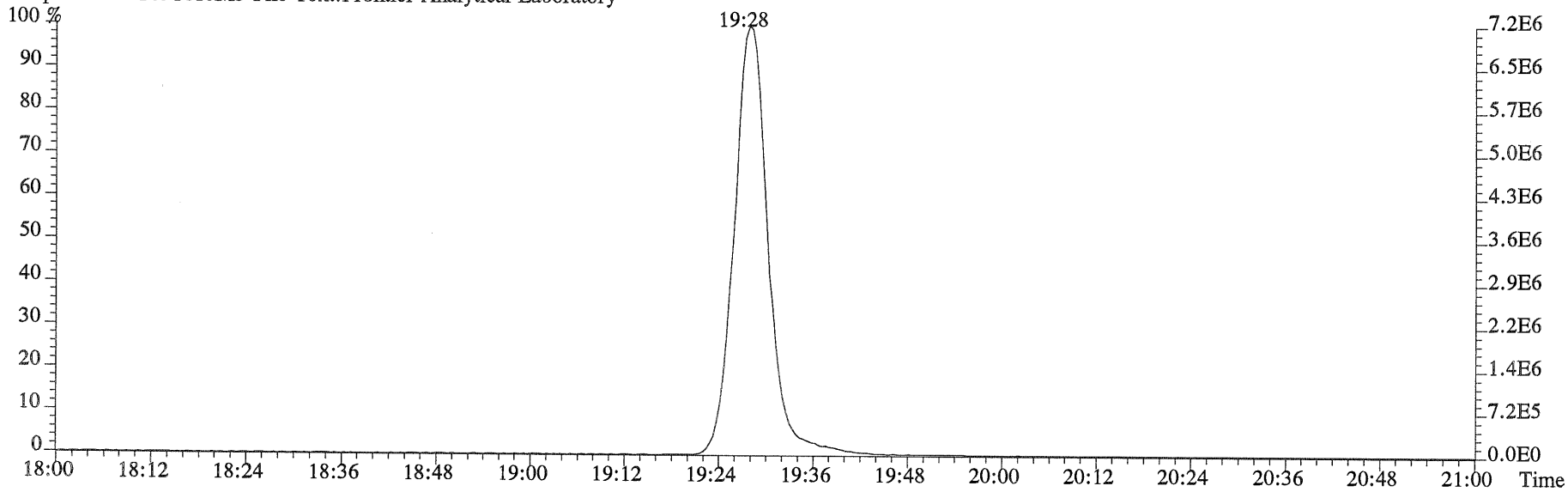




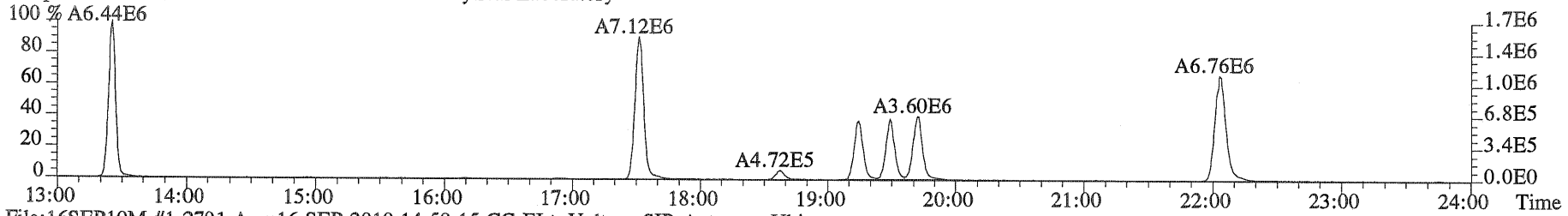
File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
303.9016 Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



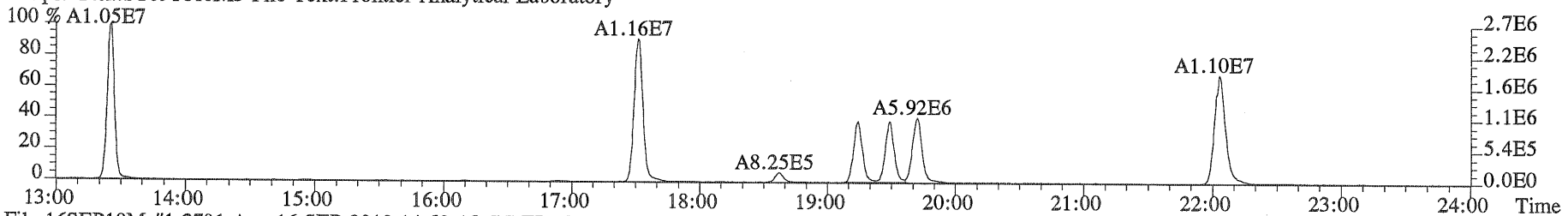
File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
317.9389 Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



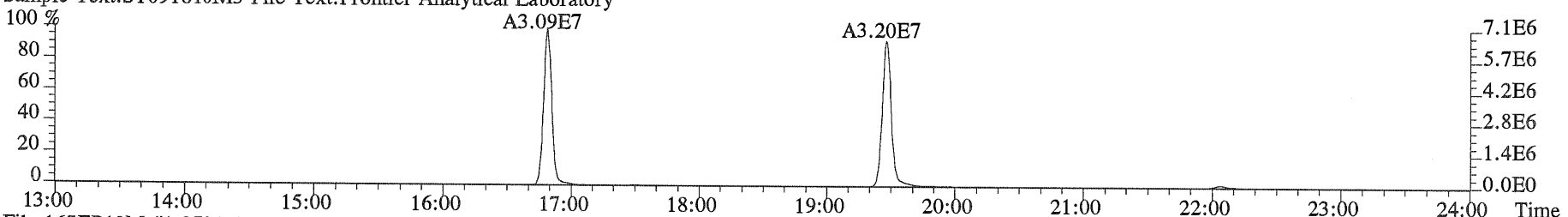
File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 14:50:15 GC EI+ Voltage SIR Autospec-Ultima
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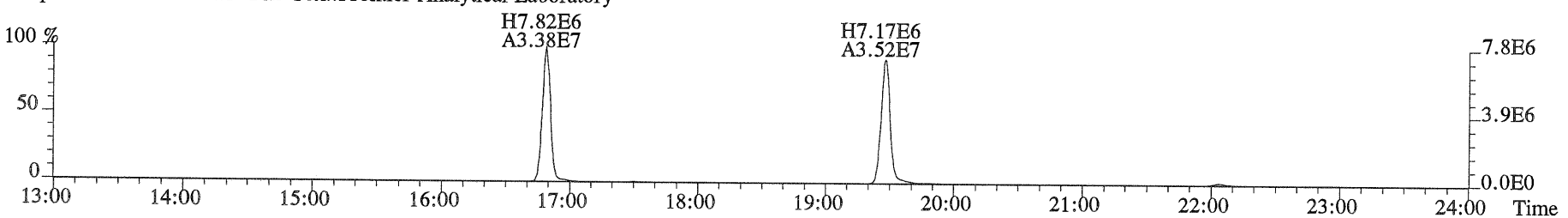
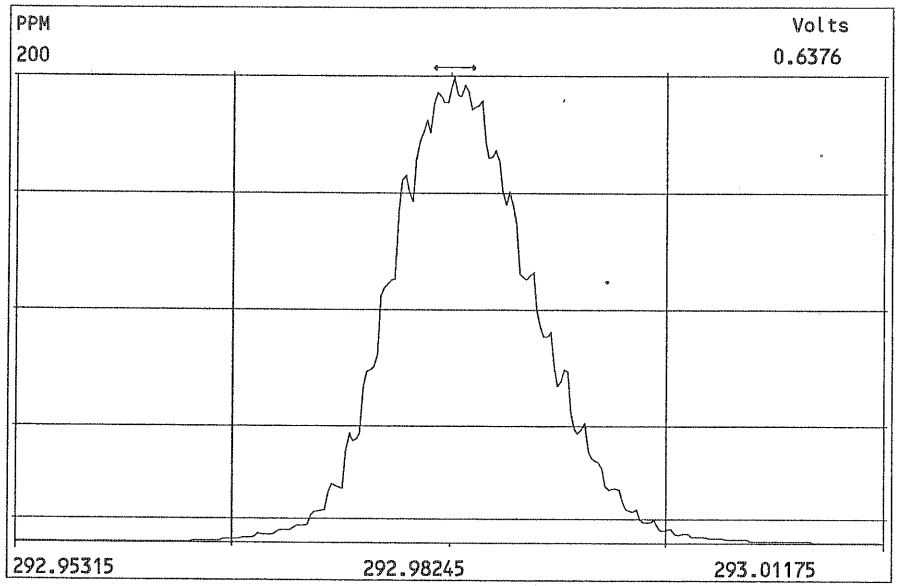
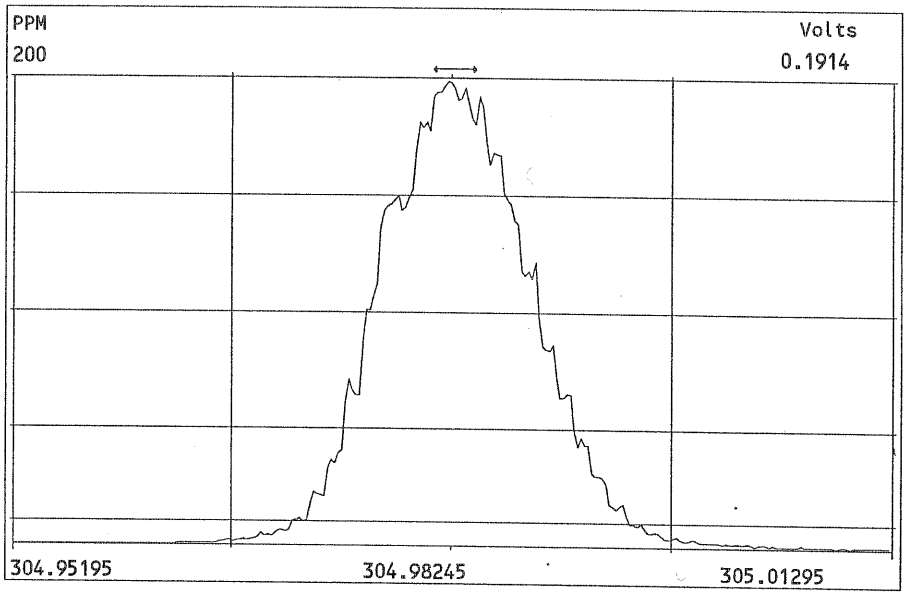
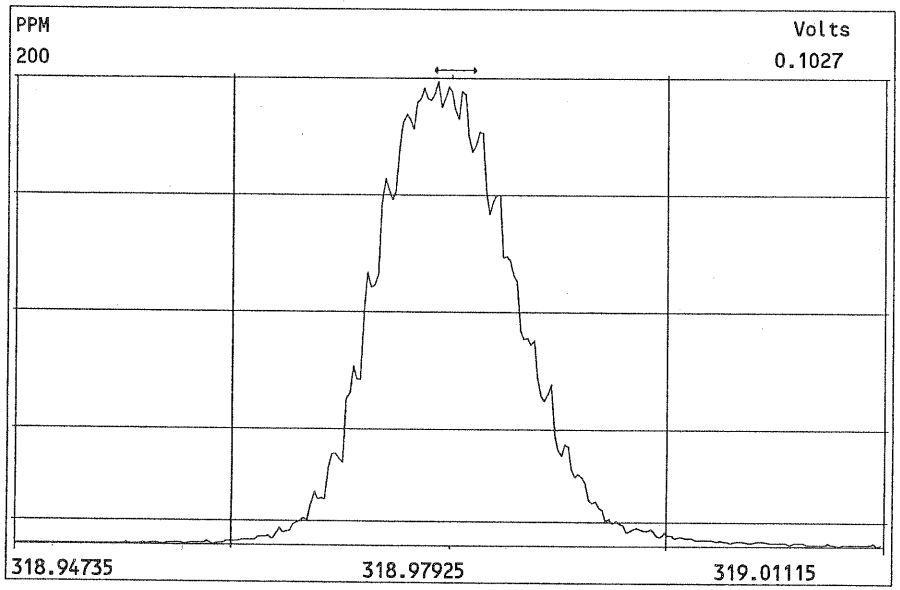
Sample Text:ST091610M3 File Text:Frontier Analytical Laboratory

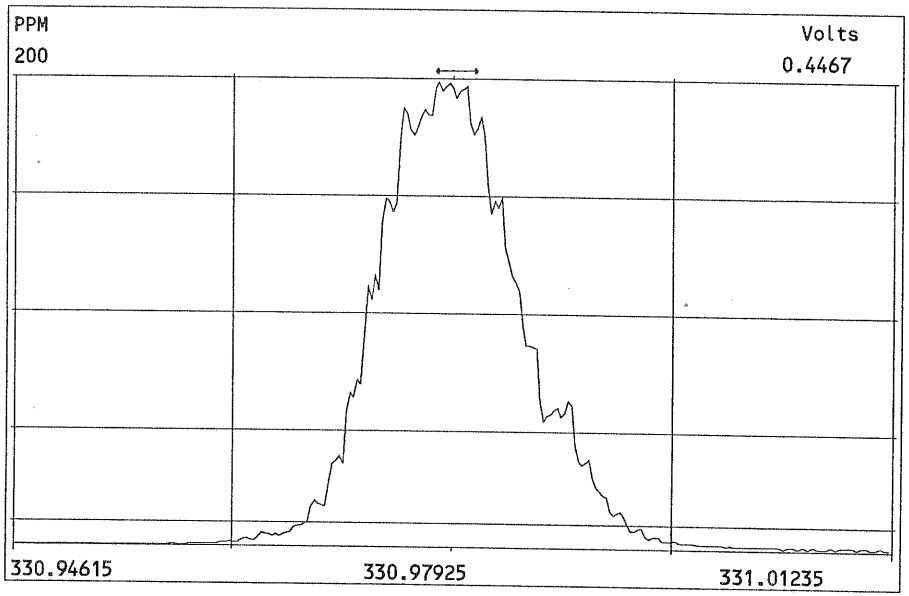


Peak Locate Examination:16-SEP-2010:23:33 File:16SEP10M_RES_CHECK
Experiment:TCDF Function:1 Reference:PFK









USEPA - ITD

FORM 4A
TCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 9/16/10

Instrument ID: FAL1 GC Column ID: DB225

VER Data Filename: 16SEP10M Sam:14 Analysis Date: 16-SEP-10 Time: 23:01:57

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-TCDF	M/M+2	0.67	0.65-0.89	y	9.46	8.40 - 12.0 ✓
LABELED COMPOUNDS						
13C-2,3,7,8-TCDF	M/M+2	0.86	0.65-0.89	y	92.6	71.0 - 140 ✓

(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

Analyst: _____ Date: 9/17/10

FAL ID: ST091610M6 Filename: 16SEP10M Sam:14 Acquired: 16-SEP-10 23:01:57 ICal: TCDFFAL3-9-16-10
Client ID: 1613 CS3 100511J ConCal: ST091610M3 EndCal: ST091610M6
Results: GC Column: DB225 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	#Hom	Rec
2,3,7,8-TCDF	5.94e+06	0.67 y	19:23	1.28	9.46		2.50	-	-	1	
13C-2,3,7,8-TCDF	4.92e+07	0.86 y	19:22	1.10	92.6						92.6
13C-1,2,3,4-TCDF	4.85e+07	0.88 y	16:43	-	77.0						

Analyst: _____ Date: 9/17/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:16SEP10M Instrument: FAL3 GC: DB225 Experiment:TCDF

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
16SEP10M	1	ST091610M3	1613 CS3 100511J	16-SEP-10 14:50:15	ST091610M3	ST091610M6	TC
16SEP10M	2	ST091610M1	1613 CS1 100511H	16-SEP-10 15:28:03	NA	NA	TC
16SEP10M	3	ST091610M2	1613 CS2 100511I	16-SEP-10 16:05:52	NA	NA	TC
16SEP10M	4	ST091610M4	1613 CS4 100511K	16-SEP-10 16:43:45	NA	NA	TC
16SEP10M	5	ST091610M5	1613 CS5 100511L	16-SEP-10 17:21:38	NA	NA	TC
16SEP10M	6	SB091610M1	Solvent Blank	16-SEP-10 17:59:27	NA	NA	TC
16SEP10M	7	6327-003-0001-SA	MW-28	16-SEP-10 18:37:16	ST091610M3	ST091610M6	TC
16SEP10M	8	6327-004-0001-SA	MW-29	16-SEP-10 19:15:04	ST091610M3	ST091610M6	TC
16SEP10M	9	6327-006-0001-SA	MW-51	16-SEP-10 19:52:53	ST091610M3	ST091610M6	TC
~~16SEP10M~~	~~10~~	~~6329-011-0001-SA~~	~~PZ-2~~	~~16-SEP-10 20:30:43~~	~~ST091610M3~~	~~ST091610M6~~	~~TC~~
16SEP10M	11	6331-006-0001-SA	PSB16-0-0.5-082510	16-SEP-10 21:08:31	ST091610M3	ST091610M6	TC
16SEP10M	12	6332-003-0001-SA	PSB18-0-0.5-082610	16-SEP-10 21:46:20	ST091610M3	ST091610M6	TC
16SEP10M	13	SB091610M2	Solvent Blank	16-SEP-10 22:24:09	ST091610M3	ST091610M6	TC
16SEP10M	14	ST091610M6	1613 CS3 100511J	16-SEP-10 23:01:57	ST091610M3	ST091610M6	TC

