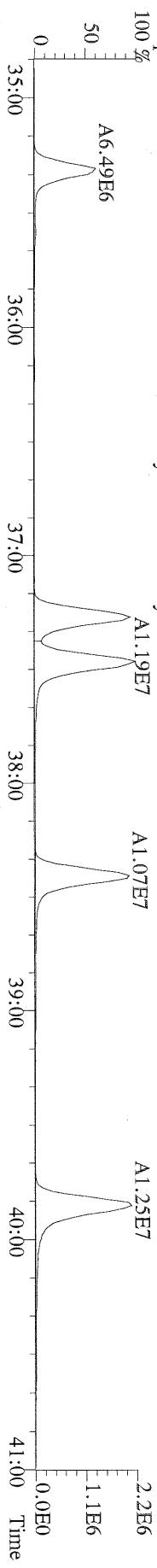
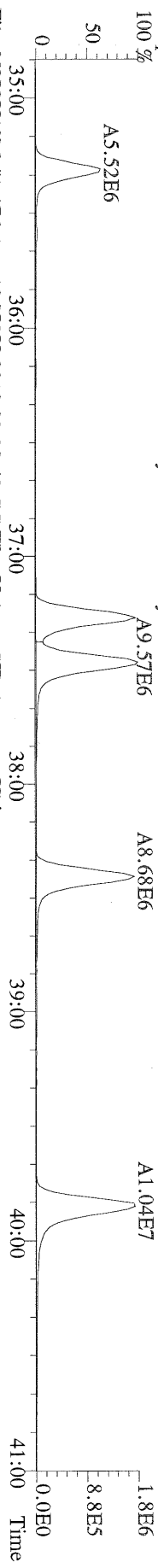


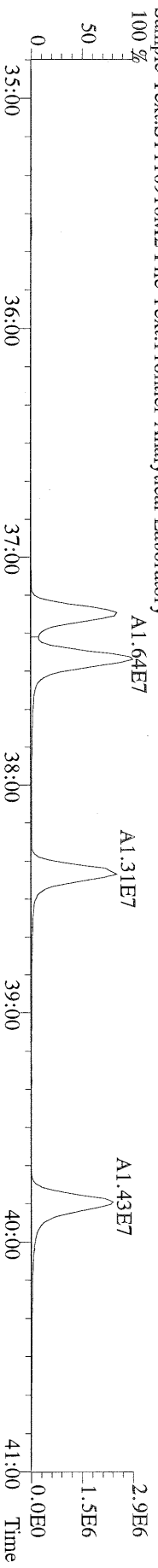
File:09NOV10M #1-476 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



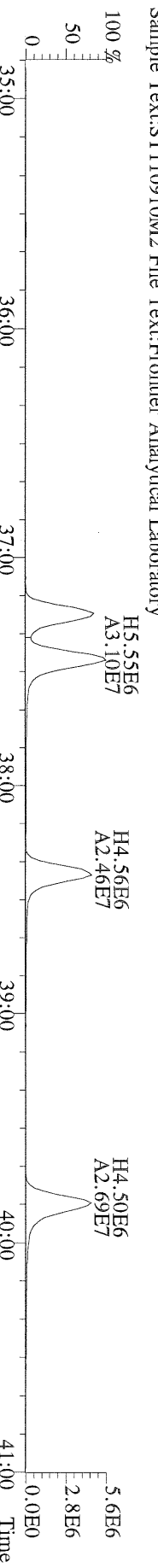
File:09NOV10M #1-476 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



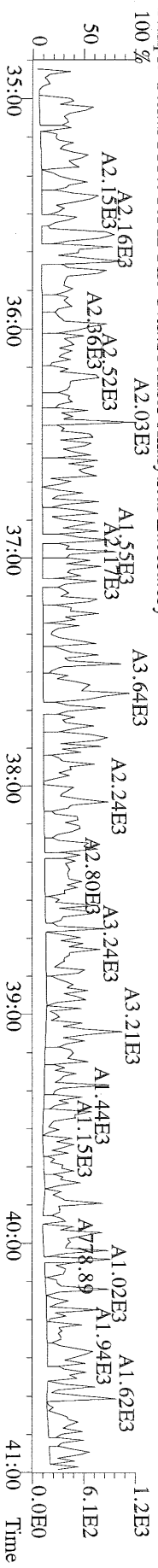
File:09NOV10M #1-476 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



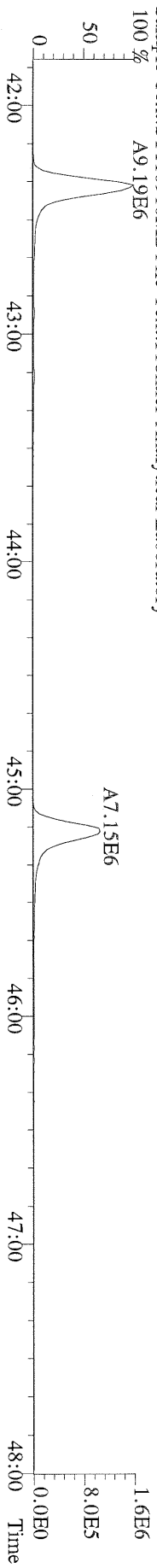
File:09NOV10M #1-476 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



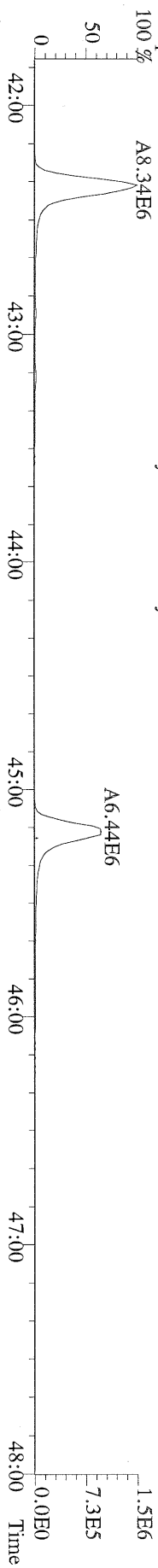
File:09NOV10M #1-476 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



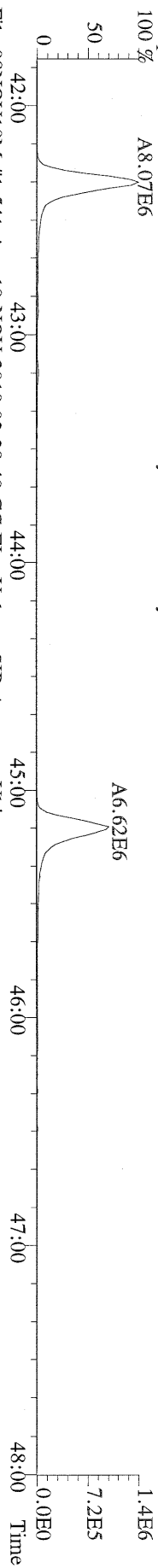
File:09NOV10M #1-541 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



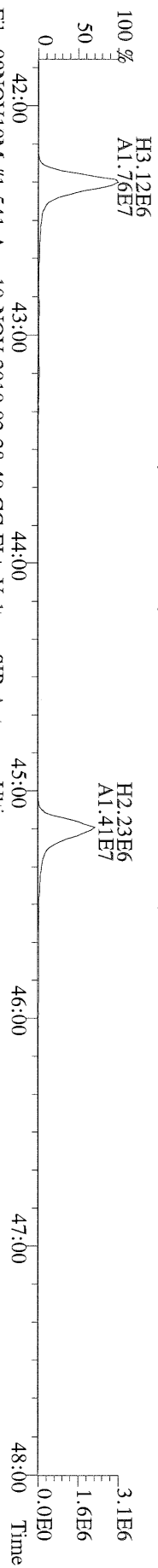
File:09NOV10M #1-541 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



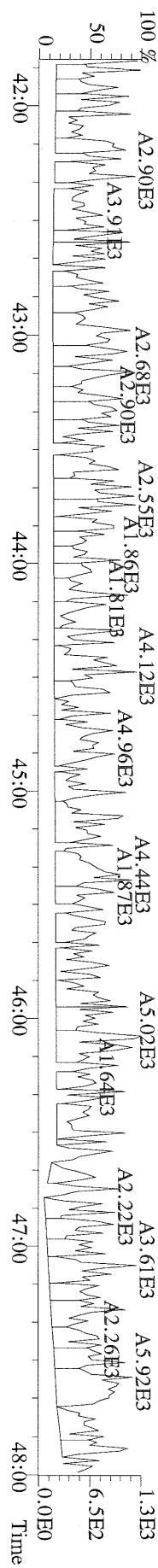
File:09NOV10M #1-541 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



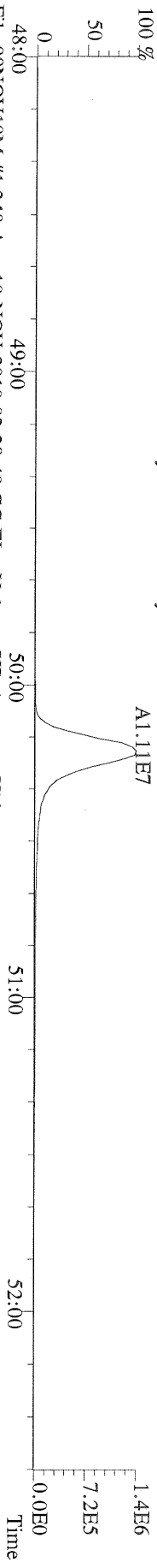
File:09NOV10M #1-541 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



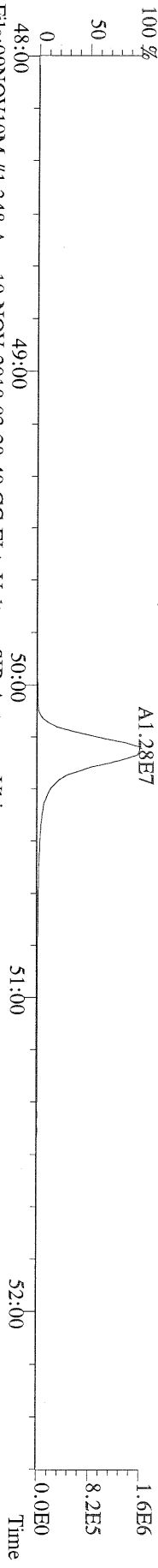
File:09NOV10M #1-541 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory



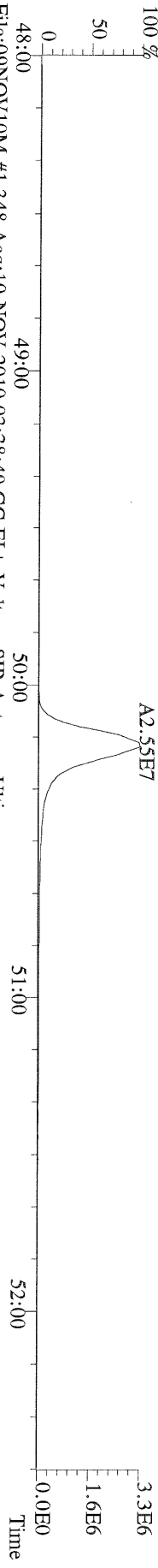
File:09NOV10M #1-348 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory
100 %



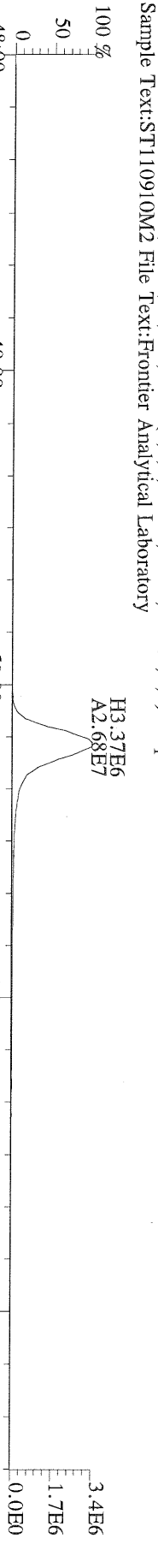
File:09NOV10M #1-348 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory
100 %



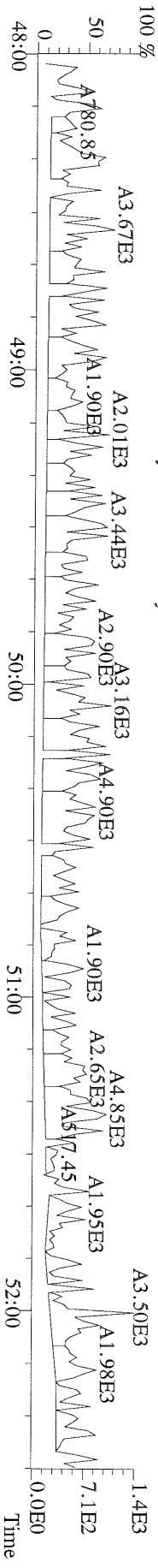
File:09NOV10M #1-348 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory
100 %

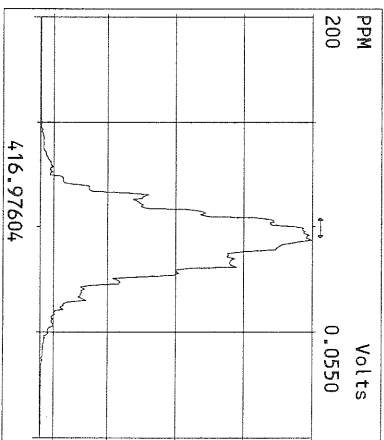
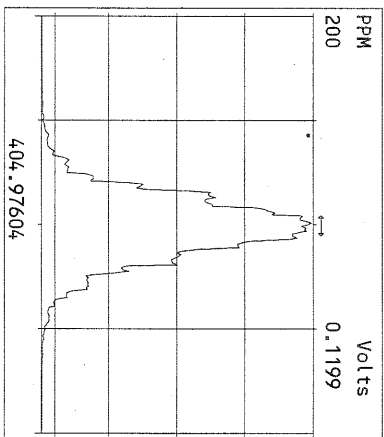
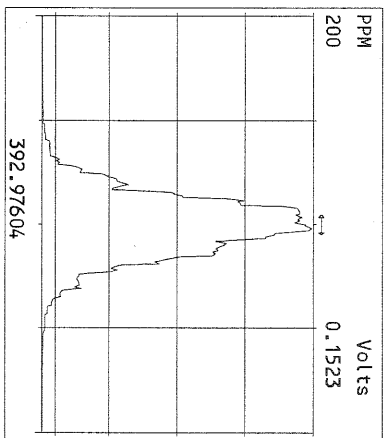
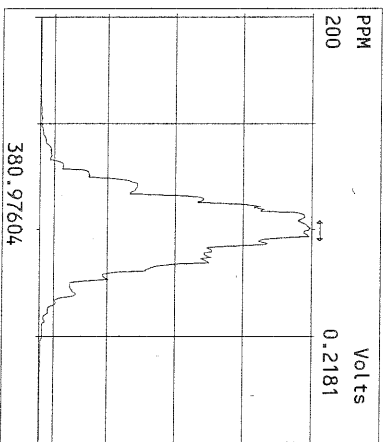
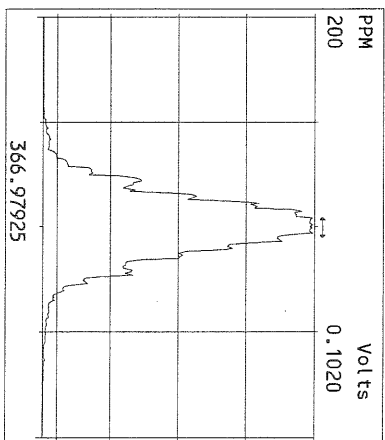
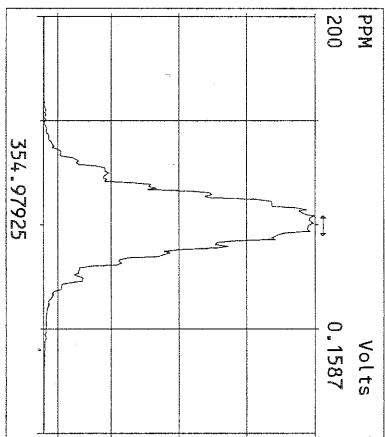
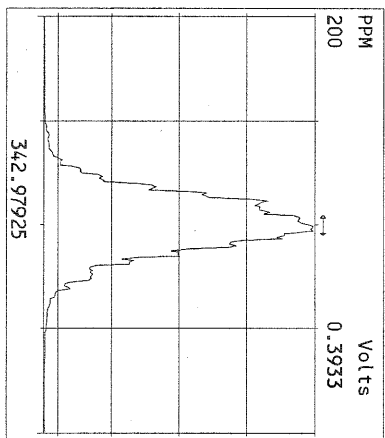
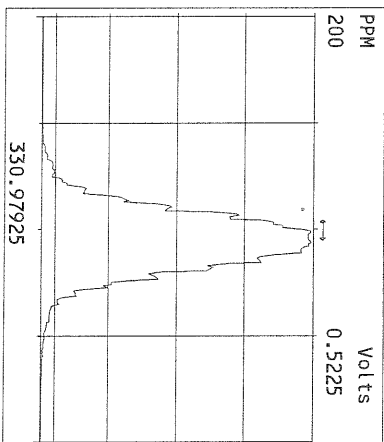
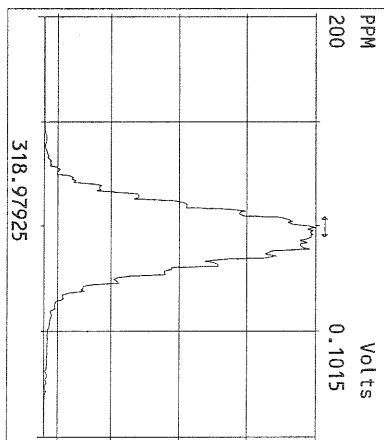
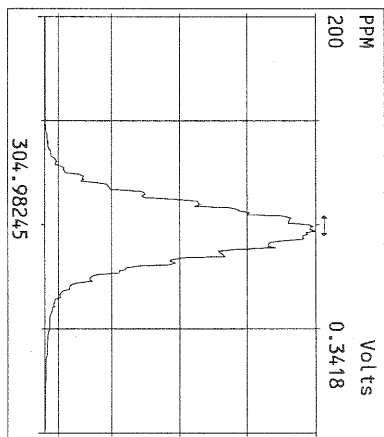
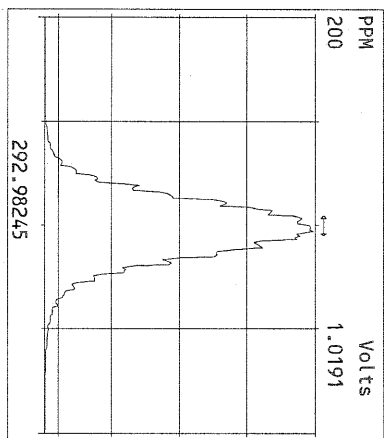


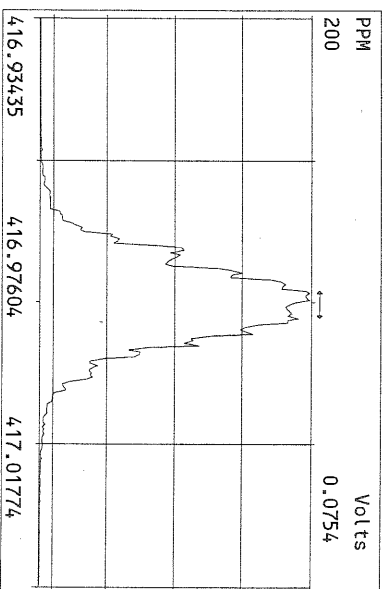
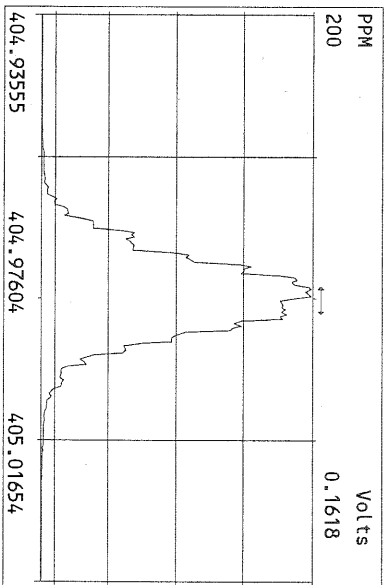
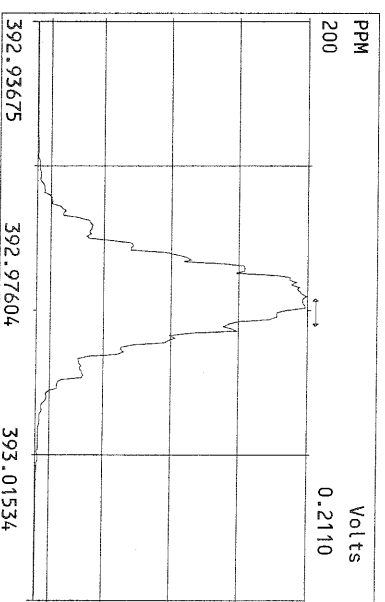
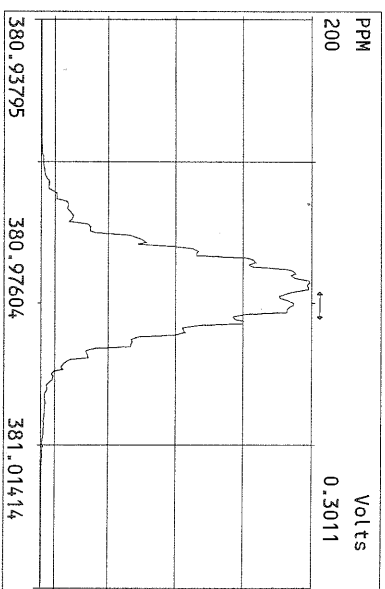
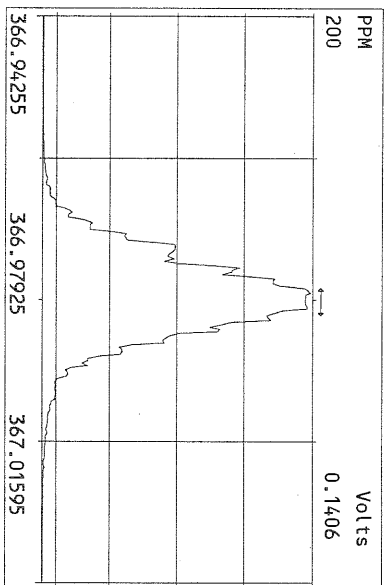
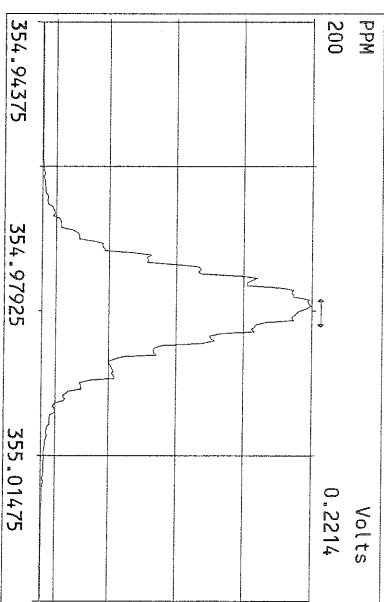
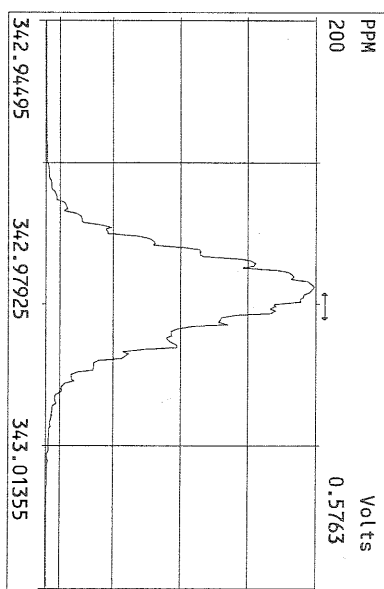
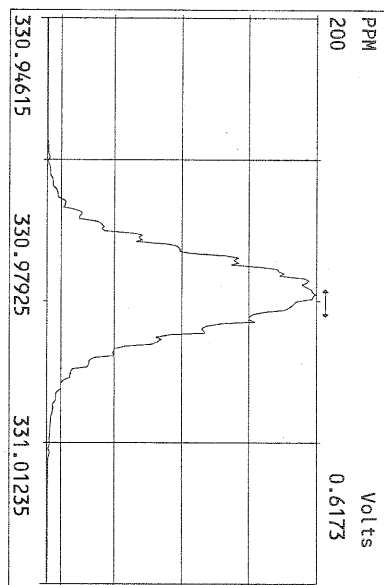
File:09NOV10M #1-348 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory

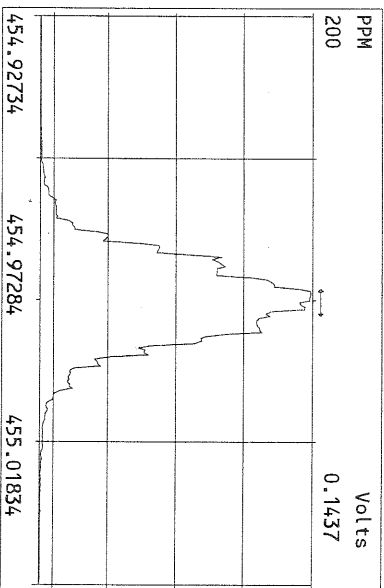
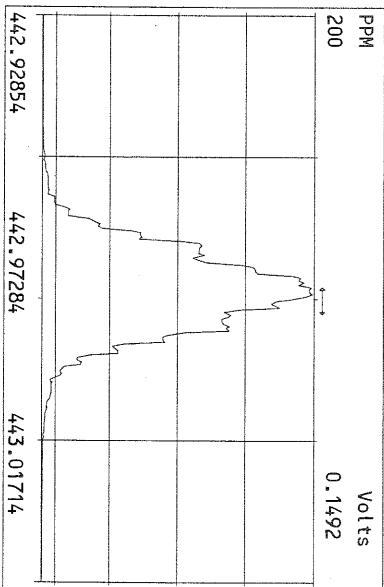
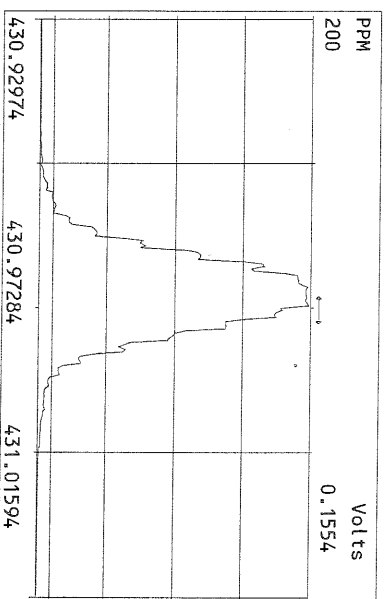
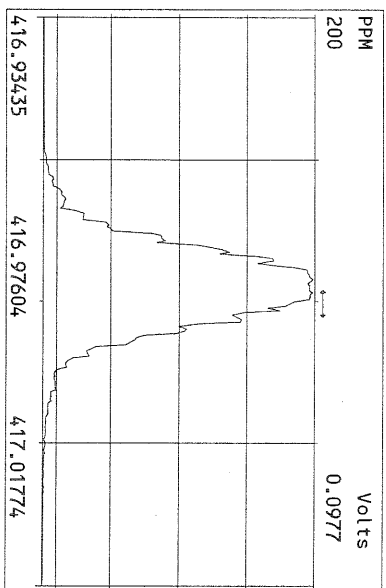
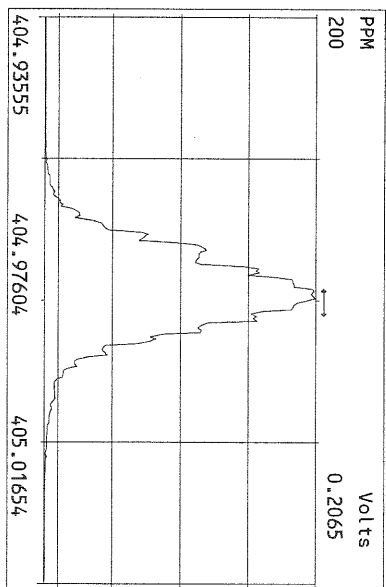
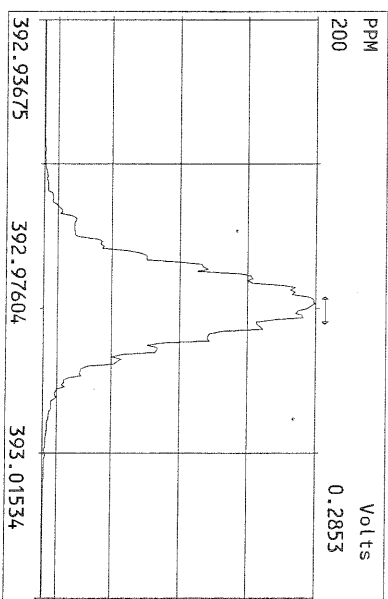
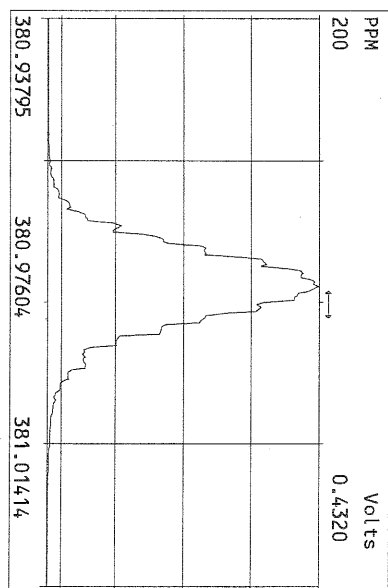
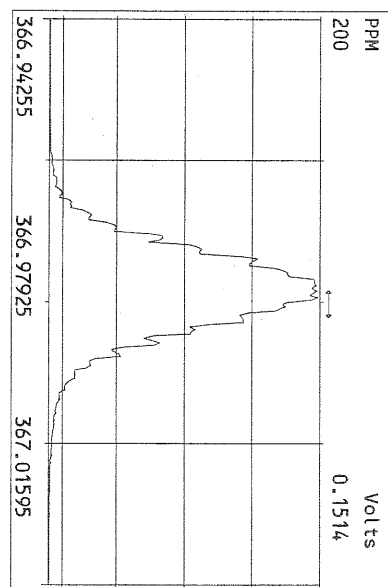


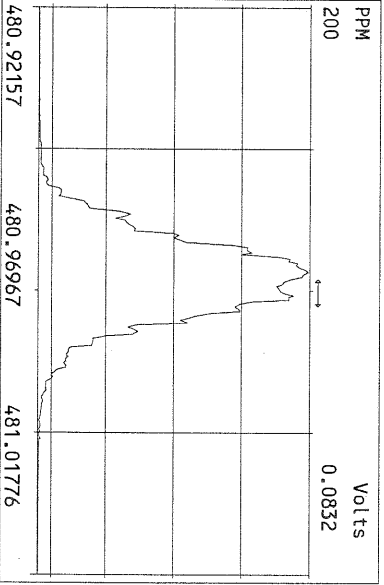
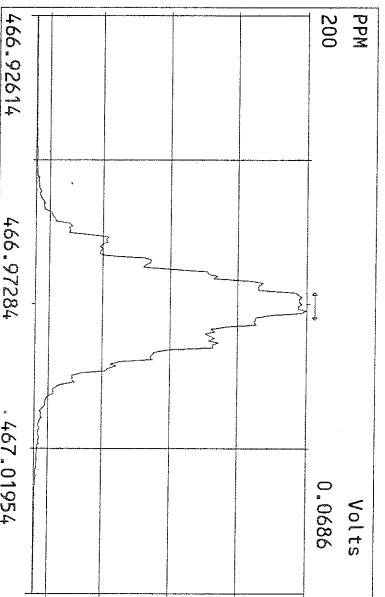
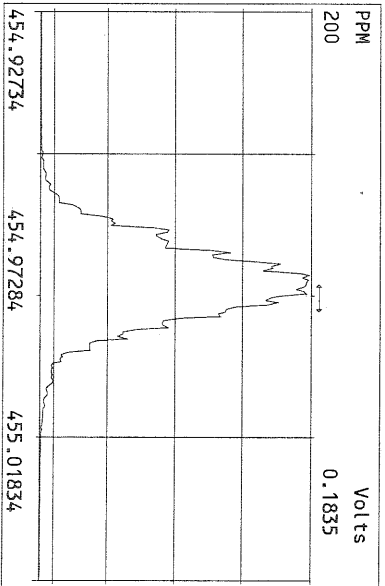
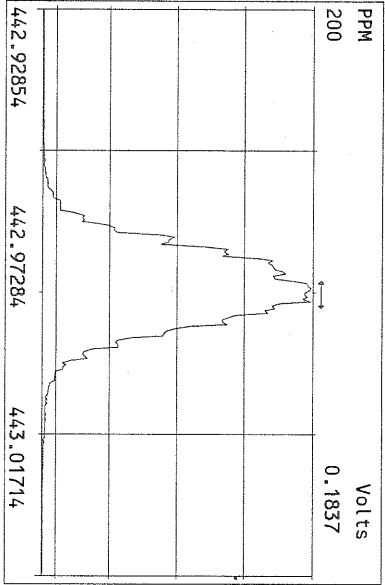
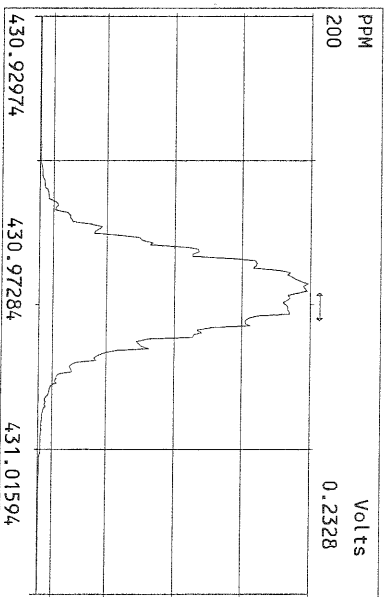
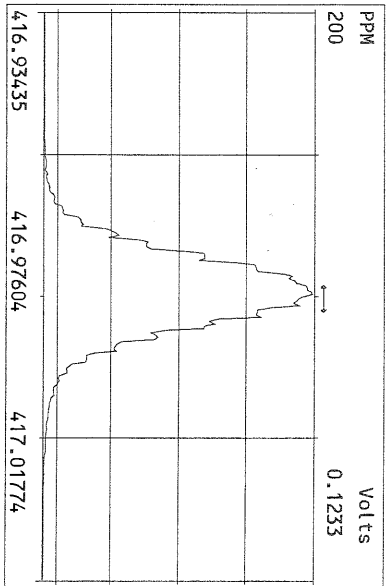
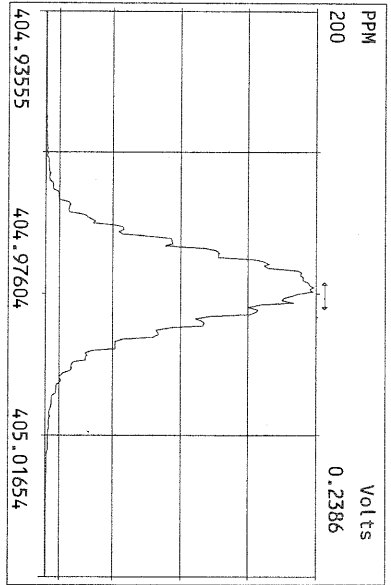
File:09NOV10M #1-348 Acq:10-NOV-2010 03:38:49 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST110910M2 File Text:Frontier Analytical Laboratory
100 %