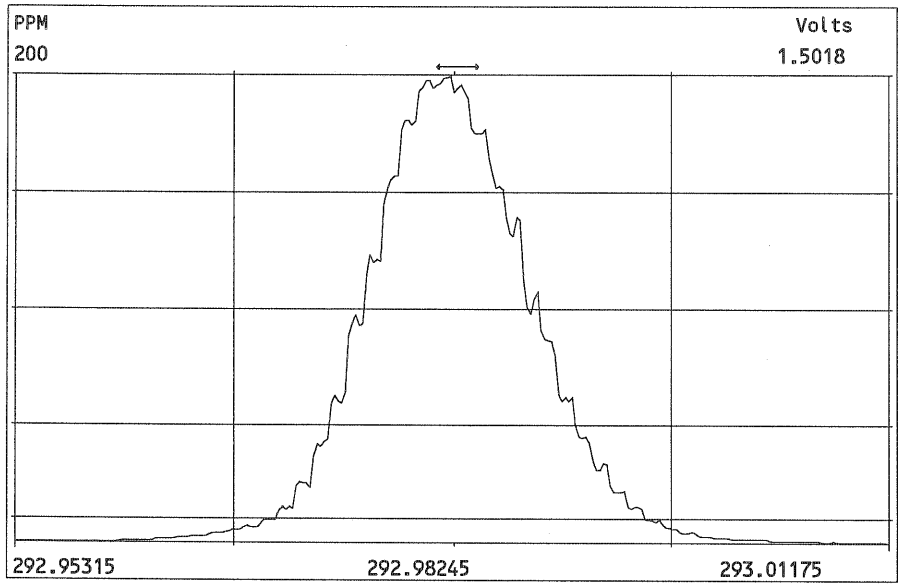
9/17/10

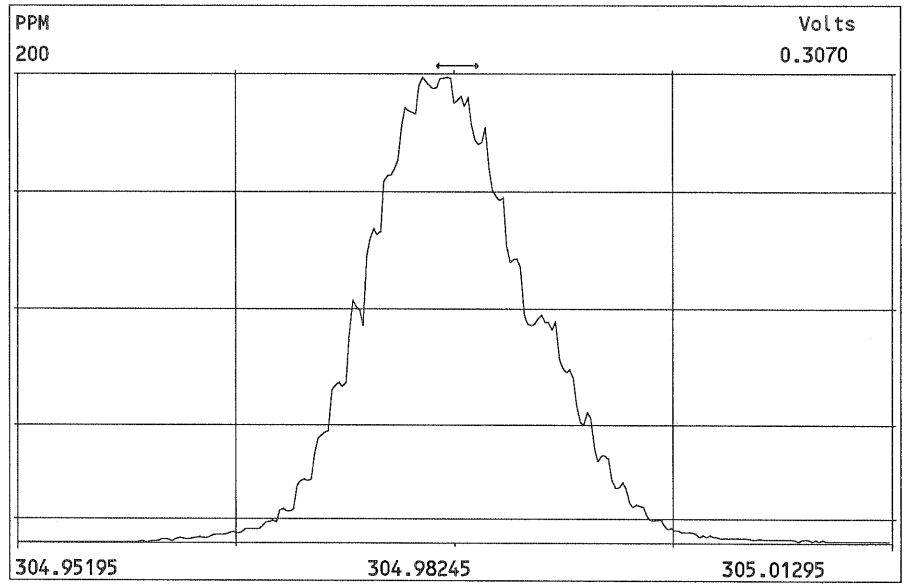
BAD Injection
ReShoot
JC 9/17/10

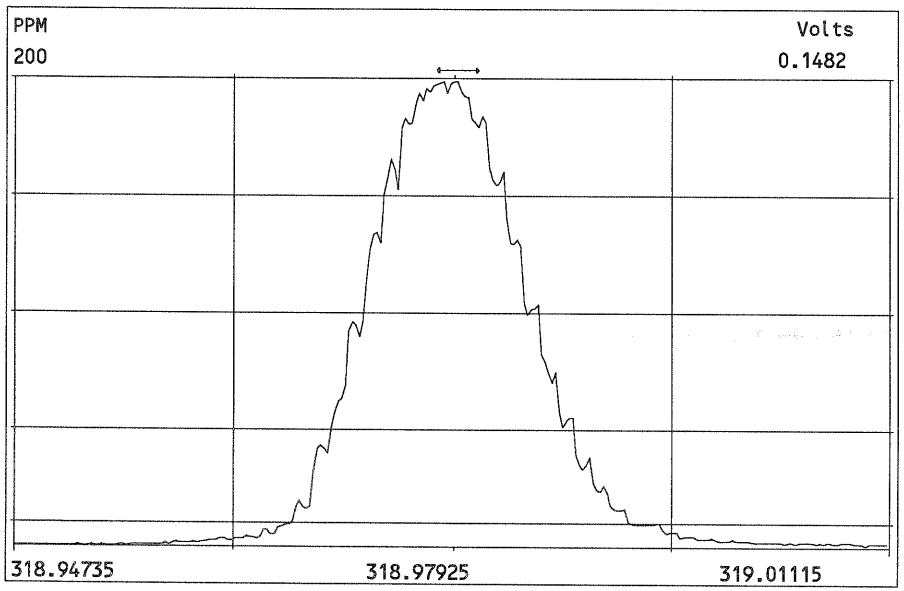
Data Backed Up:_____

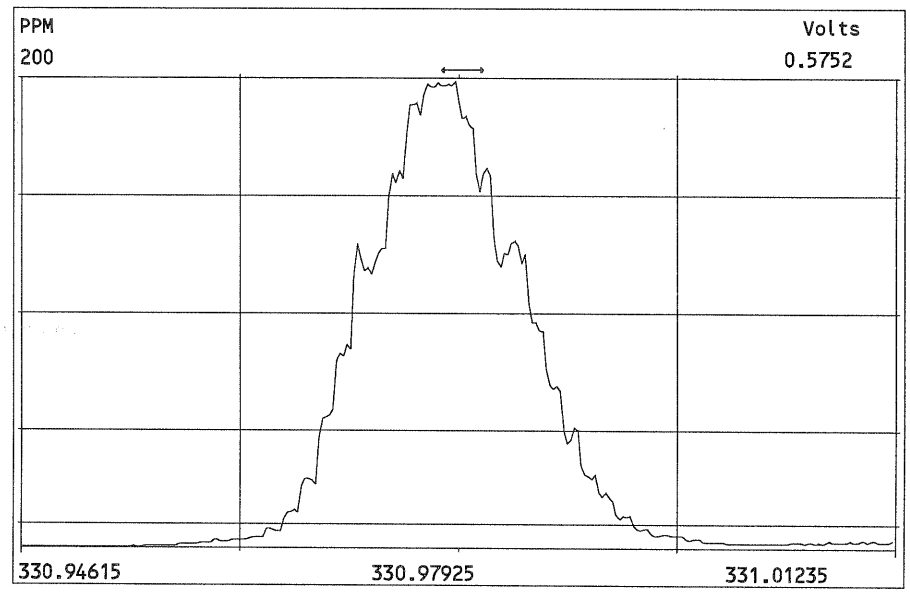
Date:_____

Peak Locate Examination:16-SEP-2010:14:49 File:16SEP10M
Experiment:TCDF Function:1 Reference:PFK

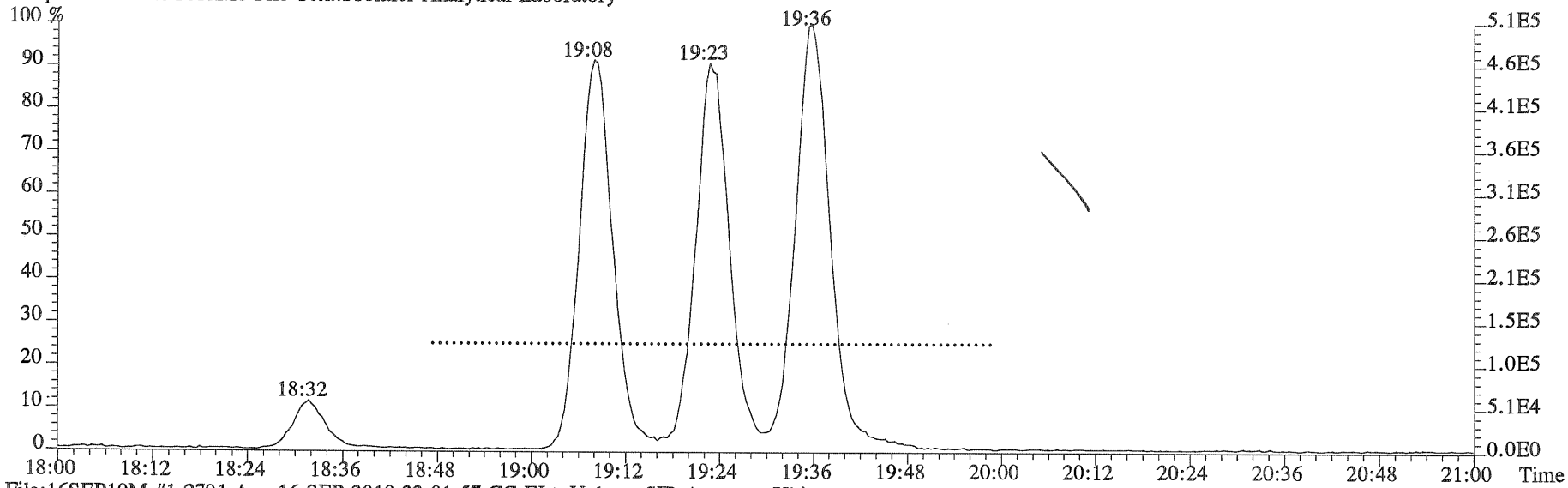




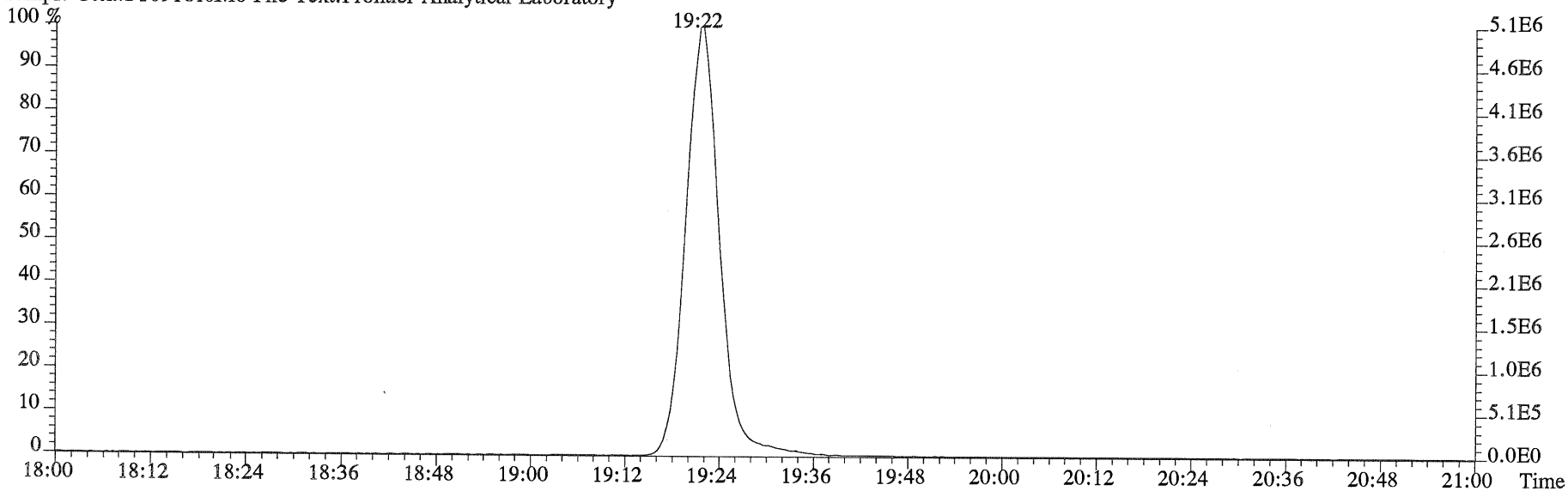




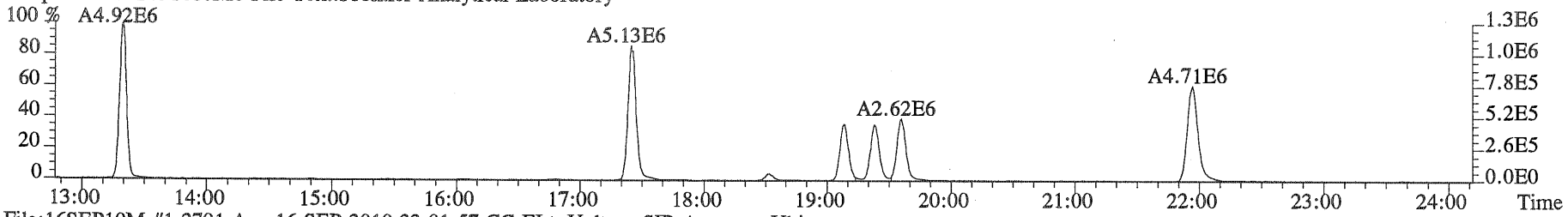
File:16SEP10M #1-2701 Acq:16-SEP-2010 23:01:57 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:14 Exp:TCDF
Sample Text:ST091610M6 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 23:01:57 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:14 Exp:TCDF
Sample Text:ST091610M6 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 23:01:57 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M6 File Text:Frontier Analytical Laboratory



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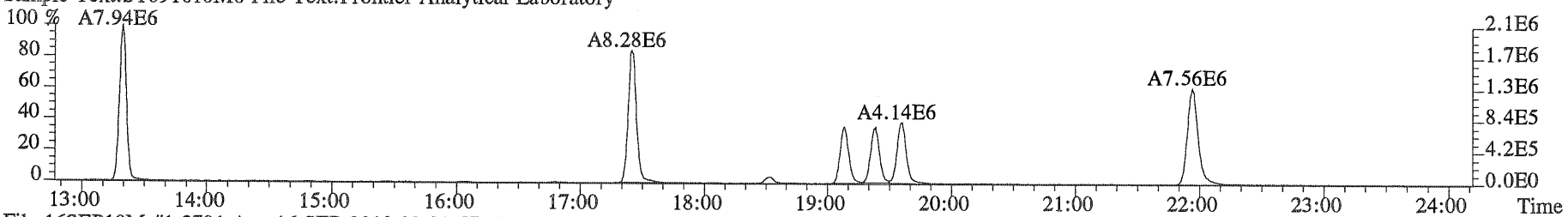
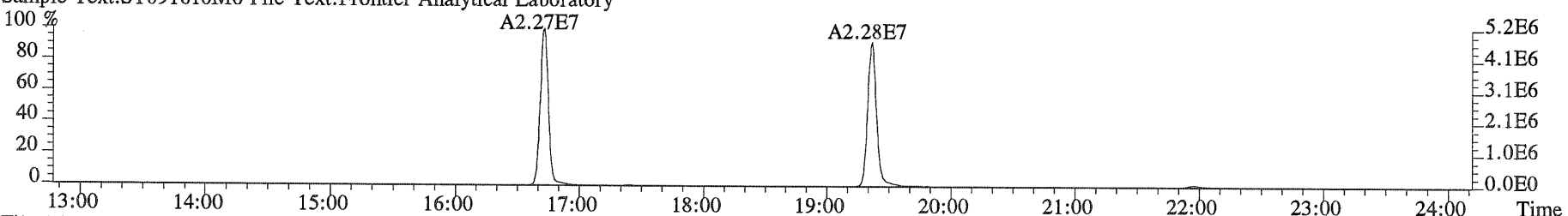
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M6 File Text:Frontier Analytical Laboratory



File:16SEP10M #1-2701 Acq:16-SEP-2010 23:01:57 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
Sample Text:ST091610M6 File Text:Frontier Analytical Laboratory



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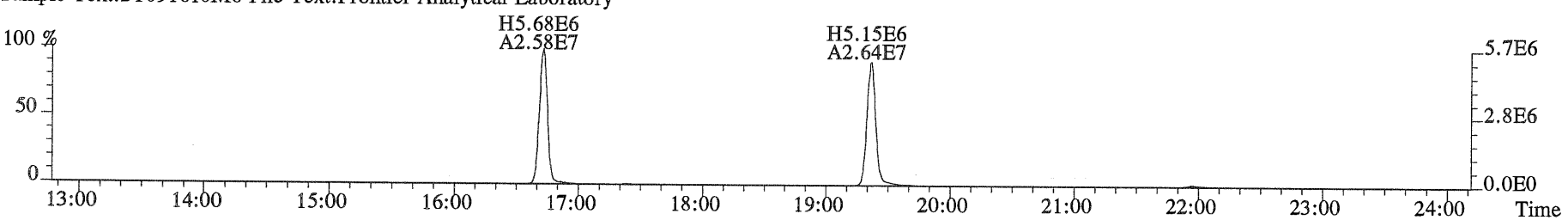
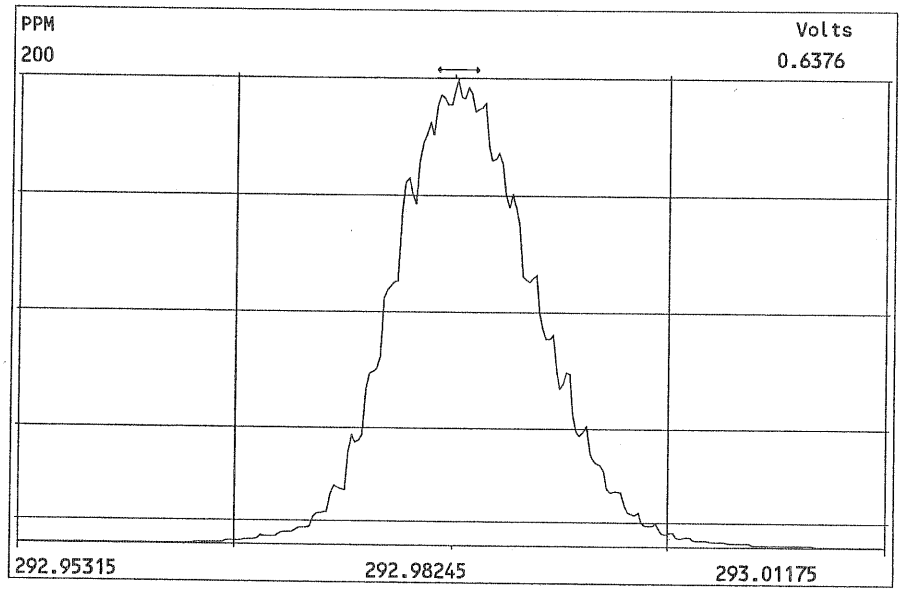
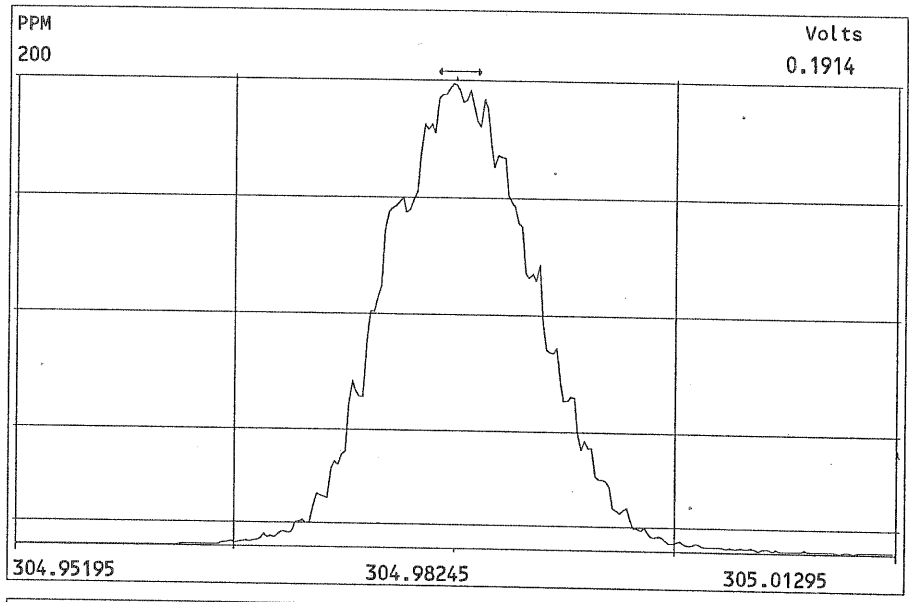
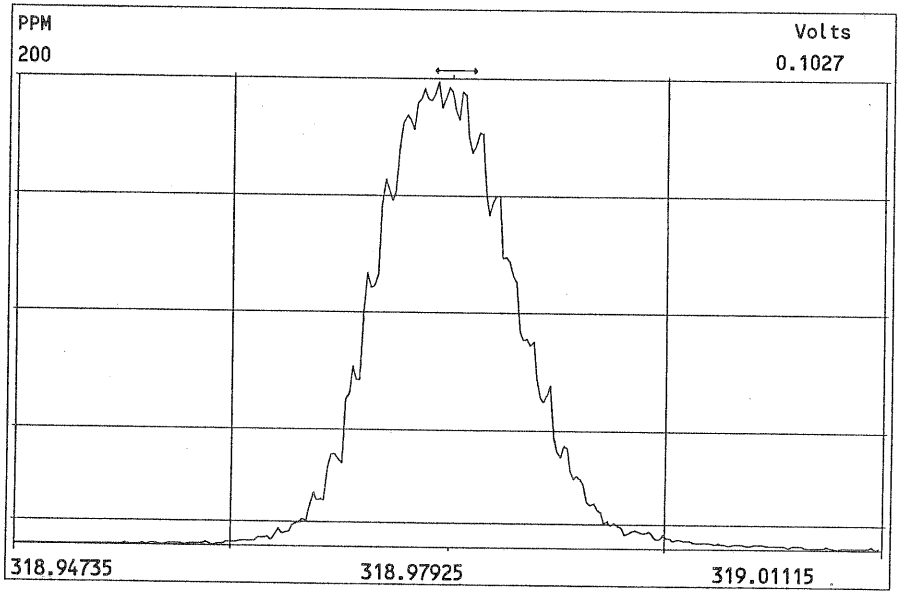
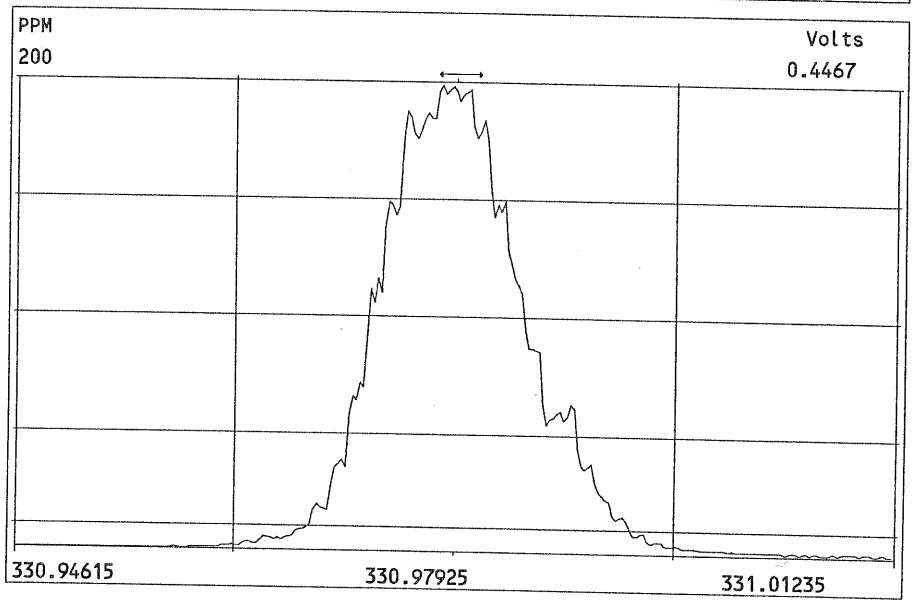


Peak Locate Examination:16-SEP-2010:23:33 File:16SEP10M_RES_CHECK
Experiment:TCDF Function:1 Reference:PFK









FRONTIER
ANALYTICAL LABORATORY

October 4, 2010

Ms. Sue Dunnihoo
Analytical Resources Incorporated
4611 South 134th Place
Tukwila, WA 98168-3240

Dear Ms. Dunnihoo,

Enclosed are the results for Frontier Analytical Laboratory project **6365**. This corresponds to your **Lora Lakes RI** project under ARI project numbers **RG94, RH17, RH74, and RM50**. A total of eleven soil samples were received on 9/21/2010 in good condition. These samples were extracted and analyzed by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and furans. The 2005 World Health Organizations toxic equivalency factors (TEFs) were used to calculate the toxic equivalents (TEQ) on your report. Per your request, a matrix spike and matrix spike duplicate (MS/MSD) were performed on sample 6365-006-SA (ARI ID: SSB01-1.5-2-080310). Analytical Resources Incorporated requested a Level IV data package and a turnaround time of fifteen business days for project **6365**.