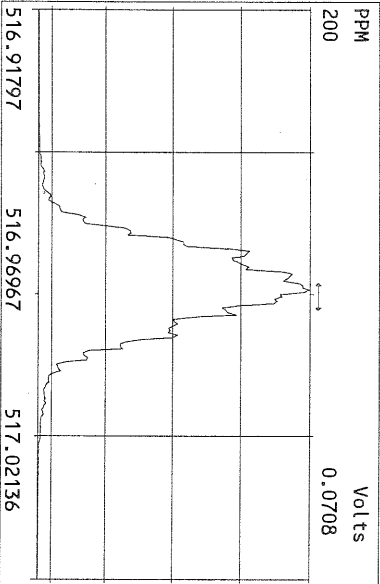
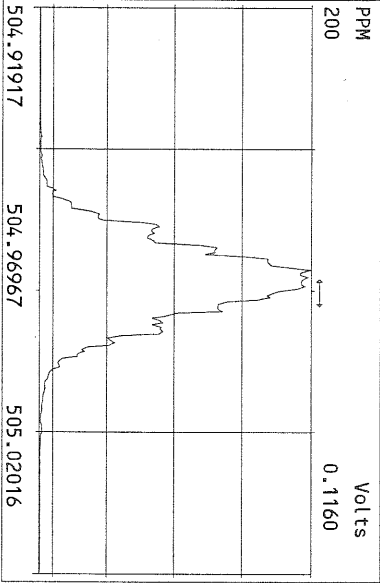
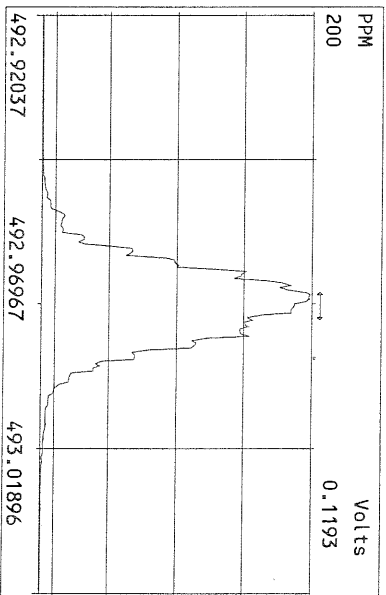
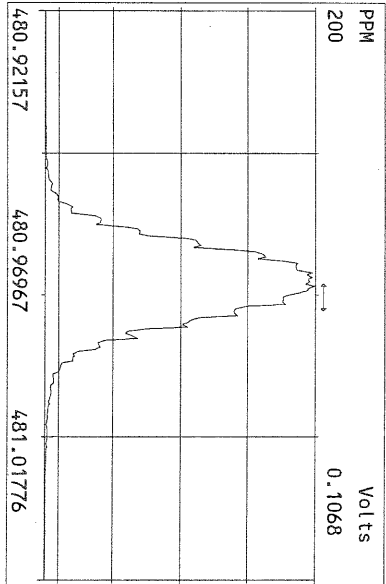
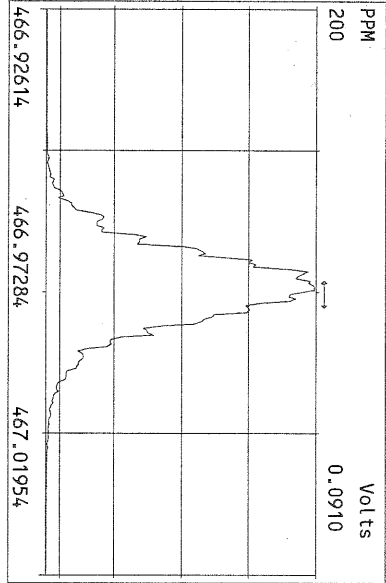
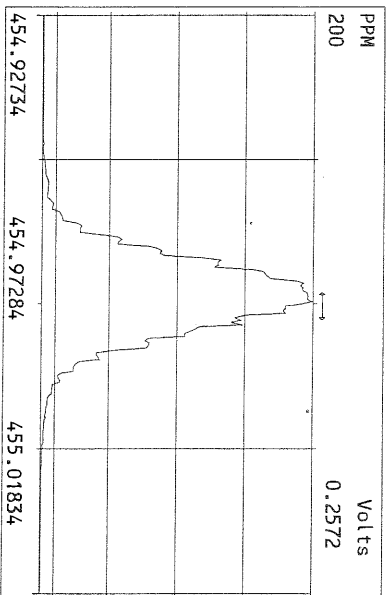
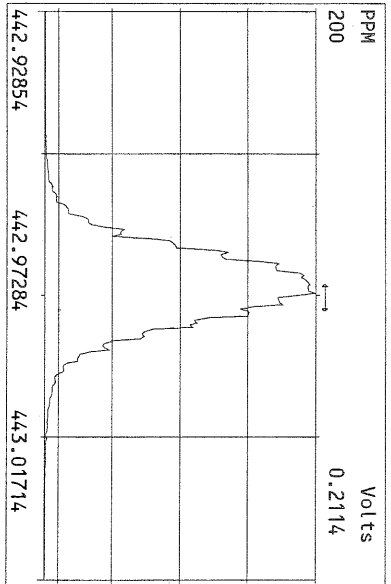
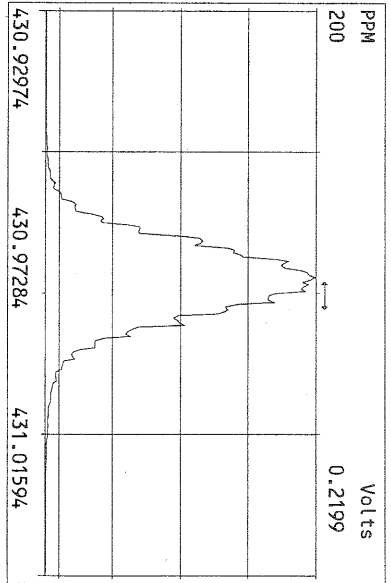












USEPA - ITD

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: 10NOV10M Sam:19

Analysis Date: 11-NOV-10 04:18:39

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	10.9	7.80 - 12.9 ✓
1,2,3,7,8-PeCDD	M+2/M+4	1.62	1.32-1.78	y	51.0	39.0 - 65.0 ✓
1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	48.8	39.0 - 64.0 ✓
1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	48.1	39.0 - 64.0 ✓
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	49.6	41.0 - 61.0 ✓
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	44.4	43.0 - 58.0 ✓
OCDD	M+2/M+4	0.88	0.76-1.02	y	98.5	79.0 - 126 ✓
2,3,7,8-TCDF	M/M+2	0.82	0.65-0.89	y	8.61	8.40 - 12.0 ✓
1,2,3,7,8-PeCDF	M+2/M+4	1.50	1.32-1.78	y	54.7	41.0 - 60.0 ✓
2,3,4,7,8-PeCDF	M+2/M+4	1.49	1.32-1.78	y	54.1	41.0 - 60.0 ✓
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	54.6	45.0 - 56.0 ✓
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	54.2	44.0 - 57.0 ✓
2,3,4,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	y	54.5	44.0 - 57.0 ✓
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	55.6	45.0 - 56.0 ✓
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.06	0.88-1.20	y	45.7	45.0 - 55.0 ✓
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20	y	46.0	43.0 - 58.0 ✓
OCDF	M+2/M+4	0.84	0.76-1.02	y	111	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: 11/11/10

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: 10NOV10M Sam:19

Analysis Date: 11-NOV-10 04:18:39

LABELLED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
13C-2,3,7,8-TCDD	M/M+2	0.73	0.65-0.89	y	101	82.0 - 121 ✓
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.67	1.32-1.78	y	112	62.0 - 160 ✓
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	108	85.0 - 117 ✓
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	96.8	85.0 - 118 ✓
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.08	0.88-1.20	y	106	72.0 - 138 ✓
13C-OCDD	M+2/M+4	0.92	0.76-1.02	y	218	96.0 - 415 ✓
13C-2,3,7,8-TCDF	M/M+2	0.88	0.65-0.89	y	101	71.0 - 140 ✓
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.65	1.32-1.78	y	112	76.0 - 130 ✓
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.66	1.32-1.78	y	111	77.0 - 130 ✓
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	96.8	76.0 - 131 ✓
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	88.7	70.0 - 143 ✓
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	91.5	73.0 - 137 ✓
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43-0.59	y	97.5	74.0 - 135 ✓
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	y	113	78.0 - 129 ✓
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.43	0.37-0.51	y	123	77.0 - 129 ✓
13C-OCDF	M+2/M+4	0.92	0.76-1.02	y	211	96.0 - 415 ✓
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					10.2	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: 11/11/10

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:
Contract No.: SAS No.:
Instrument ID: FAL3 Initial Calibration Date: 8/23/10
RT Window Data Filename: 10NOV10M Sam:19 Analysis Date: 11-NOV-10 Time: 04:18:39
DB-5 IS Data Filename: 10NOV10M Sam:19 Analysis Date: 11-NOV-10 Time: 04:18:39
DB-225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:24 ✓	1,3,6,8-TCDF (F)	23:03 ✓
1,2,8,9-TCDD (L)	28:21 ✓	1,2,8,9-TCDF (L)	28:33 ✓
1,2,4,7,9-PeCDD (F)	30:15 ✓	1,3,4,6,8-PeCDF (F)	28:26 ✓
1,2,3,8,9-PeCDD (L)	33:49 ✓	1,2,3,8,9-PeCDF (L)	34:14 ✓
1,2,4,6,7,9-HxCDD (F)	36:08 ✓	1,2,3,4,6,8-HxCDF (F)	35:15 ✓
1,2,3,7,8,9-HxCDD (L)	39:13 ✓	1,2,3,7,8,9-HxCDF (L)	39:48 ✓
1,2,3,4,6,7,9-HpCDD (F)	42:48 ✓	1,2,3,4,6,7,8-HpCDF (F)	42:17 ✓
1,2,3,4,6,7,8-HpCDD (L)	44:12 ✓	1,2,3,4,7,8,9-HpCDF (L)	45:08 ✓

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

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

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

Analyst: _____

Date: 11/11/10

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: 11-NOV-10 04:18:39

CS3 or VER Data Filename: 10NOV10M

Sam:19

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	1.000	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		1.240	1.000-1.567 ✓
13C-1,2,3,7,8-PeCDF		1.175	0.923-1.203 ✓
13C-2,3,4,7,8-PeCDF		1.224	0.923-1.303 ✓

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

Analyst: 

Date: 11/11/10

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: 11-NOV-10 04:18:39

CS3 or VER Data Filename: 10NOV10M

Sam:19

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	1.001	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	1.001	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	1.001	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		0.988	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		1.078	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		1.278	1.000-1.311 ✓

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

Analyst: Date: 11/11/10

Frontier Analytical Laboratory - Acquisition Log

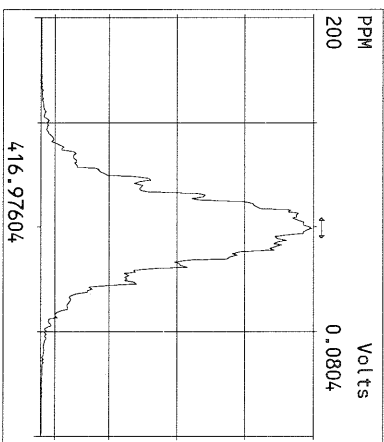
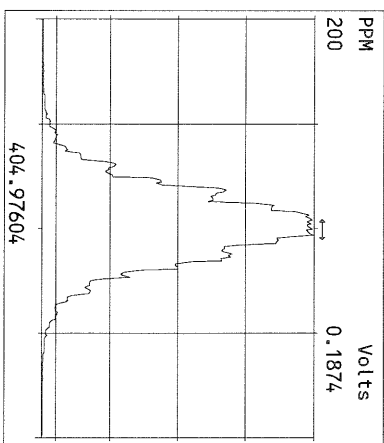
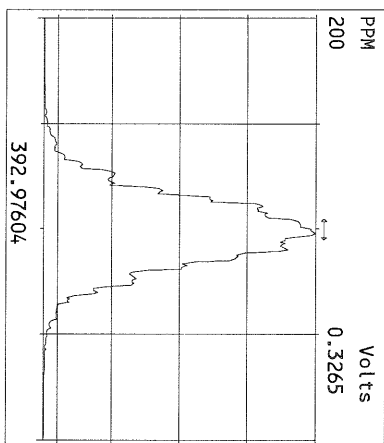
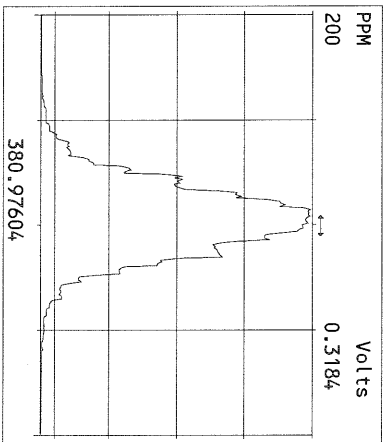
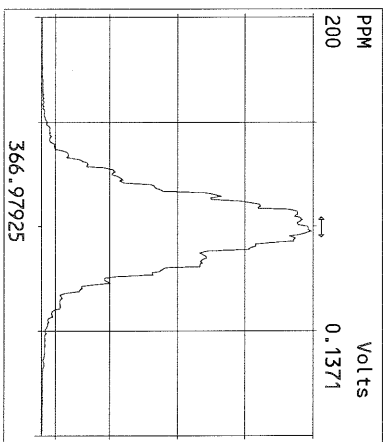
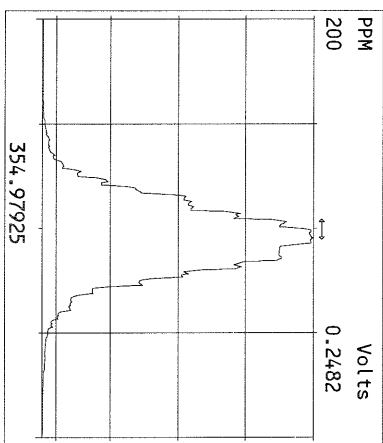
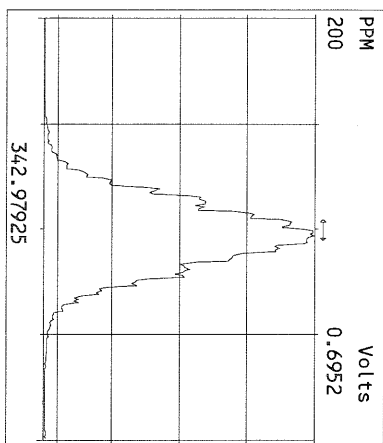
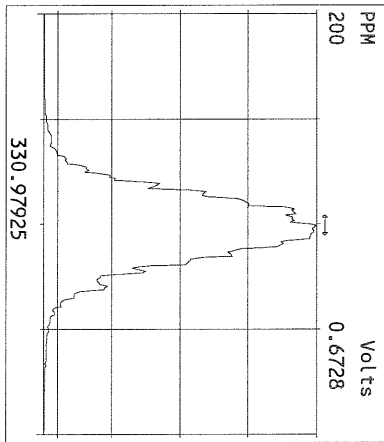
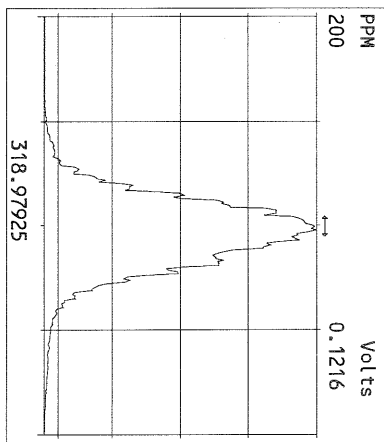
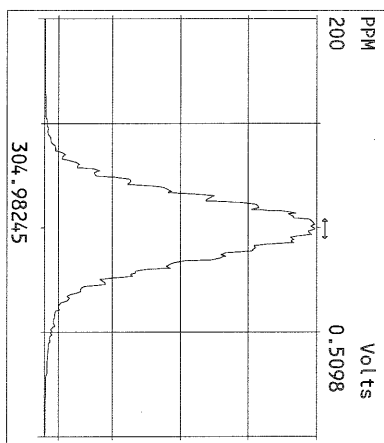
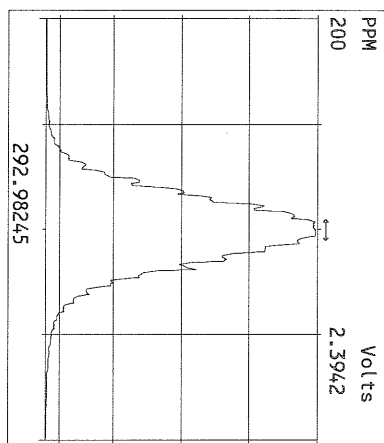
Run Name:10NOV10M Instrument: FAL3 GC: DB5 Experiment:OCDD

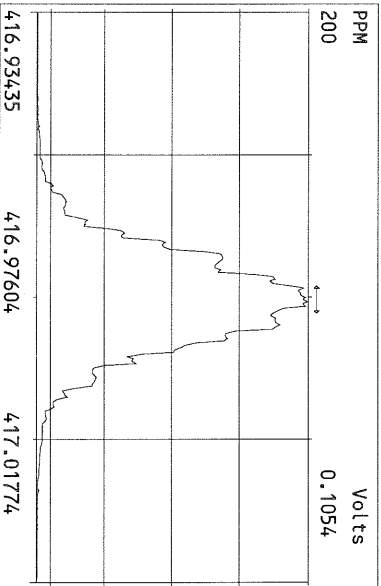
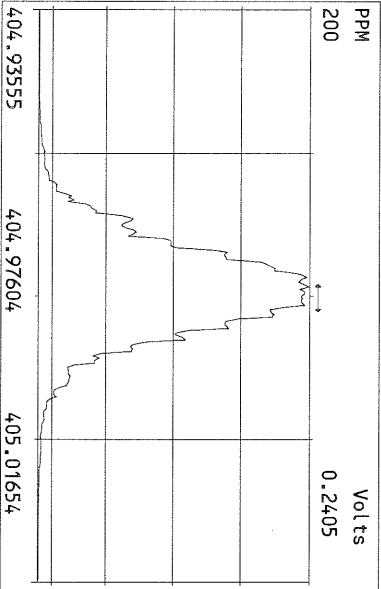
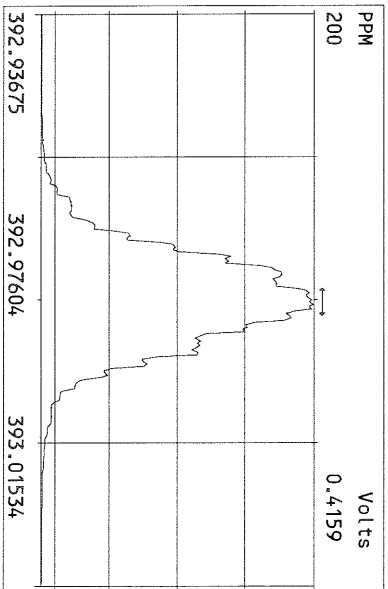
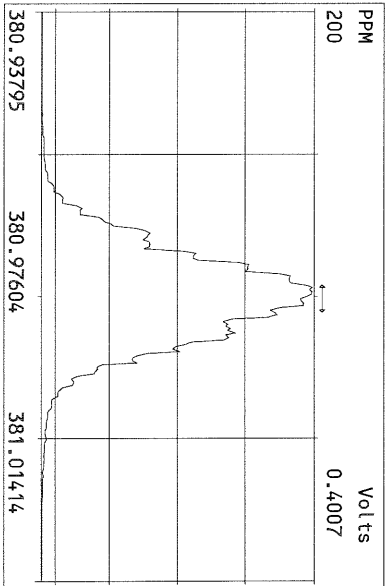
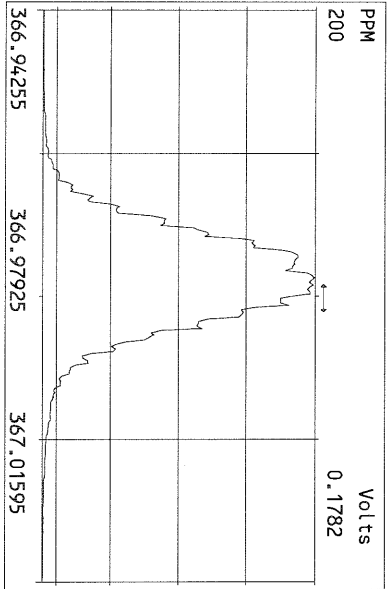
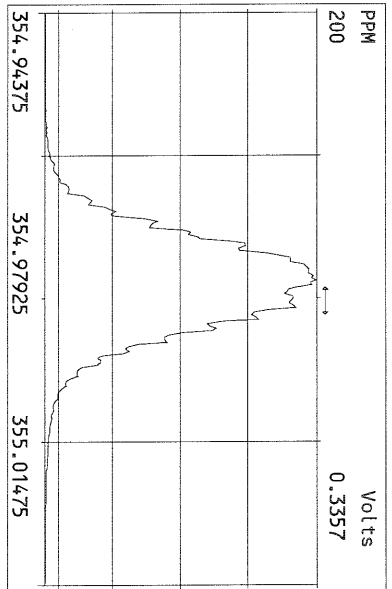
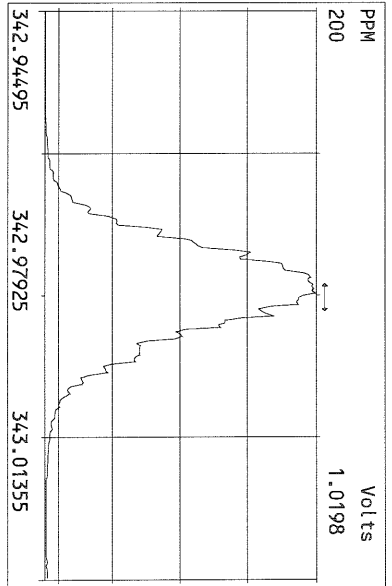
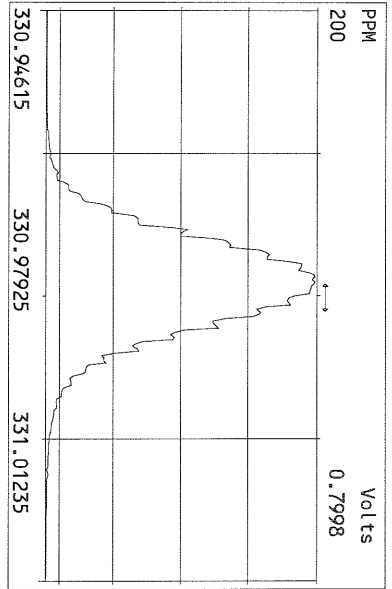
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
10NOV10M	1	ST111010M1	1613 CS3 100511J	10-NOV-10 11:42:31	ST111010M1	ST111010M2	BS
10NOV10M	2	2151-001-0001-OPR	OPR	10-NOV-10 12:37:50	ST111010M1	ST111010M2	BS
10NOV10M	3	2152-001-0001-OPR	OPR	10-NOV-10 13:33:08	ST111010M1	ST111010M2	BS
10NOV10M	4	2151-001-0001-MB	Method Blank	10-NOV-10 14:28:27	ST111010M1	ST111010M2	BS
10NOV10M	5	2152-001-0001-MB	Method Blank	10-NOV-10 15:23:49	ST111010M1	ST111010M2	BS
10NOV10M	6	6422-001-0001-SA	0101082-01	10-NOV-10 16:19:12	ST111010M1	ST111010M2	BS
10NOV10M	7	6438-001-0001-SA	DSD-65	10-NOV-10 17:14:30	ST111010M1	ST111010M2	BS
10NOV10M	8	6436-005-0001-SA	SSB-7-30-30.75	10-NOV-10 18:09:53	ST111010M1	ST111010M2	BS
10NOV10M	9	6436-004-0001-SA	SSB-7-25-26.5	10-NOV-10 19:05:13	ST111010M1	ST111010M2	BS
10NOV10M	10	6436-003-0001-SA	SSB-7-20-21.5	10-NOV-10 20:00:31	ST111010M1	ST111010M2	BS
10NOV10M	11	6436-001-0001-SA	SSB-7-2-3.5	10-NOV-10 20:55:54	ST111010M1	ST111010M2	BS
10NOV10M	12	6436-002-0001-SA	SSB-7-10-11.5	10-NOV-10 21:51:12	ST111010M1	ST111010M2	BS
10NOV10M	13	6436-002-0002-MS	SSB-7-10-11.5	10-NOV-10 22:46:31	ST111010M1	ST111010M2	BS
10NOV10M	14	6436-002-0002-MSD	SSB-7-10-11.5	10-NOV-10 23:41:49	ST111010M1	ST111010M2	BS
10NOV10M	15	SB111010M1	Solvent Blank	11-NOV-10 00:37:12	ST111010M1	ST111010M2	BS
10NOV10M	16	SB111010M2	Solvent Blank	11-NOV-10 01:32:38	ST111010M1	ST111010M2	BS
10NOV10M	17	QC111010M1	FQC	11-NOV-10 02:28:01	ST111010M1	ST111010M2	BS
10NOV10M	18	QC111010M2	IHTQC	11-NOV-10 03:23:20	ST111010M1	ST111010M2	BS
10NOV10M	19	ST111010M2	1613 CS3 100511J	11-NOV-10 04:18:39	ST111010M1	ST111010M2	BS

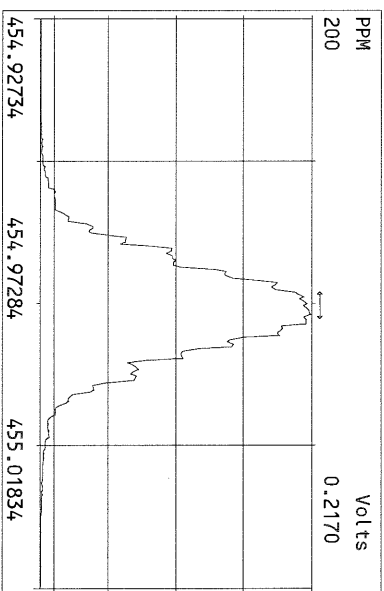
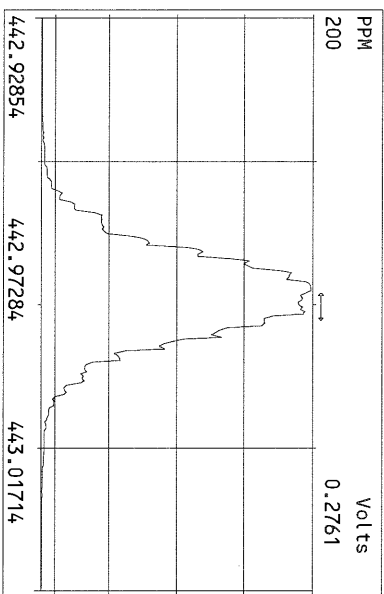
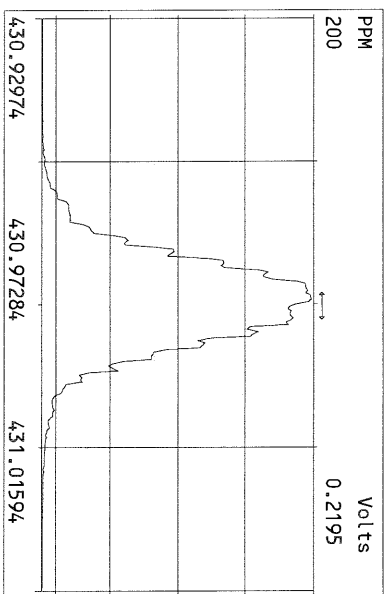
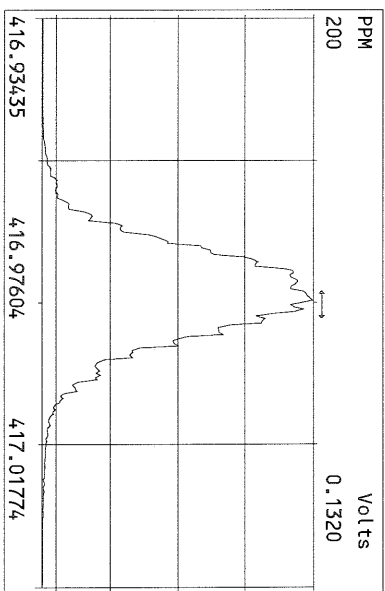
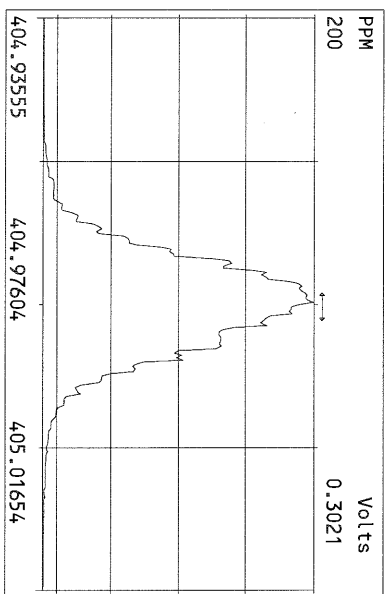
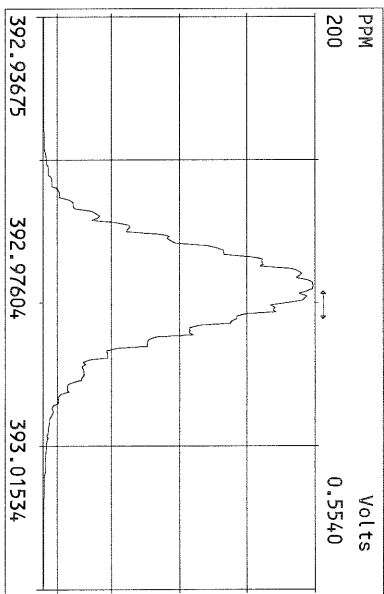
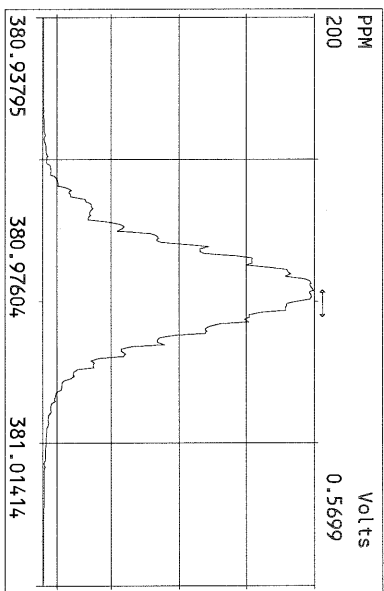
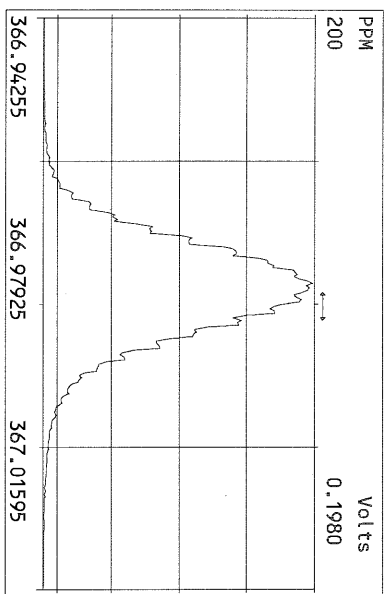
Handwritten signature

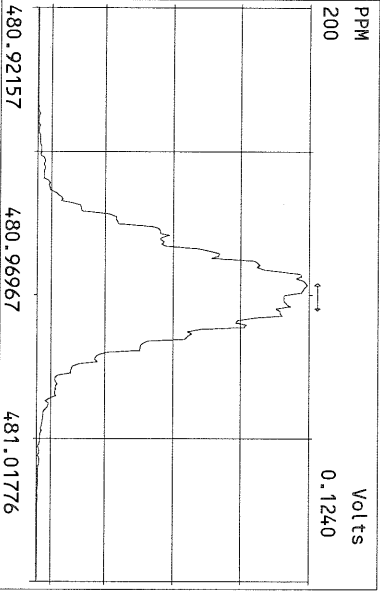
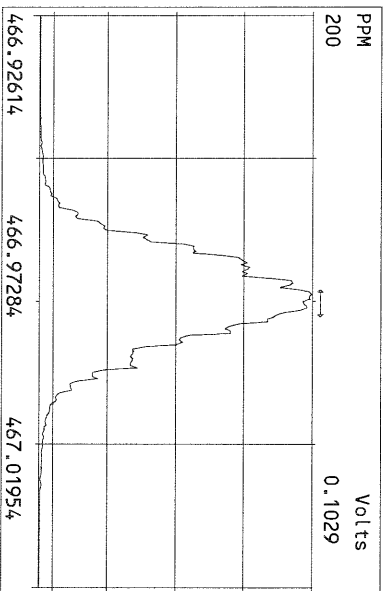
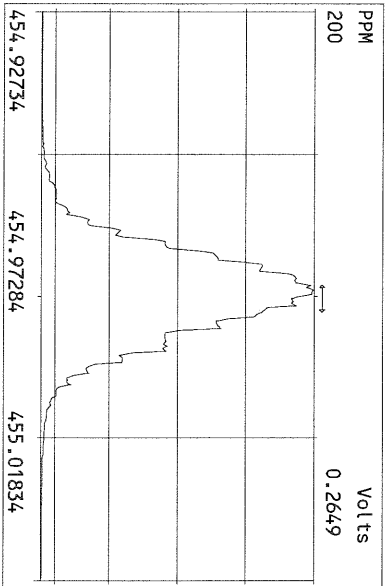
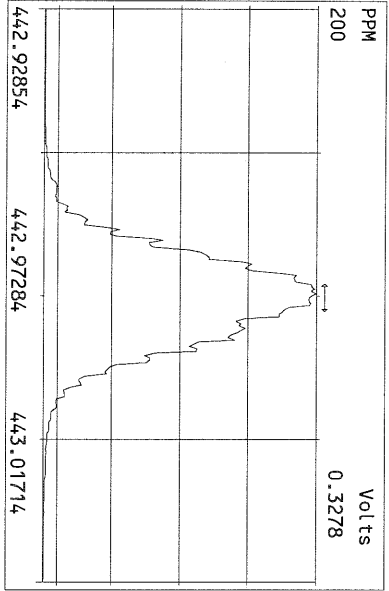
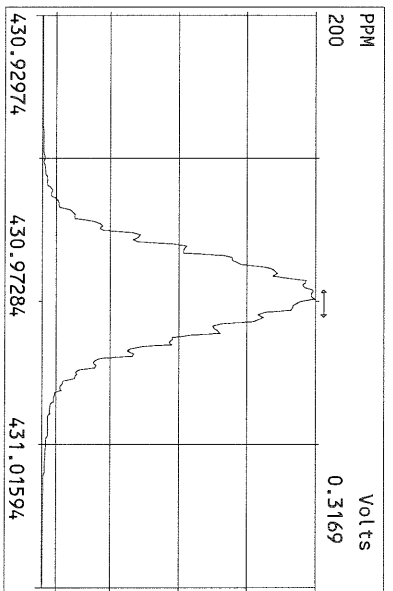
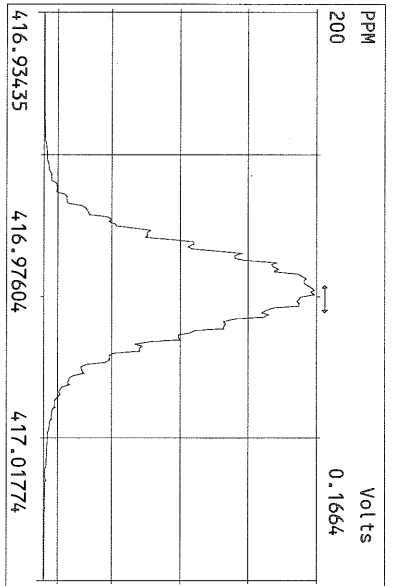
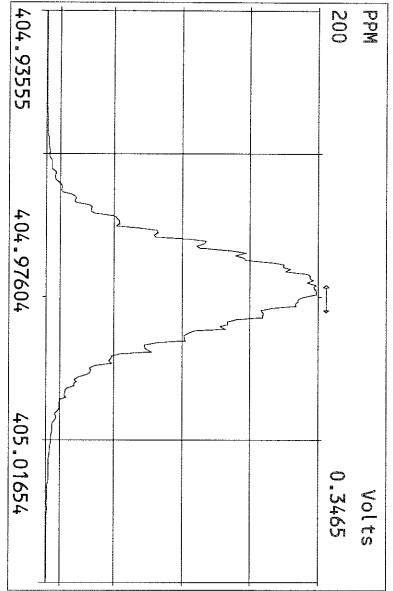
Data Backed Up: _____