The following Level IV report consists of an Analytical Data section, a Sample Receipt section, a Laboratory Raw Data section, and an Instrument Raw Data section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your chain of custody, our sample login form and the sample photo. The Laboratory Raw Data section contains our project request sheet, a percent solids sheet, an extraction bench sheet and the cleanup bench sheet. The instrument raw data section contains three sub-sections; the sample results section, the initial calibration section and the continuing/ending calibration section. The sample results sub-section consists of the quantitation summary forms with chromatograms for all samples and QC. The initial calibration sub-section consists of the individual quantitation summary forms and chromatograms for each point of the initial calibration curve as well as an overall quantitation summary form of the initial calibration curve. The continuing/ending calibration sub-section consists of the quantitation summary forms and chromatograms for all beginning and ending calibration injections associated with the samples and QC. You also requested Electronic Data Deliverables (EDD) for this project. The EDD and Level I summary have been sent to you via email. The Level IV report has been sent to you on compact disk. A hardcopy of the data package will not be forwarded unless specifically requested. The attached results are specifically for the samples referenced in this report only. These results meet all NELAC requirements and shall not be reproduced except in full.

If you have any questions regarding project **6365**, please feel free to contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Bradley B. Silverbush
Director of Operations

FRONTIER ANALYTICAL LABORATORY
5172 Hillsdale Circle • El Dorado Hills, CA 95762
Tel (916) 934-0900 • Fax (916) 934-0999
www.frontieranalytical.com

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: 6365

Received on: **09/21/2010** Project Due: **10/13/2010** Storage: **R2**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
6365-001-SA	0	Lora Lakes RI	MW13-2-4-080210	EPA 1613 D/F	Soil	08/02/2010	11:55 am	08/02/2011
6365-002-SA	0	Lora Lakes RI	MW12-2-4-080210	EPA 1613 D/F	Soil	08/02/2010	02:20 pm	08/02/2011
6365-003-SA	0	Lora Lakes RI	SSB10-0-0.5-080310	EPA 1613 D/F	Soil	08/03/2010	12:00 pm	08/03/2011
6365-004-SA	0	Lora Lakes RI	SSB10-1.5-2-080310	EPA 1613 D/F	Soil	08/03/2010	12:05 pm	08/03/2011
6365-005-SA	0	Lora Lakes RI	SSB01-0-0.5-080310	EPA 1613 D/F	Soil	08/03/2010	12:40 pm	08/03/2011
6365-006-MSD	0	Lora Lakes RI	SSB01-1.5-2-080310	EPA 1613 D/F	Soil	08/03/2010	12:50 pm	08/03/2011
6365-006-MS	0	Lora Lakes RI	SSB01-1.5-2-080310	EPA 1613 D/F	Soil	08/03/2010	12:50 pm	08/03/2011
6365-006-SA	0	Lora Lakes RI	SSB01-1.5-2-080310	EPA 1613 D/F	Soil	08/03/2010	12:50 pm	08/03/2011
6365-007-SA	0	Lora Lakes RI	SSB02-0-0.5-080310	EPA 1613 D/F	Soil	08/03/2010	01:54 pm	08/03/2011
6365-008-SA	0	Lora Lakes RI	SSB3-0-0.5-080610	EPA 1613 D/F	Soil	08/06/2010	08:51 am	08/08/2011
6365-009-SA	0	Lora Lakes RI	SSB5-0-0.5-080610	EPA 1613 D/F	Soil	08/06/2010	09:37 am	08/08/2011
6365-010-SA	0	Lora Lakes RI	SSB5-1.5-2-080610	EPA 1613 D/F	Soil	08/06/2010	09:35 am	08/08/2011
6365-011-SA	0	Lora Lakes RI	SSB4-0-0.5-090910	EPA 1613 D/F	Soil	09/09/2010	03:55 pm	09/09/2011

FAL Sample ID	Notes
6365-001-SA	'Sampling date and time taken from jar label. '
6365-002-SA	'Sampling date and time taken from jar label. '
6365-003-SA	'Sampling date and time taken from jar label. '
6365-004-SA	'Sampling date and time taken from jar label. '
6365-005-SA	'Sampling date and time taken from jar label. Sample ID taken from COC. '
6365-006-MSD	'Sample ID, date and time taken from jar label. '
6365-006-MS	'Sample ID, date and time taken from jar label. '
6365-006-SA	'Sample ID, date and time taken from jar label. '
6365-007-SA	'Sample ID, date and time taken from jar label. '
6365-008-SA	'Sample ID taken from COC. Sampling date and time taken from jar label. '
6365-009-SA	'Sample ID taken from COC. Sampling date and time taken from jar label. '
6365-010-SA	'Sample ID taken from COC. Sampling date and time taken from jar label. '
6365-011-SA	'Sample ID taken from COC. Sampling date and time taken from jar label. '

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-001-MB
Client ID: Method Blank
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: NA
Amount: 5.00 g

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 09-30-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.177		-	0.0262				
1,2,3,7,8-PeCDD	ND	0.294		-	0.0442				
1,2,3,4,7,8-HxCDD	ND	0.189		-	0.0486				
1,2,3,6,7,8-HxCDD	ND	0.244		-	0.0586	Total TCDD	ND	0.177	
1,2,3,7,8,9-HxCDD	ND	0.216		-	0.0529	Total PeCDD	ND	0.294	
1,2,3,4,6,7,8-HpCDD	ND	0.427		-	0.0954	Total HxCDD	ND	0.244	
OCDD	ND	0.830		-	0.154	Total HpCDD	ND	0.427	
2,3,7,8-TCDF	ND	0.0949		-	0.0205				
1,2,3,7,8-PeCDF	ND	0.169		-	0.0298				
2,3,4,7,8-PeCDF	ND	0.180		-	0.0313				
1,2,3,4,7,8-HxCDF	ND	0.199		-	0.0308				
1,2,3,6,7,8-HxCDF	ND	0.195		-	0.0317				
2,3,4,6,7,8-HxCDF	ND	0.229		-	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.200		-	0.0387	Total TCDF	ND	0.0949	
1,2,3,4,6,7,8-HpCDF	ND	0.235		-	0.0418	Total PeCDF	ND	0.180	
1,2,3,4,7,8,9-HpCDF	ND	0.286		-	0.0429	Total HxCDF	ND	0.229	
OCDF	ND	0.638		-	0.105	Total HpCDF	ND	0.286	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	90.6	25.0 - 164	
13C-1,2,3,7,8-PeCDD	99.3	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	99.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	83.7	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	88.5	23.0 - 140	
13C-OCDD	71.5	17.0 - 157	
13C-2,3,7,8-TCDF	91.9	24.0 - 169	
13C-1,2,3,7,8-PeCDF	96.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	95.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	100	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	86.0	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	82.0	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	92.9	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	82.8	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	98.4	26.0 - 138	
13C-OCDF	76.0	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	91.0	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-001-OPR
Client ID: OPR
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: NA
Amount: 5.00 g

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: ng/ml

Acquired: 09-30-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	10.2	6.70 - 15.8	
1,2,3,7,8-PeCDD	51.2	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	49.9	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	49.4	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	52.0	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	50.2	35.0 - 70.0	
OCDD	101	78.0 - 144	
2,3,7,8-TCDF	9.51	7.50 - 15.8	
1,2,3,7,8-PeCDF	55.8	40.0 - 67.0	
2,3,4,7,8-PeCDF	55.2	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	48.0	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	48.8	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	49.4	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	49.5	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	48.7	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	48.6	39.0 - 69.0	
OCDF	102	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	89.2	20.0 - 175	
13C-1,2,3,7,8-PeCDD	102	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	95.7	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	81.5	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	87.3	26.0 - 166	
13C-OCDD	75.2	13.0 - 198	
13C-2,3,7,8-TCDF	92.5	22.0 - 152	
13C-1,2,3,7,8-PeCDF	95.5	21.0 - 192	
13C-2,3,4,7,8-PeCDF	97.6	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	95.5	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	82.8	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	83.4	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	94.4	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	80.2	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	101	20.0 - 186	
13C-OCDF	78.9	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	92.1	31.0 - 191	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-001-SA
Client ID: MW13-2-4-080210
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.09 g
% Solids: 92.47

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 09-30-2010
2005 WHO TEQ: 0.645

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.285		-	0.0262				
1,2,3,7,8-PeCDD	ND	0.320		-	0.0442				
1,2,3,4,7,8-HxCDD	ND	0.254		-	0.0486				
1,2,3,6,7,8-HxCDD	1.03	-	J	0.103	0.0586	Total TCDD	ND	0.285	
1,2,3,7,8,9-HxCDD	0.564	-	J	0.0564	0.0529	Total PeCDD	ND	0.320	
1,2,3,4,6,7,8-HpCDD	24.4	-		0.244	0.0954	Total HxCDD	6.15	-	
OCDD	215	-		0.0645	0.154	Total HpCDD	47.3	-	
2,3,7,8-TCDF	ND	0.134		-	0.0205				
1,2,3,7,8-PeCDF	ND	0.278		-	0.0298				
2,3,4,7,8-PeCDF	ND	0.287		-	0.0313				
1,2,3,4,7,8-HxCDF	0.330	-	J	0.0330	0.0308				
1,2,3,6,7,8-HxCDF	0.206	-	J	0.0206	0.0317				
2,3,4,6,7,8-HxCDF	0.353	-	J	0.0353	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.128		-	0.0387	Total TCDF	0.306	-	J
1,2,3,4,6,7,8-HpCDF	7.38	-		0.0738	0.0418	Total PeCDF	0.648	-	J
1,2,3,4,7,8,9-HpCDF	0.498	-	J	0.00498	0.0429	Total HxCDF	5.77	-	
OCDF	30.3	-		0.00909	0.105	Total HpCDF	24.4	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	87.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	102	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	96.7	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	79.2	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	91.8	23.0 - 140	
13C-OCDD	75.2	17.0 - 157	
13C-2,3,7,8-TCDF	90.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	91.0	24.0 - 185	
13C-2,3,4,7,8-PeCDF	92.1	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	97.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	83.6	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	84.7	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	94.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	84.4	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	106	26.0 - 138	
13C-OCDF	78.3	17.0 - 157	
Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	89.8	35.0 - 197	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-002-SA
Client ID: MW12-2-4-080210
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.05 g
% Solids: 90.83

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 09-30-2010
2005 WHO TEQ: 14.7

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.844	-	J	0.844	0.0262				
1,2,3,7,8-PeCDD	1.50	-	J	1.50	0.0442				
1,2,3,4,7,8-HxCDD	2.05	-	J	0.205	0.0486				
1,2,3,6,7,8-HxCDD	15.9	-		1.59	0.0586	Total TCDD	5.32	-	
1,2,3,7,8,9-HxCDD	5.84	-		0.584	0.0529	Total PeCDD	11.1	-	M
1,2,3,4,6,7,8-HpCDD	496	-		4.96	0.0954	Total HxCDD	85.6	-	
OCDD	5510	-		1.65	0.154	Total HpCDD	975	-	
2,3,7,8-TCDF	0.682	-	J	0.0682	0.0205				
1,2,3,7,8-PeCDF	0.537	-	J	0.0161	0.0298				
2,3,4,7,8-PeCDF	1.60	-	J	0.480	0.0313				
1,2,3,4,7,8-HxCDF	4.41	-	J	0.441	0.0308				
1,2,3,6,7,8-HxCDF	2.54	-	J	0.254	0.0317				
2,3,4,6,7,8-HxCDF	3.20	-	J	0.320	0.0341				
1,2,3,7,8,9-HxCDF	0.466	-	J	0.0466	0.0387	Total TCDF	21.0	-	D,M
1,2,3,4,6,7,8-HpCDF	152	-		1.52	0.0418	Total PeCDF	32.9	-	D,M
1,2,3,4,7,8,9-HpCDF	4.97	-		0.0497	0.0429	Total HxCDF	103	-	D,M
OCDF	691	-		0.207	0.105	Total HpCDF	530	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	83.1	25.0 - 164	
13C-1,2,3,7,8-PeCDD	87.0	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	89.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	74.1	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	88.8	23.0 - 140	
13C-OCDD	93.9	17.0 - 157	
13C-2,3,7,8-TCDF	82.6	24.0 - 169	
13C-1,2,3,7,8-PeCDF	82.9	24.0 - 185	
13C-2,3,4,7,8-PeCDF	80.0	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	90.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	77.1	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	75.3	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	85.7	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	80.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	99.7	26.0 - 138	
13C-OCDF	87.8	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	83.4	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-003-SA
Client ID: SSB10-0-0.5-080310
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.20 g
% Solids: 92.04

ICal: PCDDFAL3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 10-02-2010
2005 WHO TEQ: 0.720

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.572		-	0.0262				
1,2,3,7,8-PeCDD	ND	1.19		-	0.0442				
1,2,3,4,7,8-HxCDD	ND	1.47		-	0.0486				
1,2,3,6,7,8-HxCDD	ND	1.86		-	0.0586	Total TCDD	ND	0.572	
1,2,3,7,8,9-HxCDD	ND	1.66		-	0.0529	Total PeCDD	ND	1.19	
1,2,3,4,6,7,8-HpCDD	44.6	-		0.446	0.0954	Total HxCDD	13.0	-	
OCDD	411	-		0.123	0.154	Total HpCDD	85.1	-	
2,3,7,8-TCDF	ND	0.219		-	0.0205				
1,2,3,7,8-PeCDF	ND	0.761		-	0.0298				
2,3,4,7,8-PeCDF	ND	0.801		-	0.0313				
1,2,3,4,7,8-HxCDF	ND	1.06		-	0.0308				
1,2,3,6,7,8-HxCDF	ND	1.05		-	0.0317				
2,3,4,6,7,8-HxCDF	ND	1.23		-	0.0341				
1,2,3,7,8,9-HxCDF	ND	1.15		-	0.0387	Total TCDF	7.85	-	
1,2,3,4,6,7,8-HpCDF	13.9	-		0.139	0.0418	Total PeCDF	10.6	-	
1,2,3,4,7,8,9-HpCDF	ND	1.30		-	0.0429	Total HxCDF	12.0	-	
OCDF	37.8	-		0.0113	0.105	Total HpCDF	35.5	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	87.8	25.0 - 164	
13C-1,2,3,7,8-PeCDD	83.0	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	92.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	78.8	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	75.9	23.0 - 140	
13C-OCDD	50.1	17.0 - 157	
13C-2,3,7,8-TCDF	89.6	24.0 - 169	
13C-1,2,3,7,8-PeCDF	78.4	24.0 - 185	
13C-2,3,4,7,8-PeCDF	76.3	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	118	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	100	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	91.8	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	94.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	78.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	87.3	26.0 - 138	
13C-OCDF	53.2	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	86.5	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: JC
Date: 10/5/10

Reviewed By: DAJ
Date: 10/5/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-004-SA
Client ID: SSB10-1.5-2-080310
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.08 g
% Solids: 92.51

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 09-30-2010
2005 WHO TEQ: 3.19

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.305	-	J	0.305	0.0262				
1,2,3,7,8-PeCDD	0.523	-	J	0.523	0.0442				
1,2,3,4,7,8-HxCDD	0.704	-	J	0.0704	0.0486				
1,2,3,6,7,8-HxCDD	3.48	-	J	0.348	0.0586	Total TCDD	2.53	-	
1,2,3,7,8,9-HxCDD	1.60	-	J	0.160	0.0529	Total PeCDD	4.74	-	J
1,2,3,4,6,7,8-HpCDD	85.2	-		0.852	0.0954	Total HxCDD	22.3	-	
OCDD	800	-		0.240	0.154	Total HpCDD	164	-	
2,3,7,8-TCDF	0.384	-	J	0.0384	0.0205				
1,2,3,7,8-PeCDF	0.421	-	J	0.0126	0.0298				
2,3,4,7,8-PeCDF	0.398	-	J	0.119	0.0313				
1,2,3,4,7,8-HxCDF	0.890	-	J	0.0890	0.0308				
1,2,3,6,7,8-HxCDF	0.695	-	J	0.0695	0.0317				
2,3,4,6,7,8-HxCDF	0.878	-	J	0.0878	0.0341				
1,2,3,7,8,9-HxCDF	0.266	-	J	0.0266	0.0387	Total TCDF	6.73	-	
1,2,3,4,6,7,8-HpCDF	21.2	-		0.212	0.0418	Total PeCDF	9.72	-	
1,2,3,4,7,8,9-HpCDF	1.07	-	J	0.0107	0.0429	Total HxCDF	20.9	-	
OCDF	75.6	-		0.0227	0.105	Total HpCDF	65.8	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.5	25.0 - 164	
13C-1,2,3,7,8-PeCDD	96.6	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	97.2	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	80.4	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	90.9	23.0 - 140	
13C-OCDD	76.5	17.0 - 157	
13C-2,3,7,8-TCDF	90.1	24.0 - 169	
13C-1,2,3,7,8-PeCDF	93.9	24.0 - 185	
13C-2,3,4,7,8-PeCDF	90.8	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	101	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	84.9	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	85.3	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	93.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	81.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	105	26.0 - 138	
13C-OCDF	78.5	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	87.3	35.0 - 197	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-005-SA
Client ID: SSB01-0-0.5-080310
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.07 g
% Solids: 92.32

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 09-30-2010
2005 WHO TEQ: 3.92

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	1.34	-		1.34	0.0262				
1,2,3,7,8-PeCDD	0.754	-	J	0.754	0.0442				
1,2,3,4,7,8-HxCDD	0.904	-	J	0.0904	0.0486				
1,2,3,6,7,8-HxCDD	2.70	-	J	0.270	0.0586	Total TCDD	13.6	-	
1,2,3,7,8,9-HxCDD	1.79	-	J	0.179	0.0529	Total PeCDD	17.9	-	M
1,2,3,4,6,7,8-HpCDD	46.5	-		0.465	0.0954	Total HxCDD	29.8	-	
OCDD	370	-		0.111	0.154	Total HpCDD	85.9	-	
2,3,7,8-TCDF	0.628	-	J	0.0628	0.0205				
1,2,3,7,8-PeCDF	0.508	-	J	0.0152	0.0298				
2,3,4,7,8-PeCDF	0.633	-	J	0.190	0.0313				
1,2,3,4,7,8-HxCDF	1.13	-	J	0.113	0.0308				
1,2,3,6,7,8-HxCDF	1.14	-	J	0.114	0.0317				
2,3,4,6,7,8-HxCDF	0.993	-	J	0.0993	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.202		-	0.0387	Total TCDF	14.4	-	
1,2,3,4,6,7,8-HpCDF	10.2	-		0.102	0.0418	Total PeCDF	18.8	-	D,M
1,2,3,4,7,8,9-HpCDF	1.07	-	J	0.0107	0.0429	Total HxCDF	16.5	-	D,M
OCDF	25.5	-		0.00765	0.105	Total HpCDF	28.3	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	85.2	25.0 - 164	
13C-1,2,3,7,8-PeCDD	89.5	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	93.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	75.6	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	85.4	23.0 - 140	
13C-OCDD	78.1	17.0 - 157	
13C-2,3,7,8-TCDF	89.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	84.2	24.0 - 185	
13C-2,3,4,7,8-PeCDF	84.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	95.8	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	81.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	80.8	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	89.7	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	78.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	93.8	26.0 - 138	
13C-OCDF	79.4	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	89.5	35.0 - 197	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-006-SA
Client ID: SSB01-1.5-2-080310
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 4.94 g
% Solids: 91.02

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 09-30-2010
2005 WHO TEQ: 6.94

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.891	-	J	0.891	0.0262				
1,2,3,7,8-PeCDD	1.19	-	J	1.19	0.0442				
1,2,3,4,7,8-HxCDD	1.48	-	J	0.148	0.0486				
1,2,3,6,7,8-HxCDD	5.45	-		0.545	0.0586	Total TCDD	13.0	-	
1,2,3,7,8,9-HxCDD	2.78	-	J	0.278	0.0529	Total PeCDD	15.7	-	M
1,2,3,4,6,7,8-HpCDD	137	-		1.37	0.0954	Total HxCDD	42.6	-	
OCDD	1110	-		0.333	0.154	Total HpCDD	247	-	
2,3,7,8-TCDF	1.68	-		0.168	0.0205				
1,2,3,7,8-PeCDF	1.28	-	J	0.0384	0.0298				
2,3,4,7,8-PeCDF	1.91	-	J	0.573	0.0313				
1,2,3,4,7,8-HxCDF	2.90	-	J	0.290	0.0308				
1,2,3,6,7,8-HxCDF	3.10	-	J	0.310	0.0317				
2,3,4,6,7,8-HxCDF	3.57	-	J	0.357	0.0341				
1,2,3,7,8,9-HxCDF	0.634	-	J	0.0634	0.0387	Total TCDF	63.2	-	D,M
1,2,3,4,6,7,8-HpCDF	32.5	-		0.325	0.0418	Total PeCDF	80.9	-	D,M
1,2,3,4,7,8,9-HpCDF	2.67	-	J	0.0267	0.0429	Total HxCDF	66.0	-	D,M
OCDF	107	-		0.0321	0.105	Total HpCDF	115	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	95.1	25.0 - 164	
13C-1,2,3,7,8-PeCDD	109	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	97.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	80.8	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	94.5	23.0 - 140	
13C-OCDD	88.2	17.0 - 157	
13C-2,3,7,8-TCDF	90.9	24.0 - 169	
13C-1,2,3,7,8-PeCDF	76.7	24.0 - 185	
13C-2,3,4,7,8-PeCDF	103	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	99.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	85.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	86.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	91.4	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	87.3	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	99.3	26.0 - 138	
13C-OCDF	88.6	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	96.8	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-006-MS/MSD
Client ID: SSB01-1.5-2-080310
Matrix: Soil

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Sample Amount: 4.94 g
MS Amount: 4.97 g
MSD Amount: 4.96 g

ICal: pcddfal3-8-23-10
Batch No: X2118
Units: pg/g

MS Acquired: 2010-10-01
MSD Acquired: 2010-10-01
GC Column: DB5

Compound	Amount Spiked (pg)	Sample Amount	MS Amount	MSD Amount	% RSD	Qual
2,3,7,8-TCDD	200	0.891	42.2	40.0	6.00	
1,2,3,7,8-PeCDD	1000	1.19	212	198	6.35	
1,2,3,4,7,8-HxCDD	1000	1.48	201	191	5.38	
1,2,3,6,7,8-HxCDD	1000	5.45	207	201	3.05	
1,2,3,7,8,9-HxCDD	1000	2.78	217	202	8.17	
1,2,3,4,6,7,8-HpCDD	1000	137	339	328	5.03	
OCDD	2000	1110	1460	1460	0.576	
2,3,7,8-TCDF	200	1.68	40.9	38.2	7.45	
1,2,3,7,8-PeCDF	1000	1.28	215	207	3.85	
2,3,4,7,8-PeCDF	1000	1.91	225	211	6.51	
1,2,3,4,7,8-HxCDF	1000	2.90	195	184	6.04	
1,2,3,6,7,8-HxCDF	1000	3.10	198	189	4.97	
2,3,4,6,7,8-HxCDF	1000	3.57	199	186	7.04	
1,2,3,7,8,9-HxCDF	1000	0.634	201	189	6.42	
1,2,3,4,6,7,8-HpCDF	1000	32.5	236	221	7.29	
1,2,3,4,7,8,9-HpCDF	1000	2.67	205	193	6.76	
OCDF	2000	107	515	497	4.53	

Internal Standards		% Rec	% Rec	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	2000	95.1	80.2	74.9	25.0 - 164	
13C-1,2,3,7,8-PeCDD	2000	109	85.9	90.0	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	2000	97.1	87.6	83.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	2000	80.8	73.4	68.7	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	2000	94.5	86.1	73.0	23.0 - 140	
13C-OCDD	4000	88.2	93.9	67.8	17.0 - 157	
13C-2,3,7,8-TCDF	2000	90.9	81.7	71.7	24.0 - 169	
13C-1,2,3,7,8-PeCDF	2000	76.7	85.3	70.1	24.0 - 185	
13C-2,3,4,7,8-PeCDF	2000	103	81.4	79.8	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	2000	99.9	91.5	88.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	2000	85.5	78.0	75.0	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	2000	86.1	78.7	69.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	2000	91.4	88.1	75.9	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	2000	87.3	78.2	75.2	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	2000	99.3	102	81.7	26.0 - 138	
13C-OCDF	4000	88.6	89.3	73.3	17.0 - 157	
Cleanup Surrogate						
37Cl-2,3,7,8-TCDD	800	96.8	81.9	76.3	35.0 - 197	

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/9/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-007-SA
Client ID: SSB02-0-0.5-080310
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.09 g
% Solids: 94.96

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 09-30-2010
2005 WHO TEQ: 11.5

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.531	-	J	0.531	0.0262				
1,2,3,7,8-PeCDD	3.04	-	J	3.04	0.0442				
1,2,3,4,7,8-HxCDD	4.42	-	J	0.442	0.0486				
1,2,3,6,7,8-HxCDD	11.8	-		1.18	0.0586	Total TCDD	6.64	-	
1,2,3,7,8,9-HxCDD	9.08	-		0.908	0.0529	Total PeCDD	18.6	-	
1,2,3,4,6,7,8-HpCDD	245	-		2.45	0.0954	Total HxCDD	83.5	-	
OCDD	1800	-		0.540	0.154	Total HpCDD	448	-	
2,3,7,8-TCDF	0.815	-	J	0.0815	0.0205				
1,2,3,7,8-PeCDF	0.758	-	J	0.0227	0.0298				
2,3,4,7,8-PeCDF	1.20	-	J	0.360	0.0313				
1,2,3,4,7,8-HxCDF	3.16	-	J	0.316	0.0308				
1,2,3,6,7,8-HxCDF	3.35	-	J	0.335	0.0317				
2,3,4,6,7,8-HxCDF	4.23	-	J	0.423	0.0341				
1,2,3,7,8,9-HxCDF	0.554	-	J	0.0554	0.0387	Total TCDF	20.7	-	D,M
1,2,3,4,6,7,8-HpCDF	69.5	-		0.695	0.0418	Total PeCDF	48.5	-	D,M
1,2,3,4,7,8,9-HpCDF	3.69	-	J	0.0369	0.0429	Total HxCDF	76.7	-	D,M
OCDF	194	-		0.0582	0.105	Total HpCDF	181	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	107	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	90.7	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	74.7	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	89.0	23.0 - 140	
13C-OCDD	93.7	17.0 - 157	
13C-2,3,7,8-TCDF	84.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	74.0	24.0 - 185	
13C-2,3,4,7,8-PeCDF	95.2	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	90.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	78.9	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	78.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	88.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	80.3	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	99.2	26.0 - 138	
13C-OCDF	90.8	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	97.2	35.0 - 197	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-008-SA
Client ID: SSB3-0-0.5-080610
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.12 g
% Solids: 95.61

ICal: PCDDFAL3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 10-04-2010
2005 WHO TEQ: 6.51

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.530		-	0.0262				
1,2,3,7,8-PeCDD	1.94	-	J	1.94	0.0442				
1,2,3,4,7,8-HxCDD	2.60	-	J	0.260	0.0486				
1,2,3,6,7,8-HxCDD	6.61	-		0.661	0.0586	Total TCDD	1.53	-	
1,2,3,7,8,9-HxCDD	5.32	-		0.532	0.0529	Total PeCDD	7.14	-	
1,2,3,4,6,7,8-HpCDD	139	-		1.39	0.0954	Total HxCDD	58.4	-	
OCDD	1050	-		0.315	0.154	Total HpCDD	278	-	
2,3,7,8-TCDF	ND	0.334		-	0.0205				
1,2,3,7,8-PeCDF	ND	0.614		-	0.0298				
2,3,4,7,8-PeCDF	0.832	-	J	0.250	0.0313				
1,2,3,4,7,8-HxCDF	2.30	-	J	0.230	0.0308				
1,2,3,6,7,8-HxCDF	2.51	-	J	0.251	0.0317				
2,3,4,6,7,8-HxCDF	2.45	-	J	0.245	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.766		-	0.0387	Total TCDF	14.1	-	
1,2,3,4,6,7,8-HpCDF	37.0	-		0.370	0.0418	Total PeCDF	36.1	-	
1,2,3,4,7,8,9-HpCDF	4.61	-	J	0.0461	0.0429	Total HxCDF	50.3	-	
OCDF	70.9	-		0.0213	0.105	Total HpCDF	86.7	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	80.7	25.0 - 164	
13C-1,2,3,7,8-PeCDD	71.7	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	93.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	78.5	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	74.4	23.0 - 140	
13C-OCDD	57.6	17.0 - 157	
13C-2,3,7,8-TCDF	82.9	24.0 - 169	
13C-1,2,3,7,8-PeCDF	71.1	24.0 - 185	
13C-2,3,4,7,8-PeCDF	68.1	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	102	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	93.1	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	89.4	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	90.4	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	70.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	79.7	26.0 - 138	
13C-OCDF	59.1	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	83.2	35.0 - 197	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/5/10

Reviewed By: DN
Date: 10/5/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-009-SA
Client ID: SSB5-0-0.5-080610
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.05 g
% Solids: 90.91

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 10-01-2010
2005 WHO TEQ: 10.5

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.434	-	J	0.434	0.0262				
1,2,3,7,8-PeCDD	2.53	-	J	2.53	0.0442				
1,2,3,4,7,8-HxCDD	3.59	-	J	0.359	0.0486				
1,2,3,6,7,8-HxCDD	10.9	-		1.09	0.0586	Total TCDD	5.90	-	
1,2,3,7,8,9-HxCDD	8.01	-		0.801	0.0529	Total PeCDD	18.2	-	
1,2,3,4,6,7,8-HpCDD	247	-		2.47	0.0954	Total HxCDD	90.7	-	
OCDD	1990	-		0.597	0.154	Total HpCDD	503	-	
2,3,7,8-TCDF	0.437	-	J	0.0437	0.0205				
1,2,3,7,8-PeCDF	0.525	-	J	0.0158	0.0298				
2,3,4,7,8-PeCDF	1.07	-	J	0.321	0.0313				
1,2,3,4,7,8-HxCDF	2.38	-	J	0.238	0.0308				
1,2,3,6,7,8-HxCDF	3.25	-	J	0.325	0.0317				
2,3,4,6,7,8-HxCDF	3.88	-	J	0.388	0.0341				
1,2,3,7,8,9-HxCDF	0.385	-	J	0.0385	0.0387	Total TCDF	16.3	-	
1,2,3,4,6,7,8-HpCDF	74.0	-		0.740	0.0418	Total PeCDF	46.2	-	D,M
1,2,3,4,7,8,9-HpCDF	2.71	-	J	0.0271	0.0429	Total HxCDF	71.7	-	D,M
OCDF	187	-		0.0561	0.105	Total HpCDF	181	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	83.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	95.6	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	92.7	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	75.6	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	85.3	23.0 - 140	
13C-OCDD	82.4	17.0 - 157	
13C-2,3,7,8-TCDF	88.1	24.0 - 169	
13C-1,2,3,7,8-PeCDF	88.6	24.0 - 185	
13C-2,3,4,7,8-PeCDF	85.7	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	99.8	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	83.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	80.3	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	88.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	77.2	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	93.0	26.0 - 138	
13C-OCDF	80.2	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	94.5	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-010-SA
Client ID: SSB5-1.5-2-080610
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.08 g
% Solids: 94.74

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 10-01-2010
2005 WHO TEQ: 0.240

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.144		-	0.0262				
1,2,3,7,8-PeCDD	ND	0.220		-	0.0442				
1,2,3,4,7,8-HxCDD	ND	0.207		-	0.0486				
1,2,3,6,7,8-HxCDD	0.537	-	J	0.0537	0.0586	Total TCDD	0.531	-	J
1,2,3,7,8,9-HxCDD	0.306	-	J	0.0306	0.0529	Total PeCDD	0.966	-	J
1,2,3,4,6,7,8-HpCDD	10.0	-		0.100	0.0954	Total HxCDD	4.80	-	J
OCDD	76.1	-		0.0228	0.154	Total HpCDD	20.3	-	
2,3,7,8-TCDF	ND	0.153		-	0.0205				
1,2,3,7,8-PeCDF	ND	0.172		-	0.0298				
2,3,4,7,8-PeCDF	ND	0.202		-	0.0313				
1,2,3,4,7,8-HxCDF	ND	0.264		-	0.0308				
1,2,3,6,7,8-HxCDF	ND	0.277		-	0.0317				
2,3,4,6,7,8-HxCDF	ND	0.292		-	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.255		-	0.0387	Total TCDF	1.47	-	
1,2,3,4,6,7,8-HpCDF	3.07	-	J	0.0307	0.0418	Total PeCDF	2.11	-	J
1,2,3,4,7,8,9-HpCDF	ND	0.309		-	0.0429	Total HxCDF	2.21	-	J
OCDF	8.00	-	J	0.00240	0.105	Total HpCDF	7.30	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	85.3	25.0 - 164	
13C-1,2,3,7,8-PeCDD	87.6	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	93.7	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	76.9	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	86.7	23.0 - 140	
13C-OCDD	74.9	17.0 - 157	
13C-2,3,7,8-TCDF	89.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	91.2	24.0 - 185	
13C-2,3,4,7,8-PeCDF	87.6	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	98.8	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	82.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	84.2	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	92.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	79.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	109	26.0 - 138	
13C-OCDF	80.3	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	85.3	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/4/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6365-011-SA
Client ID: SSB4-0-0.5-090910
Matrix: Soil
Batch No: X2118

Date Extracted: 09-28-2010
Date Received: 09-21-2010
Amount: 5.02 g
% Solids: 93.48

ICal: pcddfal3-8-23-10
GC Column: DB5
Units: pg/g

Acquired: 10-01-2010
2005 WHO TEQ: 2.68

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.243		-	0.0262				
1,2,3,7,8-PeCDD	0.526	-	J	0.526	0.0442				
1,2,3,4,7,8-HxCDD	1.25	-	J	0.125	0.0486				
1,2,3,6,7,8-HxCDD	3.01	-	J	0.301	0.0586	Total TCDD	2.79	-	
1,2,3,7,8,9-HxCDD	2.00	-	J	0.200	0.0529	Total PeCDD	7.34	-	
1,2,3,4,6,7,8-HpCDD	59.0	-		0.590	0.0954	Total HxCDD	22.1	-	
OCDD	457	-		0.137	0.154	Total HpCDD	105	-	
2,3,7,8-TCDF	0.623	-	J	0.0623	0.0205				
1,2,3,7,8-PeCDF	0.528	-	J	0.0158	0.0298				
2,3,4,7,8-PeCDF	0.724	-	J	0.217	0.0313				
1,2,3,4,7,8-HxCDF	1.38	-	J	0.138	0.0308				
1,2,3,6,7,8-HxCDF	0.956	-	J	0.0956	0.0317				
2,3,4,6,7,8-HxCDF	1.09	-	J	0.109	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.343		-	0.0387	Total TCDF	12.0	-	
1,2,3,4,6,7,8-HpCDF	13.7	-		0.137	0.0418	Total PeCDF	12.0	-	
1,2,3,4,7,8,9-HpCDF	1.13	-	J	0.0113	0.0429	Total HxCDF	17.5	-	
OCDF	34.9	-		0.0105	0.105	Total HpCDF	38.6	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	86.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	90.4	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	89.4	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	74.4	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	83.5	23.0 - 140	
13C-OCDD	74.1	17.0 - 157	
13C-2,3,7,8-TCDF	89.9	24.0 - 169	
13C-1,2,3,7,8-PeCDF	85.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	83.4	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	94.6	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	80.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	80.6	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	88.2	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	77.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	95.9	26.0 - 138	
13C-OCDF	77.5	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	86.2	35.0 - 197	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 10/1/10

Reviewed By: _____
Date: 10/8/11

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6365
0 oc

CUSTODY TRANSFER
Printed: 09/20/10
ARI Job No: RG94

ANALYTICAL RESOURCES INCORPORATED
4611 South 134th Place, Suite 100
Tukwila WA 98168
206-695-6200 206-695-6201 (fax)

ARI Project Manager: Sue Dunnihoo	Client Contact: Jessi Massingale	Sampling Event: POS-LLA	Samples Received: 08/02/10
	Client: Floyd/Snider	Project: POS-LLA (Lora Lake Apartments)	Sample Site: NA

	LOGNUM ARI ID	CLIENT ID	MATRIX	# CONTAINERS	ANALYTICAL REQUEST	ANALYTICAL REQUEST	ANALYTICAL REQUEST	COMMENTS
1	10-18613 RG94T	MW13-2-4-080210	Soil	1	Dioxin			8-2-10 11:55
2	10-18615 RG94V	MW12-2-4-080210	Soil	1				8-2-10 14:20

Sue to Kathy - Batch in groups of 11 samples + name project (Lora Lakes RI). L4 & EDD. 9/22/10

Comments/Special Instructions:	Relinquished By:	Received by: (Signature)	Relinqushed By:	Received by: (Signature)
	Printed Name: D. Volgardsen	Printed Name: Gabby Navarro	Printed Name:	Printed Name:
	Company: ARI	Company: Frontier	Company:	Company:
	Date/Time: 9/20/10 1555	Date/Time: 9.21.10 940	Date/Time:	Date/Time:

2 of 4

CUSTODY TRANSFER
Printed: 09/20/10
ARI Job No: RH17

6.3°C

ANALYTICAL RESOURCES INCORPORATED
4611 South 134th Place, Suite 100
Tukwila WA 98168
206-695-6200 206-695-6201 (fax)

ARI Project Manager: Sue Dunnihoo	Client Contact: Jessi Massingale	Sampling Event: POS-LLA	Samples Received: 08/03/10
	Client: Floyd-Snider	Project: Lora Lake RI	Sample Site: NA

	LOGNUM ARI ID	CLIENT ID	MATRIX	# CONTAINERS	ANALYTICAL REQUEST	ANALYTICAL REQUEST	ANALYTICAL REQUEST	COMMENTS
3	10-18798 RH17G	SSB10-0-0.5-080310	Soil	1	Dioxin			8-3-10 12:00
4	10-18799 RH17H	SSB10-1.5-2-080310	Soil	1				8-3-10 12:05
5	10-18800 RH17I	SSB01-0-0.5-080310	Soil	1				8-3-10 12:40
6 ★	10-18802 RH17K	SSB01-1.5-2-08031	Soil	2		MS/MSD		8-3-10 12:50
7	10-18803 RH17L	SSB02-0-0.5-08031	Soil	1				8-3-10 13:54

★ Sue to Kathy – Run MS/MSD on this sample.