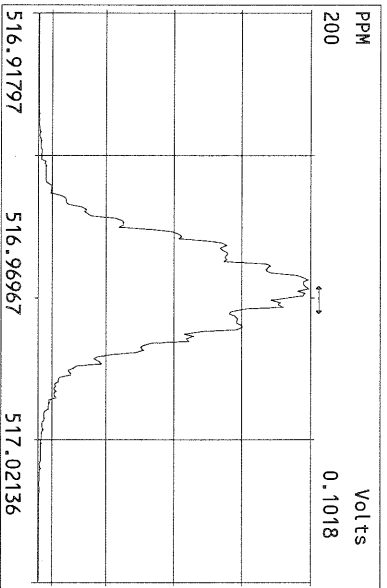
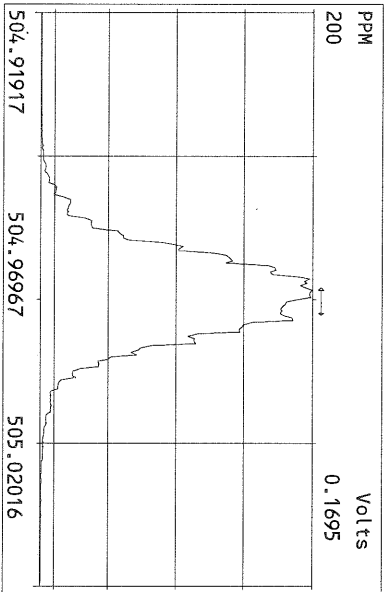
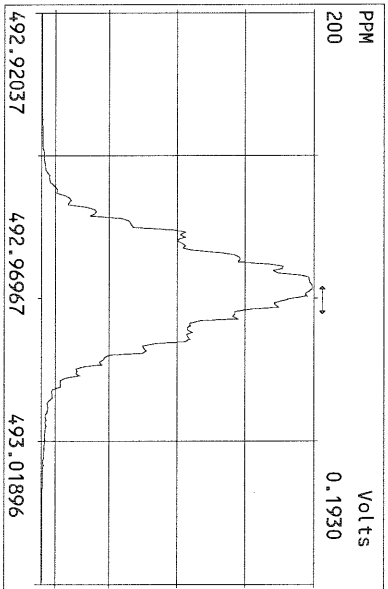
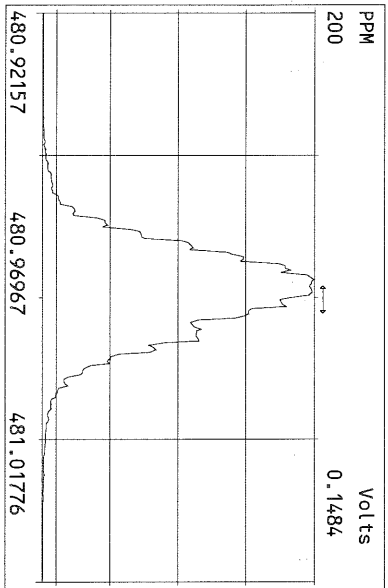
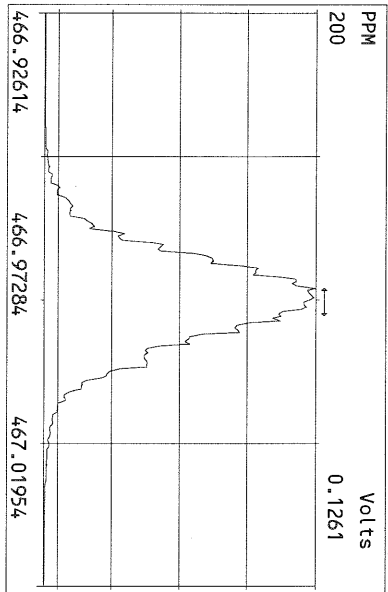
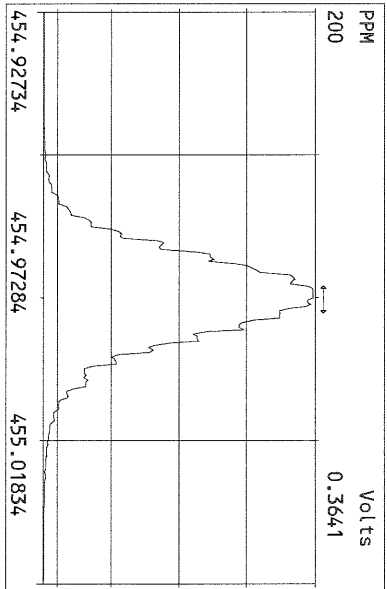
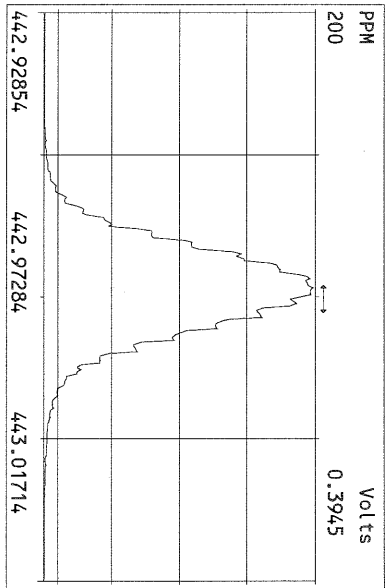
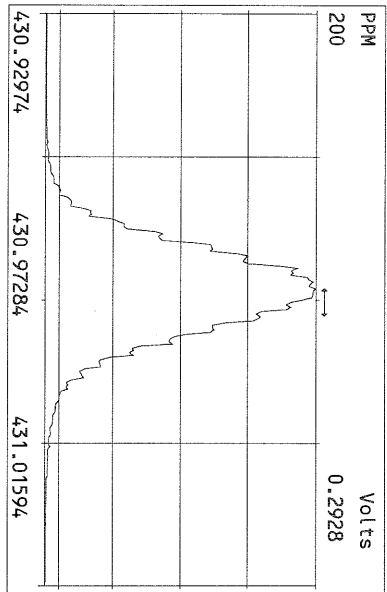
Date: _____



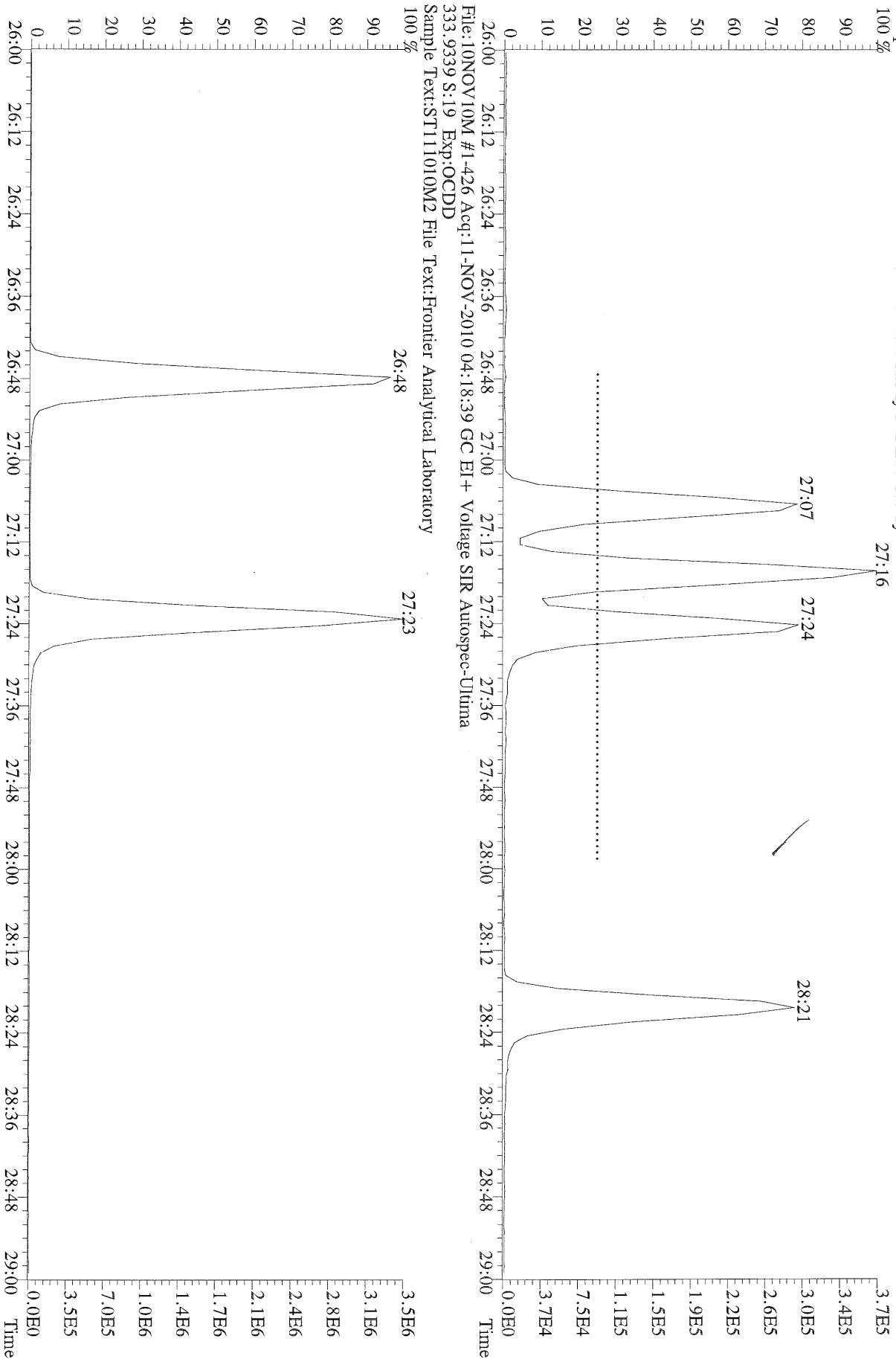




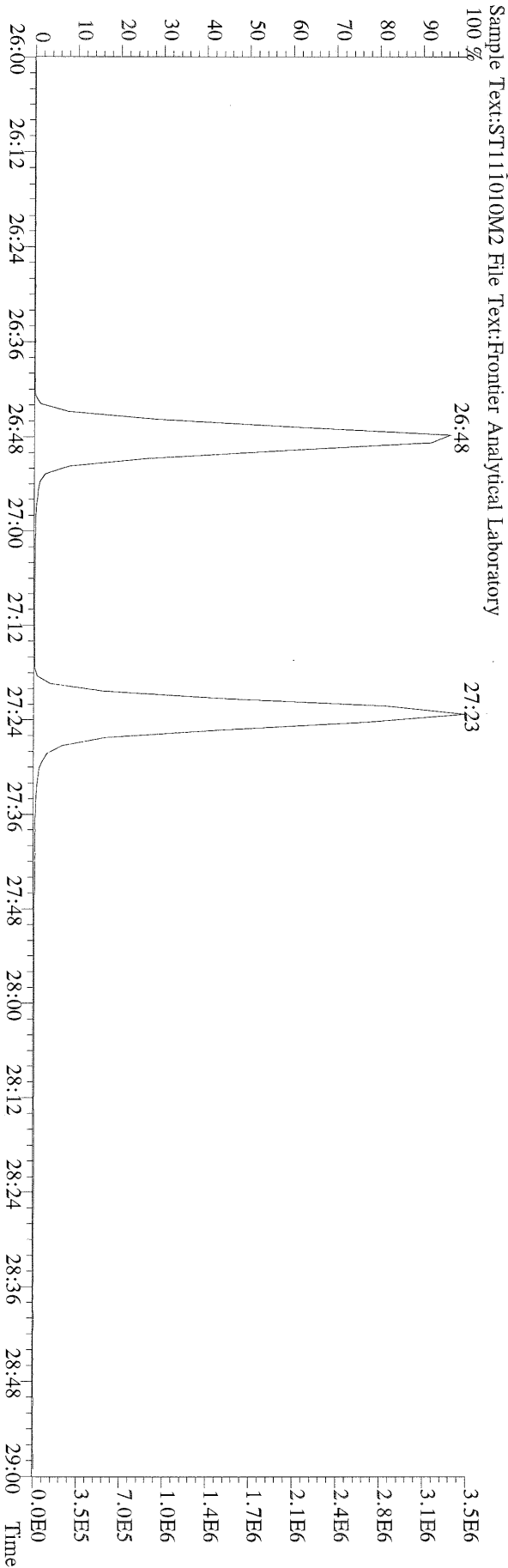




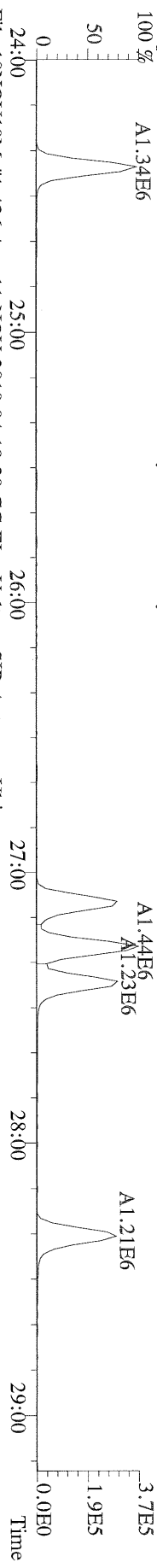
File: 10NOV10M #1-426 Acq: 11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:19 Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



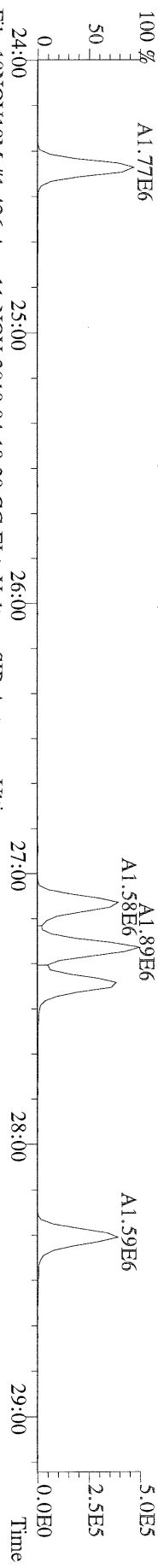
File: 10NOV10M #1-426 Acq: 11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:19 Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



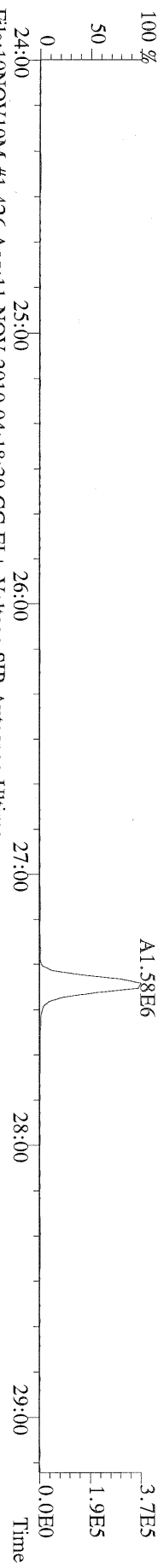
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



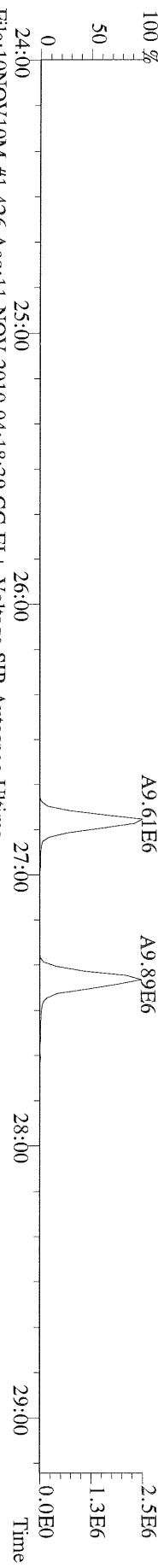
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



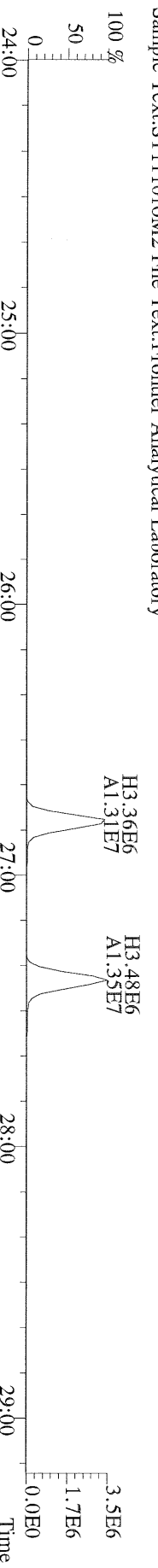
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



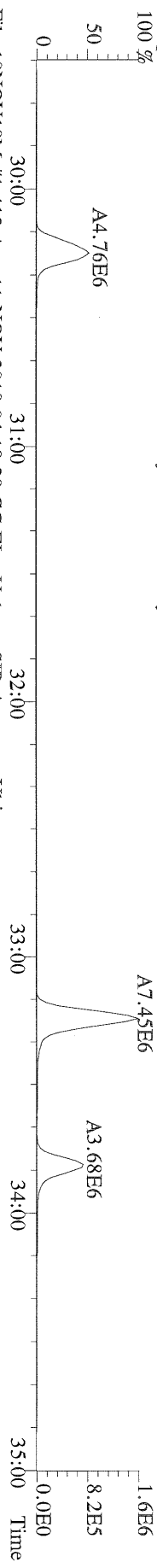
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



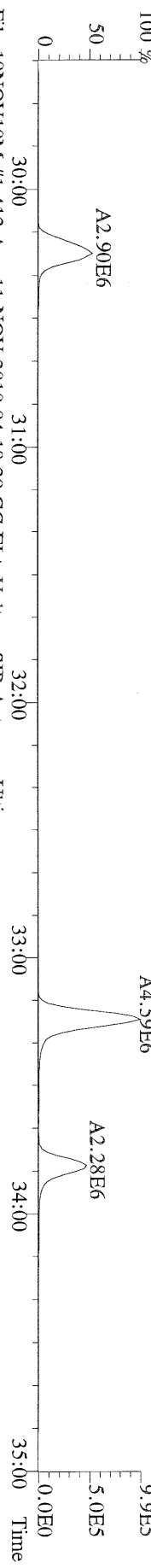
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



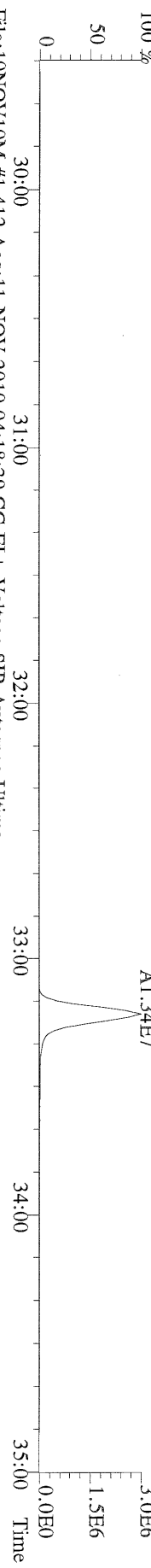
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 355.8546 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



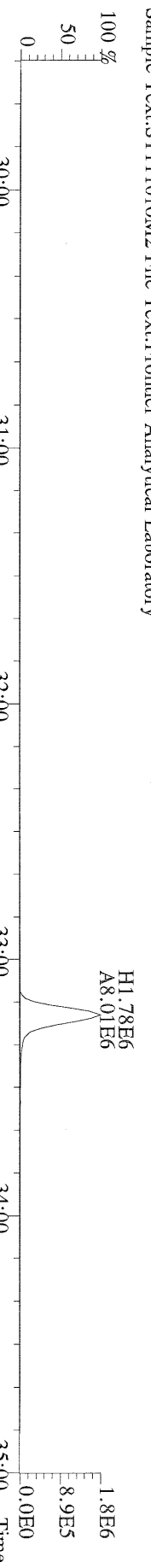
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 357.8517 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



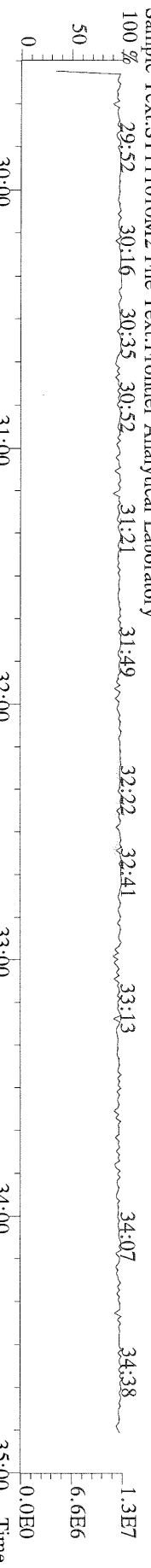
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 367.8949 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



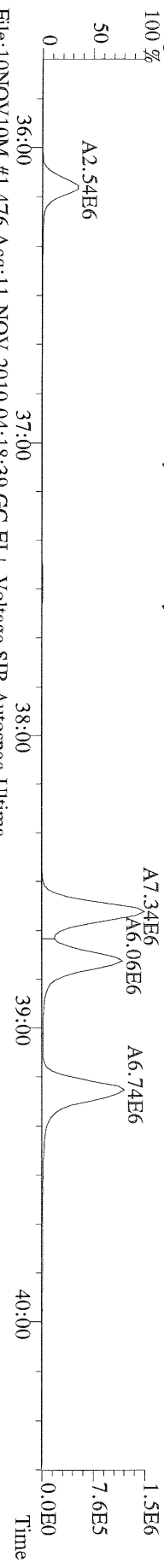
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 369.8919 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



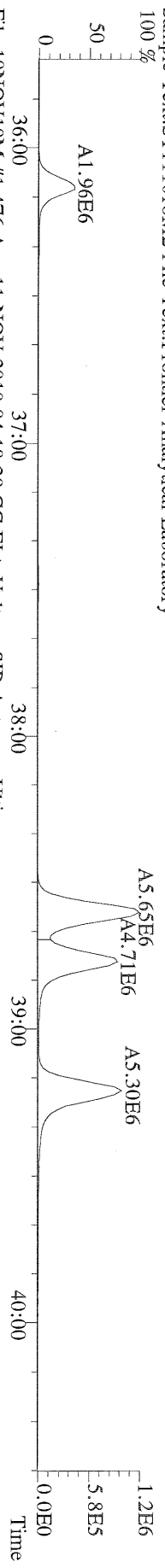
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 366.9792 S:19 F:2 Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



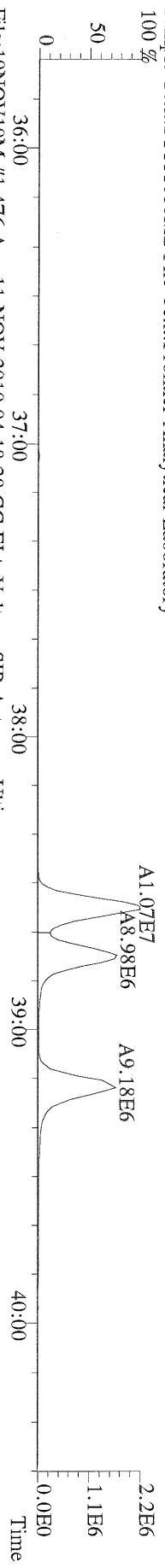
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 389.8156 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



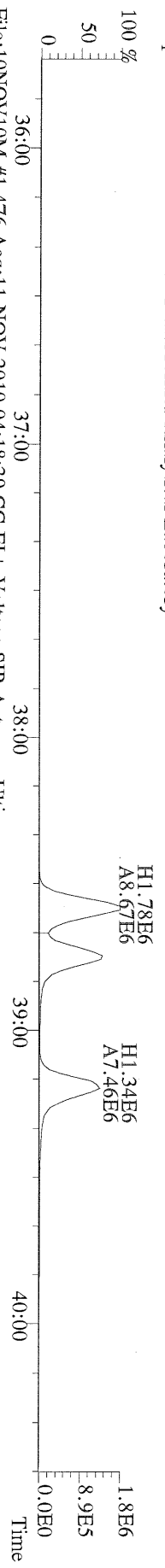
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 391.8127 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



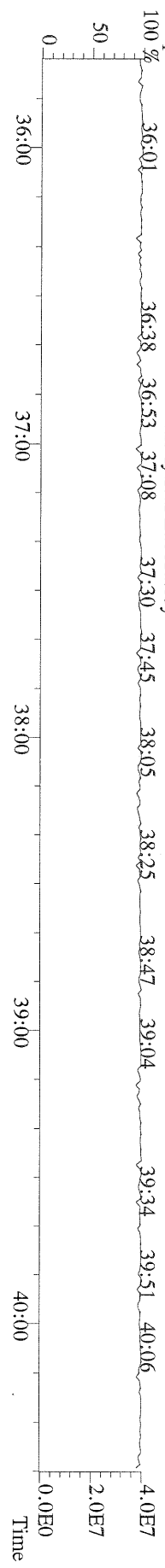
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 401.8559 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



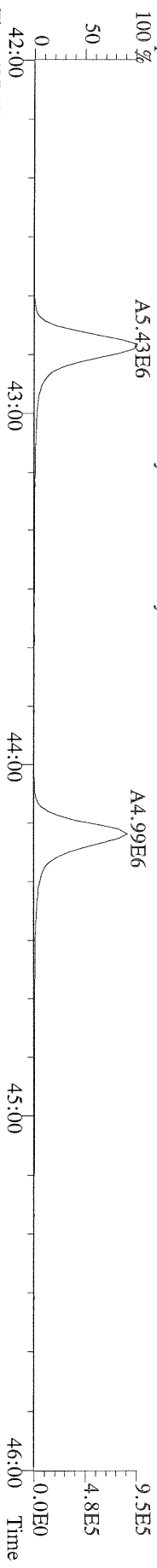
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 403.8530 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



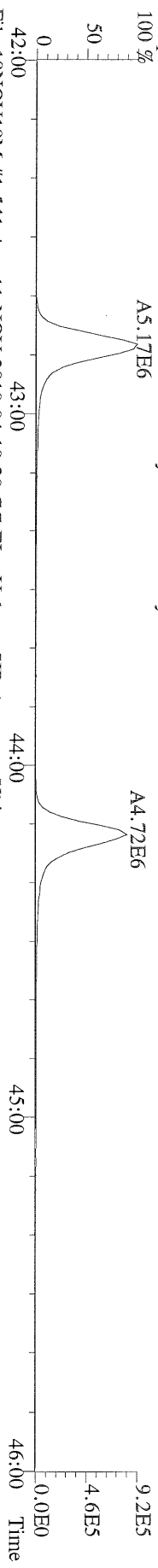
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 380.9760 S:19 F:3 Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



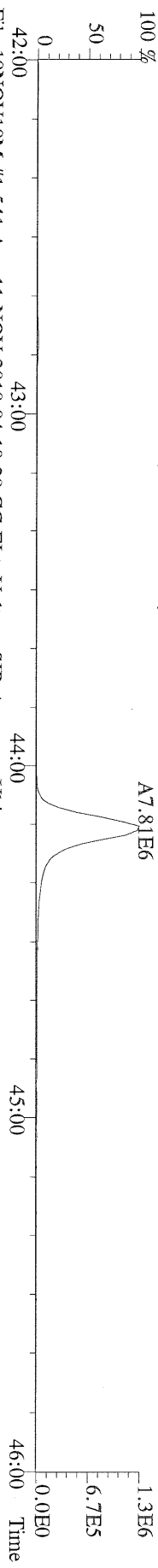
File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



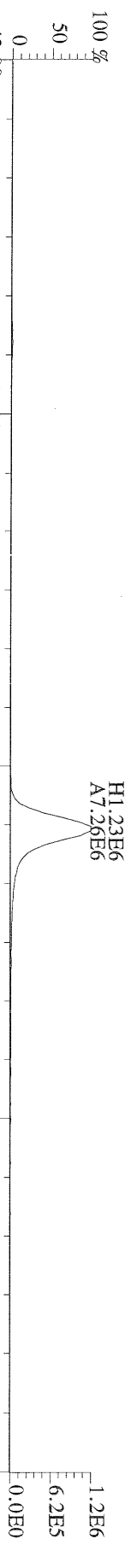
File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



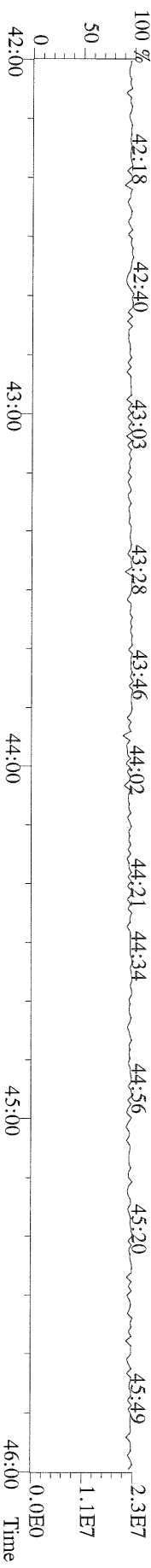
File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



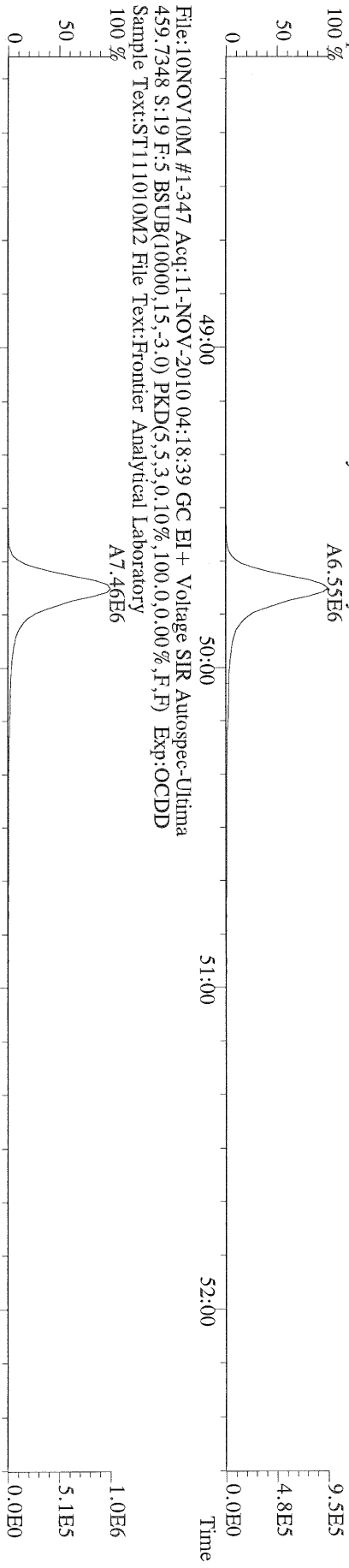
File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



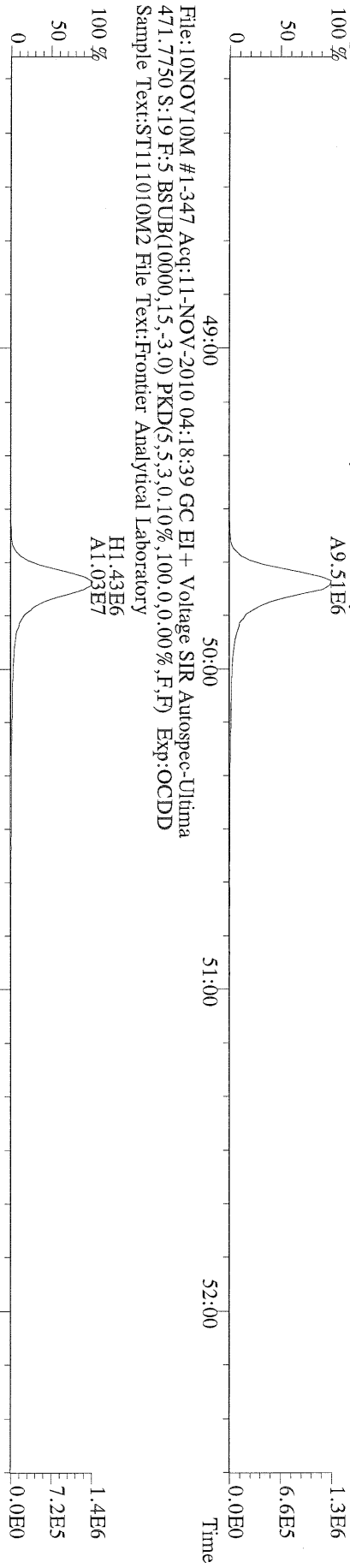
File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:19 F:4 Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



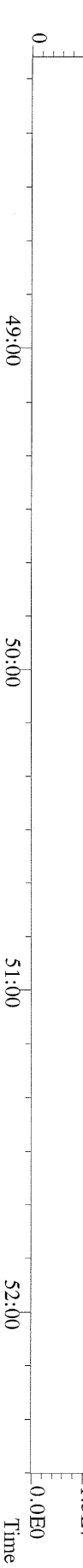
File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



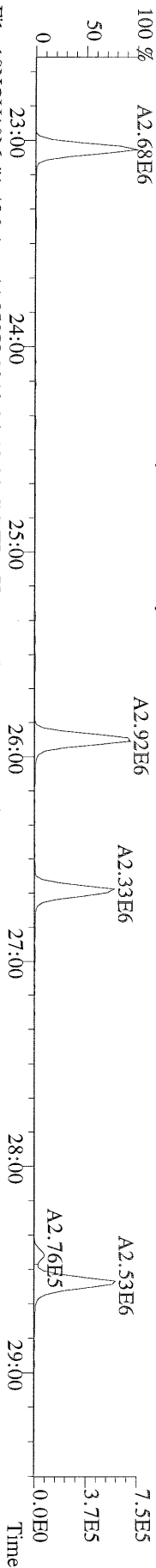
File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