Frontier Analytical → California 1389269501498513 95

Comments/Special Instructions:	Relinquished By:	Received by: (Signature)	Relinquished By:	Received by: (Signature)
	Printed Name: A. Volgardsen	Printed Name: Gabby Navarro	Printed Name:	Printed Name:
	Company: ARI	Company: Frontier	Company:	Company:
	Date/Time: 9/20/10 1555	Date/Time: 9.21.10 940	Date/Time:	Date/Time:

609000018 of 000609

10365
0.2

CUSTODY TRANSFER
Printed: 09/20/10
ARI Job No: RH74

ANALYTICAL RESOURCES INCORPORATED
4611 South 134th Place, Suite 100
Tukwila WA 98168
206-695-6200 206-695-6201 (fax)

ARI Project Manager: Sue Dunnihoo	Client Contact: Jessi Massingale	Sampling Event: POS-LLA	Samples Received: 08/06/10
	Client: Floyd-Snider	Project: Lora Lakes Apartments RI	Sample Site: NA

	LOGNUM ARI ID	CLIENT ID	MATRIX	# CONTAINERS	ANALYTICAL REQUEST	ANALYTICAL REQUEST	ANALYTICAL REQUEST	COMMENTS
8	10-19181 RH74A	SSB3-0-0.5-080610	Soil	1	Dioxin			8-6-10 8:51
9	10-19183 RH74C	SSB5-0-0.5-080610	Soil	1	↓			8-6-10 9:37
10	10-19184 RH74D	SSB5-1.5-2-080610	Soil	1	↓			8-6-10 9:35

Comments/Special Instructions:	Relinqushed By:	Received by: (Signature)	Relinqushed By:	Received by: (Signature)
	Printed Name: A. Volgardsen	Printed Name: Gabby Navarro	Printed Name:	Printed Name:
	Company: ARI	Company: Frontier	Company:	Company:
	Date/Time: 9/20/10 1555	Date/Time: 9.21.10 940	Date/Time:	Date/Time:

CUSTODY TRANSFER
Printed: 09/20/10
ARI Job No: RM50

6365
0°C

ANALYTICAL RESOURCES INCORPORATED
4611 South 134th Place, Suite 100
Tukwila WA 98168
206-695-6200 206-695-6201 (fax)

ARI Project Manager: Sue Dunnihoo	Client Contact: Jessi Massingale	Sampling Event: POS-LLA	Samples Received: 09/10/10
	Client: Floyd-Snider	Project: Port of Seattle - Lora Lake	Sample Site: NA

LOGNUM ARI ID	CLIENT ID	MATRIX	# CONTAINERS	ANALYTICAL REQUEST	ANALYTICAL REQUEST	ANALYTICAL REQUEST	COMMENTS
10-22959 RM50C	SSB4-0-0.5-090910	Soil	1	Dioxin			9-9-10 15:55

11

Comments/Special Instructions:	Relinquished By:	Received by: (Signature)	Relinquished By:	Received by: (Signature)
	Printed Name: A. Volgardsen	Printed Name: Gabby Navarro	Printed Name:	Printed Name:
	Company: ARI	Company: Frontier	Company:	Company:
	Date/Time: 9/20/10 1555	Date/Time: 9.21.10 940	Date/Time:	Date/Time:

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **6365**

Client:	Analytical Resources Inc. Sue Dunnihoo
Client Project ID:	Lora Lakes RI
Date Received:	09/21/2010
Time Received:	09:40 am
Received By:	GN
Logged In By:	KZ
# of Samples Received:	11
Duplicates:	0
Storage Location:	R2

Method of Delivery:	UPS
Tracking Number:	1Z8326950149851395
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	0
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test for residual Chlorine	No
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	08/02/2011
Adequate Sample Volume	Yes

Anomalies or additional comments:

L4 & EDD

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Frontier Analytical Laboratory

PROJECT REQUEST SHEET

Project #:	6365	Sample #:	1 - 11 + MS/MSD	Client Manager:	BS
Client:	Analytical Resources Inc. Sue Dunnihoo			Hold Time:	08/02/2011
Matrix:	Soil	Extraction Batch:	2118	Due Date:	10/13/2010
Method:	EPA 1613 D/F			Storage:	R2
SOP:	SOPs: EP2A Rev.7 IP2A Rev.8				

COMMENTS/INSTRUCTIONS:

L4629DD

Results: 6365

Extract/s located in box: "Salad Bowl City"

Standards: 6365

Instrument:
DB5 Tal3
DB225 ____
DB1 ____
Other ____

Frontier Analytical Laboratory
Percent Solids

FAL Project: 6365

	Sample ID	Chemist	Date	Wet Sample Weight (g)	Dry Sample Weight (g)	% Solids	10g Equiv	
1.34	6365-001-0001-SA	GN	9/28/10	8.10	7.49	92.47	10.81	1
1.36	6365-002-0001-SA			9.05	8.22	90.83	11.01	2
	6365-003-0001-SA			9.04 GN 9/28/10	8.32	92.04	10.87	3
1.35	6365-004-0001-SA			7.08~~8.32~~ GN 9/28/10	6.55	92.51	10.81	4
1.35	6365-005-0001-SA			8.72	8.05	92.32	10.83	5
1.35	6365-006-0001-SA			6.46	5.88	91.02	10.99	6
1.34	6365-007-0001-SA			7.93	7.53	94.96	10.53	7
	6365-008-0001-SA			7.75	7.41	95.61	10.46	8
	6365-009-0001-SA			5.83	5.30	90.91	11.00	9
	6365-010-0001-SA			6.66	6.31	94.74 GN 9/28/10	~~10.8~~ 10.55	10
	6365-011-0001-SA	↓	↓	7.36	6.88	93.48	10.70	11
	6365-006-0001-MS	same as		6365-006-0001-SA				
	6365-006-0001-MSD	same as		6365-006-0001-SA				

% Solids Summary:

Non-Filtered Determination

1. Place an aliquot of sample into a pre-weighed aluminum weighing boat. Use approximately two to ten grams for solid samples, approximately 10 mL for aqueous samples.
2. Record the weight.
3. Dry sample overnight at approximately 110 C.

Filtered Determination

1. Pre-weigh a glass fiber filter of appropriate pore size and pressure filter a sample aliquot (200-1000mL) through it.
2. Air dry the filter and record the dry weight.

% Solids calculation

% solids = aliquot after drying/aliquot before drying x 100

1 Samples containing one percent solids or less are prepared as aqueous samples.
1 Samples containing greater than one percent solids prepared as solid samples.

EXTRACTION SHEET

Project #: 6365 Extraction Date: 2010-09-28 Extraction Chemist: GN

Method/Analysis: EPA 1613 D/F

Procedure: SOX/SDS Solvent: Toluene

Sample ID	Wet wt. (g/L)	Dry wt. (g/L)	IS Amt: 10.0uL ID: 100511A Vial: 2 Chemist/Witness/Date	NS Amt: 10.0uL ID: 100511B Vial: 2 Chemist/Witness/Date	CSS Amt: 10.0uL ID: 100511C Vial: 2 Chemist/Witness/Date
2118-001-0001-MB	(5.00g)	(5.00g)	GN MP 9/28/10	NA	GN DN 9/29/10
2118-001-0001-OPR	(5.00g)	(5.00g)		GN MP 9/28/10	
6365-001-0001-SA	5.50	5.09		NA	
6365-002-0001-SA	5.56	5.05			
6365-003-0001-SA	5.65	5.20			
6365-004-0001-SA	5.49	5.08			
6365-005-0001-SA	5.49	5.07			
6365-006-0001-SA	5.43	4.94			
6365-006-0001-MS	5.46	4.97		GN MP 9/28/10	
6365-006-0001-MSD	5.45	4.96			
6365-007-0001-SA	5.36	5.09		NA	
6365-008-0001-SA	5.35	5.12			
6365-009-0001-SA	5.56	5.05			
6365-010-0001-SA	5.36	5.08			
6365-011-0001-SA	5.37	5.02			

AX-21 Charcoal Cleaned	031210	Acetone	50180	Acid Alumina	08623DJ	Hexane	50143
Hydrochloric Acid	B08505	Methanol	101438	Methylene Chloride (DCM)	50132	Silica Gel	TA1593034
Sodium Hydroxide	9265	Sodium Sulfate	49009905	Sulfuric Acid	101570	Tetradecane	081394
Toluene	101346	Water	50193	C-18 Empore Discs	320505	Cyclohexane	48151

Comments:

CLEANUP SHEET

Project #: 6365

Method/Analysis: EPA 1613 D/F

Splits: 0 Split Date: N/A Final Volume: 20.0uL

Sample ID	Cleanup 1 MSG/AA Chemist/Date	Cleanup 2 Charcoal Chemist/Date	Cleanup 3 NA Chemist/Date	RS Amt: 10.0uL ID: 100511D Vial: 2 Chemist/Witness/Date
2118-001-0001-MB	GN 9/29/10	GN 9/29/10	NA	GN MP 9/29/10
2118-001-0001-OPR				
6365-001-0001-SA				
6365-002-0001-SA				
6365-003-0001-SA				
6365-004-0001-SA				
6365-005-0001-SA				
6365-006-0001-SA				
6365-006-0001-MS				
6365-006-0001-MSD				
6365-007-0001-SA				
6365-008-0001-SA				
6365-009-0001-SA				
6365-010-0001-SA				
6365-011-0001-SA				

Comments:

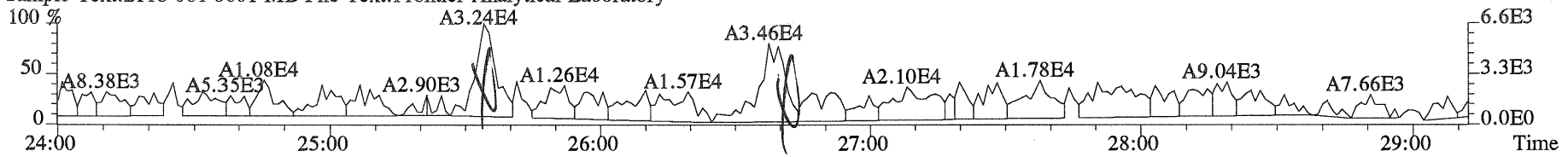
FAL ID: 2118-001-0001-MB Filename: 30SEP10M Sam:4 Acquired: 30-SEP-10 12:23:04 ICal: pcddfal3-8-23-10
Client ID: Method Blank ConCal: ST093010M1 EndCal: ST093010M2
Results: 6365 GC Column: DB5 Amount: 5.000 NATO 1989 Tox: 0.00
WHO 1998 Tox: 0.00 WHO 2005 Tox: 0.00

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.11	*		2.50	1240	1280	0.177
1,2,3,7,8-PeCDD	*	*	n	NotFnd	1.10	*		2.50	1970	1330	0.294
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	965	1300	0.189
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	965	1300	0.244
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.36	*		2.50	965	1300	0.216
1,2,3,4,6,7,8-HpCDD	*	*	n	NotFnd	1.45	*		2.50	1690	1900	0.427
OCDD	*	*	n	NotFnd	1.43	*		2.50	1400	1390	0.830
2,3,7,8-TCDF	*	*	n	NotFnd	1.50	*		2.50	1480	1510	0.0949
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.94	*		2.50	1370	1290	0.169
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.94	*		2.50	1370	1290	0.180
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	0.93	*		2.50	1320	1430	0.199
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.82	*		2.50	1320	1430	0.195
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	1320	1430	0.229
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.00	*		2.50	1320	1430	0.200
1,2,3,4,6,7,8-HpCDF	*	*	n	NotFnd	1.39	*		2.50	1150	1220	0.235
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.36	*		2.50	1150	1220	0.286
OCDF	*	*	n	NotFnd	0.79	*		2.50	1240	1310	0.638
											Rec
13C-2,3,7,8-TCDD	5.39e+07	0.84	y	27:24	1.02	362					90.6
13C-1,2,3,7,8-PeCDD	4.85e+07	1.74	y	33:14	0.84	397					99.3
13C-1,2,3,4,7,8-HxCDD	4.17e+07	1.25	y	38:36	1.07	396					99.0
13C-1,2,3,6,7,8-HxCDD	3.33e+07	1.26	y	38:46	1.01	335					83.7
13C-1,2,3,4,6,7,8-HpCDD	2.98e+07	0.94	y	44:12	0.86	354					88.5
13C-OCDD	3.07e+07	0.94	y	49:47	0.55	572					71.5
13C-2,3,7,8-TCDF	8.45e+07	0.88	y	26:39	0.99	367					91.9
13C-1,2,3,7,8-PeCDF	7.50e+07	1.76	y	31:30	0.84	387					96.8
13C-2,3,4,7,8-PeCDF	7.18e+07	1.73	y	32:49	0.81	382					95.5
13C-1,2,3,4,7,8-HxCDF	7.30e+07	0.52	y	37:13	1.85	401					100
13C-1,2,3,6,7,8-HxCDF	8.56e+07	0.52	y	37:24	2.54	344					86.0
13C-2,3,4,6,7,8-HxCDF	6.49e+07	0.52	y	38:21	2.01	328					82.0
13C-1,2,3,7,8,9-HxCDF	7.41e+07	0.52	y	39:46	2.03	371					92.9
13C-1,2,3,4,6,7,8-HpCDF	3.61e+07	0.44	y	42:18	1.11	331					82.8
13C-1,2,3,4,7,8,9-HpCDF	3.11e+07	0.44	y	45:07	0.80	394					98.4
13C-OCDF	6.46e+07	0.98	y	50:08	1.08	608					76.0
37Cl-2,3,7,8-TCDD	1.45e+07			27:25	0.69	146					91.0
13C-1,2,3,4-TCDD	5.81e+07	0.84	y	26:50	-	25.8					
13C-1,2,3,4-TCDF	9.26e+07	0.87	y	25:34	-	25.6					
13C-1,2,3,7,8,9-HxCDD	3.93e+07	1.24	y	39:13	-	28.5					

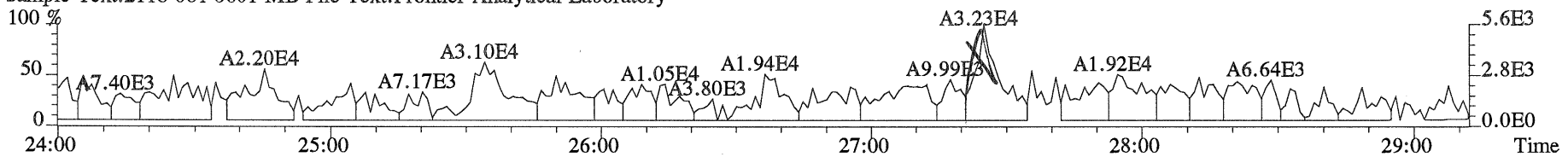
					Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*		NotFnd	1.11	*	2.50	1240	1280	0.177		0
Total Penta-Dioxins	*		NotFnd	1.10	*	2.50	1970	1330	0.294		0
Total Hexa-Dioxins	*		NotFnd	1.37	*	2.50	965	1300	0.244		0
Total Hepta-Dioxins	*		NotFnd	1.45	*	2.50	1690	1900	0.427		0
Total Tetra-Furans	*		NotFnd	1.50	*	2.50	1480	1510	0.0949		0
1st Fn. Tot Penta-Furans	*		NotFnd	0.94	*	2.50	1370	1290	0.180	PeCDF	0
Total Penta-Furans	*		NotFnd	0.94	*	2.50	1370	1290	0.180	*	0
Total Hexa-Furans	*		NotFnd	0.91	*	2.50	1320	1430	0.229		0
Total Hepta-Furans	*		NotFnd	1.38	*	2.50	1150	1220	0.286		0

Analyst: _____ Date: 10/4/10

File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



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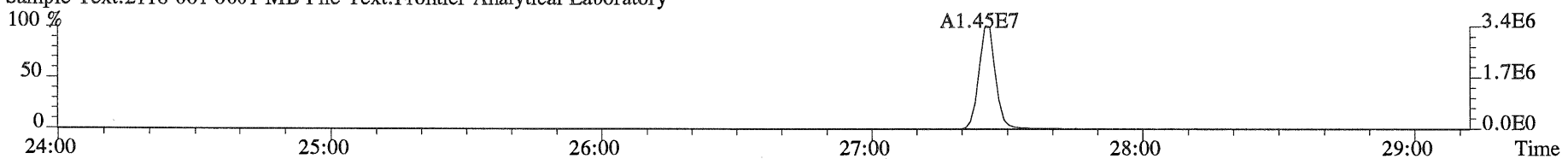

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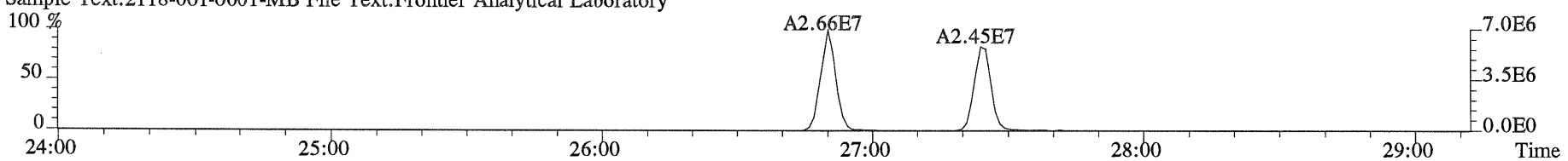
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



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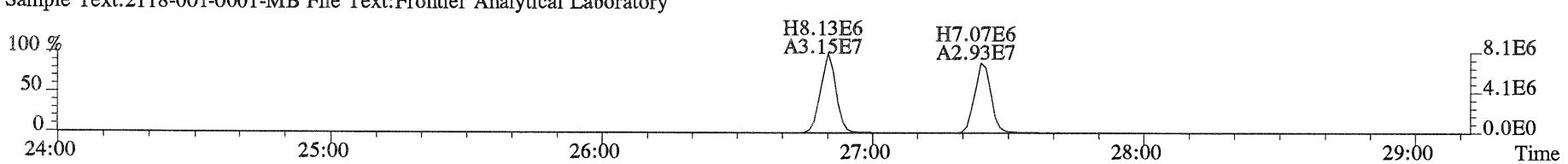
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



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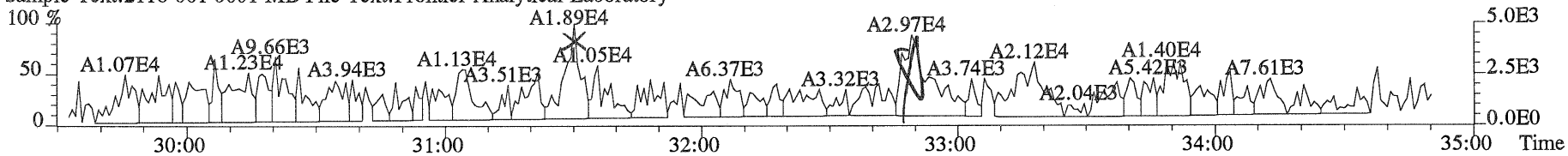
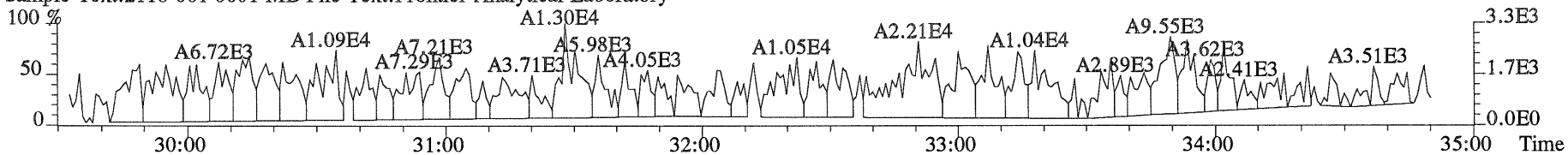
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-411 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



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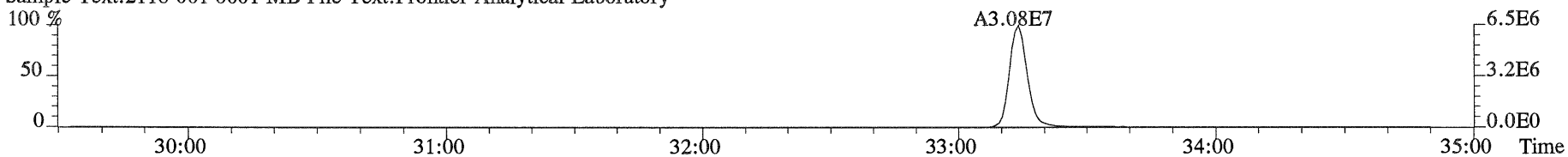
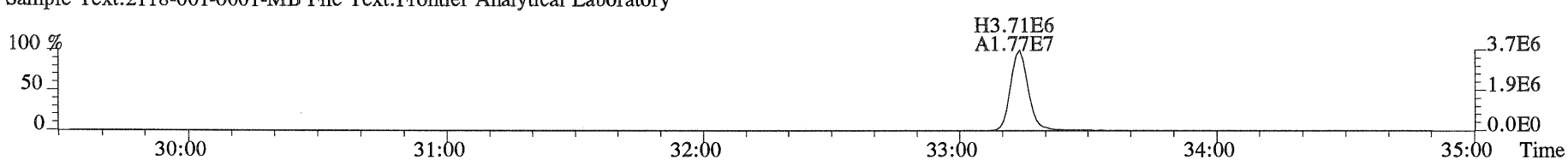
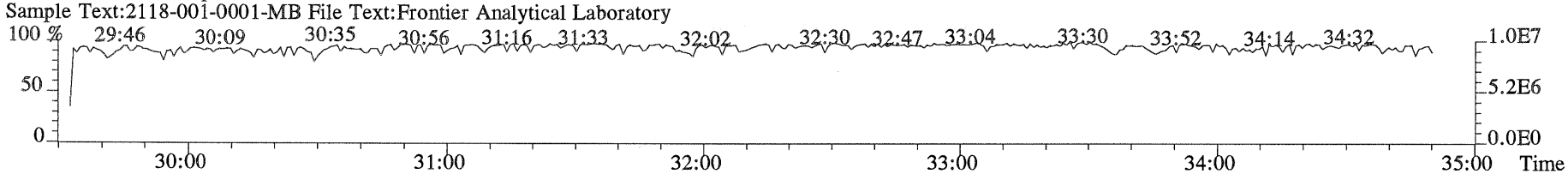
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



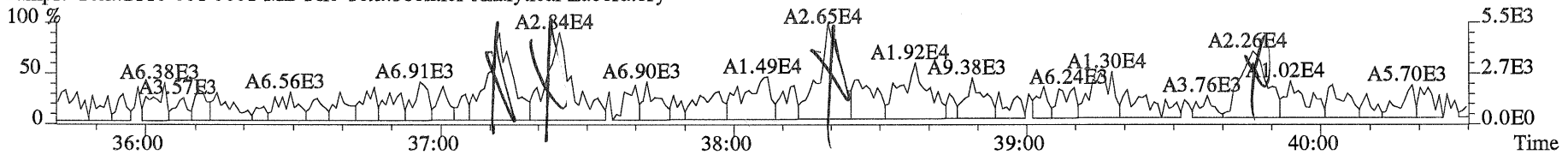
File:30SEP10M #1-411 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



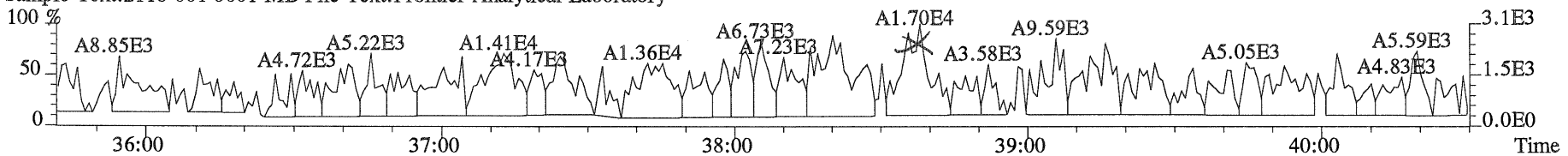
File:30SEP10M #1-411 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



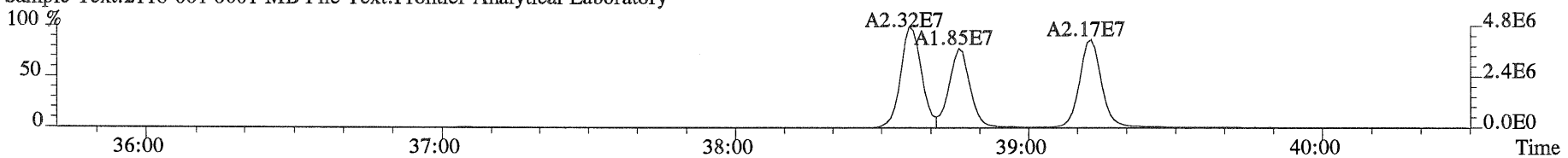
File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
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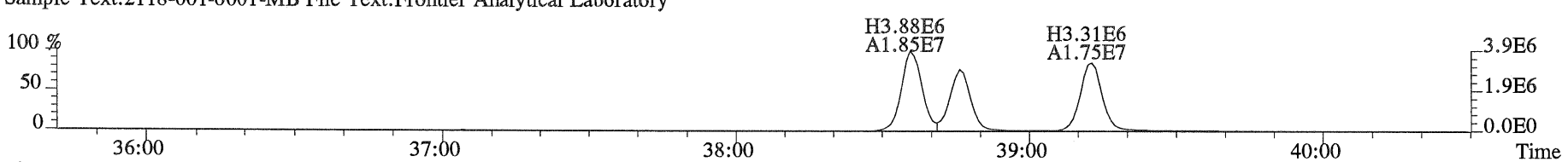
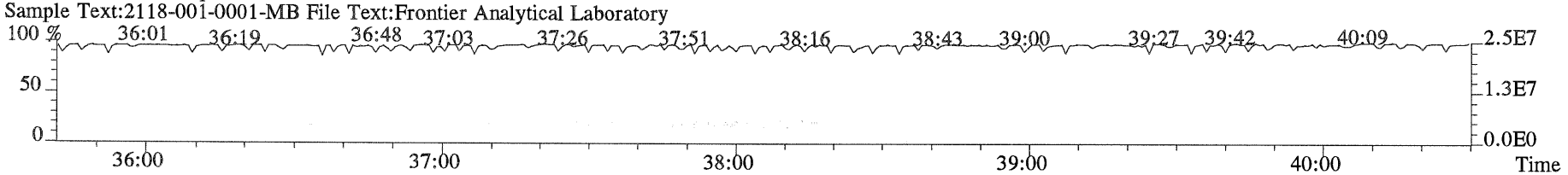
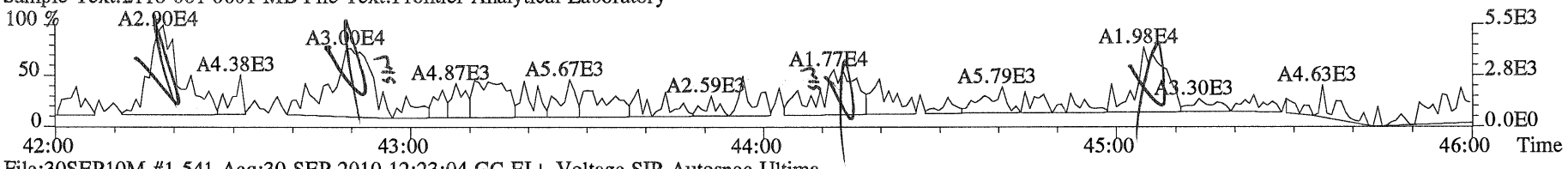


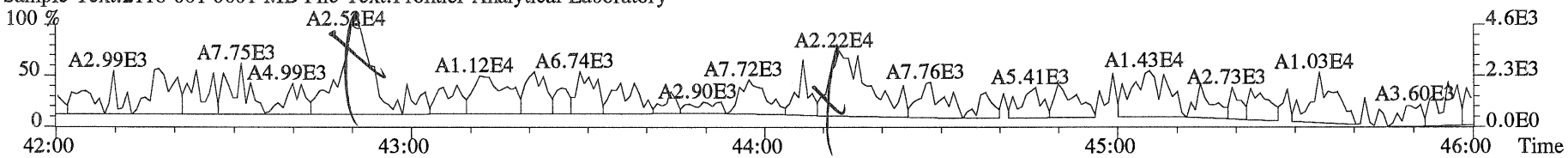
File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



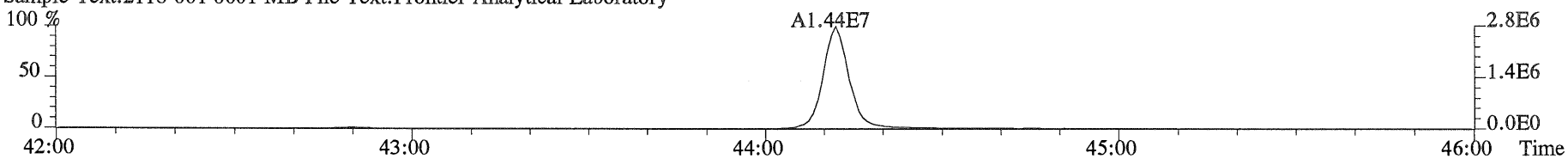
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



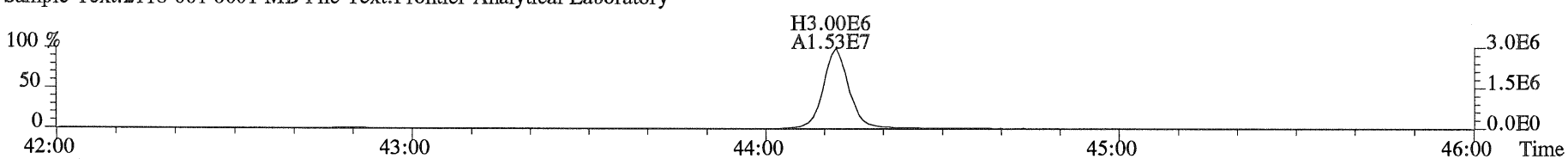
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



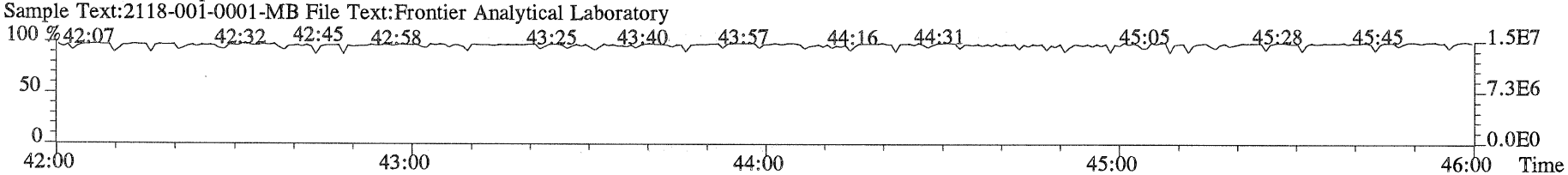
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



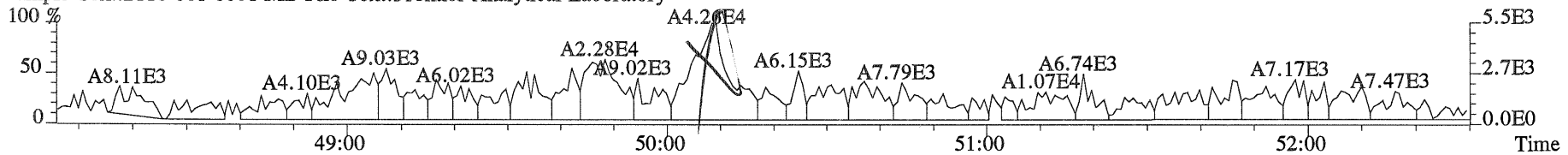
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



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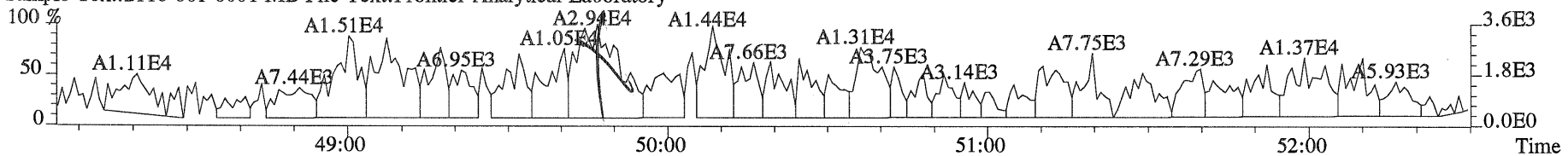
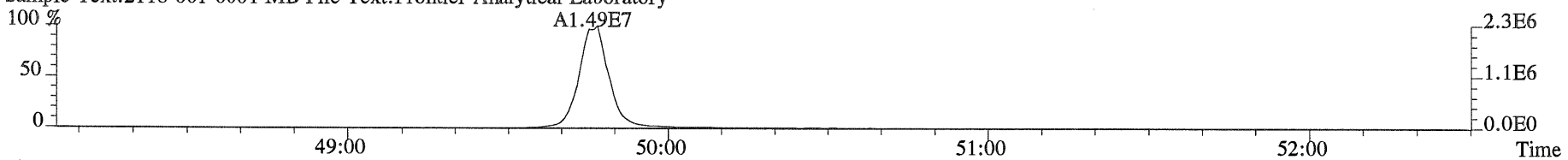
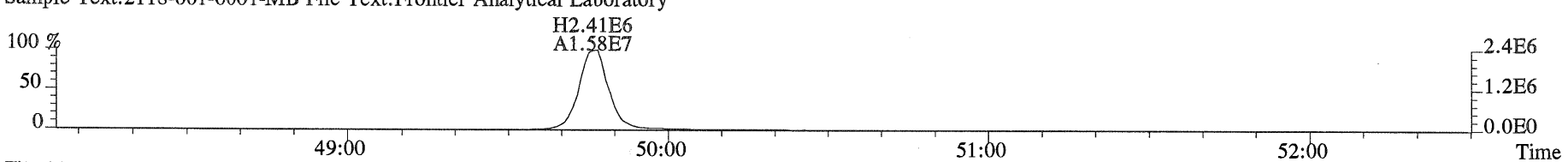
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



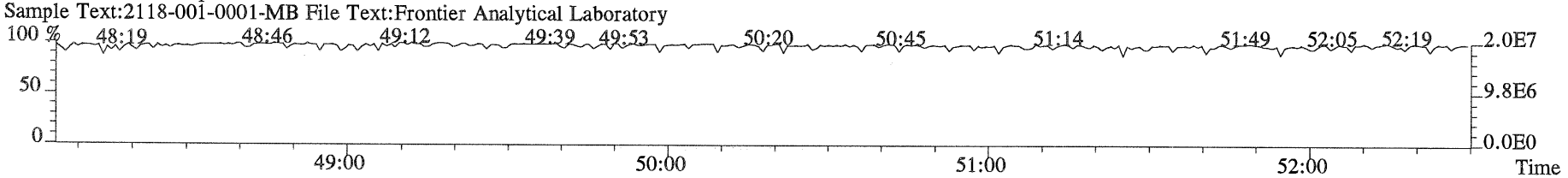
File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



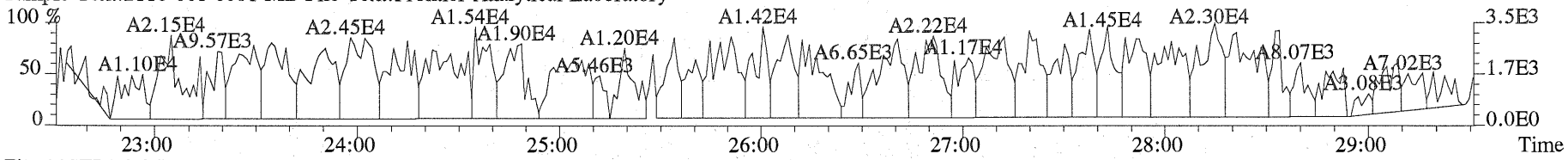
File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



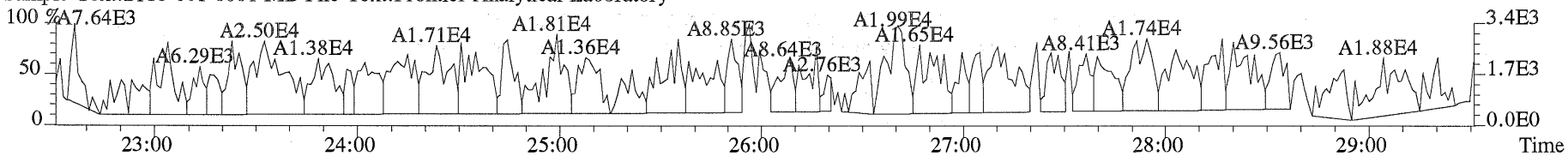
File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



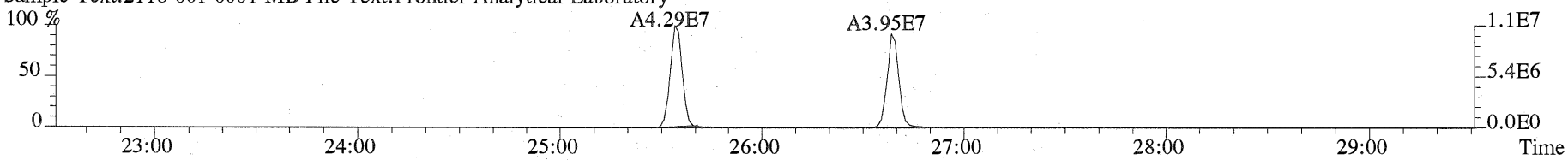
File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



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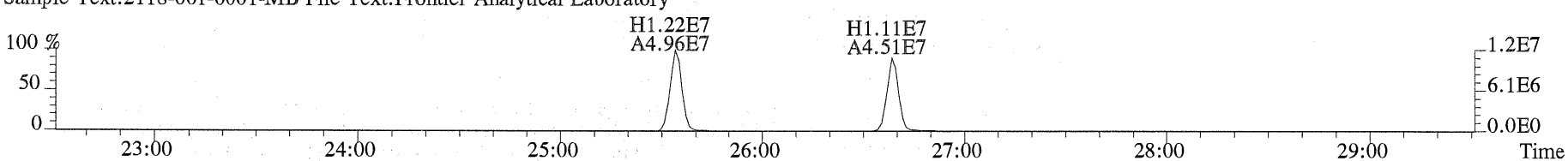
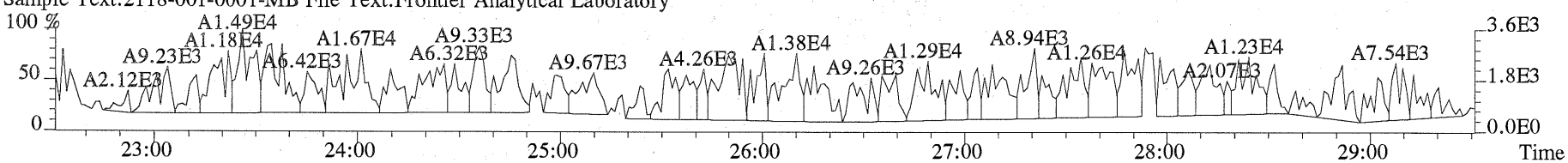
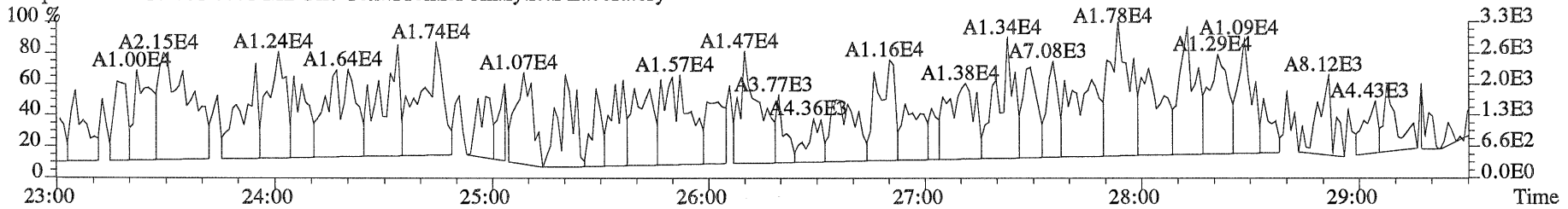
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