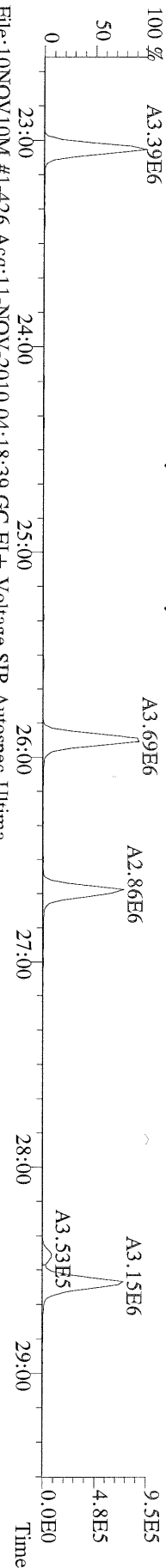
File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:19 F:5 Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



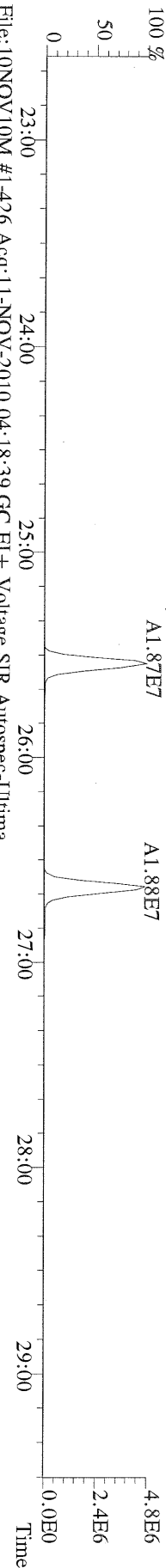
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



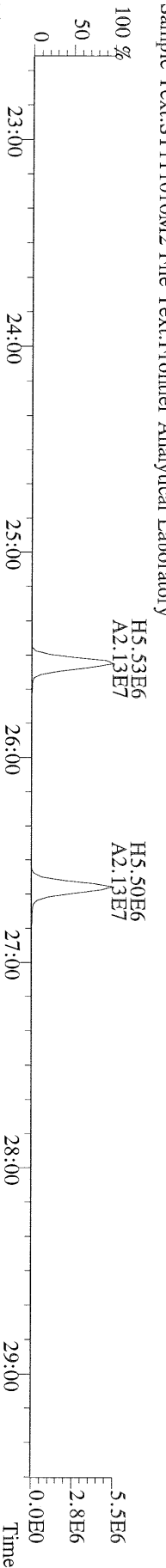
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



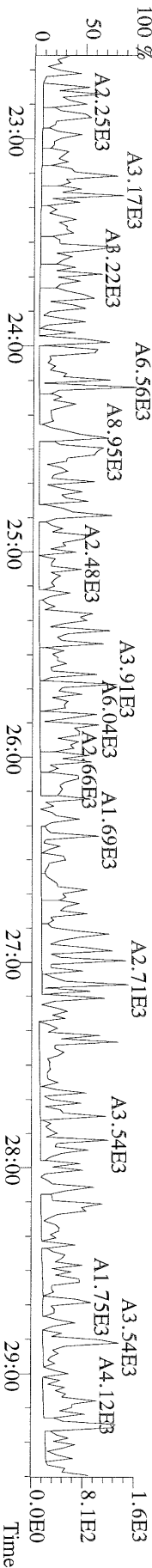
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



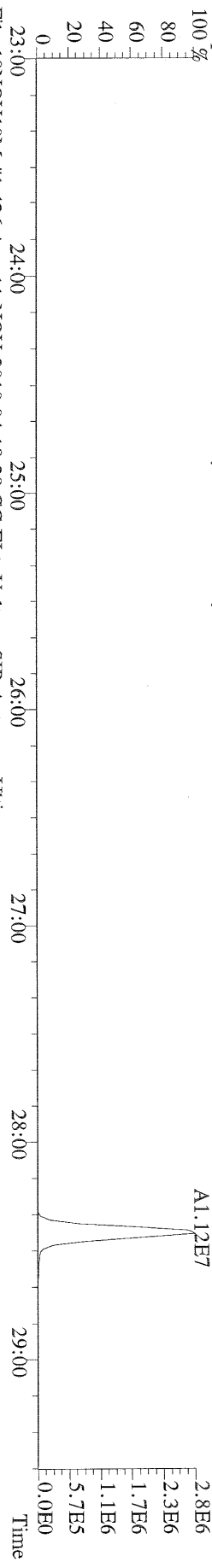
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



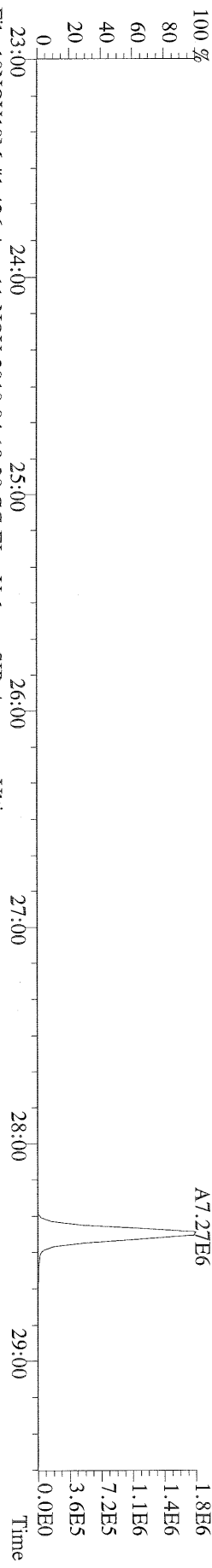
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



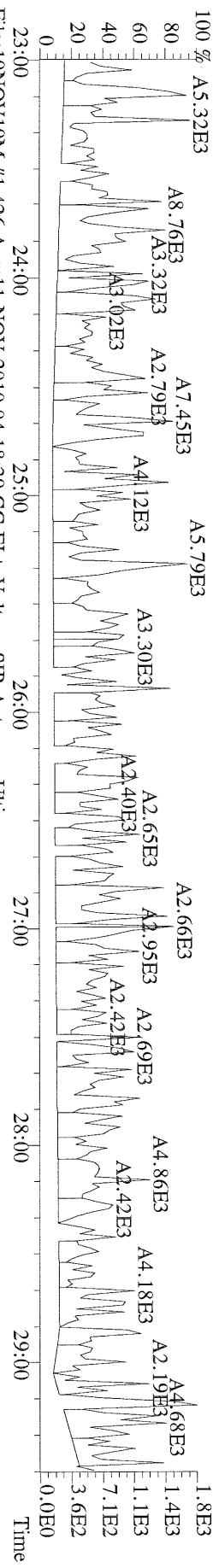
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:19 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



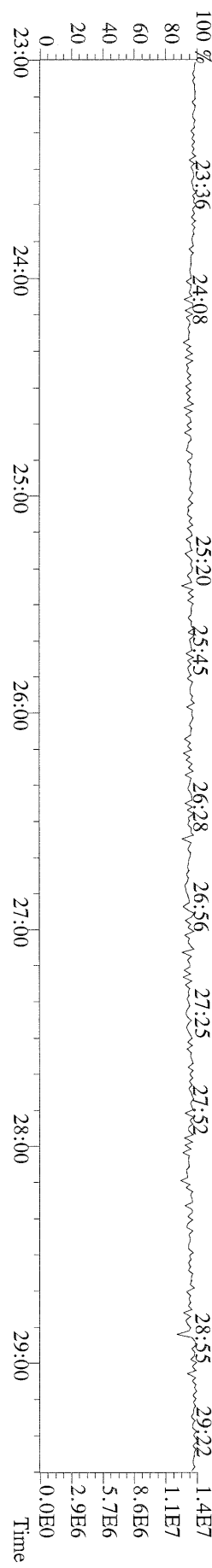
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:19 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



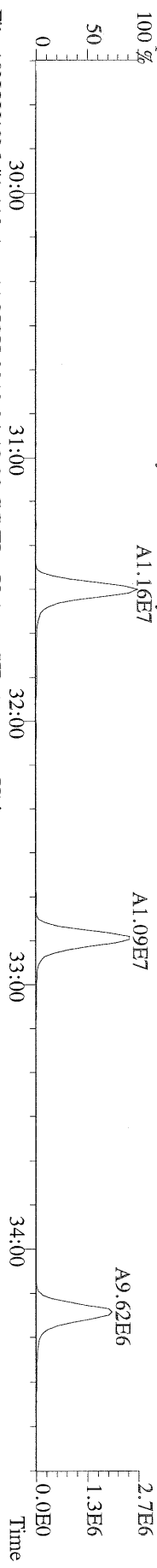
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:19 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



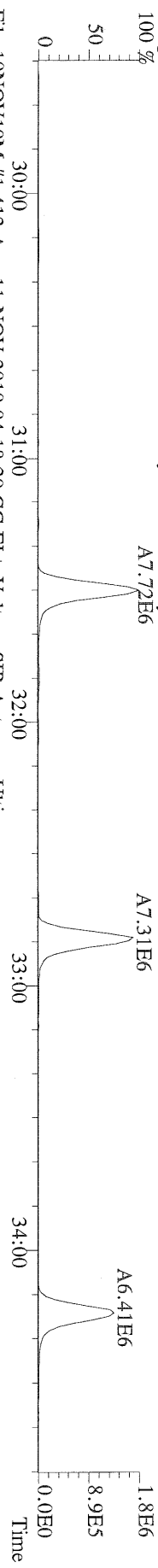
File:10NOV10M #1-426 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 316.9824 S:19 Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



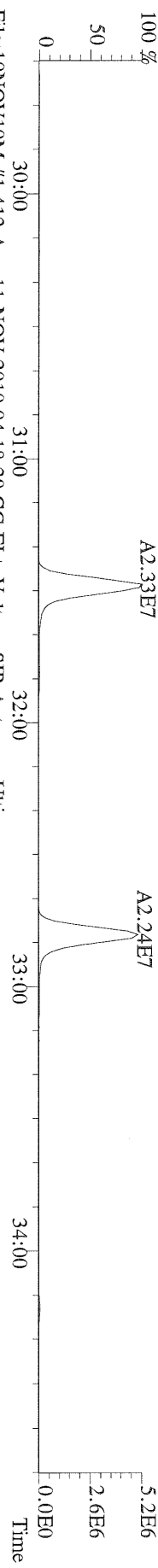
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



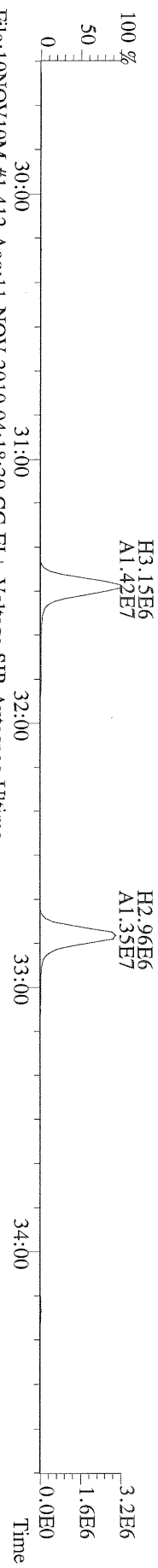
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



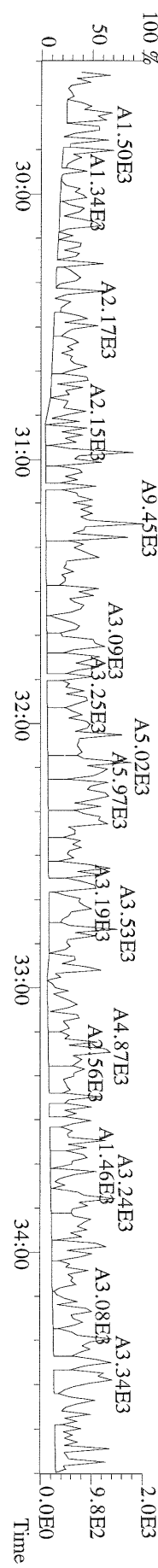
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 351.9000 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



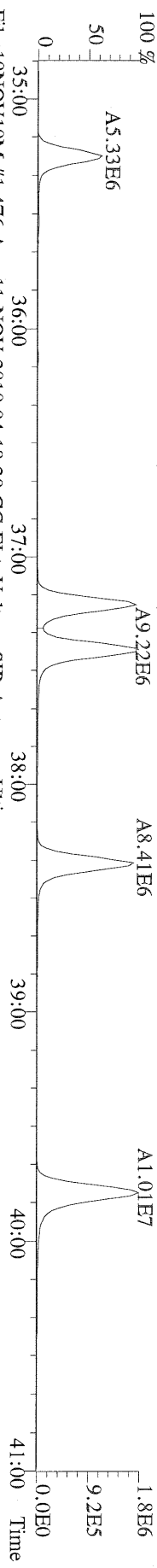
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 353.8970 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



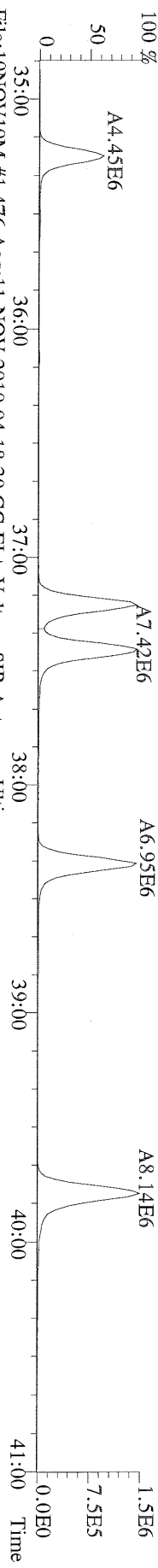
File:10NOV10M #1-412 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



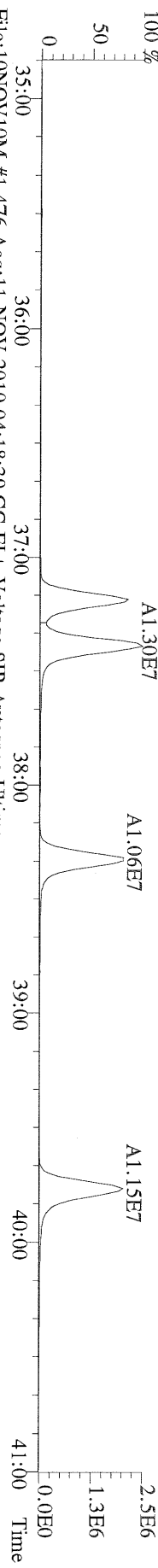
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



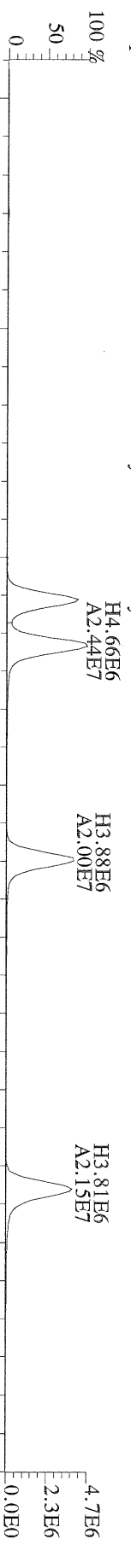
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



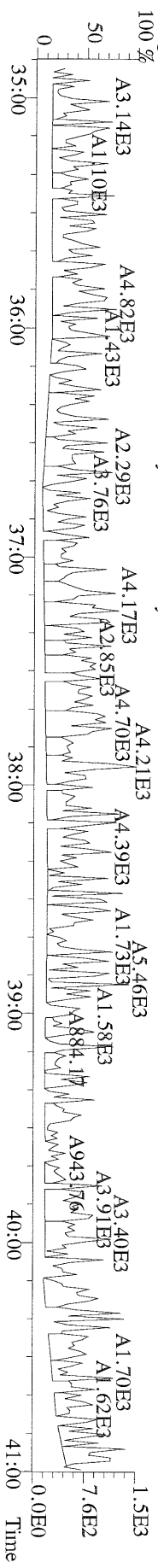
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



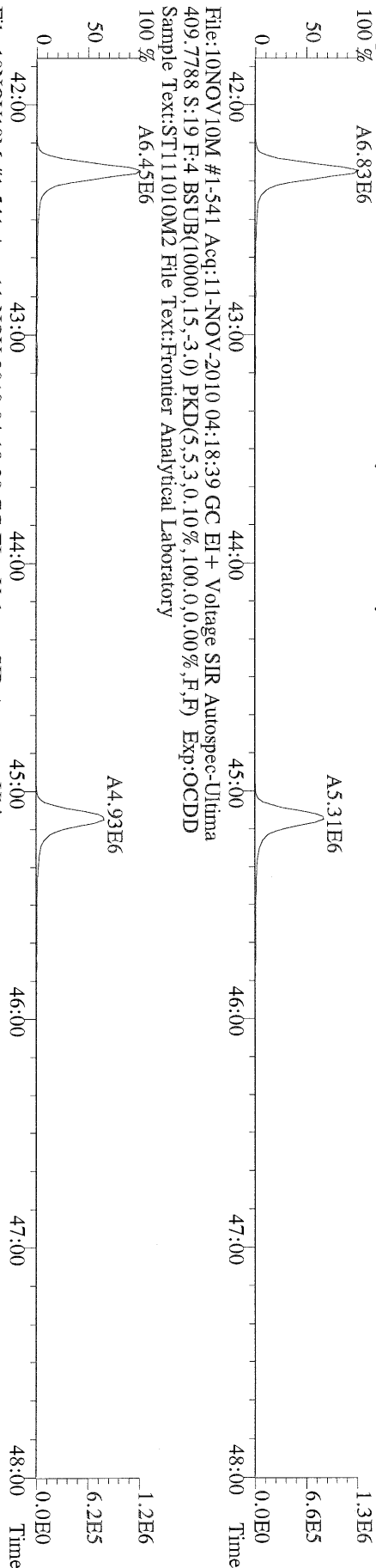
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



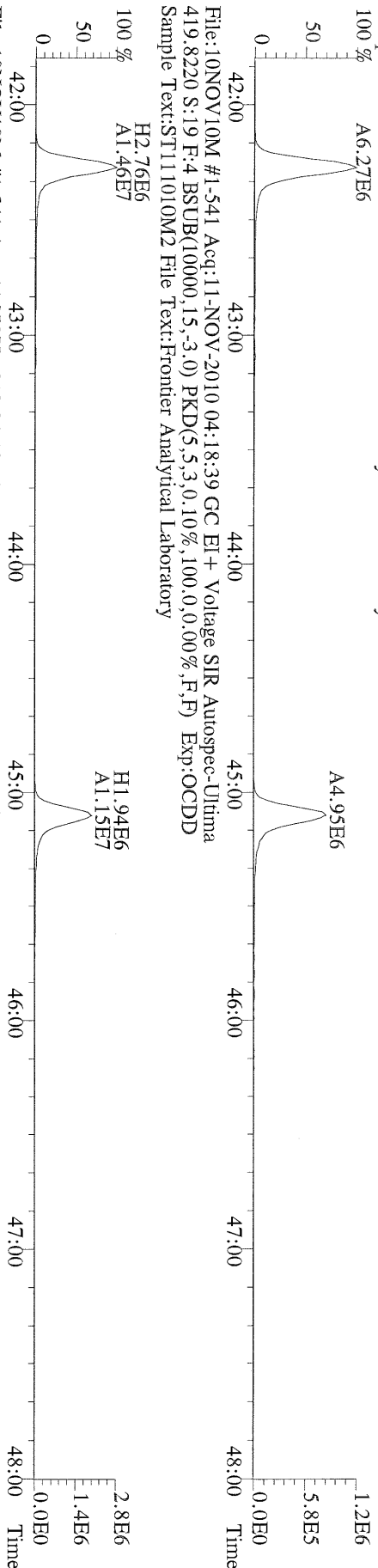
File:10NOV10M #1-476 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



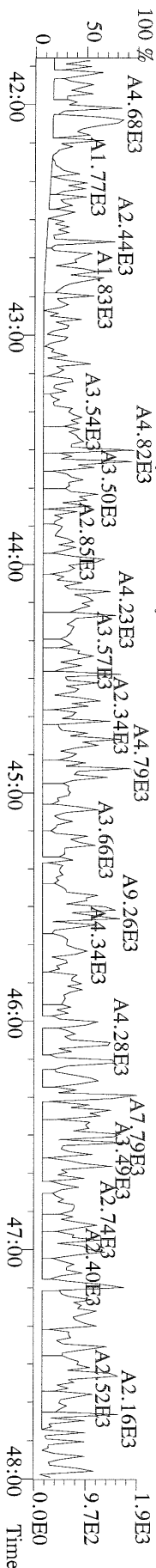
File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



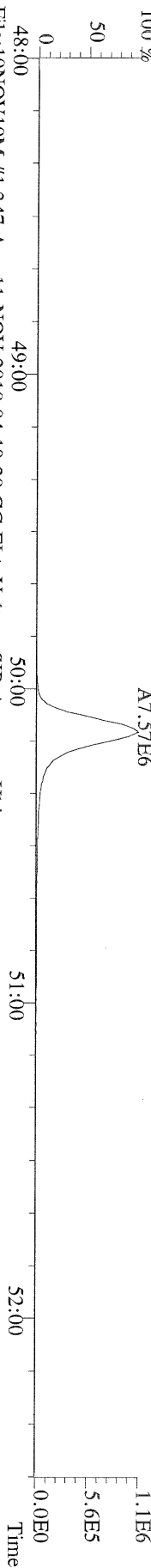
File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



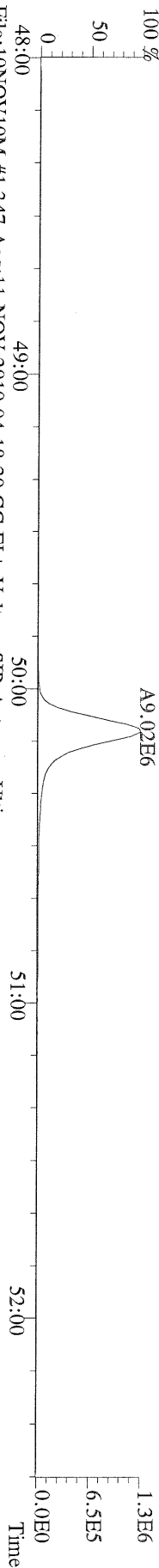
File:10NOV10M #1-541 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



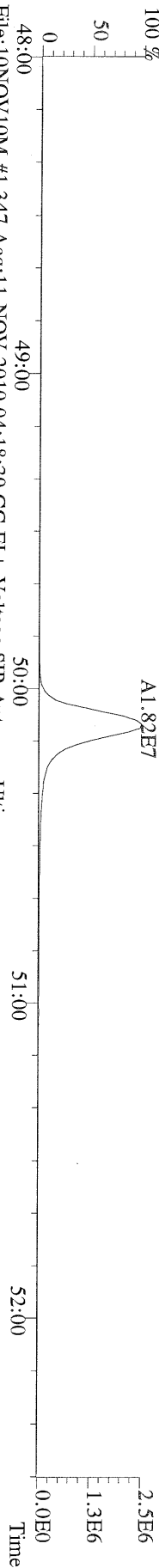
File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 441.7428 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



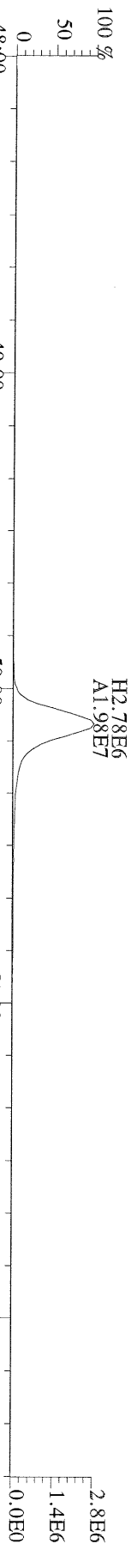
File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 443.7398 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory



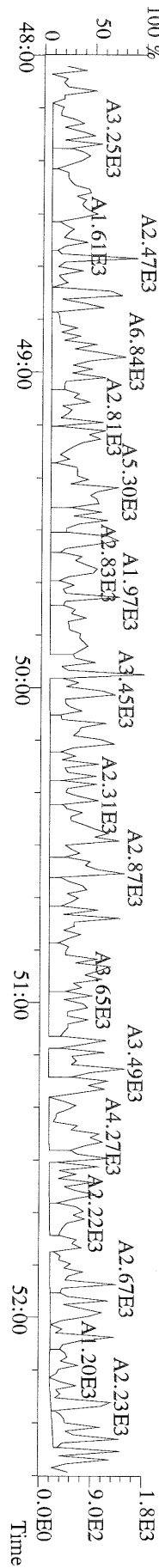
File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 453.7831 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory

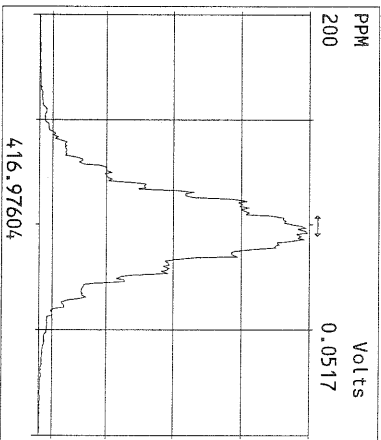
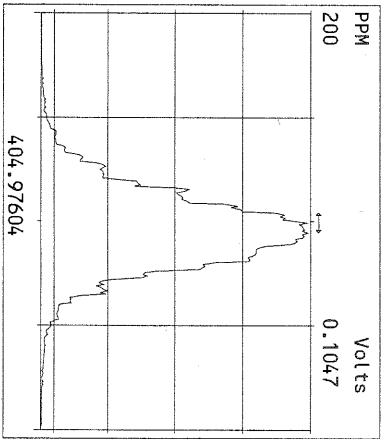
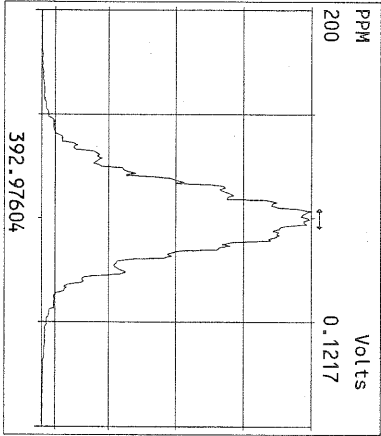
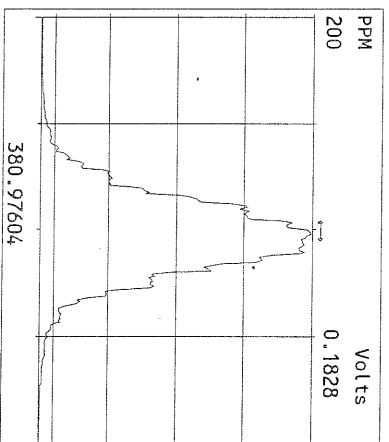
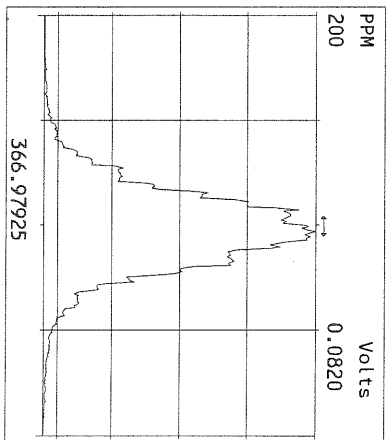
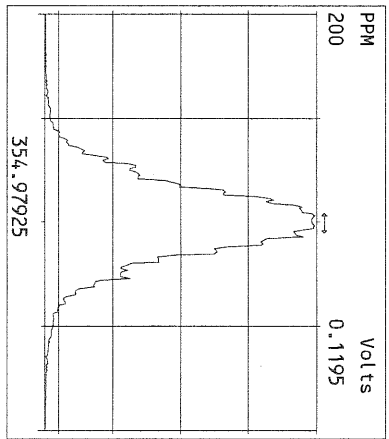
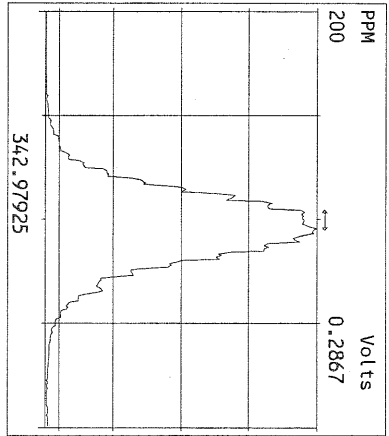
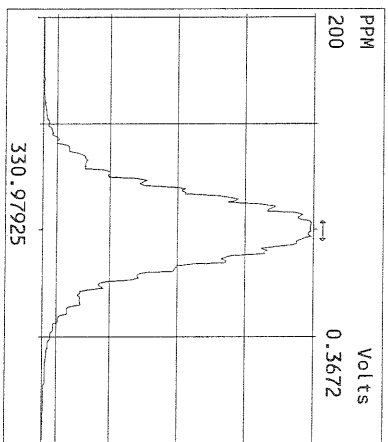
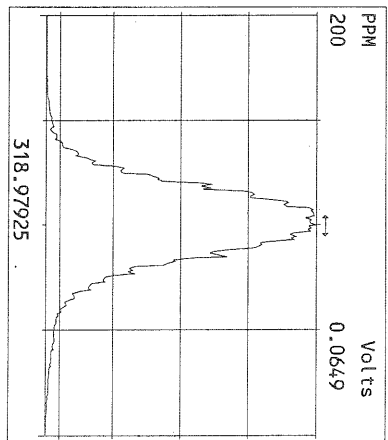
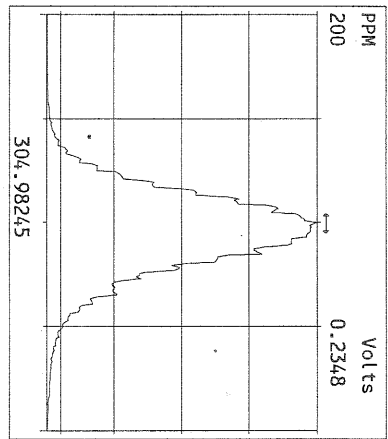
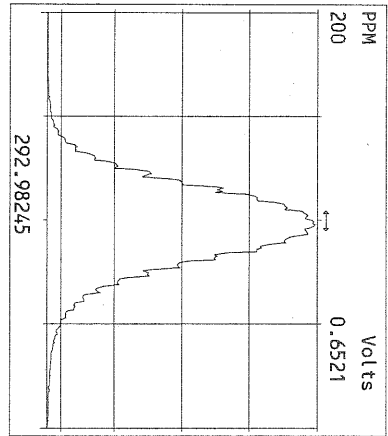


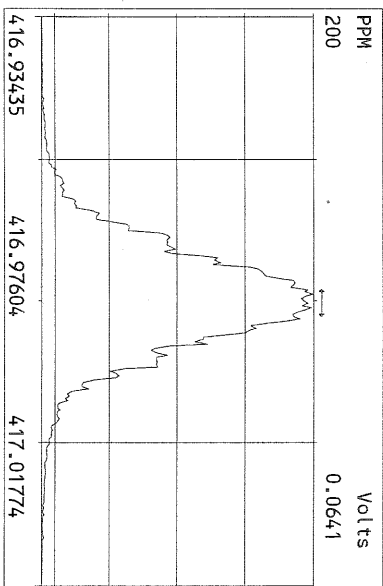
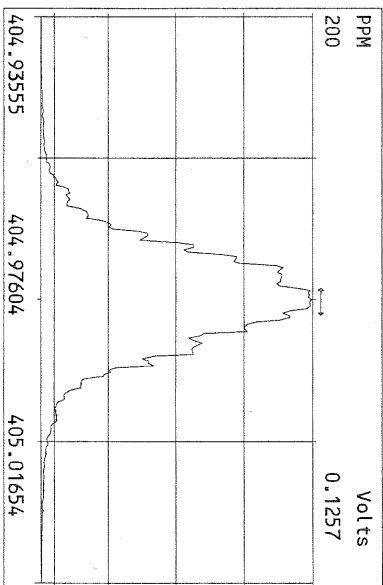
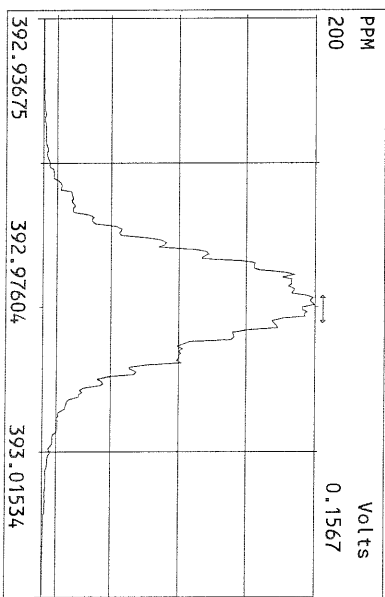
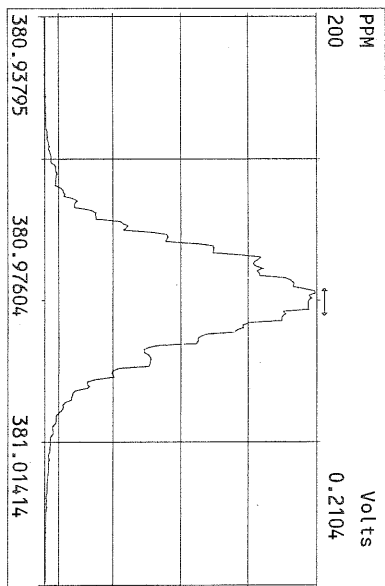
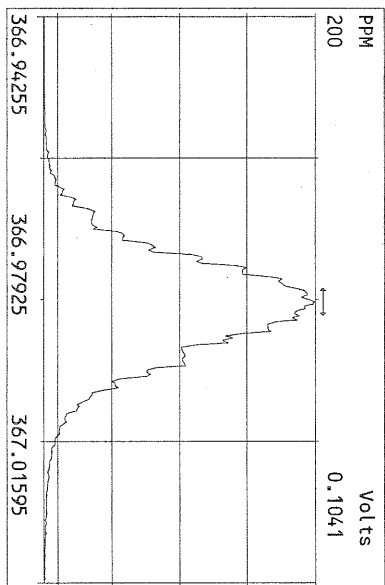
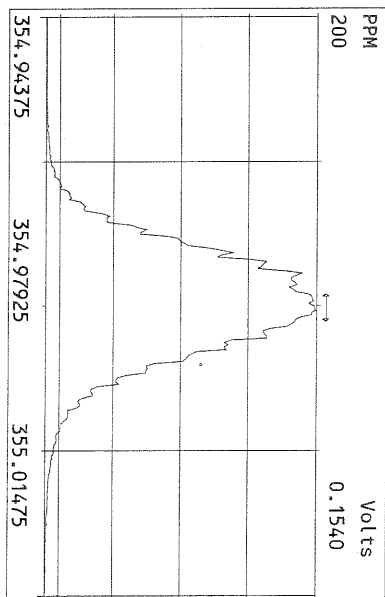
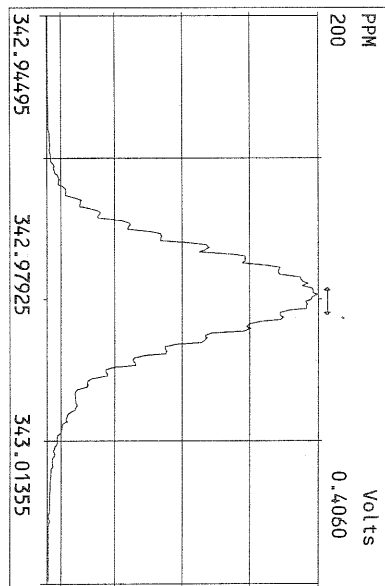
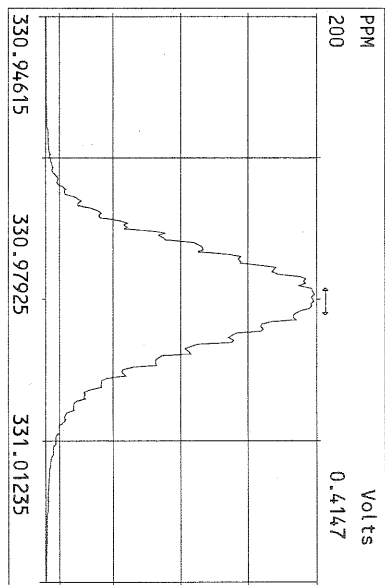
File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 455.7801 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory

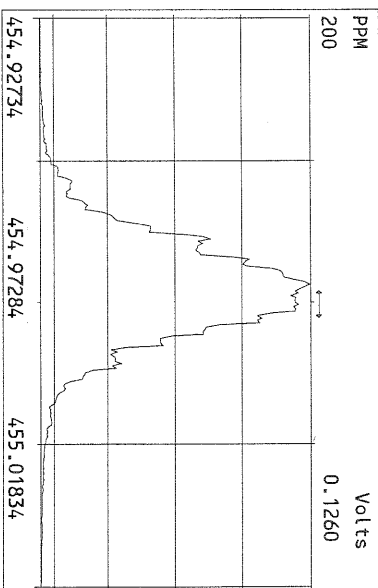
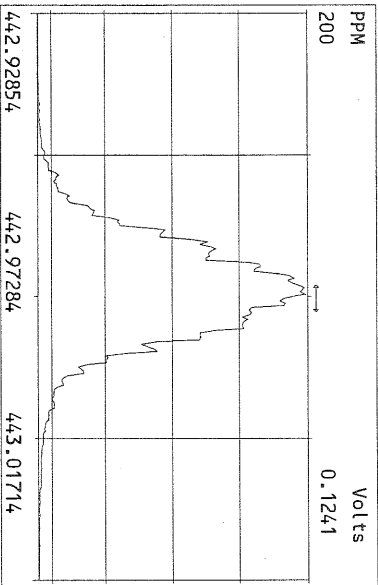
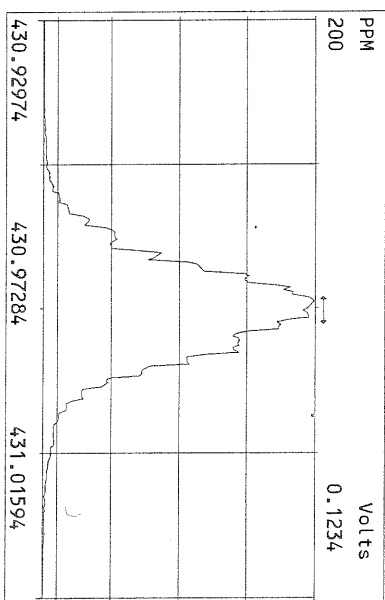
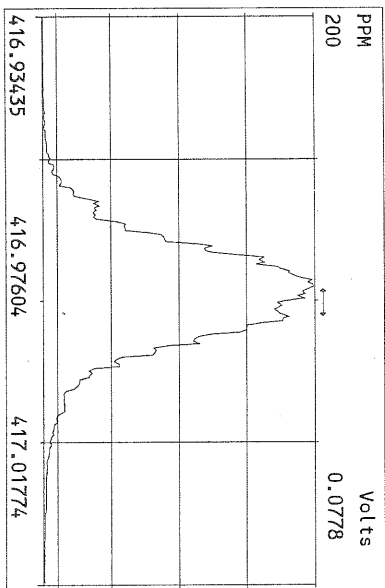
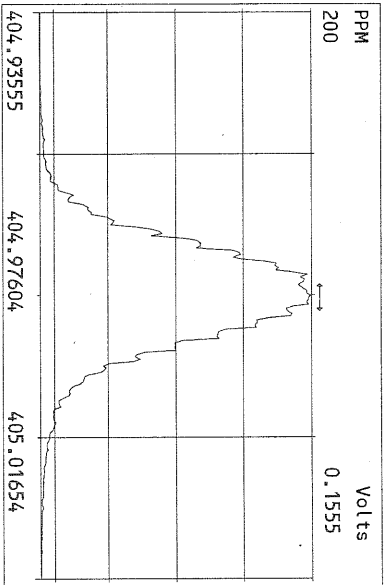
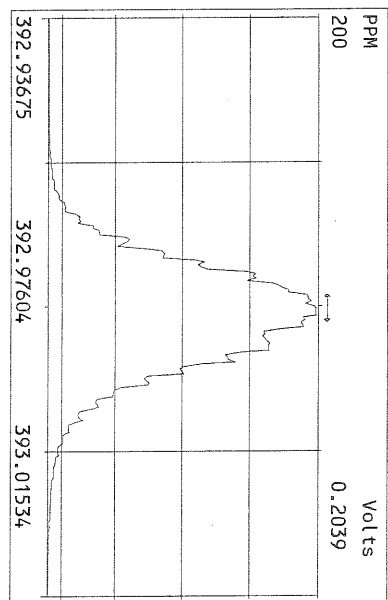
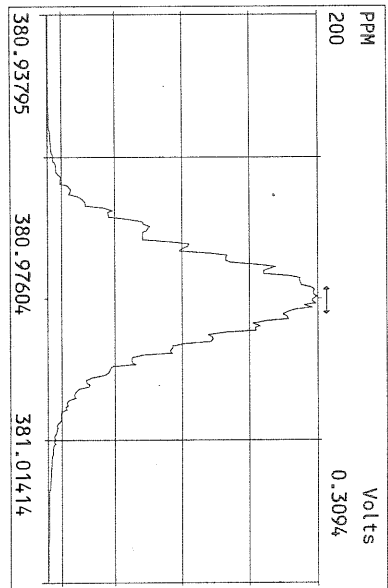
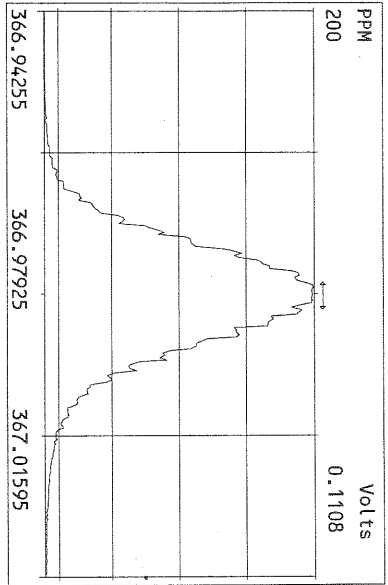


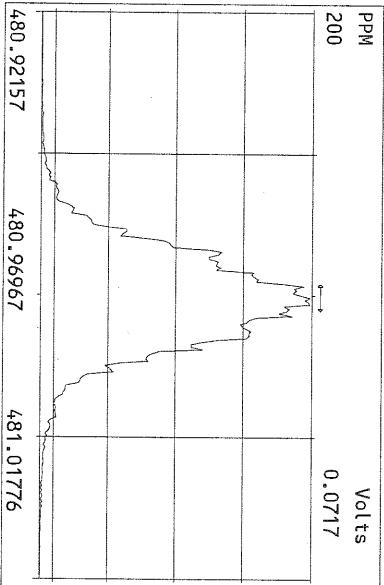
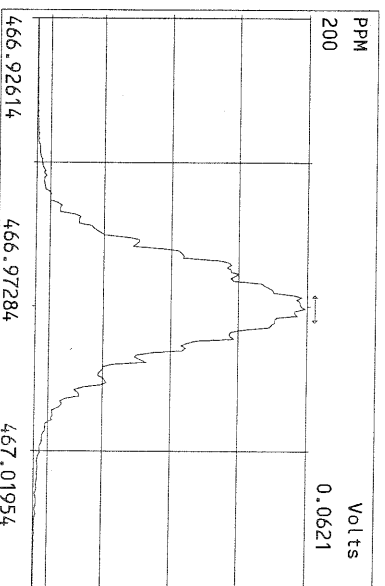
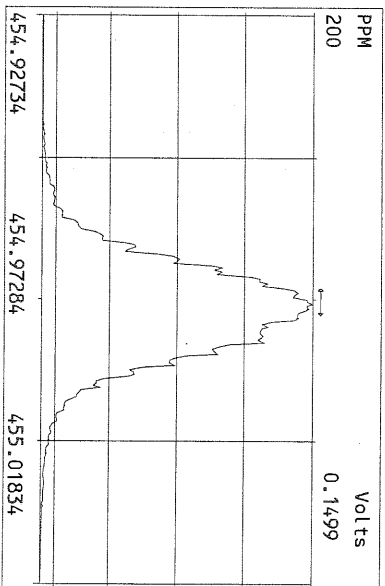
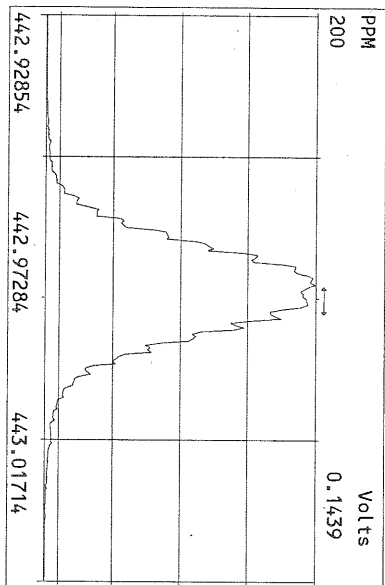
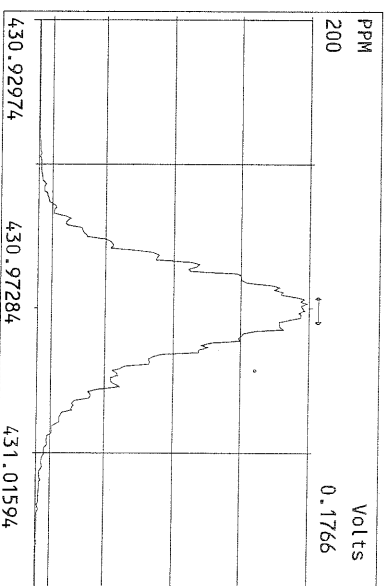
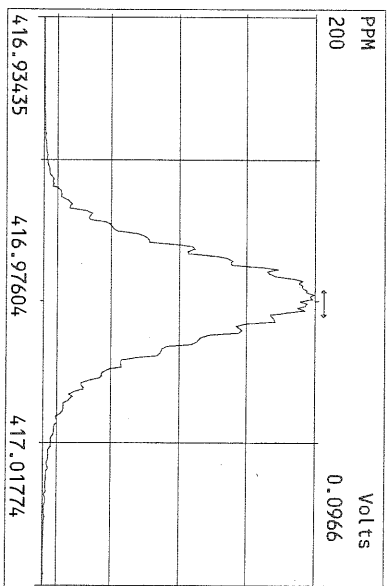
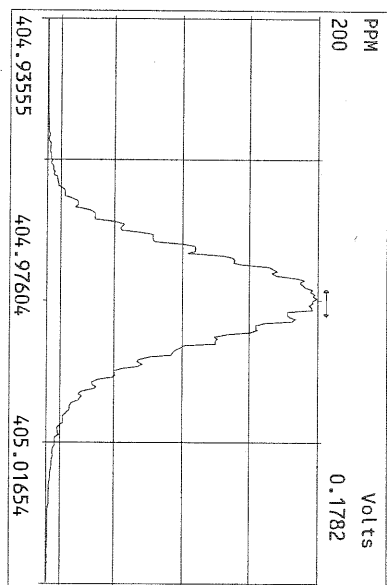
File:10NOV10M #1-347 Acq:11-NOV-2010 04:18:39 GC EI+ Voltage SIR Autospec-Ultima
 513.6775 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111010M2 File Text:Frontier Analytical Laboratory

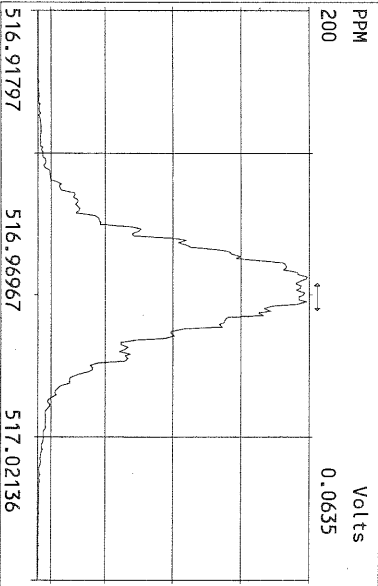
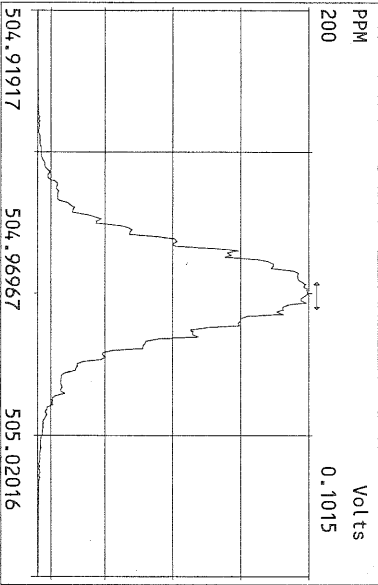
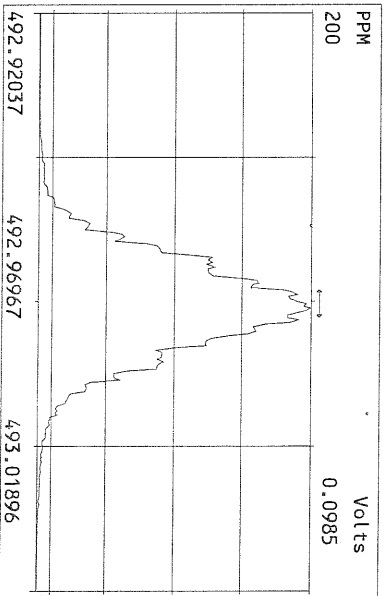
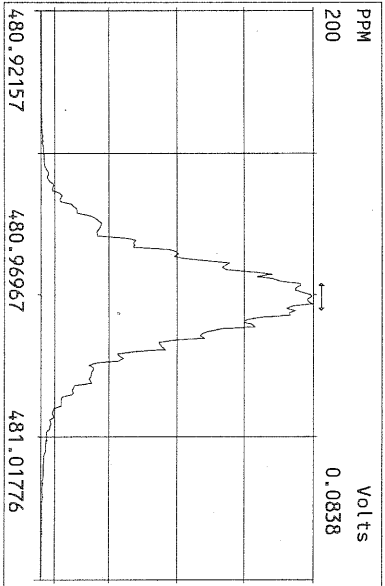
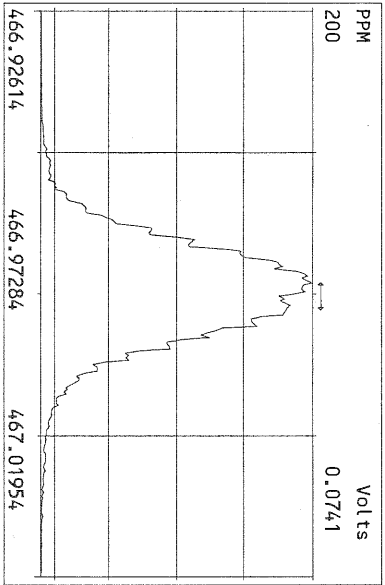
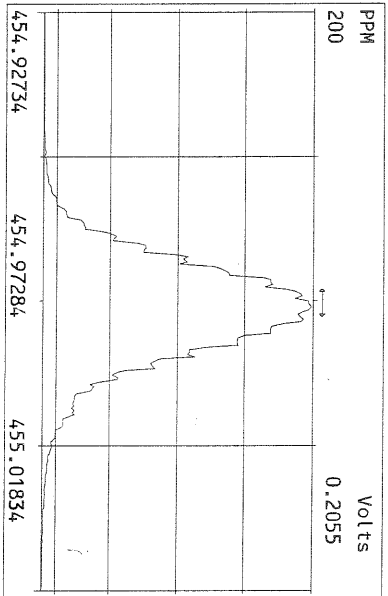
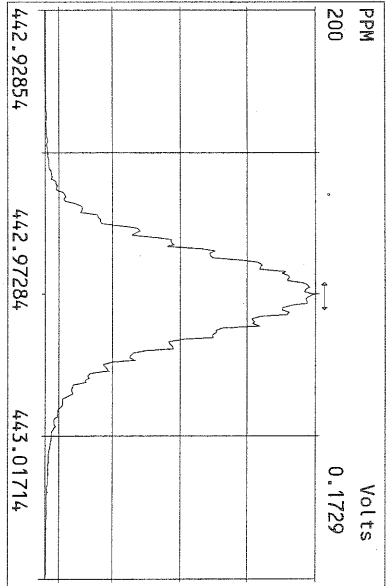
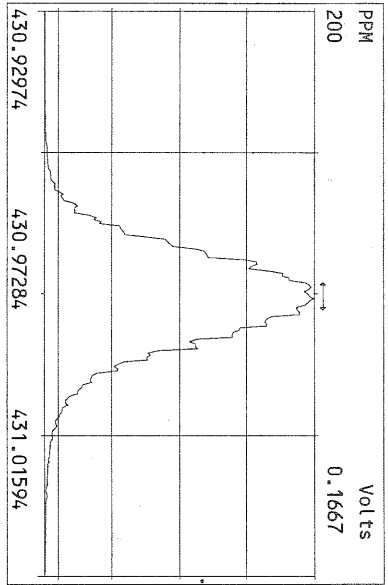












USEPA - ITD

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: 12NOV10M Sam:1

Analysis Date: 12-NOV-10 14:03:46

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	10.4	7.80 - 12.9 ✓
1,2,3,7,8-PeCDD	M+2/M+4	1.67	1.32-1.78	y	50.8	39.0 - 65.0 ✓
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	48.1	39.0 - 64.0 ✓
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	50.0	39.0 - 64.0 ✓
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	52.4	41.0 - 61.0 ✓
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	45.2	43.0 - 58.0 ✓
OCDD	M+2/M+4	0.88	0.76-1.02	y	96.4	79.0 - 126 ✓
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.28	8.40 - 12.0 ✓
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	y	56.1	41.0 - 60.0 ✓
2,3,4,7,8-PeCDF	M+2/M+4	1.50	1.32-1.78	y	55.3	41.0 - 60.0 ✓
1,2,3,4,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	y	54.6	45.0 - 56.0 ✓
1,2,3,6,7,8-HxCDF	M+2/M+4	1.17	1.05-1.43	y	54.2	44.0 - 57.0 ✓
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	54.1	44.0 - 57.0 ✓
1,2,3,7,8,9-HxCDF	M+2/M+4	1.18	1.05-1.43	y	54.9	45.0 - 56.0 ✓
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.07	0.88-1.20	y	48.8	45.0 - 55.0 ✓
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	0.88-1.20	y	49.2	43.0 - 58.0 ✓
OCDF	M+2/M+4	0.89	0.76-1.02	y	115	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: DNDate: 11/12/10

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: 12NOV10M Sam:1

Analysis Date: 12-NOV-10 14:03:46

LABELLED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
13C-2,3,7,8-TCDD	M/M+2	0.82	0.65-0.89	y	101	82.0 - 121 ✓
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.76	1.32-1.78	y	114	62.0 - 160 ✓
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	100	85.0 - 117 ✓
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	92.1	85.0 - 118 ✓
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	112	72.0 - 138 ✓
13C-OCDD	M+2/M+4	0.94	0.76-1.02	y	239	96.0 - 415 ✓
13C-2,3,7,8-TCDF	M/M+2	0.87	0.65-0.89	y	104	71.0 - 140 ✓
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.75	1.32-1.78	y	118	76.0 - 130 ✓
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.72	1.32-1.78	y	118	77.0 - 130 ✓
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	92.3	76.0 - 131 ✓
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	87.0	70.0 - 143 ✓
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	90.0	73.0 - 137 ✓
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.50	0.43-0.59	y	94.7	74.0 - 135 ✓
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	111	78.0 - 129 ✓
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	127	77.0 - 129 ✓
13C-OCDF	M+2/M+4	0.96	0.76-1.02	y	234	96.0 - 415 ✓
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.95	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: DNJDate: 11/2/10

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:
Contract No.: SAS No.:
Instrument ID: FAL3 Initial Calibration Date: 8/23/10
RT Window Data Filename: 12NOV10M Sam:1 Analysis Date: 12-NOV-10 Time: 14:03:46
DB-5 IS Data Filename: 12NOV10M Sam:1 Analysis Date: 12-NOV-10 Time: 14:03:46
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)	24:20 ✓	1,3,6,8-TCDF (F)	22:59 ✓
1,2,8,9-TCDD (L)	28:16 ✓	1,2,8,9-TCDF (L)	28:30 ✓
1,2,4,7,9-PeCDD (F)	30:12 ✓	1,3,4,6,8-PeCDF (F)	28:21 ✓
1,2,3,8,9-PeCDD (L)	33:46 ✓	1,2,3,8,9-PeCDF (L)	34:11 ✓
1,2,4,6,7,9-HxCDD (F)	36:04 ✓	1,2,3,4,6,8-HxCDF (F)	35:12 ✓
1,2,3,7,8,9-HxCDD (L)	39:09 ✓	1,2,3,7,8,9-HxCDF (L)	39:44 ✓
1,2,3,4,6,7,9-HpCDD (F)	42:45 ✓	1,2,3,4,6,7,8-HpCDF (F)	42:14 ✓
1,2,3,4,6,7,8-HpCDD (L)	44:08 ✓	1,2,3,4,7,8,9-HpCDF (L)	45:04 ✓

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

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

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

Analyst: PAJ Date: 11/2/10

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: 12-NOV-10 14:03:46

CS3 or VER Data Filename: 12NOV10M

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	1.000	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		1.240	1.000-1.567 ✓
13C-1,2,3,7,8-PeCDF		1.175	0.923-1.203 ✓
13C-2,3,4,7,8-PeCDF		1.225	0.923-1.303 ✓

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

Analyst: DNDate: 11/12/10

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: 12-NOV-10 14:03:46

CS3 or VER Data Filename: 12NOV10M

Sam:1

NATIVE ANALYTES	RETENTION TIME		RRT	RRT
	REFERENCE			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		1.000	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		1.001	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		0.985	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			1.127	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: DNJDate: 11/2/10

Name	Resp	RA	RT	RRF	Conc	Qual	Fac Noise-1	Noise-2	DL	Rec	#Hom
2,3,7,8-TCDD	2.34e+06	0.76 y	27:21	1.11	10.4		2.50	-	-	*	
1,2,3,7,8-PeCDD	1.05e+07	1.67 y	33:11	1.10	50.8		2.50	-	-	*	
1,2,3,4,7,8-HxCDD	1.11e+07	1.26 y	38:32	1.37	48.1		2.50	-	-	*	
1,2,3,6,7,8-HxCDD	9.96e+06	1.25 y	38:42	1.37	50.0		2.50	-	-	*	
1,2,3,7,8,9-HxCDD	1.12e+07	1.27 y	39:09	1.36	52.4		2.50	-	-	*	
1,2,3,4,6,7,8-HpCDD	9.81e+06	1.02 y	44:08	1.45	45.2		2.50	-	-	*	
OCDD	1.40e+07	0.88 y	49:40	1.43	96.4		2.50	-	-	*	
2,3,7,8-TCDF	4.62e+06	0.77 y	26:36	1.50	9.28		2.50	-	-	*	
1,2,3,7,8-PeCDF	1.67e+07	1.53 y	31:27	0.94	56.1		2.50	-	-	*	
2,3,4,7,8-PeCDF	1.59e+07	1.50 y	32:46	0.94	55.3		2.50	-	-	*	
1,2,3,4,7,8-HxCDF	1.35e+07	1.21 y	37:09	0.93	54.6		2.50	-	-	*	
1,2,3,6,7,8-HxCDF	1.53e+07	1.17 y	37:21	0.82	54.2		2.50	-	-	*	
2,3,4,6,7,8-HxCDF	1.40e+07	1.20 y	38:18	0.92	54.1		2.50	-	-	*	
1,2,3,7,8,9-HxCDF	1.64e+07	1.18 y	39:44	1.00	54.9		2.50	-	-	*	
1,2,3,4,6,7,8-HpCDF	1.30e+07	1.07 y	42:14	1.39	48.8		2.50	-	-	*	
1,2,3,4,7,8,9-HpCDF	1.06e+07	1.07 y	45:04	1.36	49.2		2.50	-	-	*	
OCDF	1.78e+07	0.89 y	50:04	0.79	115		2.50	-	-	*	
13C-2,3,7,8-TCDD	2.02e+07	0.82 y	27:19	1.02	101						101
13C-1,2,3,7,8-PeCDD	1.88e+07	1.76 y	33:10	0.84	114						114
13C-1,2,3,4,7,8-HxCDD	1.67e+07	1.21 y	38:32	1.07	100						100
13C-1,2,3,6,7,8-HxCDD	1.45e+07	1.21 y	38:42	1.01	92.1						92.1
13C-1,2,3,4,6,7,8-HpCDD	1.49e+07	1.07 y	44:07	0.86	112						112
13C-OCDD	2.03e+07	0.94 y	49:39	0.55	239						119
13C-2,3,7,8-TCDF	3.32e+07	0.87 y	26:35	0.99	104						104
13C-1,2,3,7,8-PeCDF	3.17e+07	1.75 y	31:25	0.84	118						118
13C-2,3,4,7,8-PeCDF	3.07e+07	1.72 y	32:45	0.81	118						118
13C-1,2,3,4,7,8-HxCDF	2.66e+07	0.52 y	37:08	1.85	92.3						92.3
13C-1,2,3,6,7,8-HxCDF	3.43e+07	0.52 y	37:19	2.54	87.0						87.0
13C-2,3,4,6,7,8-HxCDF	2.82e+07	0.53 y	38:16	2.01	90.0						90.0
13C-1,2,3,7,8,9-HxCDF	2.99e+07	0.50 y	39:42	2.03	94.7						94.7
13C-1,2,3,4,6,7,8-HpCDF	1.92e+07	0.44 y	42:12	1.11	111						111
13C-1,2,3,4,7,8,9-HpCDF	1.58e+07	0.44 y	45:03	0.80	127						127
13C-OCDF	3.94e+07	0.96 y	50:02	1.08	234						117
37Cl-2,3,7,8-TCDD	1.33e+06		27:21	0.69	9.95						99.5
13C-1,2,3,4-TCDD	1.96e+07	0.81 y	26:45	-	43.5						
13C-1,2,3,4-TCDF	3.20e+07	0.86 y	25:29	-	44.2						
13C-1,2,3,7,8,9-HxCDD	1.56e+07	1.20 y	39:08	-	56.5						
Total Tetra-Dioxins	1.25e+07		22:49	1.11	55.8		2.50	-	-	*	31
Total Penta-Dioxins	2.24e+07		30:12	1.10	108		2.50	-	-	*	16
Total Hexa-Dioxins	3.69e+07		36:04	1.37	172		2.50	-	-	*	27
Total Hepta-Dioxins	2.08e+07		42:45	1.45	95.8		2.50	-	-	*	17
Total Tetra-Furans	2.18e+07		22:59	1.50	43.7		2.50	-	-	*	33
1st Fn. Tot Penta-Furans	1.45e+07		28:21	0.94	49.3		2.50	-	-	*	PeCDF 1
Total Penta-Furans	4.78e+07		30:07	0.94	163		2.50	-	-	*	212 13
Total Hexa-Furans	6.80e+07		35:12	0.91	250		2.50	-	-	*	13
Total Hepta-Furans	2.41e+07		42:14	1.38	100.0		2.50	-	-	*	9

Analyst: DW

Date: 11/12/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:12NOV10M

Instrument: FAL3

GC: DB5

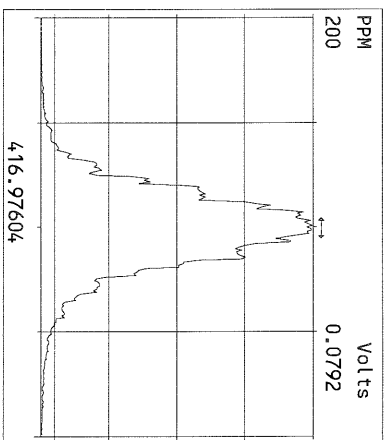
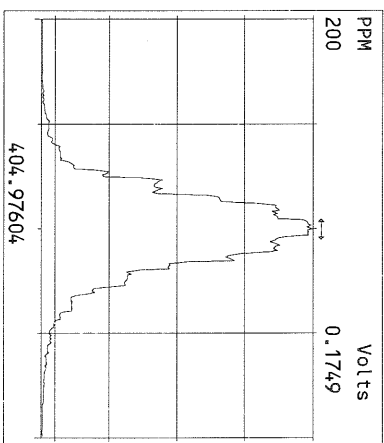
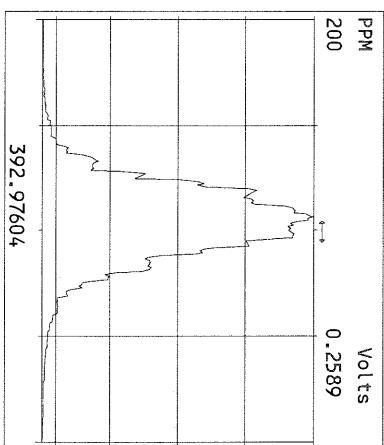
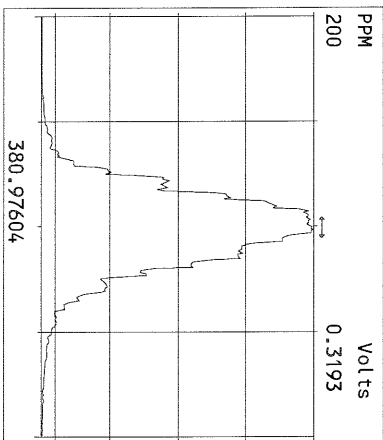
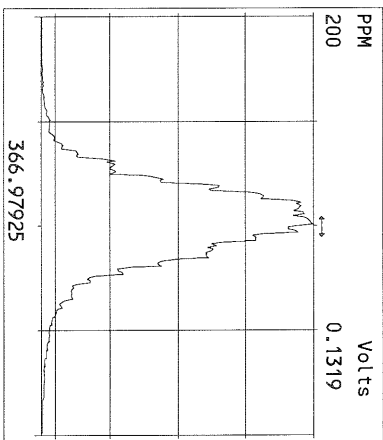
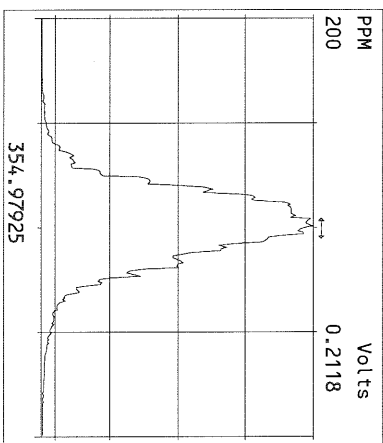
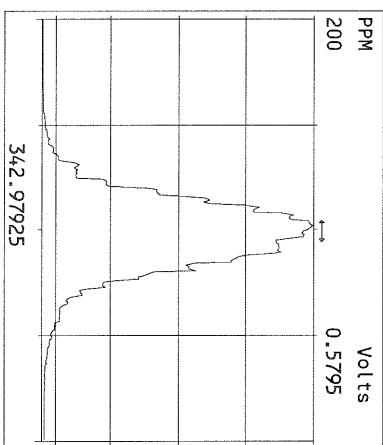
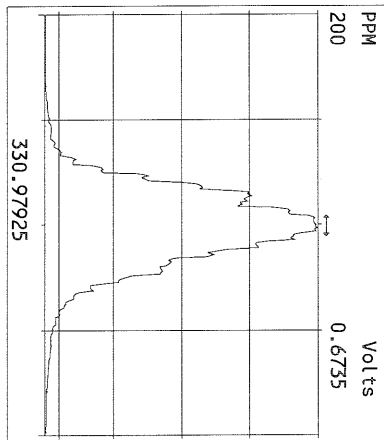
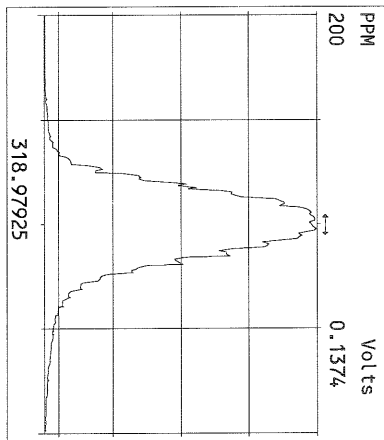
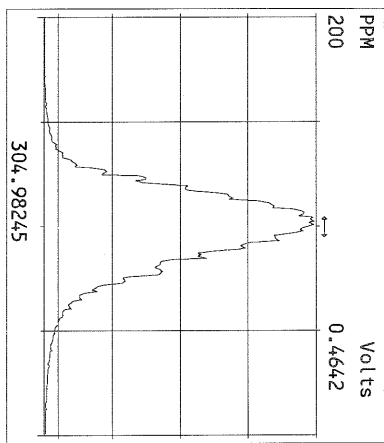
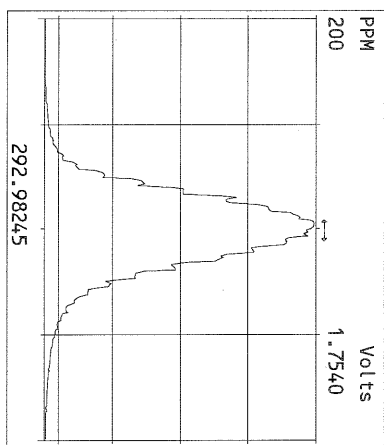
Experiment:OCDD