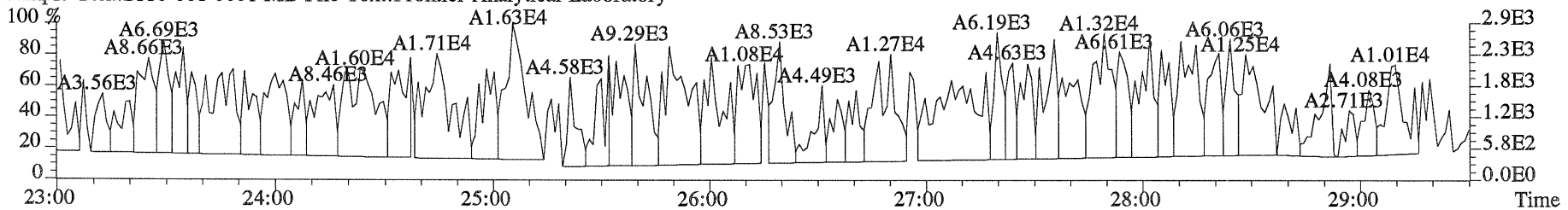
File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



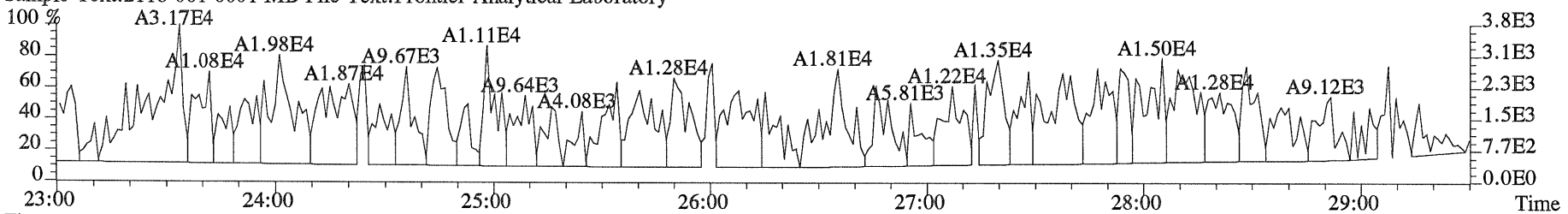
File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



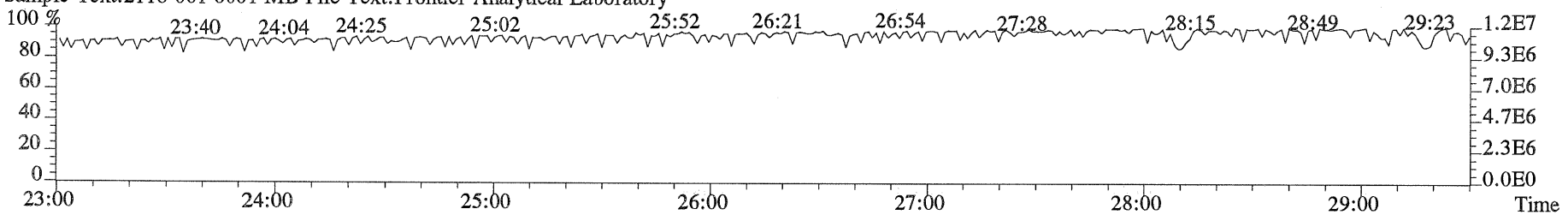
File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



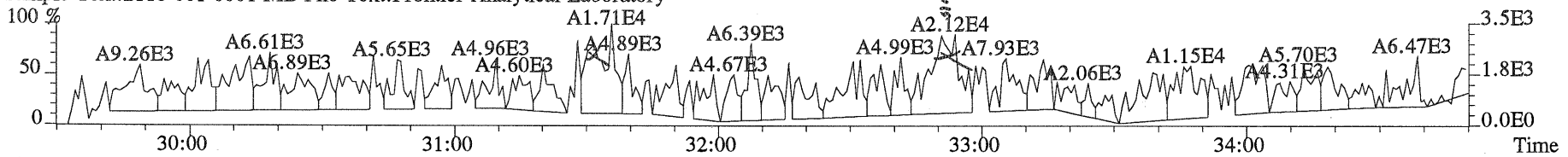
File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



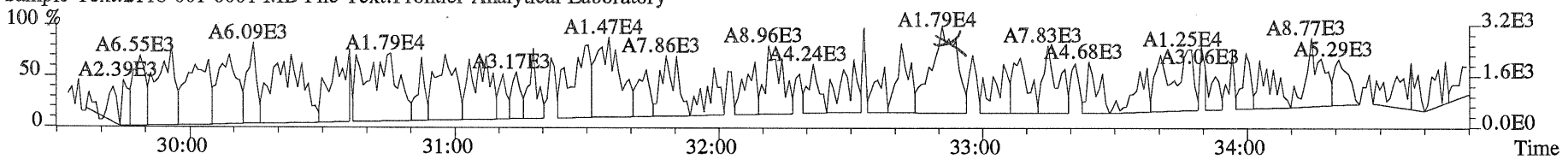
File:30SEP10M #1-398 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
316.9824 S:4 Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



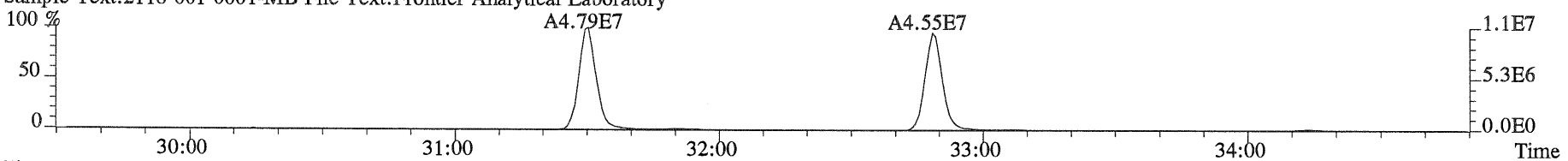
File:30SEP10M #1-411 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



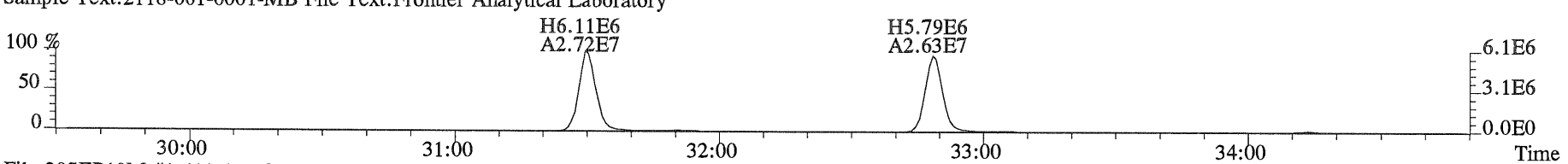
File:30SEP10M #1-411 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



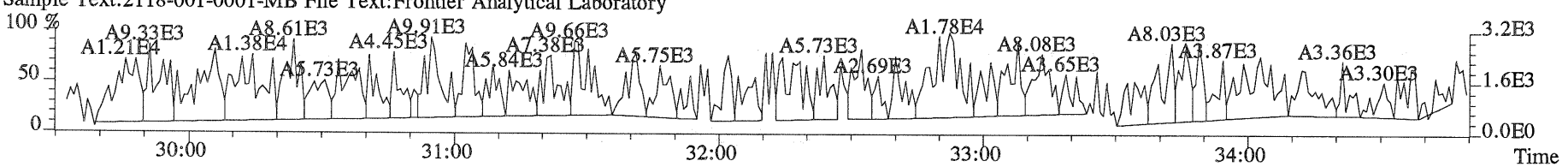
File:30SEP10M #1-411 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



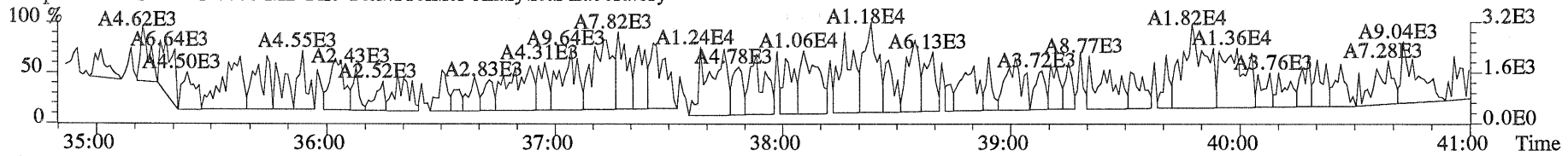
File:30SEP10M #1-411 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



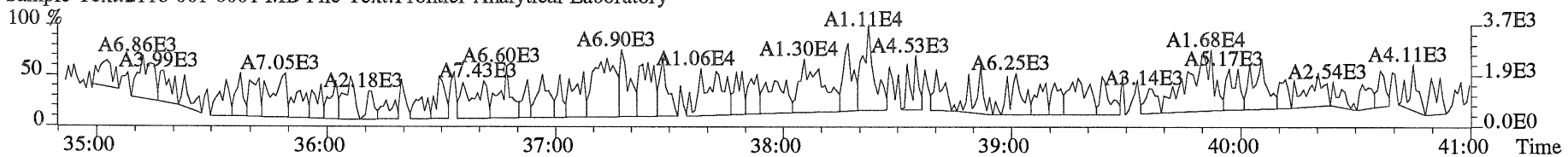
File:30SEP10M #1-411 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



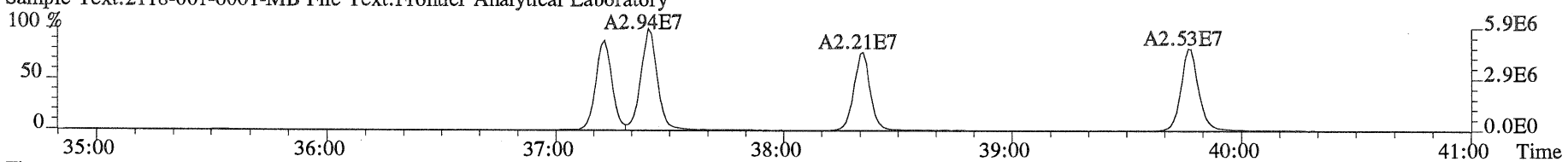
File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



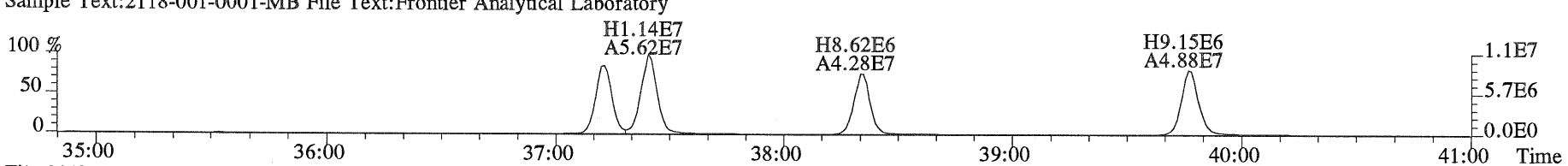
File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



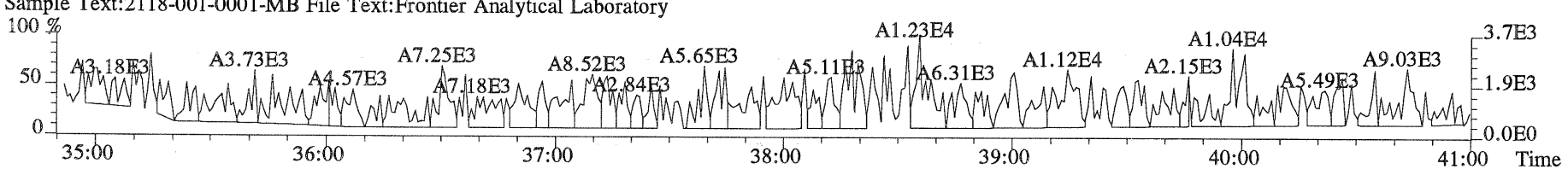
File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



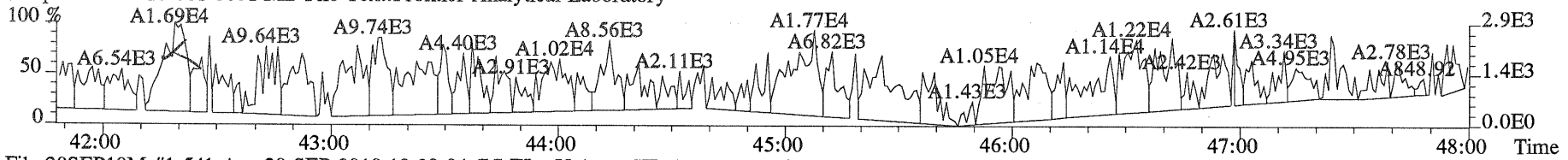
File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



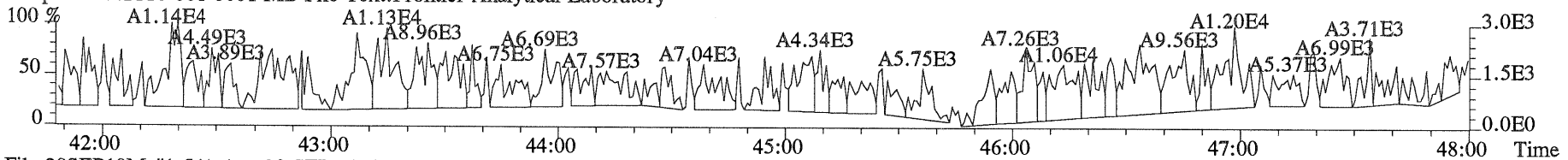
File:30SEP10M #1-477 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



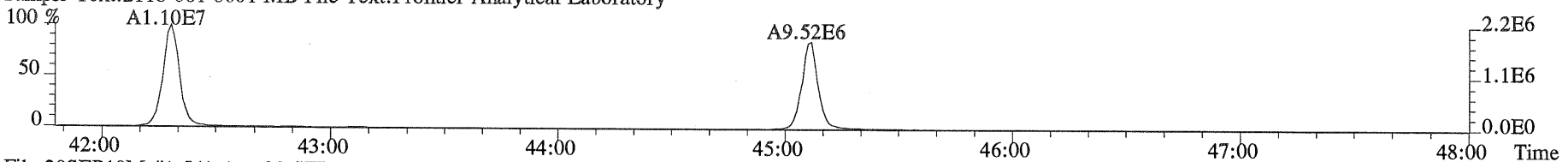
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



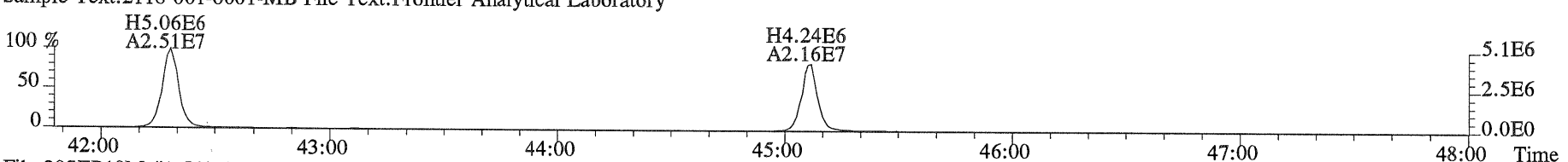
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



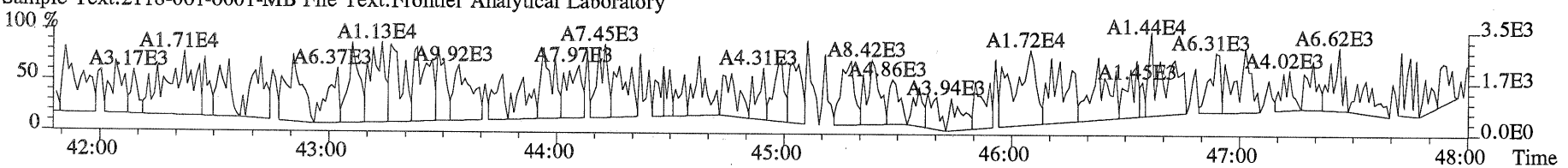
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



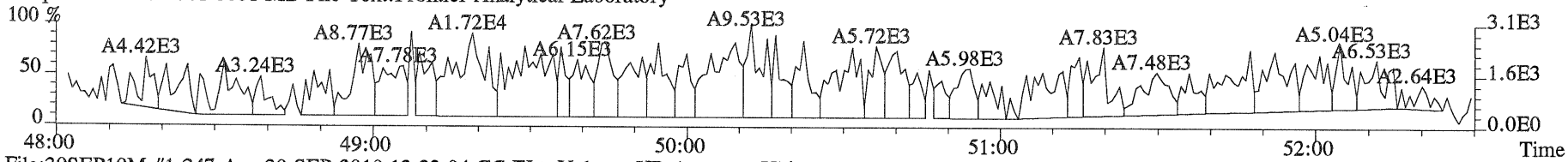
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



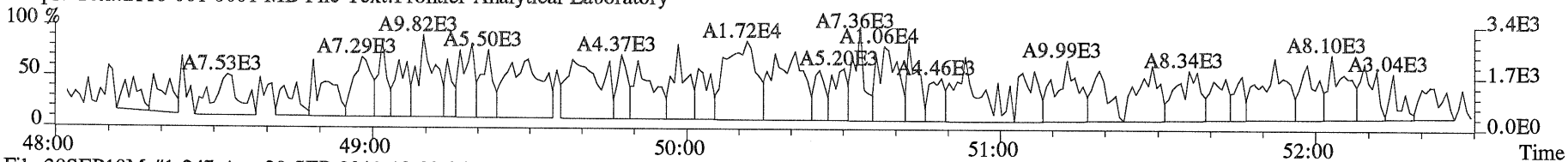
File:30SEP10M #1-541 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



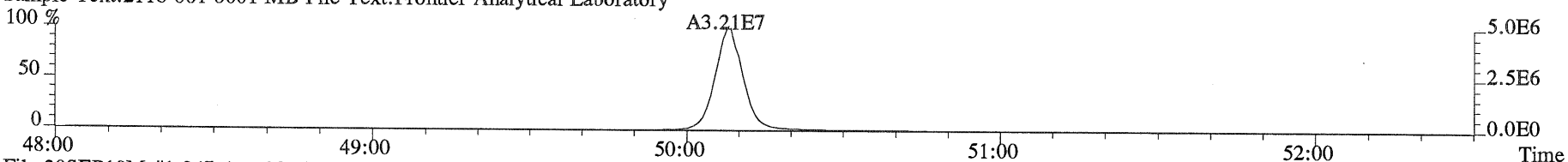
File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



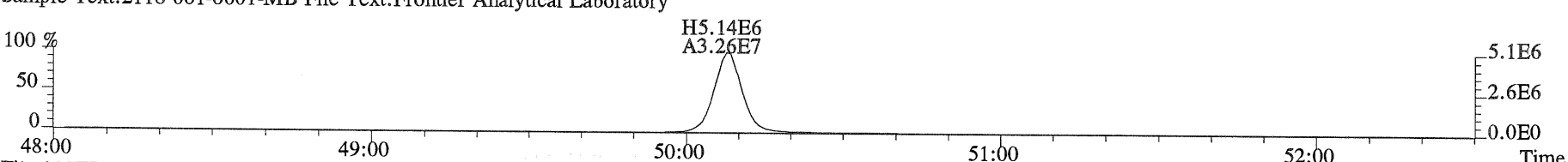
File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



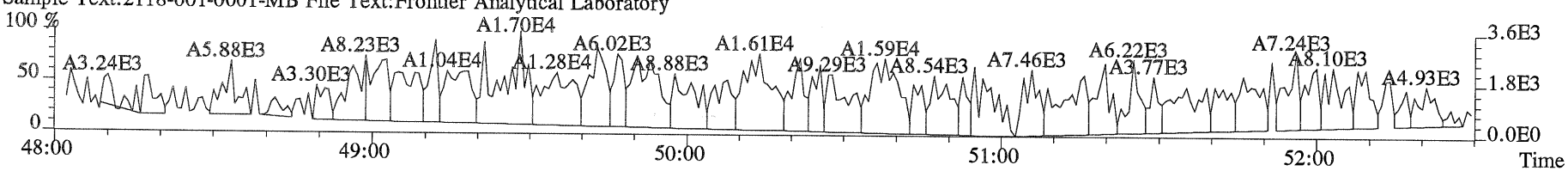
File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



File:30SEP10M #1-347 Acq:30-SEP-2010 12:23:04 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-MB File Text:Frontier Analytical Laboratory



2118.001.0001.OPR

USEPA - ITD

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

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Soil OPR Data Filename: 30SEP10M Sam:2

Ext. Date: 9/28/10 Shift: Day Analysis Date: 30-SEP-10 10:32:18

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
NATIVE ANALYTES			
2,3,7,8-TCDD	10	10.2	6.70 - 15.8
1,2,3,7,8-PeCDD	50	51.2	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	49.9	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	49.4	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	52.0	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	50.2	35.0 - 70.0
OCDD	100	101	78.0 - 144
2,3,7,8-TCDF	10	9.51	7.50 - 15.8
1,2,3,7,8-PeCDF	50	55.8	40.0 - 67.0
2,3,4,7,8-PeCDF	50	55.2	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	48.0	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	48.8	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	49.4	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	49.5	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	48.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	48.6	39.0 - 69.0
OCDF	100	102	63.0 - 170

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

Analyst: _____ Date: 10/1/10

USEPA - ITD

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

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Soil OPR Data Filename: 30SEP10M Sam:2

Ext. Date: 9/28/10 Shift: Day Analysis Date: 30-SEP-10 10:32:18

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	100	89.2	20.0 - 175
13C-1,2,3,7,8-PeCDD	100	102	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	100	95.7	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	100	81.5	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	100	87.3	26.0 - 166
13C-OCDD	200	150	26.0 - 397
13C-2,3,7,8-TCDF	100	92.5	22.0 - 152
13C-1,2,3,7,8-PeCDF	100	95.5	21.0 - 192
13C-2,3,4,7,8-PeCDF	100	97.6	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	100	95.5	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	82.8	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	100	83.4	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	94.4	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	100	80.2	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	100	101	20.0 - 186
13C-OCDF	200	158	26.0 - 397
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	36.8	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613
Labeled compound concentration limits are based on required percent recovery of 25%-150%.