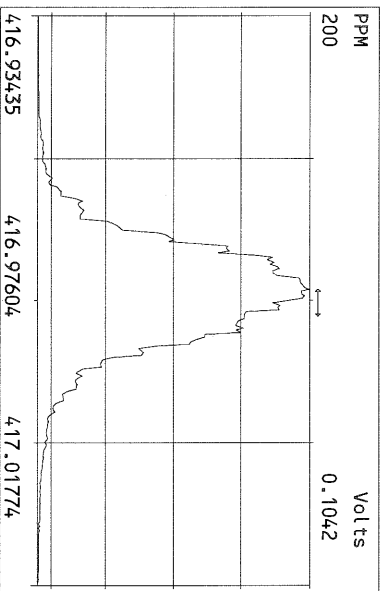
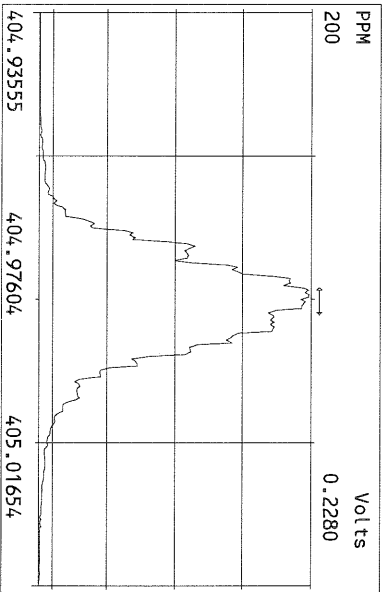
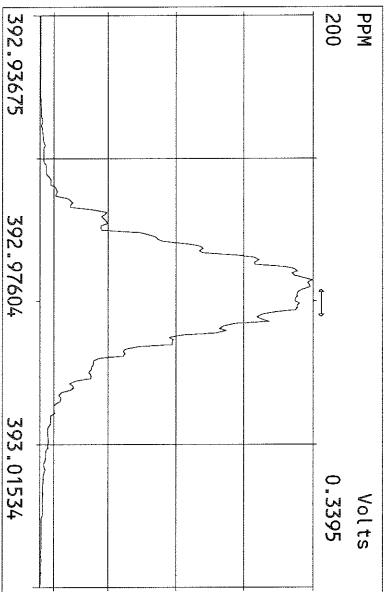
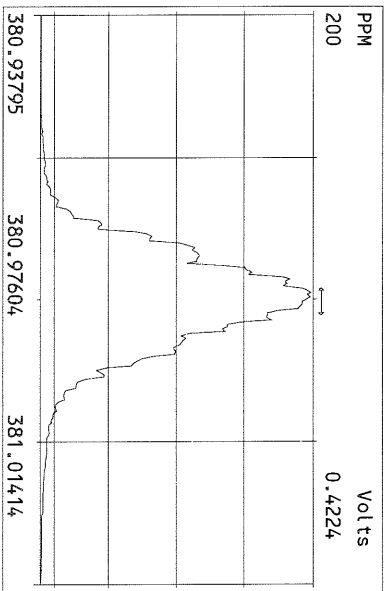
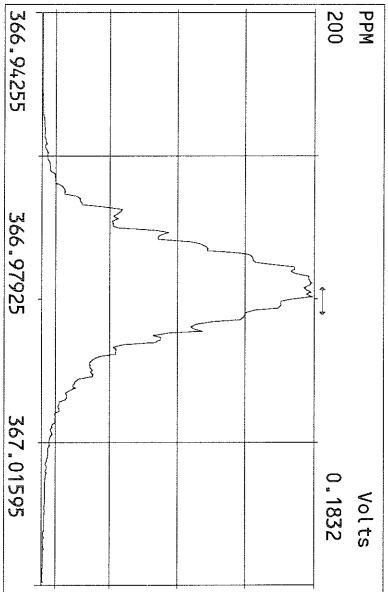
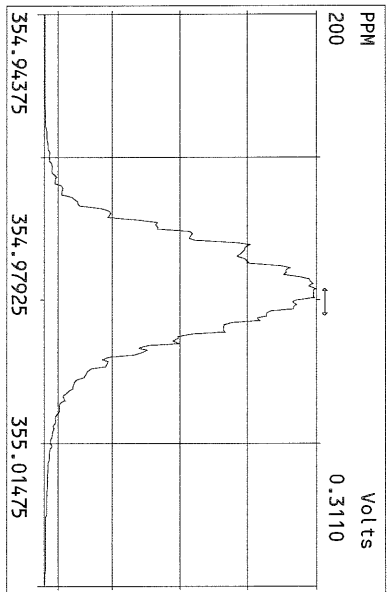
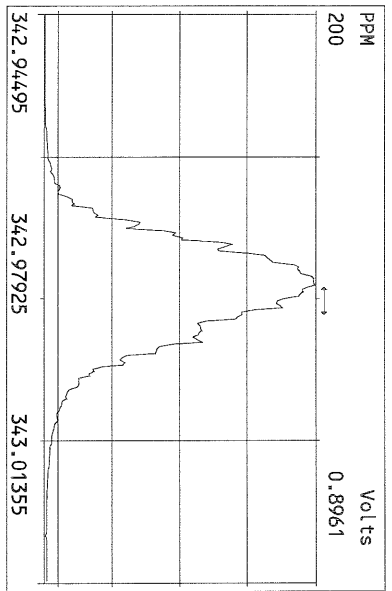
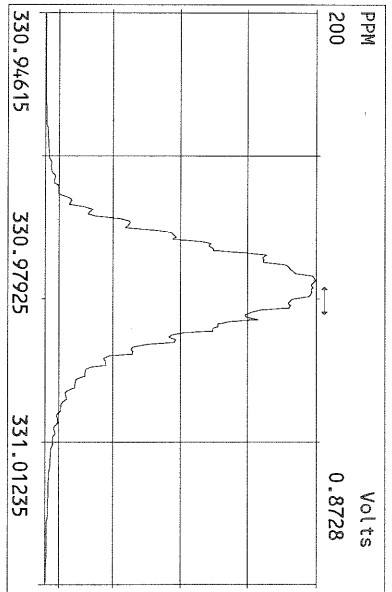
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
12NOV10M	1	ST111210M1	1613 CS3 100511J	12-NOV-10 14:03:46	ST111210M1	ST111210M2	BS
12NOV10M	2	2149-001-0001-OPR	OPR	12-NOV-10 14:59:04	ST111210M1	ST111210M2	BS
12NOV10M	3	2149-001-0001-MB	Method Blank	12-NOV-10 15:54:22	ST111210M1	ST111210M2	BS
12NOV10M	4	6418-001-0001-SA	PSB10-14-15-073010	12-NOV-10 16:49:45	ST111210M1	ST111210M2	BS
12NOV10M	5	SB111210Z1	Solvent Blank	12-NOV-10 17:45:08	ST111210M1	ST111210M2	BS
12NOV10M	6	ST111210M2	1613 CS3 100511J	12-NOV-10 18:40:27	ST111210M2	ST111210M3	BS
12NOV10M	7	2155-001-0001-OPR	OPR	12-NOV-10 19:35:46	ST111210M2	ST111210M3	BS
12NOV10M	8	2155-001-0001-MB	Method Blank	12-NOV-10 20:31:04	ST111210M2	ST111210M3	BS
12NOV10M	9	6415-001-0001-SA	IWTP - Effluent	12-NOV-10 21:26:23	ST111210M2	ST111210M3	BS
12NOV10M	10	6417-001-0001-SA	IN-4894	12-NOV-10 22:21:41	ST111210M2	ST111210M3	BS
12NOV10M	11	6417-002-0001-SA	IN-4895	12-NOV-10 23:16:56	ST111210M2	ST111210M3	BS
12NOV10M	12	6420-001-0001-SA	T001186-01	13-NOV-10 00:12:15	ST111210M2	ST111210M3	BS
12NOV10M	13	6421-001-0001-SA	0101075-01	13-NOV-10 01:07:38	ST111210M2	ST111210M3	BS
12NOV10M	14	6421-002-0001-SA	0101075-03	13-NOV-10 02:02:56	ST111210M2	ST111210M3	BS
12NOV10M	15	6424-001-0001-SA	DDS1-20101028	13-NOV-10 02:58:15	ST111210M2	ST111210M3	BS
12NOV10M	16	6424-001-0002-MS	DDS1-20101028	13-NOV-10 03:53:37	ST111210M2	ST111210M3	BS
12NOV10M	17	6424-001-0002-MSD	DDS1-20101028	13-NOV-10 04:48:51	ST111210M2	ST111210M3	BS
12NOV10M	18	SB111210Z2	Solvent Blank	13-NOV-10 05:44:10	ST111210M2	ST111210M3	BS
12NOV10M	19	ST111210M3	1613 CS3 100511J	13-NOV-10 06:39:36	ST111210M2	ST111210M3	BS

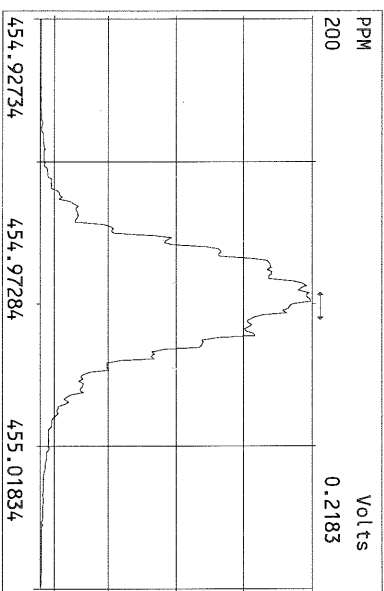
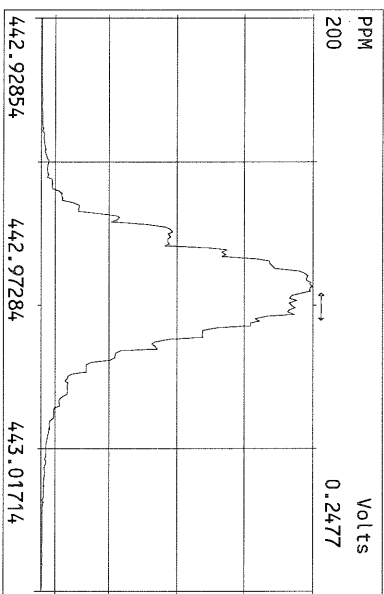
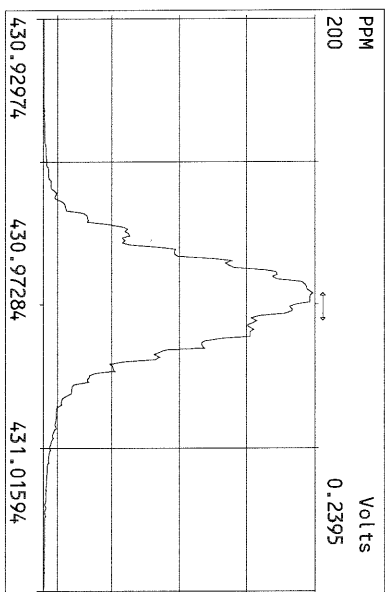
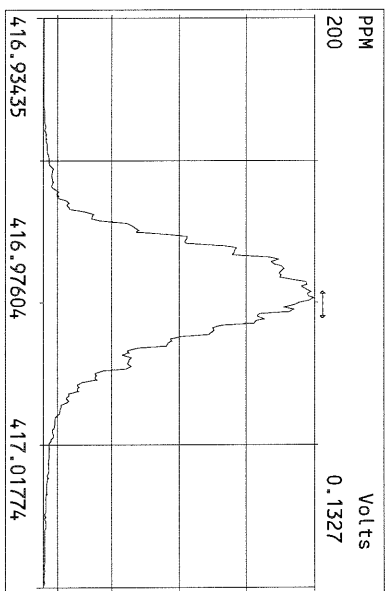
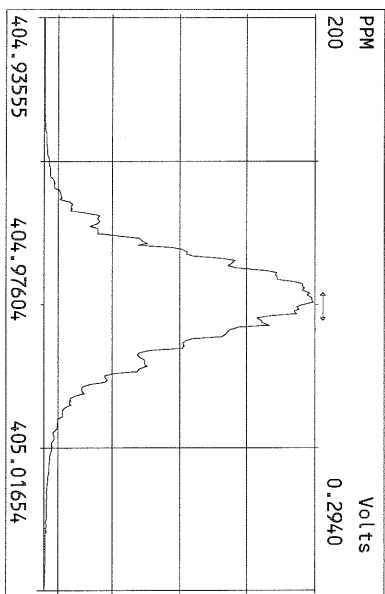
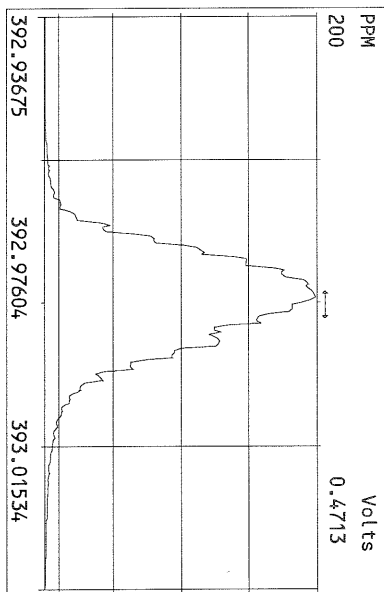
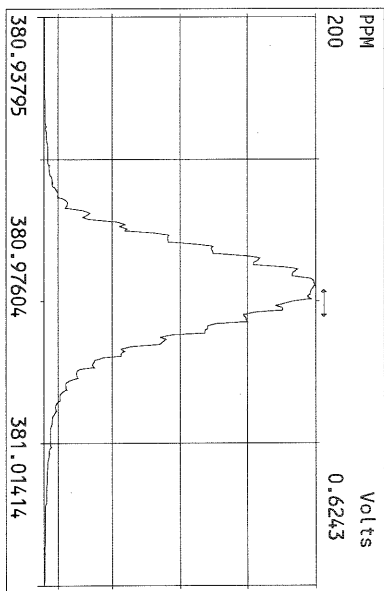
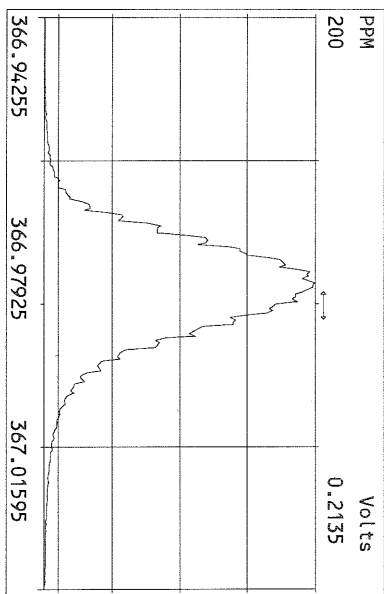
Bill/10/10

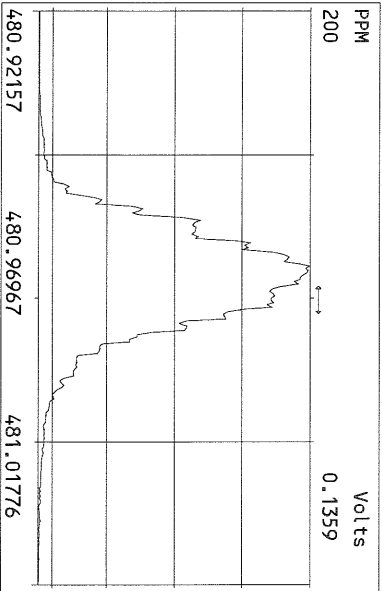
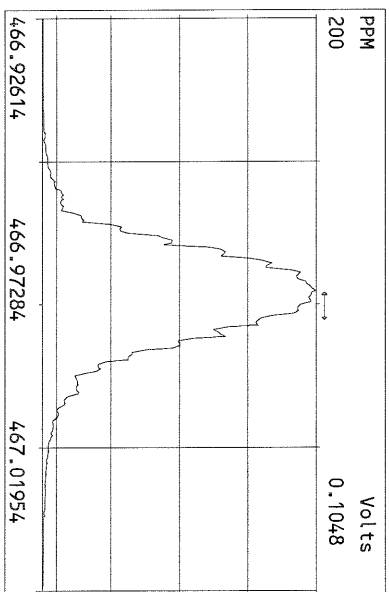
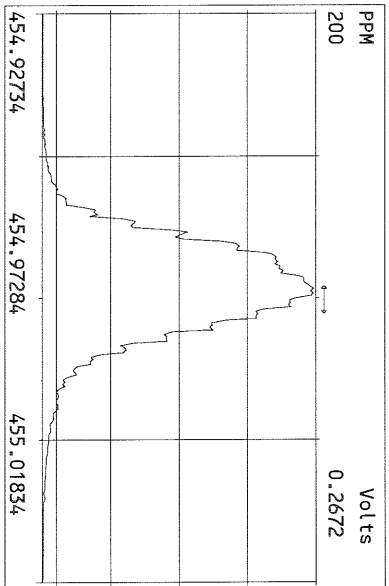
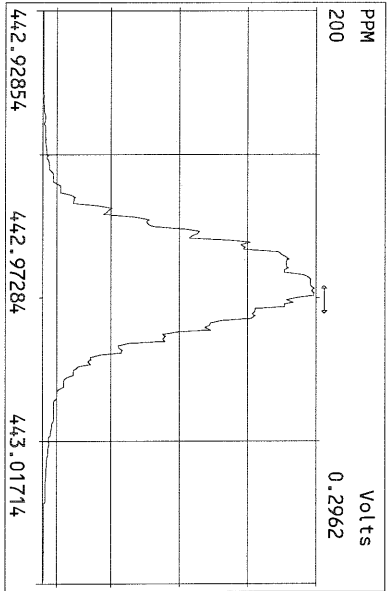
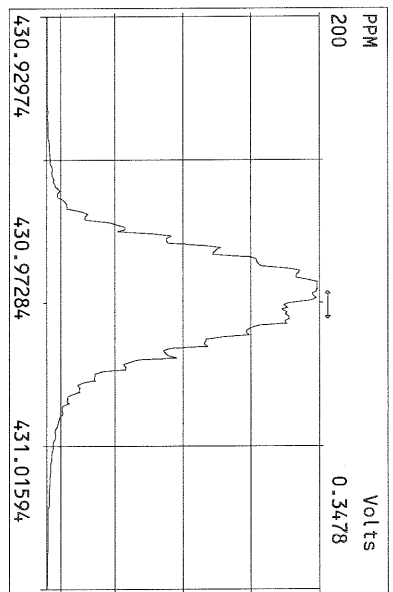
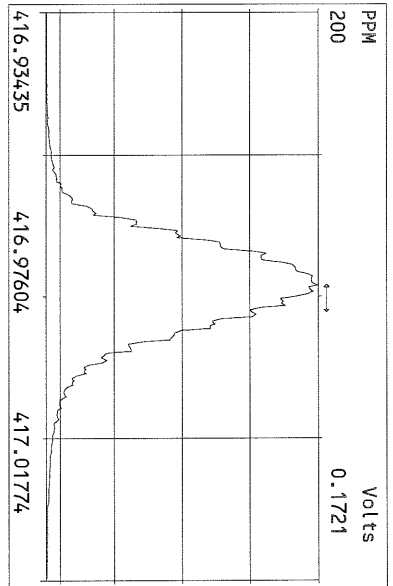
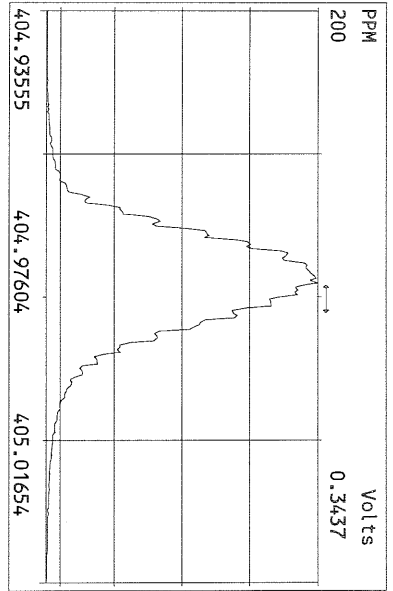
Data Backed Up: _____

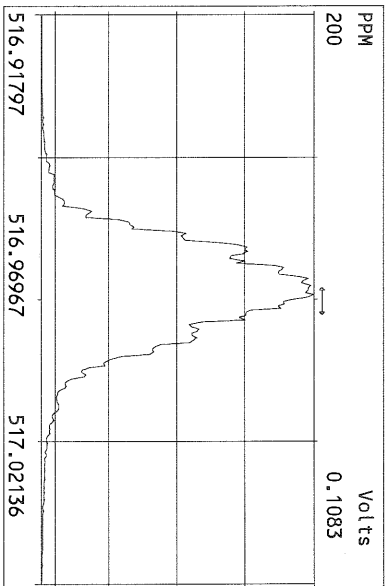
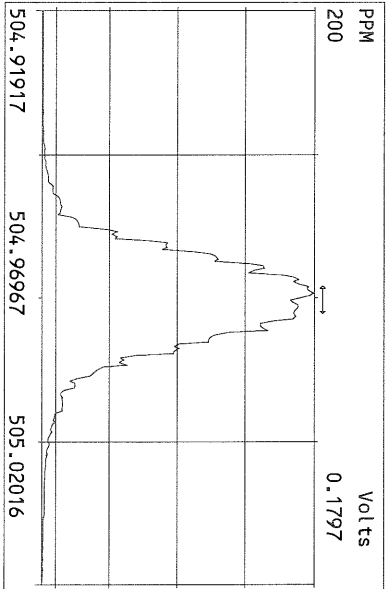
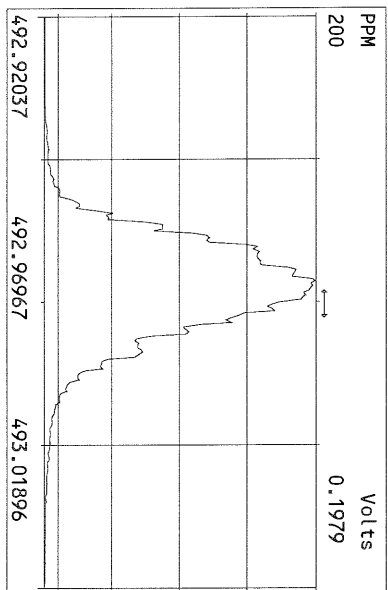
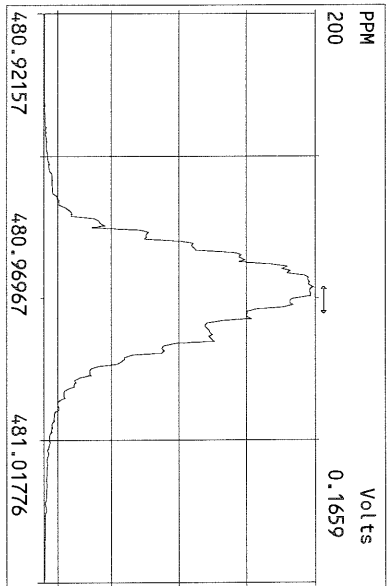
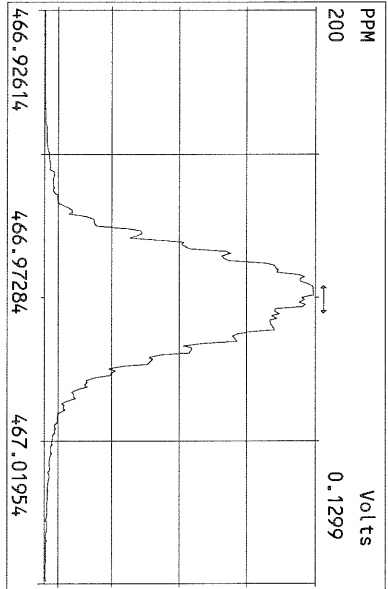
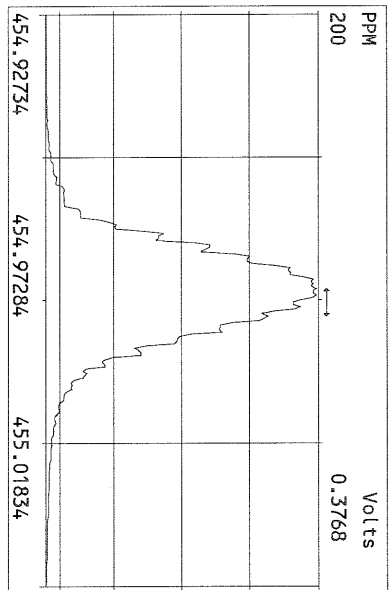
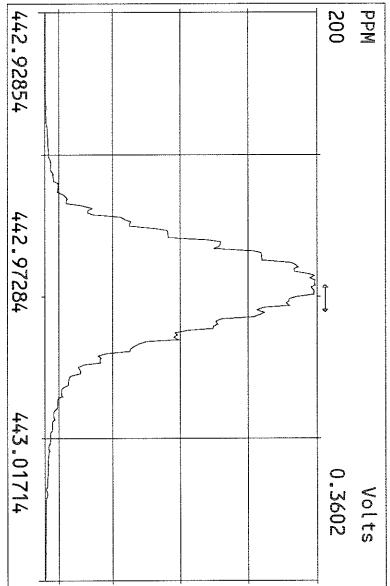
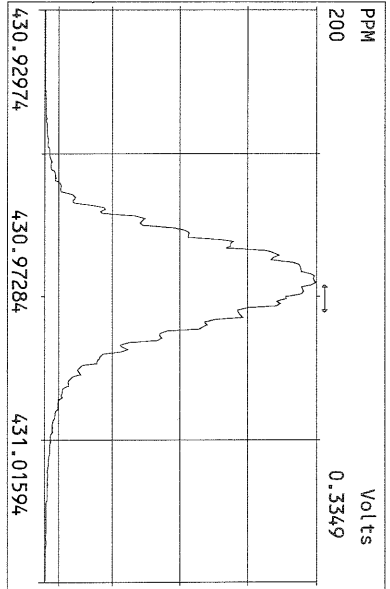
Date: _____



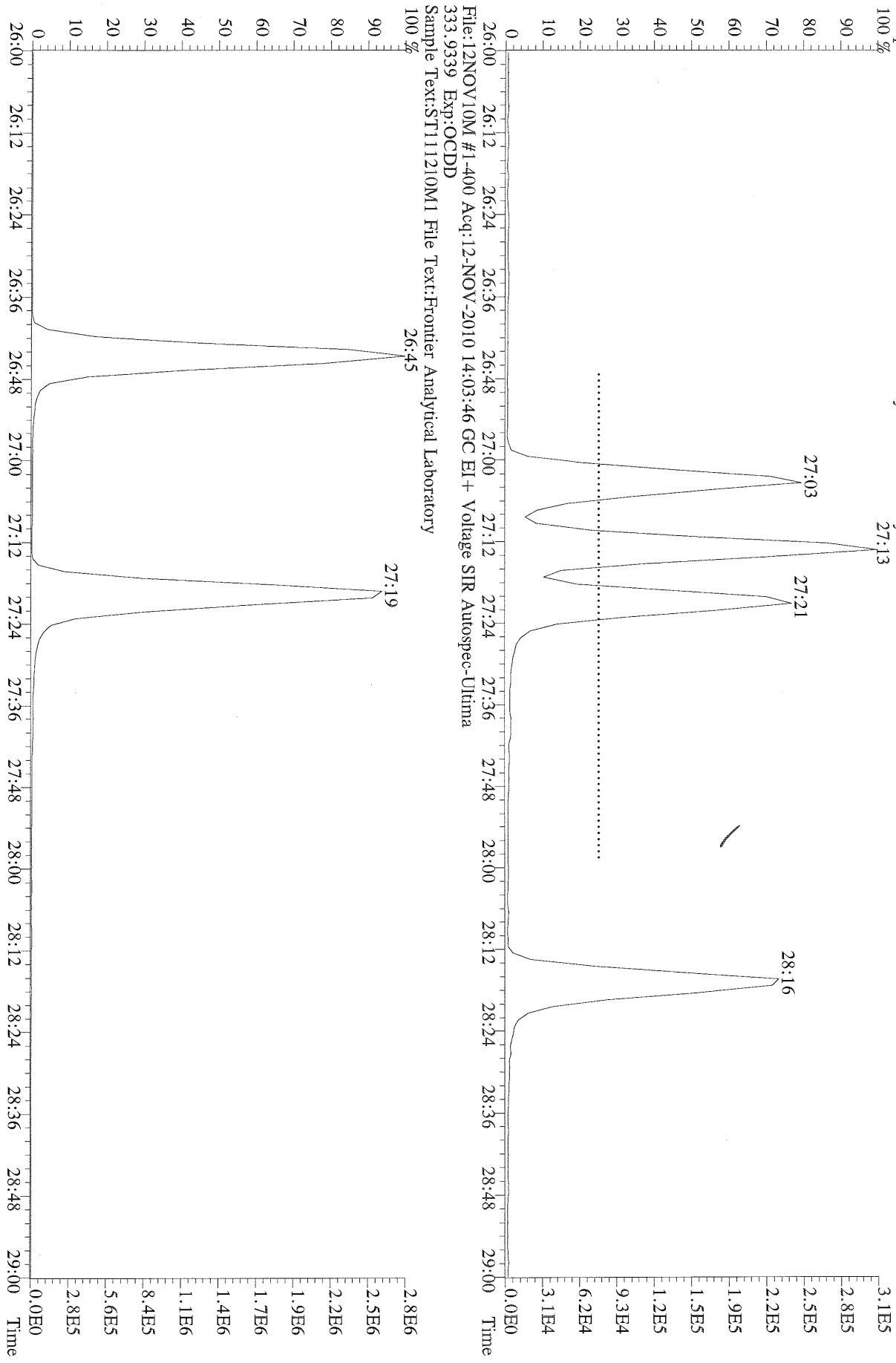




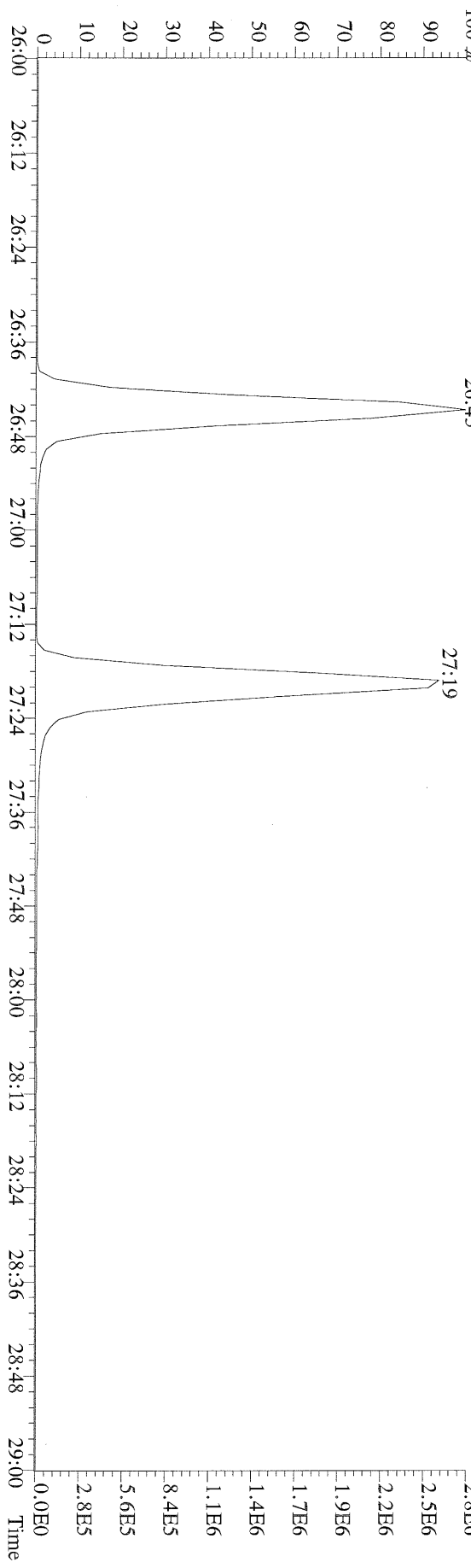




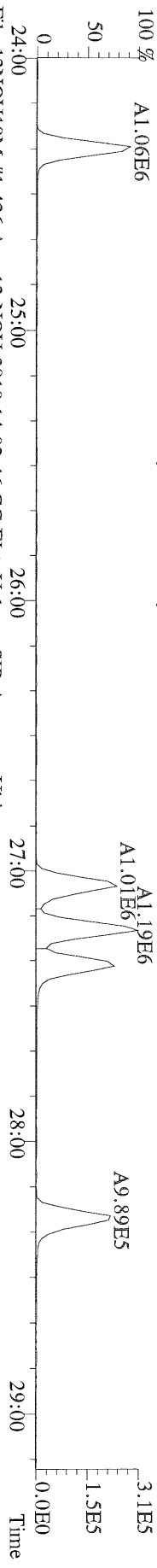
File:12NOV10M #1-400 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Utima
319.8965 Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



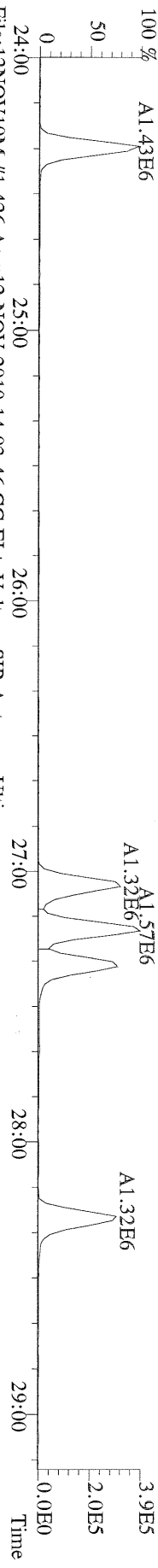
File:12NOV10M #1-400 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Utima
333.9339 Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



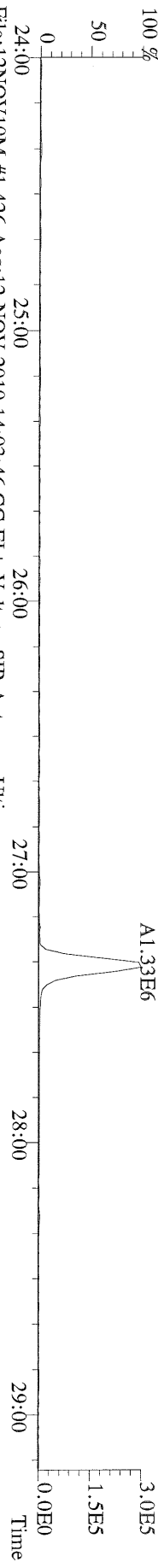
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



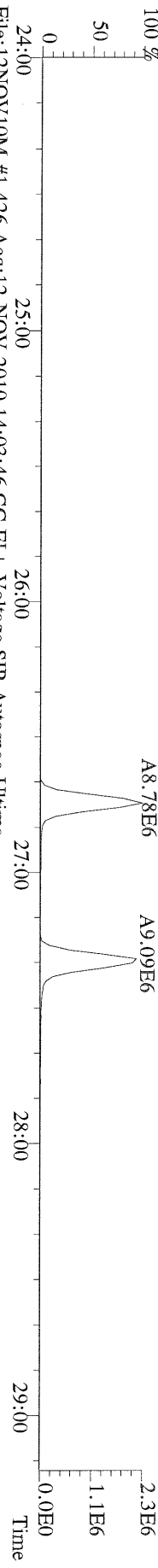
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



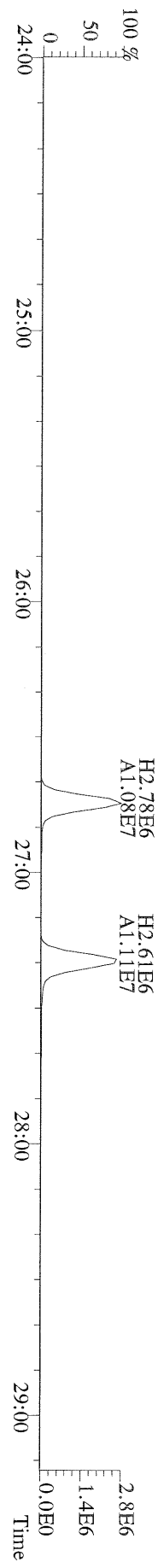
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



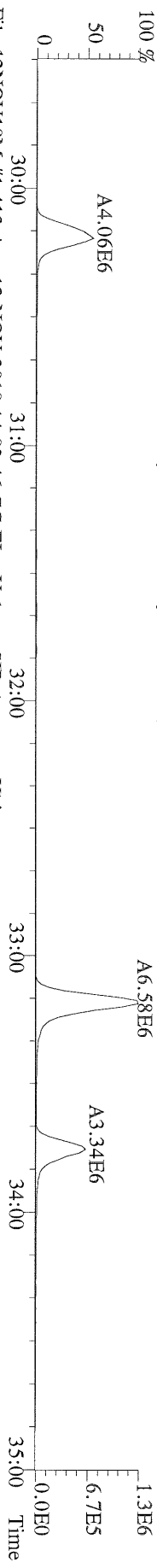
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



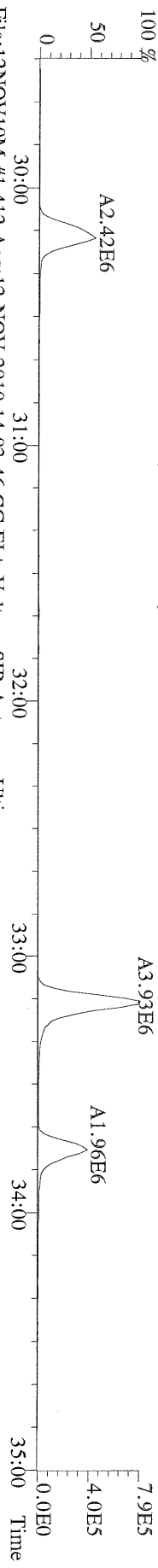
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



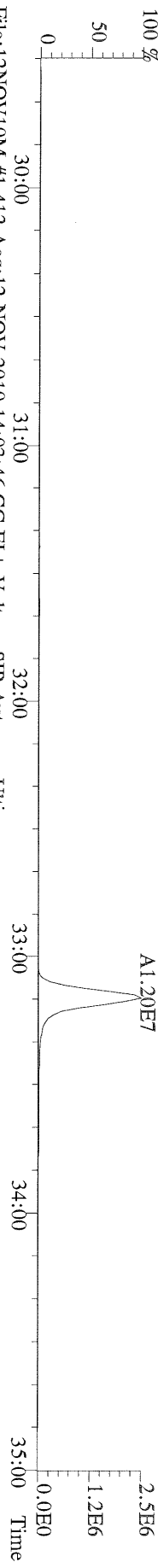
File:12NOV10M #1-412 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



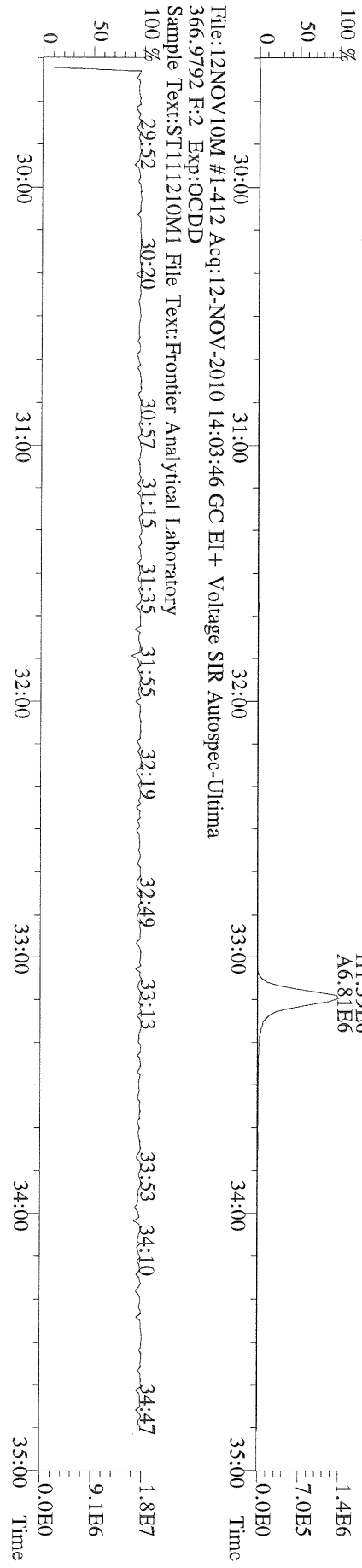
File:12NOV10M #1-412 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



File:12NOV10M #1-412 Acq:12-NOV-2010 14:03:46 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:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %

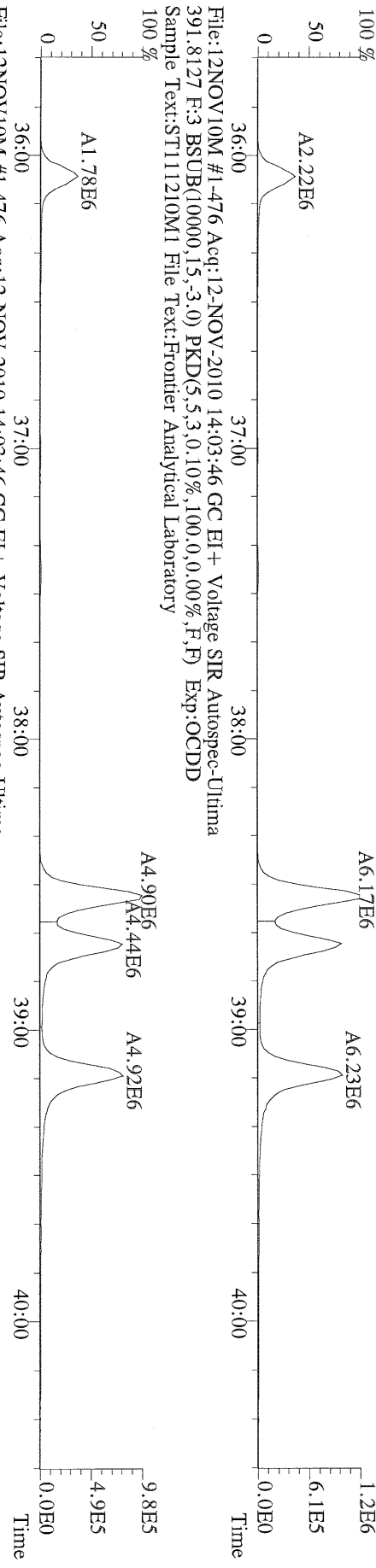


File:12NOV10M #1-412 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory

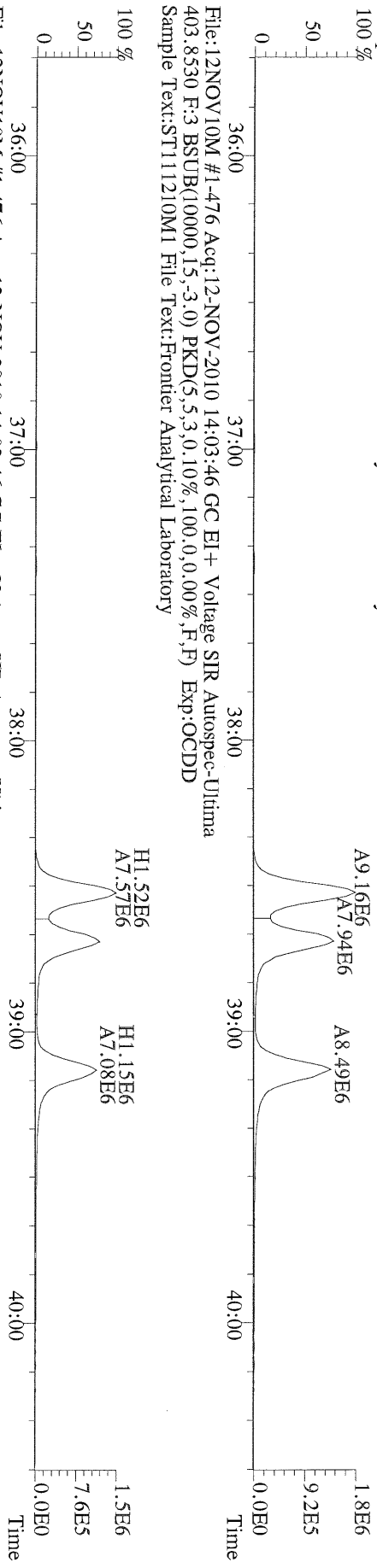


File:12NOV10M #1-412 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %

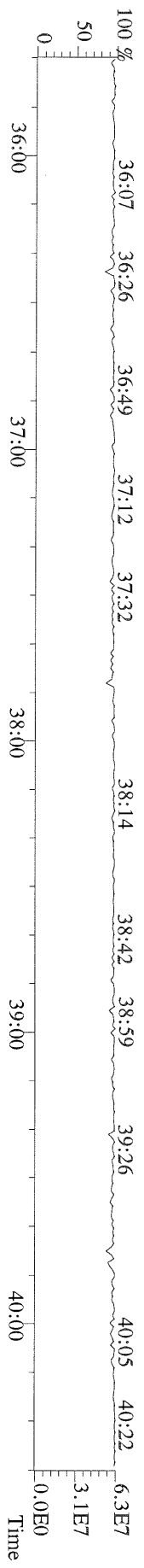
File:12NOV10M1-476 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



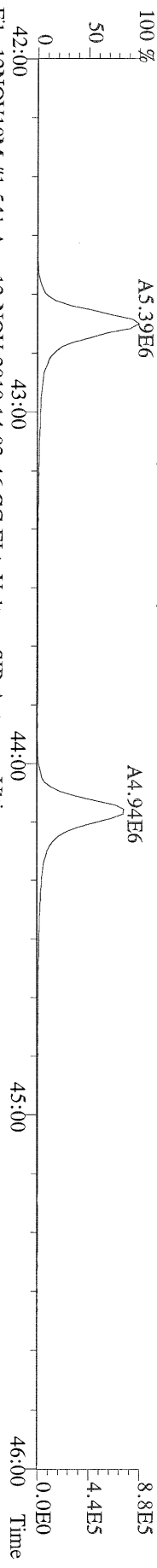
File:12NOV10M1-476 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



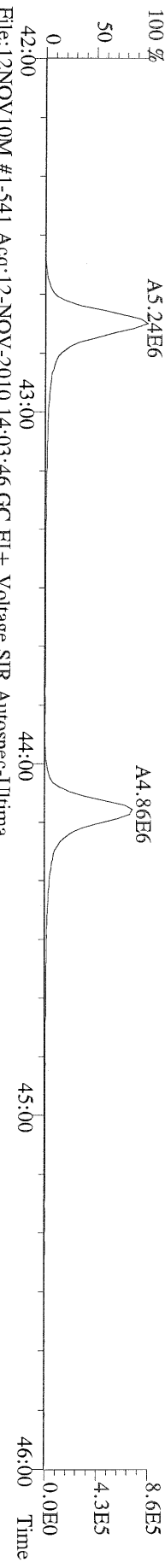
File:12NOV10M1-476 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
LOCK MASS CHECK F:3 Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



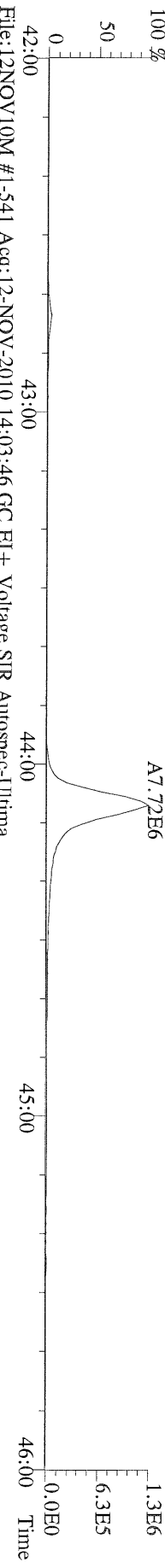
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



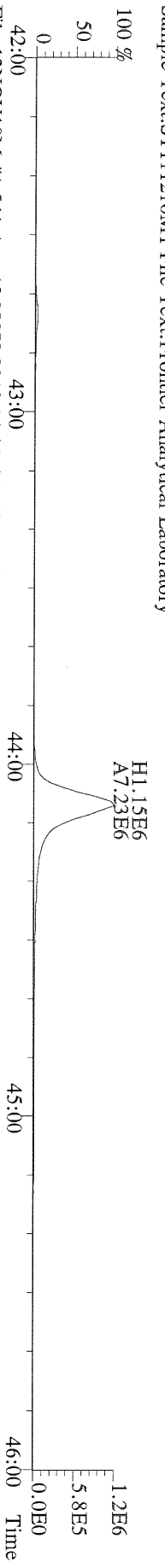
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



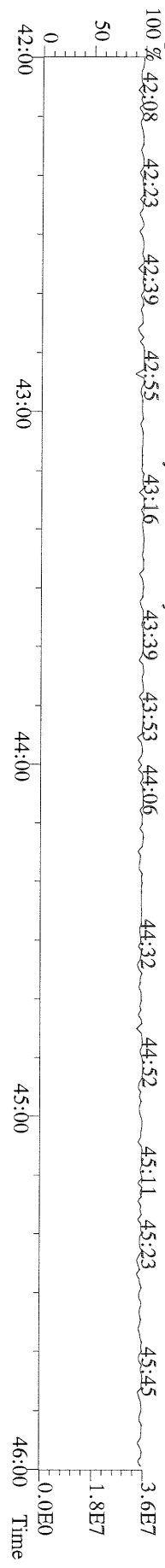
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



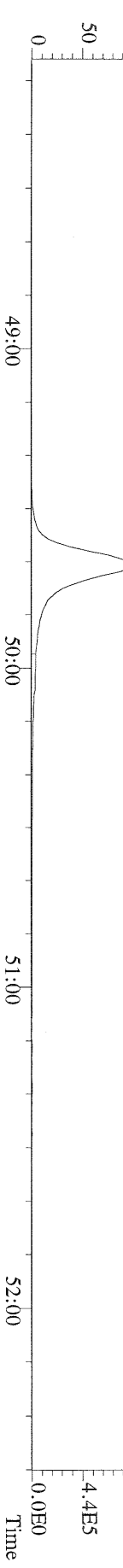
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



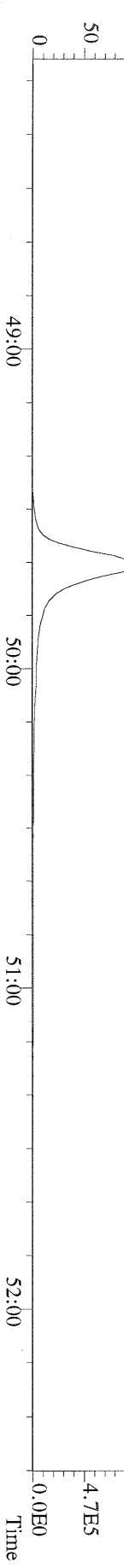
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



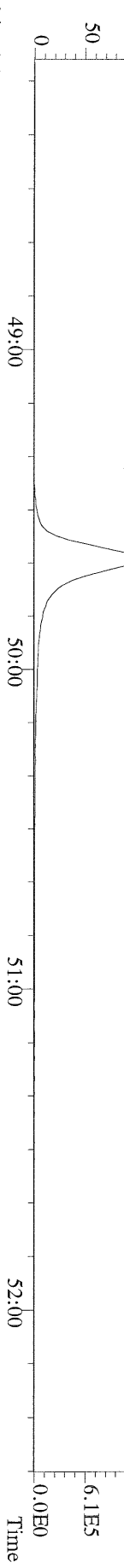
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



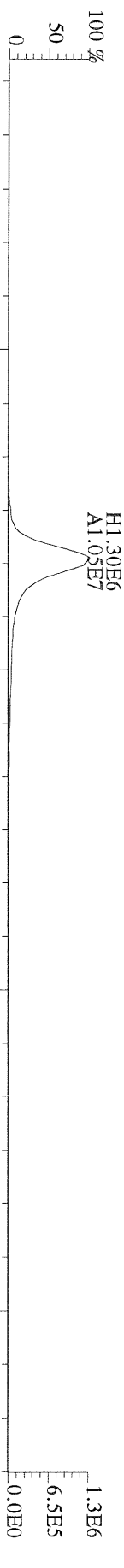
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



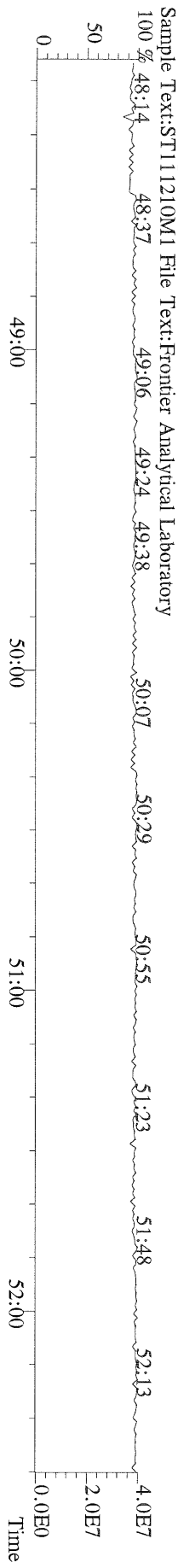
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory
100 %



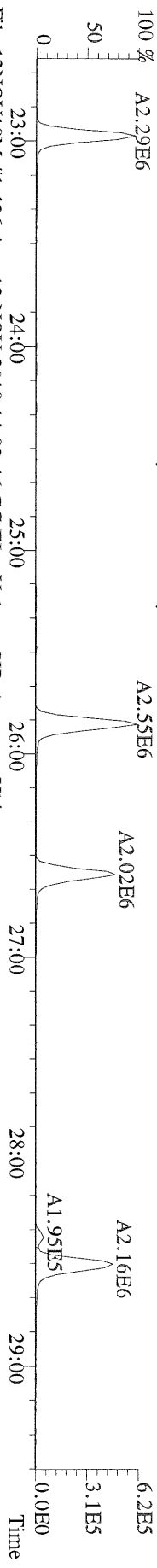
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



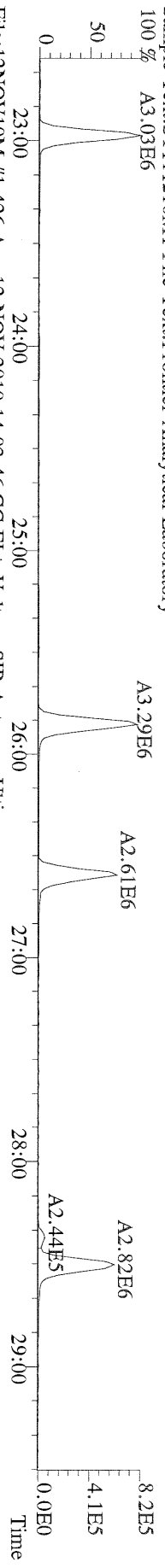
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



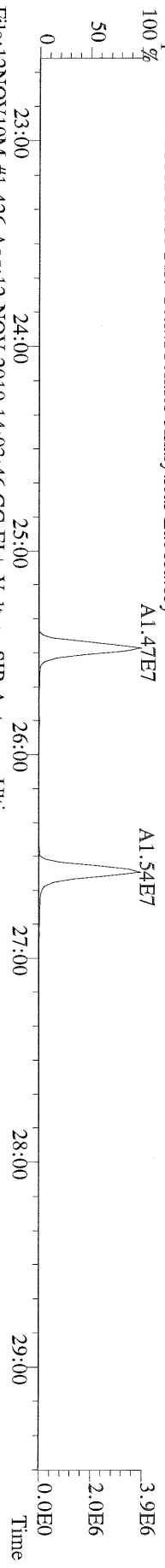
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



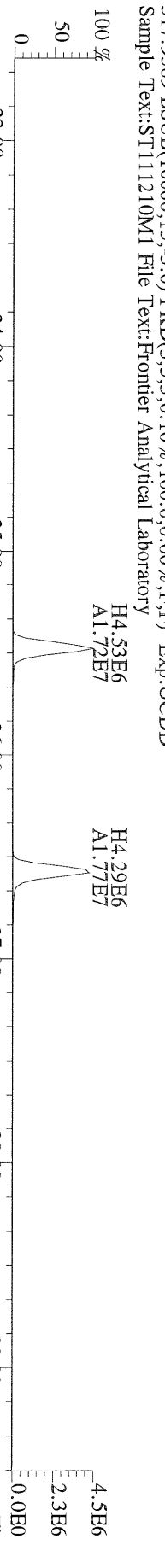
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



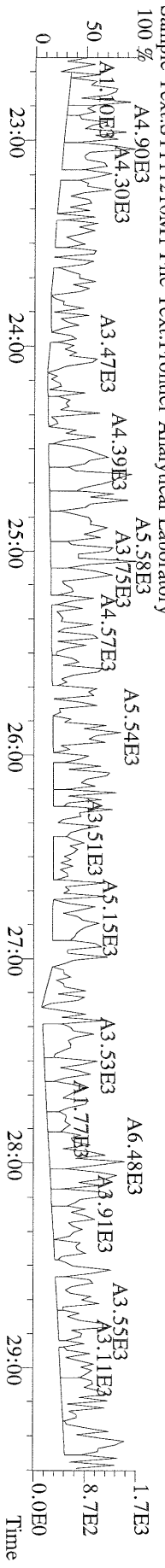
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



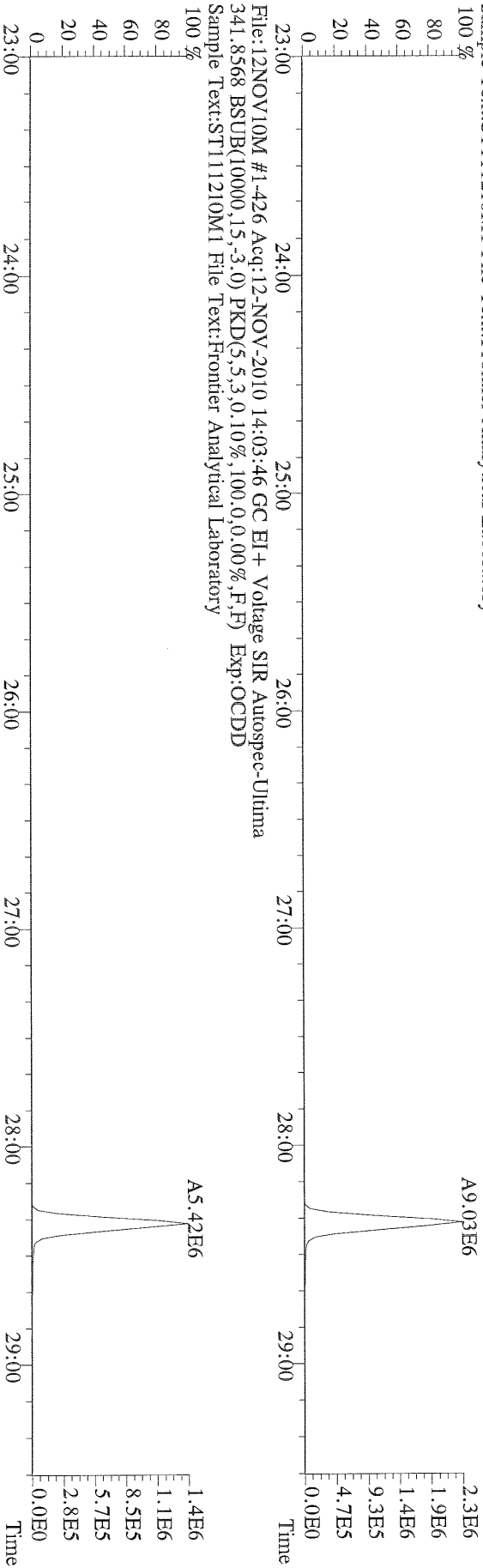
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



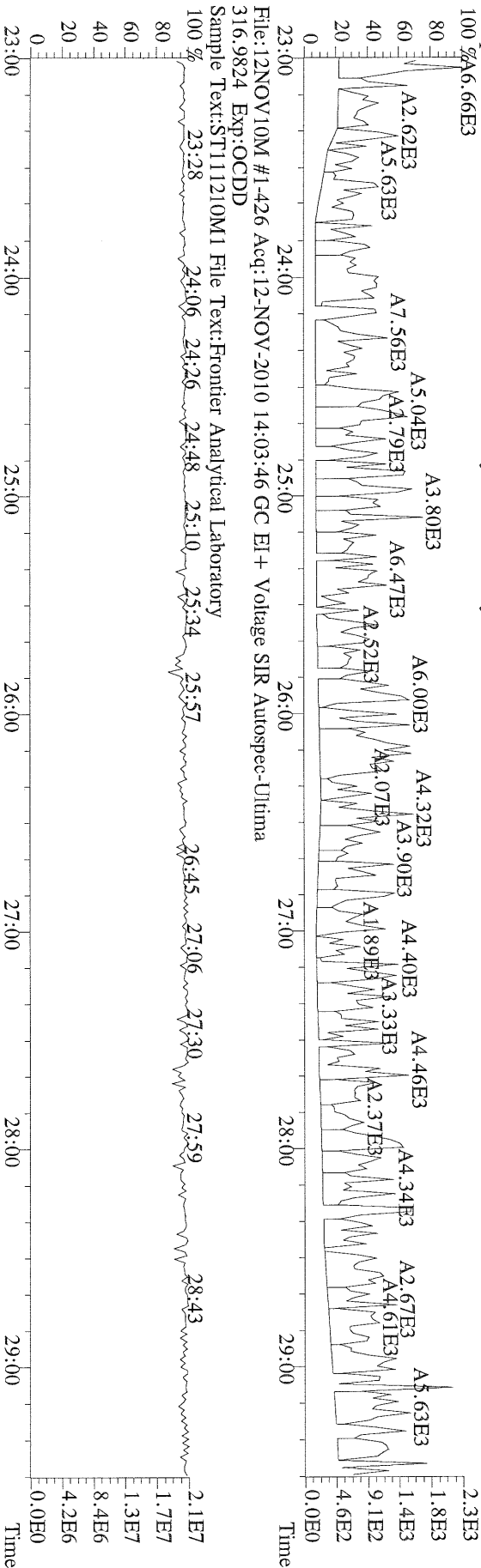
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



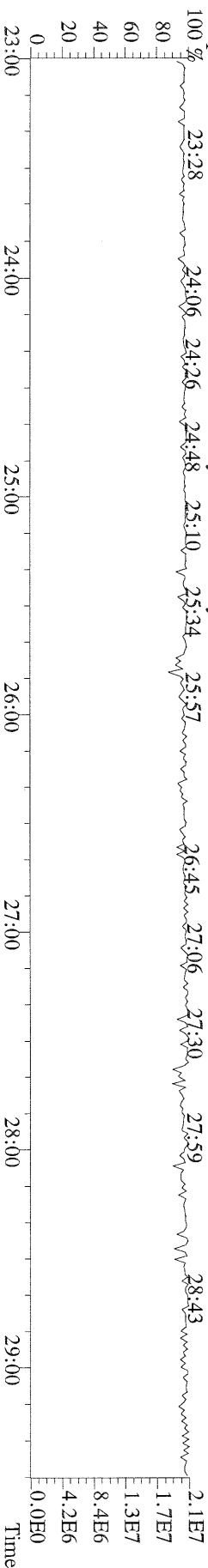
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
 Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



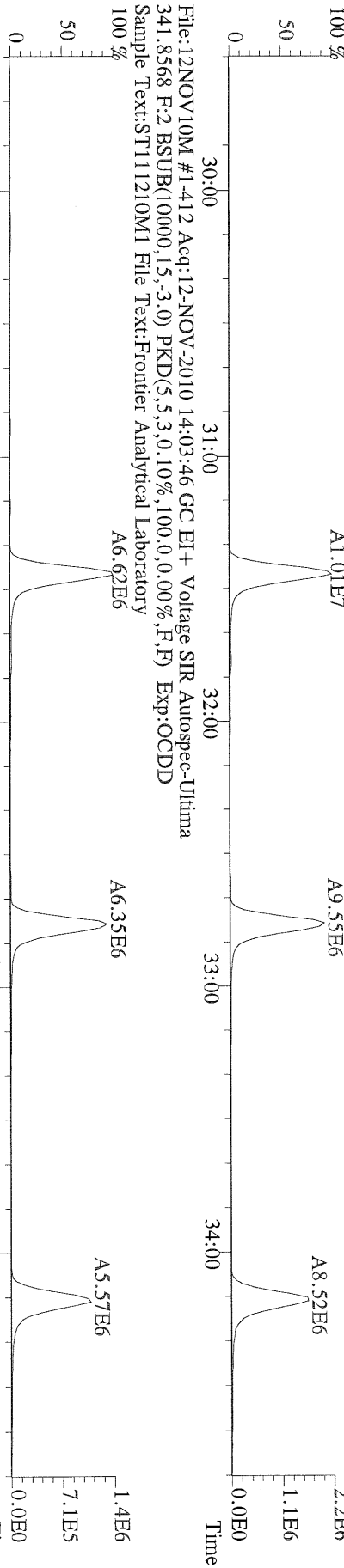
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
 Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



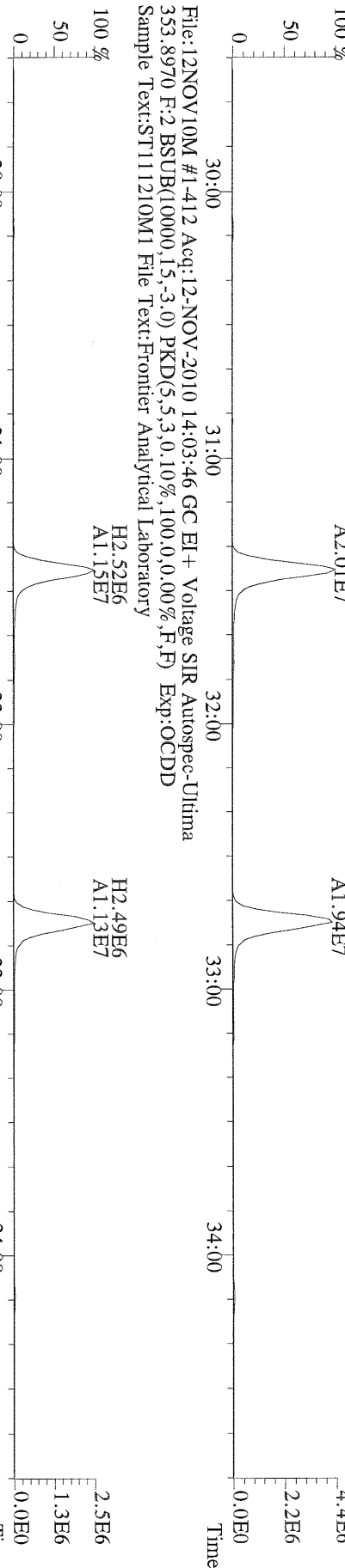
File: 12NOV10M #1-426 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 316.9824 Exp: OCDD
 Sample Text: ST111210M1 File Text: Frontier Analytical Laboratory



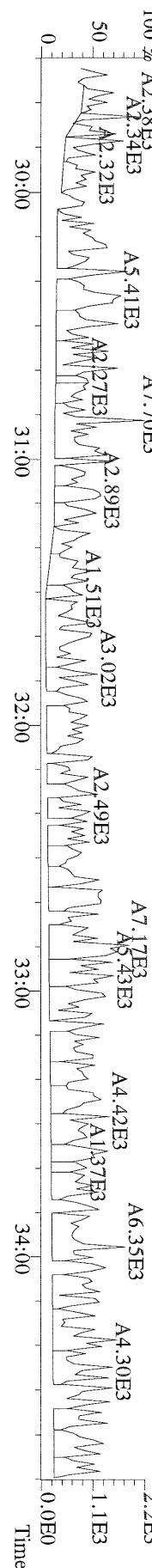
File:12NOV10M1 #1-412 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



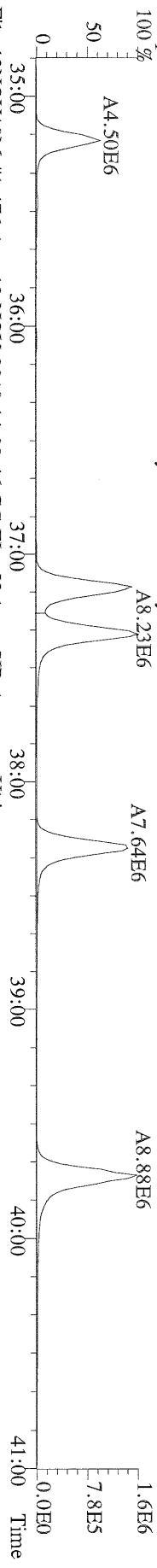
File:12NOV10M1 #1-412 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



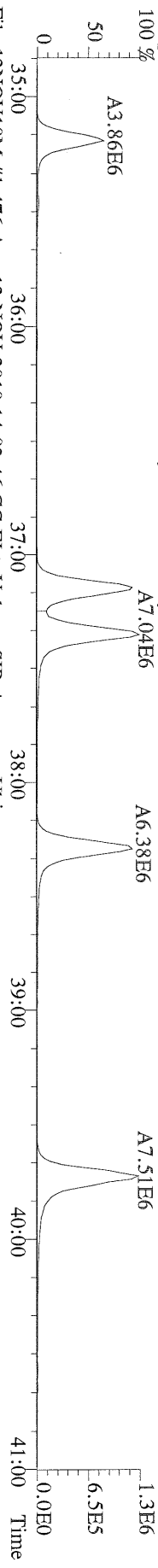
File:12NOV10M1 #1-412 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



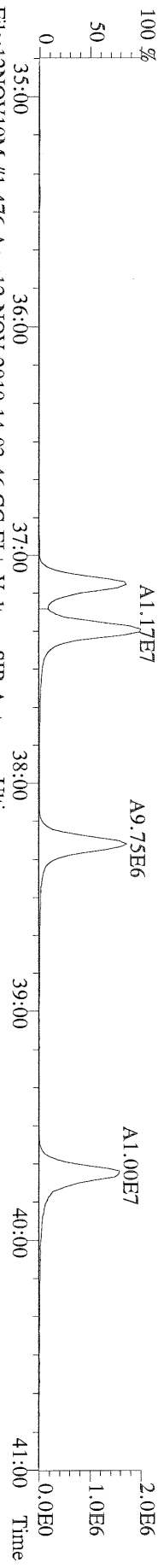
File: 12NOV10M #1-476 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



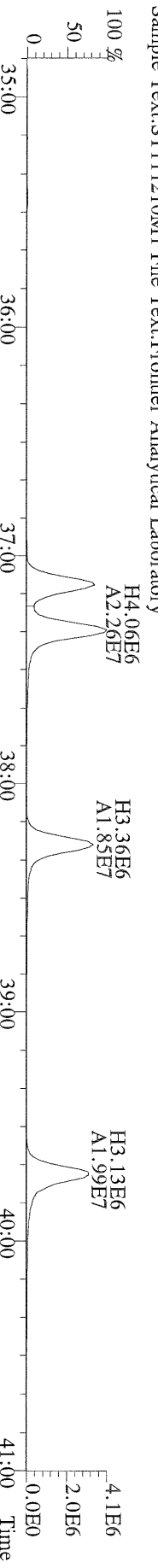
File: 12NOV10M #1-476 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 373.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