Analyst: _____ Date: 10/1/10

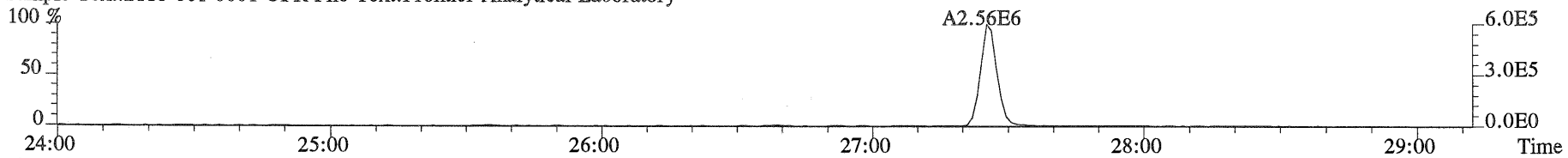
FAL ID: 2118-001-0001-OPR Filename: 30SEP10M Sam:2 Acquired: 30-SEP-10 10:32:18 ICal: pcddfal3-8-23-10
Client ID: OPR ConCal: ST093010M1 EndCal: ST093010M2
Results: 2118 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 104
WHO 1998 Tox: 129 WHO 2005 Tox: 117

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	5.91e+06	0.76 y	27:25	1.11	10.2		2.50	-	-	*
1,2,3,7,8-PeCDD	2.77e+07	1.62 y	33:16	1.10	51.2		2.50	-	-	*
1,2,3,4,7,8-HxCDD	3.02e+07	1.39 y	38:37	1.37	49.9		2.50	-	-	*
1,2,3,6,7,8-HxCDD	2.40e+07	1.38 y	38:47	1.37	49.4		2.50	-	-	*
1,2,3,7,8,9-HxCDD	2.81e+07	1.35 y	39:14	1.36	52.0		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	2.34e+07	0.98 y	44:13	1.45	50.2		2.50	-	-	*
OCDD	2.54e+07	0.95 y	49:47	1.43	101		2.50	-	-	*
2,3,7,8-TCDF	1.19e+07	0.68 y	26:40	1.50	9.51		2.50	-	-	*
1,2,3,7,8-PeCDF	3.82e+07	1.50 y	31:31	0.94	55.8		2.50	-	-	*
2,3,4,7,8-PeCDF	3.72e+07	1.47 y	32:50	0.94	55.2		2.50	-	-	*
1,2,3,4,7,8-HxCDF	3.38e+07	1.22 y	37:14	0.93	48.0		2.50	-	-	*
1,2,3,6,7,8-HxCDF	3.61e+07	1.22 y	37:27	0.82	48.8		2.50	-	-	*
2,3,4,6,7,8-HxCDF	3.27e+07	1.22 y	38:22	0.92	49.4		2.50	-	-	*
1,2,3,7,8,9-HxCDF	4.06e+07	1.23 y	39:48	1.00	49.5		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	2.58e+07	1.05 y	42:20	1.39	48.7		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	2.30e+07	1.06 y	45:08	1.36	48.6		2.50	-	-	*
OCDF	2.94e+07	0.92 y	50:10	0.79	102		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	5.23e+07	0.82 y	27:24	1.02	89.2					89.2
13C-1,2,3,7,8-PeCDD	4.90e+07	1.74 y	33:14	0.84	102					102
13C-1,2,3,4,7,8-HxCDD	4.40e+07	1.26 y	38:36	1.07	95.7					95.7
13C-1,2,3,6,7,8-HxCDD	3.54e+07	1.25 y	38:46	1.01	81.5					81.5
13C-1,2,3,4,6,7,8-HpCDD	3.20e+07	0.94 y	44:12	0.86	87.3					87.3
13C-OCDD	3.52e+07	0.95 y	49:47	0.55	150					75.2
13C-2,3,7,8-TCDF	8.36e+07	0.88 y	26:39	0.99	92.5					92.5
13C-1,2,3,7,8-PeCDF	7.27e+07	1.78 y	31:30	0.84	95.5					95.5
13C-2,3,4,7,8-PeCDF	7.20e+07	1.75 y	32:49	0.81	97.6					97.6
13C-1,2,3,4,7,8-HxCDF	7.58e+07	0.52 y	37:13	1.85	95.5					95.5
13C-1,2,3,6,7,8-HxCDF	9.00e+07	0.53 y	37:24	2.54	82.8					82.8
13C-2,3,4,6,7,8-HxCDF	7.20e+07	0.53 y	38:21	2.01	83.4					83.4
13C-1,2,3,7,8,9-HxCDF	8.22e+07	0.53 y	39:47	2.03	94.4					94.4
13C-1,2,3,4,6,7,8-HpCDF	3.81e+07	0.43 y	42:19	1.11	80.2					80.2
13C-1,2,3,4,7,8,9-HpCDF	3.49e+07	0.44 y	45:07	0.80	101					101
13C-OCDF	7.33e+07	0.98 y	50:08	1.08	158					78.9
37Cl-2,3,7,8-TCDD	1.45e+07		27:25	0.69	36.8					92.1
13C-1,2,3,4-TCDD	5.73e+07	0.82 y	26:50	-	128					
13C-1,2,3,4-TCDF	9.09e+07	0.88 y	25:34	-	126					
13C-1,2,3,7,8,9-HxCDD	4.29e+07	1.25 y	39:13	-	155					

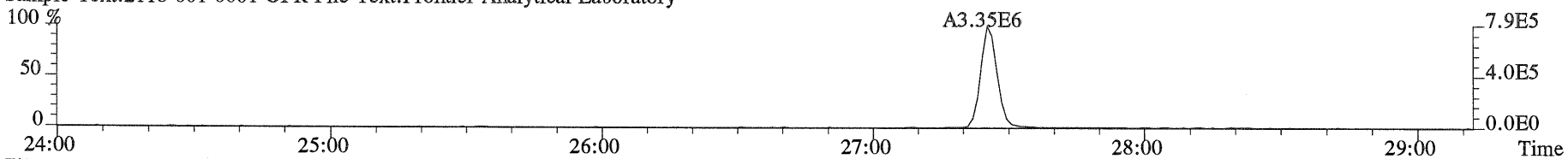
							Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	6.28e+06		22:53	1.11	10.8		2.50	-	-	*		28
Total Penta-Dioxins	2.77e+07		33:16	1.10	51.2		2.50	-	-	*		1
Total Hexa-Dioxins	8.23e+07		38:37	1.37	151		2.50	-	-	*		3
Total Hepta-Dioxins	2.38e+07		42:51	1.45	51.2		2.50	-	-	*		10
Total Tetra-Furans	1.24e+07		23:04	1.50	9.90		2.50	-	-	*		16
1st Fn. Tot Penta-Furans	5.59e+05		22:42	0.94	0.823		2.50	-	-	*	PeCDF	30
Total Penta-Furans	7.70e+07		30:15	0.94	113		2.50	-	-	*	114	8
Total Hexa-Furans	1.43e+08		35:34	0.91	196		2.50	-	-	*		6
Total Hepta-Furans	4.89e+07		42:20	1.38	97.5		2.50	-	-	*		4

Analyst: _____ Date: 10/1/10

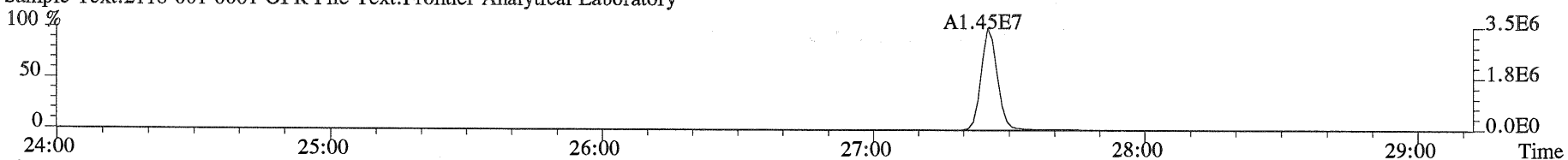
File:30SEP10M #1-397 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



File:30SEP10M #1-397 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



File:30SEP10M #1-397 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



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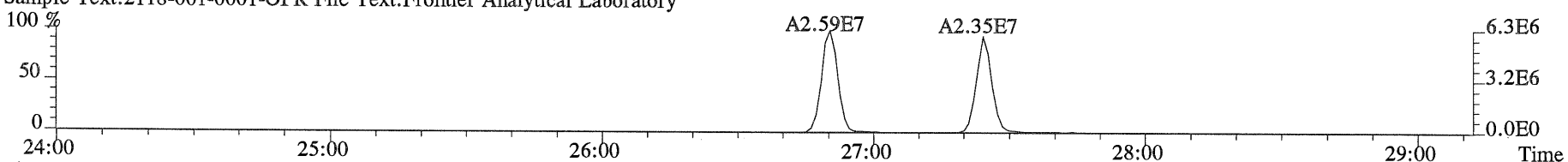
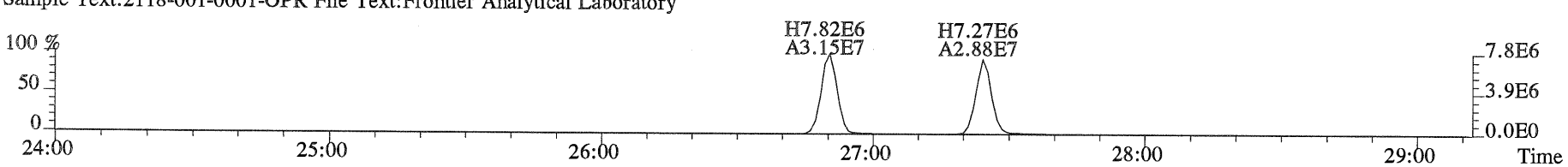
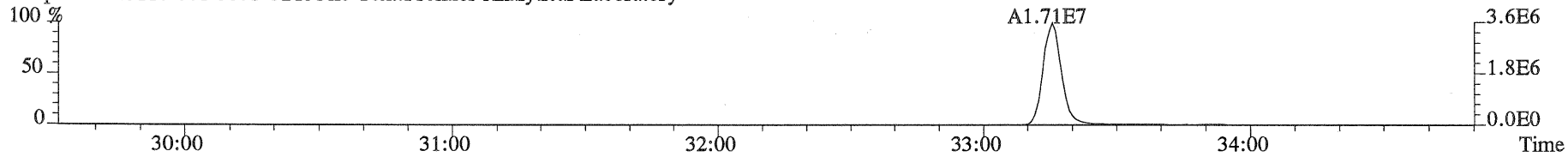
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



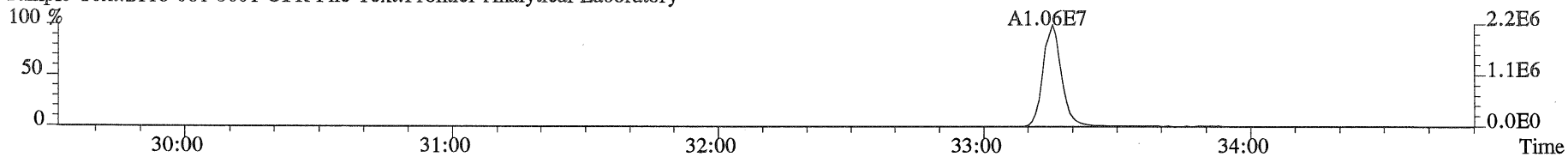
File:30SEP10M #1-397 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



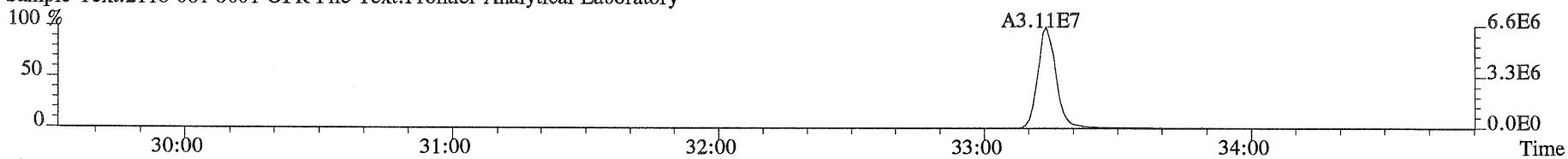
File:30SEP10M #1-412 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



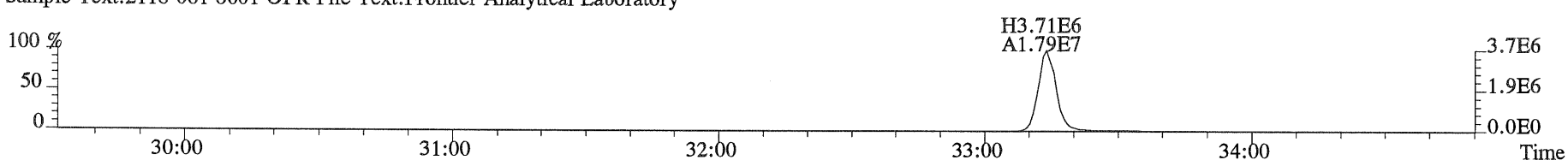
File:30SEP10M #1-412 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



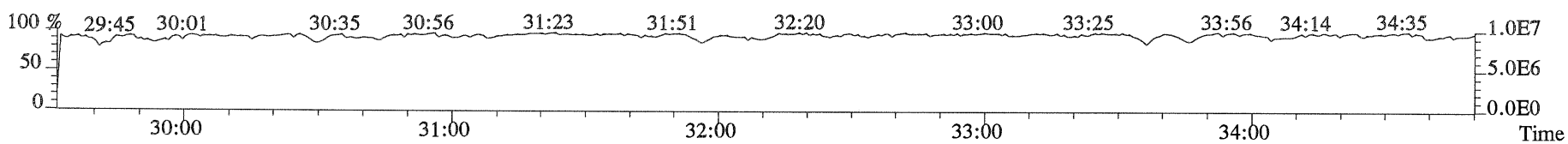
File:30SEP10M #1-412 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



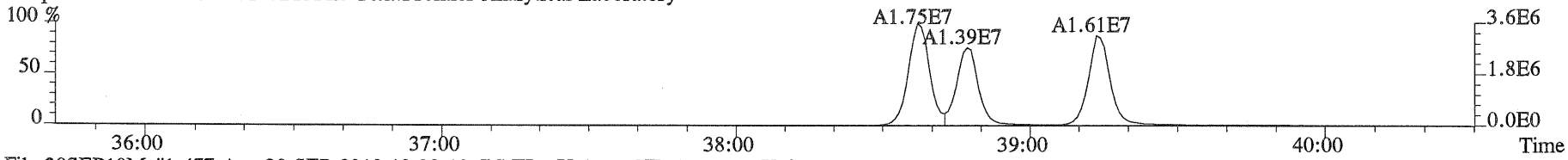
File:30SEP10M #1-412 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



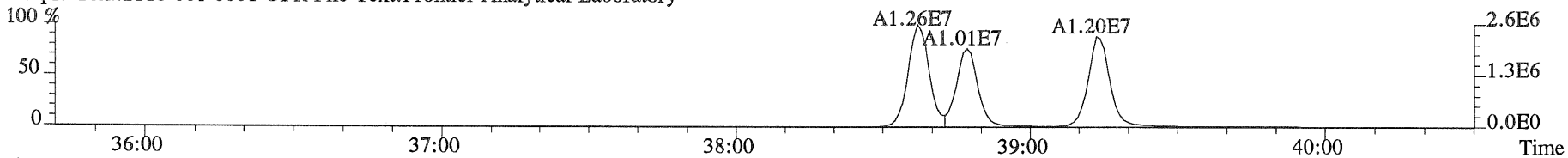
File:30SEP10M #1-412 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



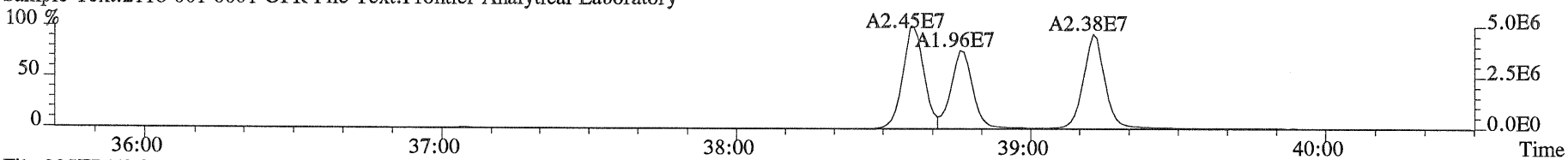
File:30SEP10M #1-477 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



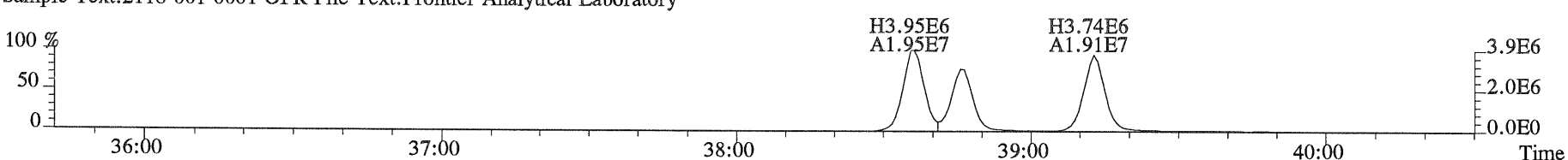
File:30SEP10M #1-477 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



File:30SEP10M #1-477 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



File:30SEP10M #1-477 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory



File:30SEP10M #1-477 Acq:30-SEP-2010 10:32:18 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:OCDD
Sample Text:2118-001-0001-OPR File Text:Frontier Analytical Laboratory