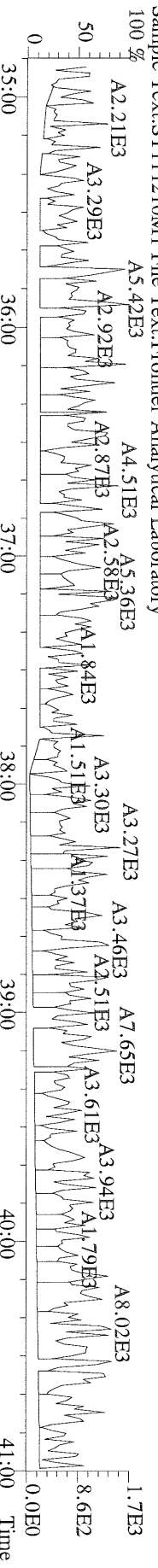
File: 12NOV10M #1-476 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 385.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



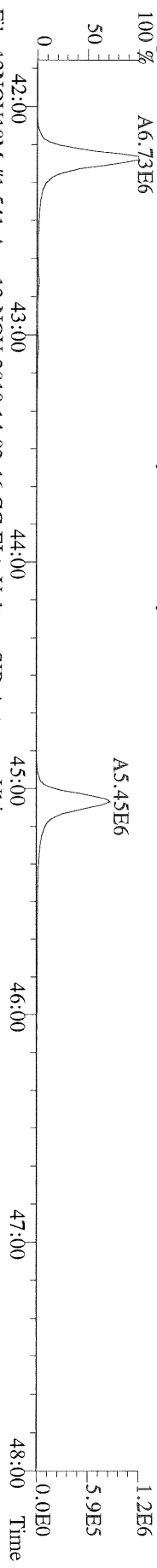
File: 12NOV10M #1-476 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



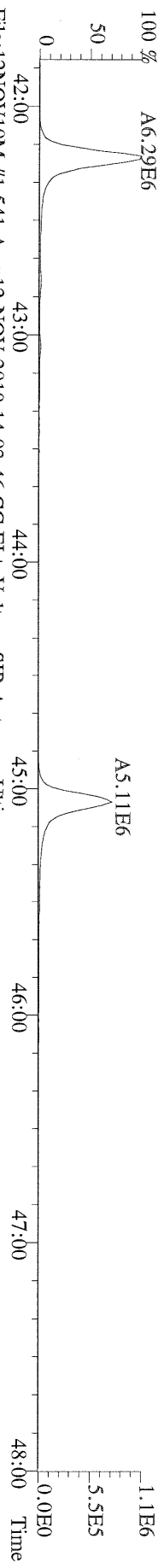
File: 12NOV10M #1-476 Acq: 12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



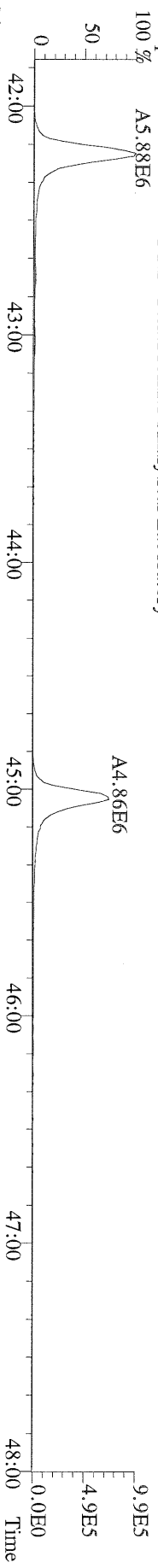
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Fronter Analytical Laboratory



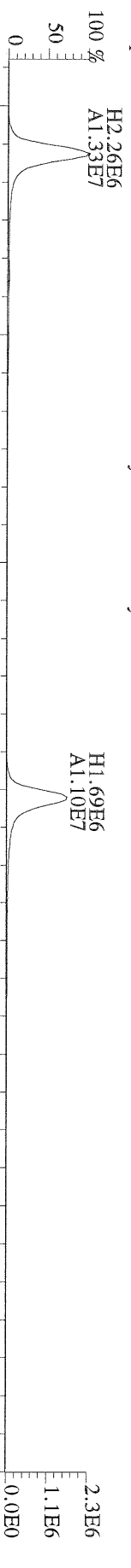
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Fronter Analytical Laboratory



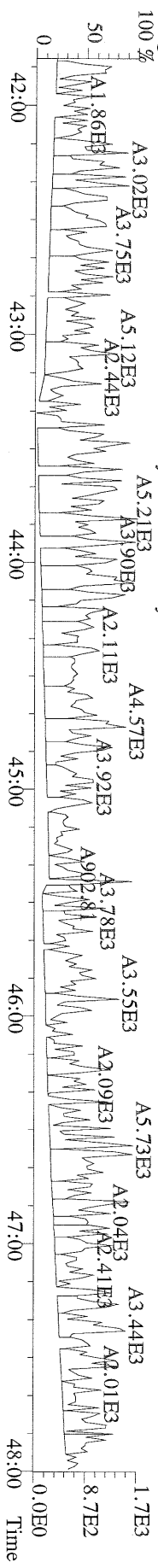
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Fronter Analytical Laboratory



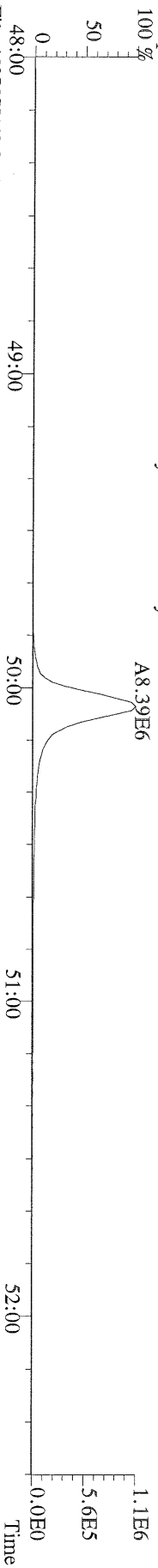
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Fronter Analytical Laboratory



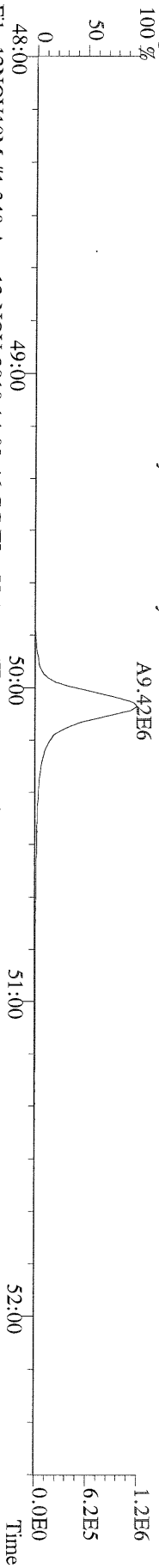
File:12NOV10M #1-541 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
 479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M1 File Text:Fronter Analytical Laboratory



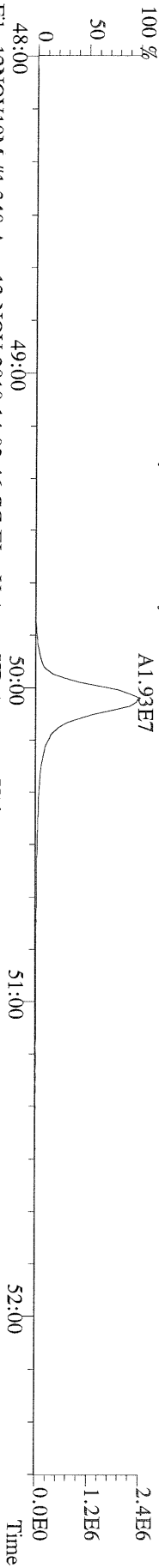
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



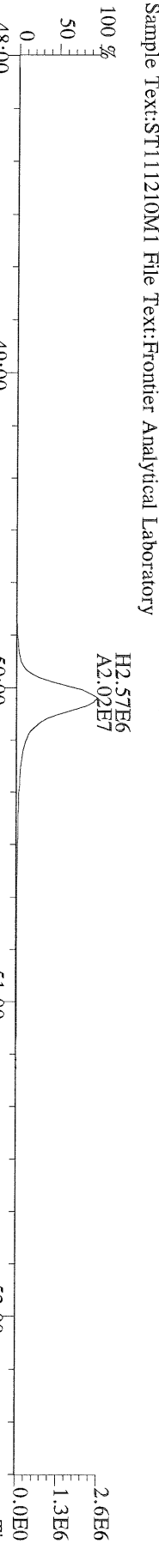
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory



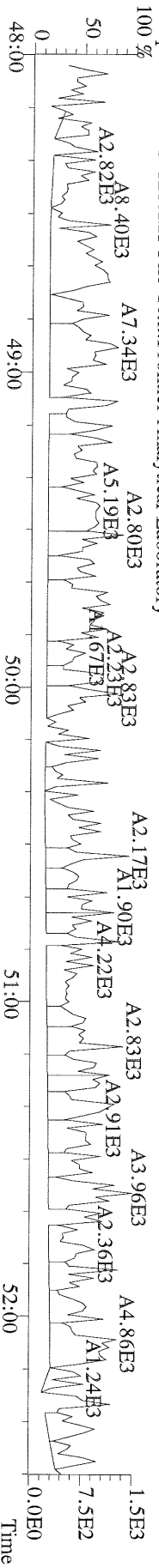
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory

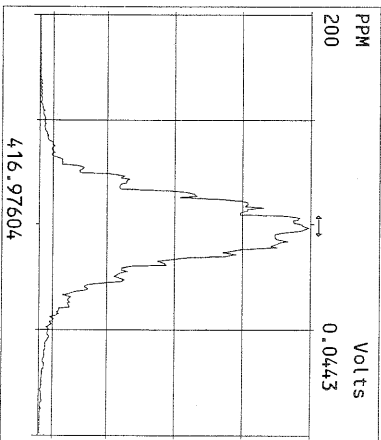
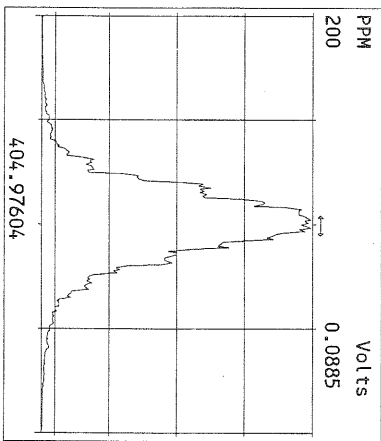
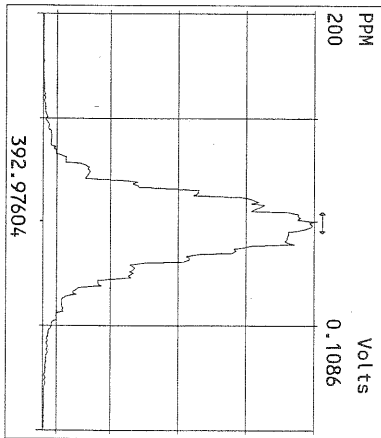
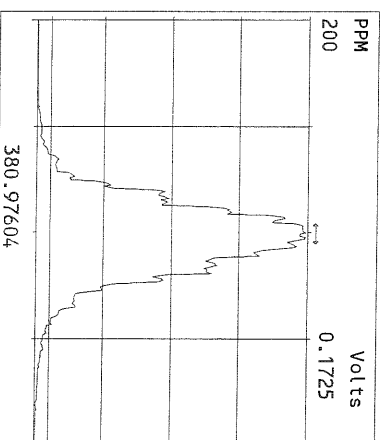
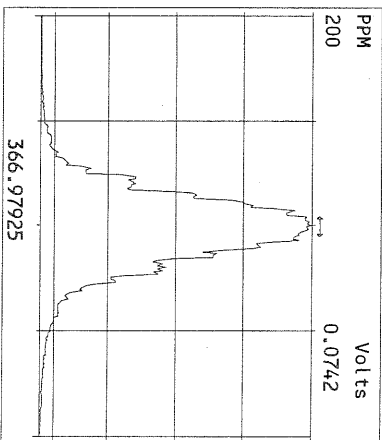
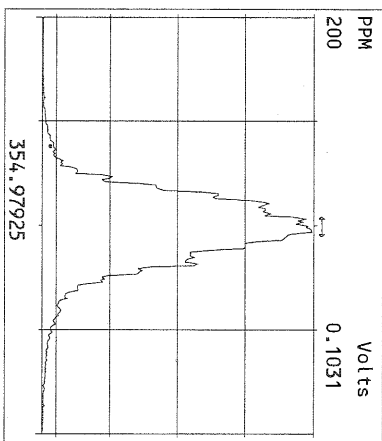
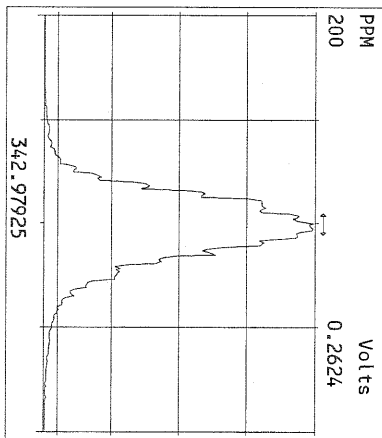
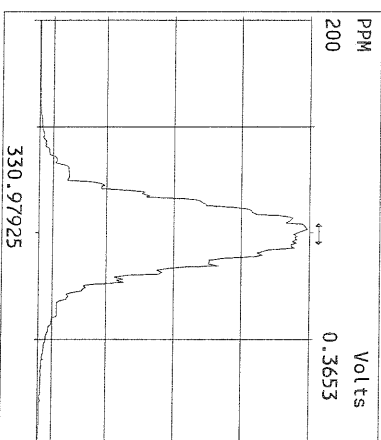
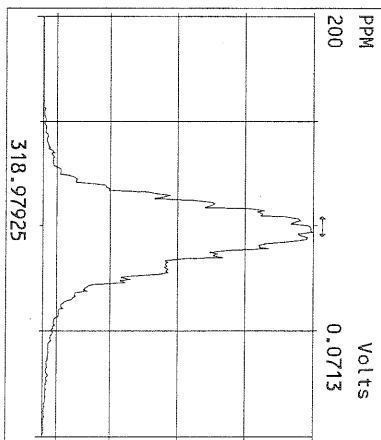
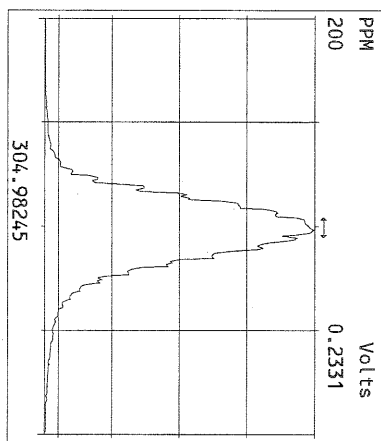
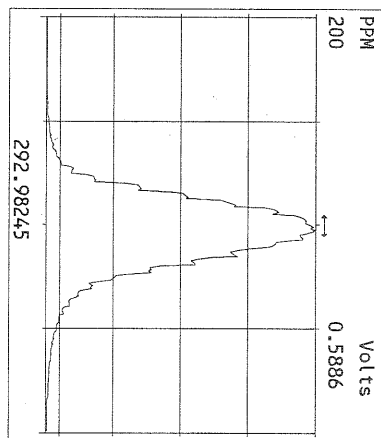


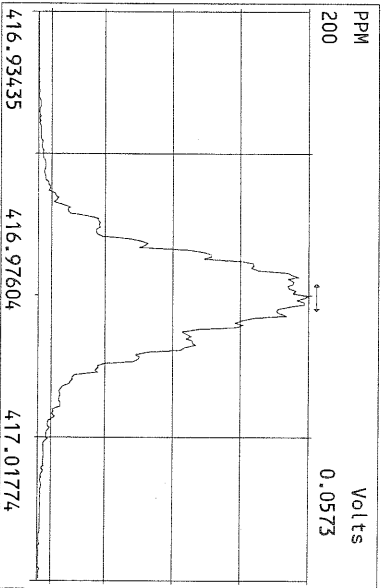
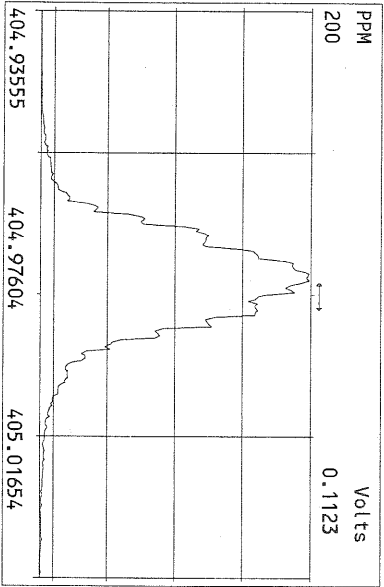
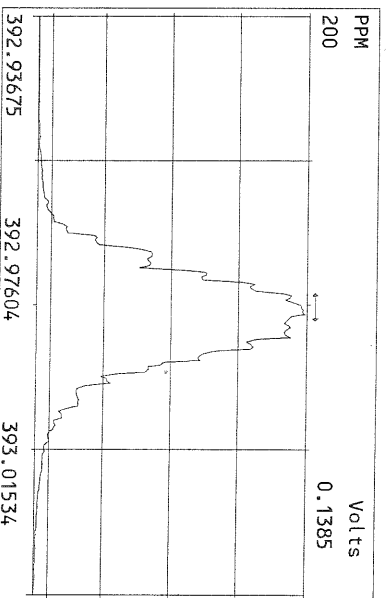
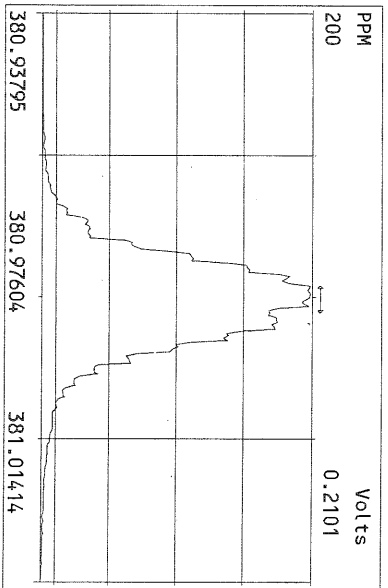
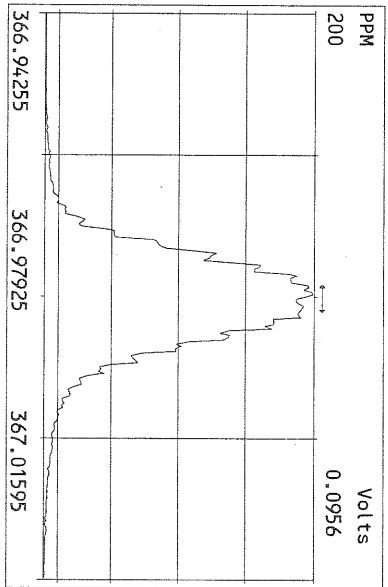
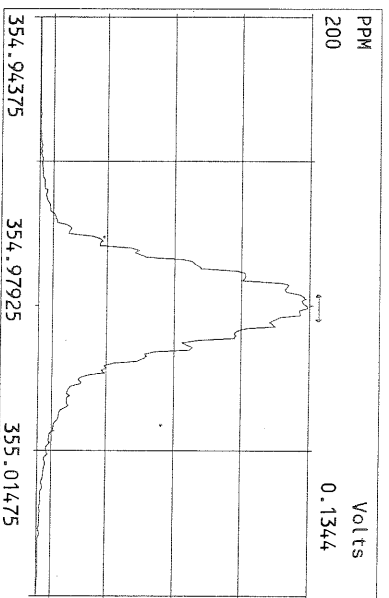
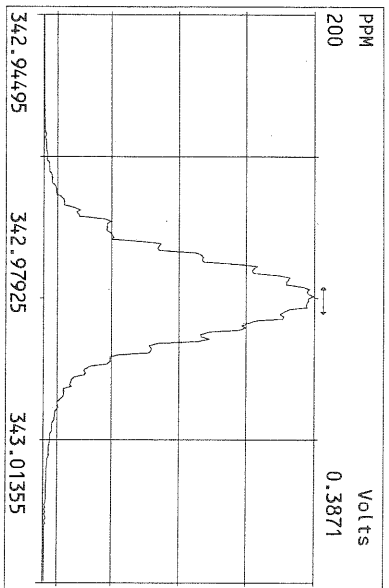
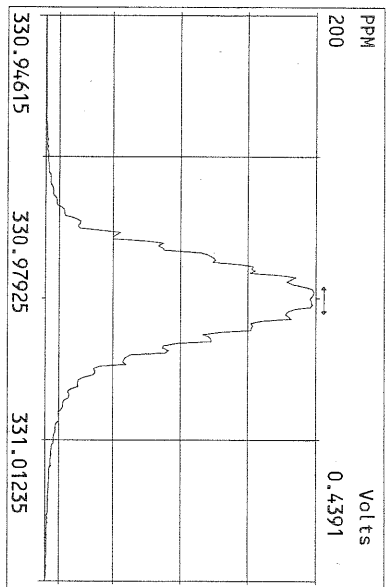
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory

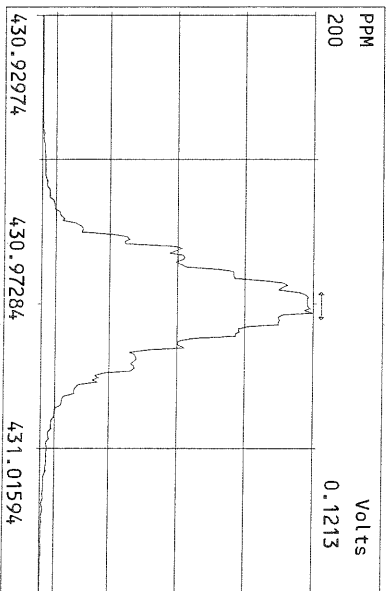
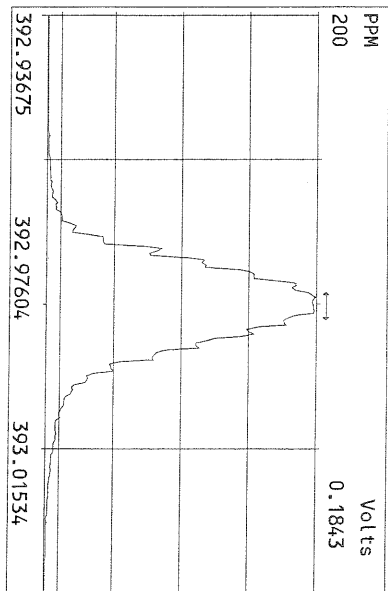
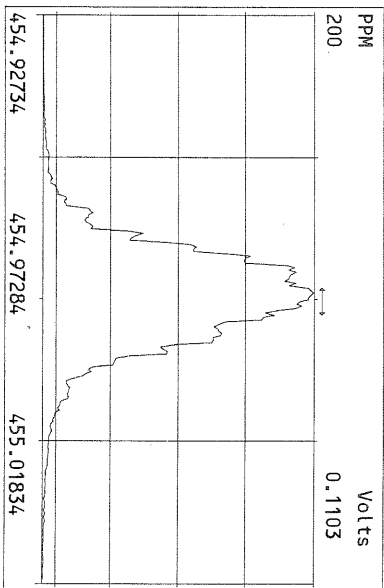
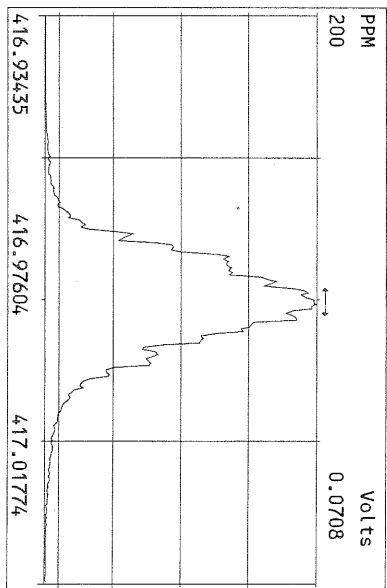
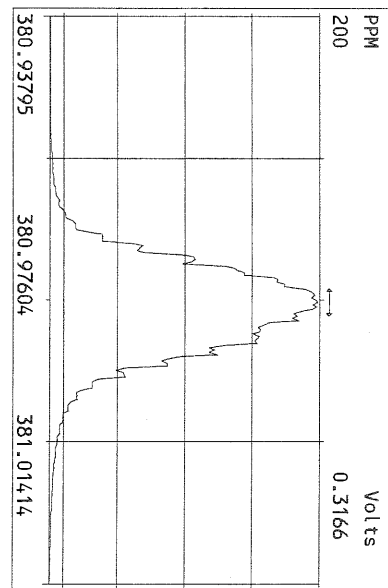
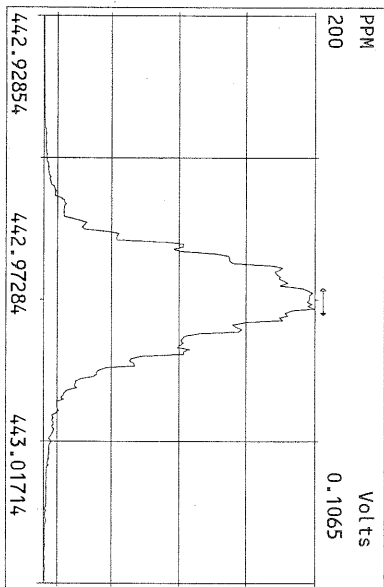
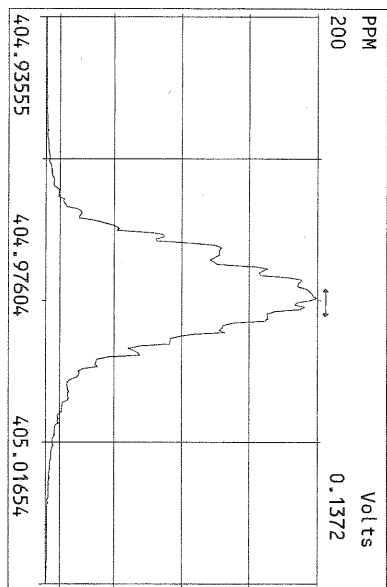
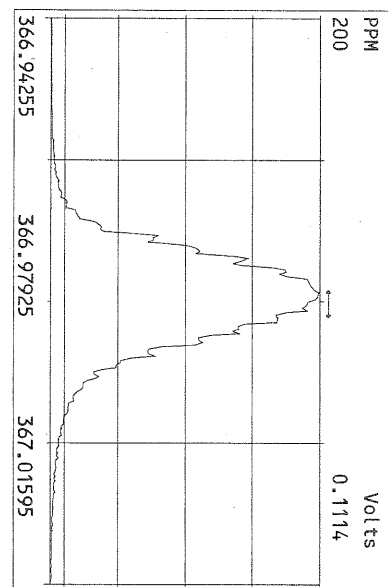


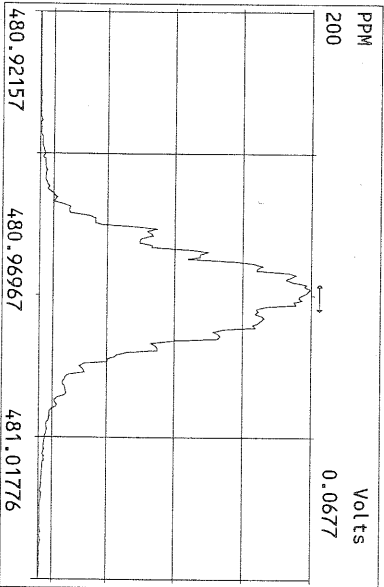
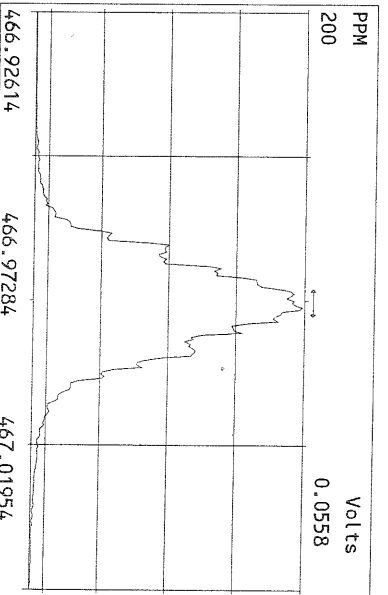
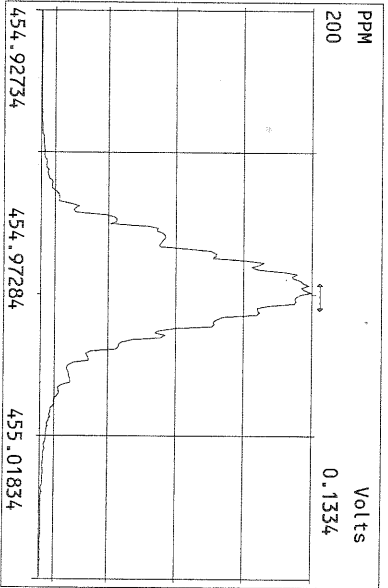
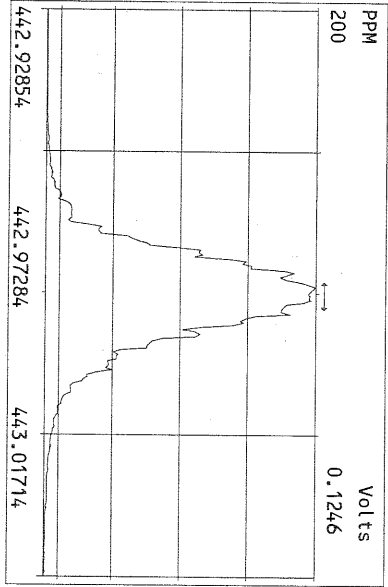
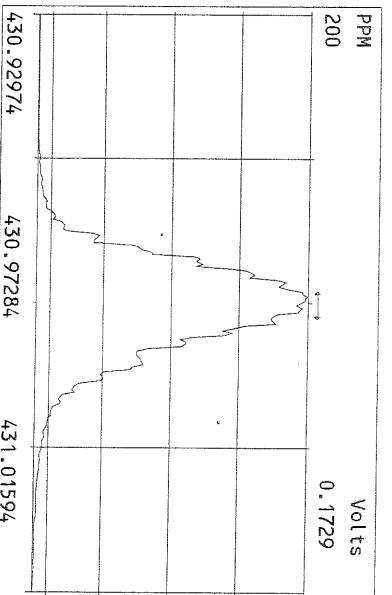
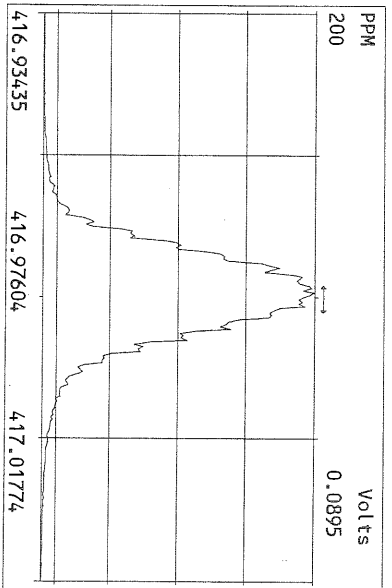
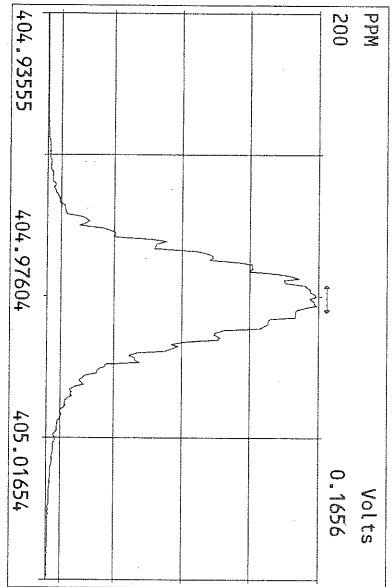
File:12NOV10M #1-348 Acq:12-NOV-2010 14:03:46 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M1 File Text:Frontier Analytical Laboratory

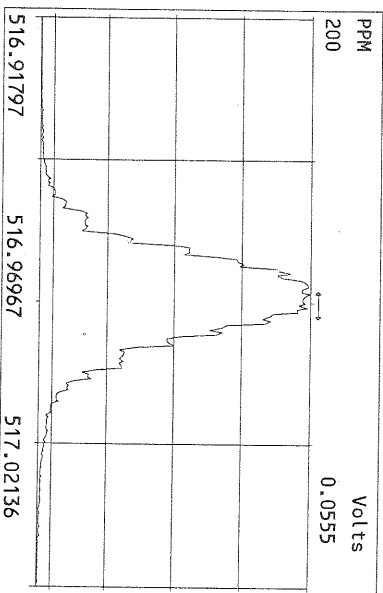
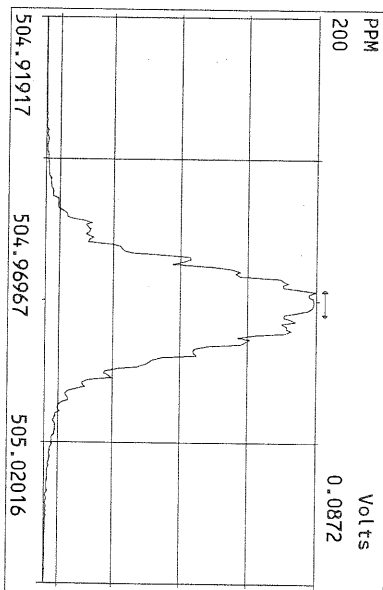
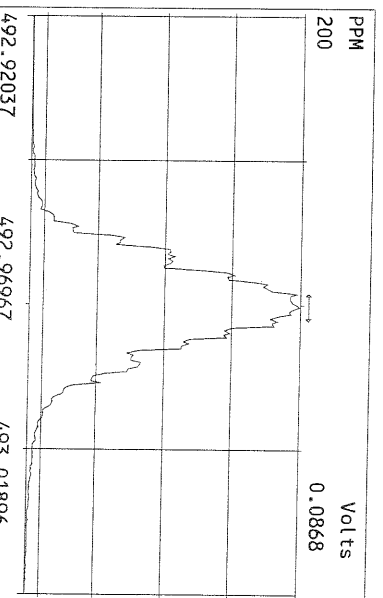
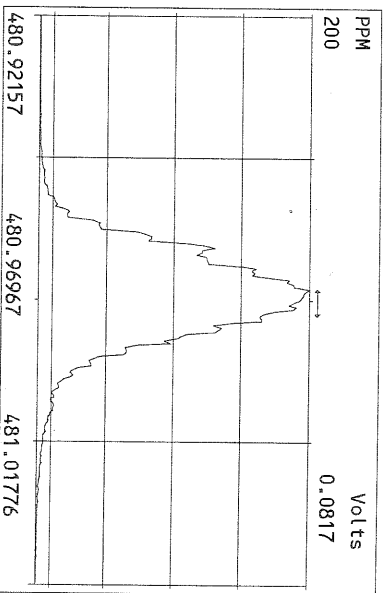
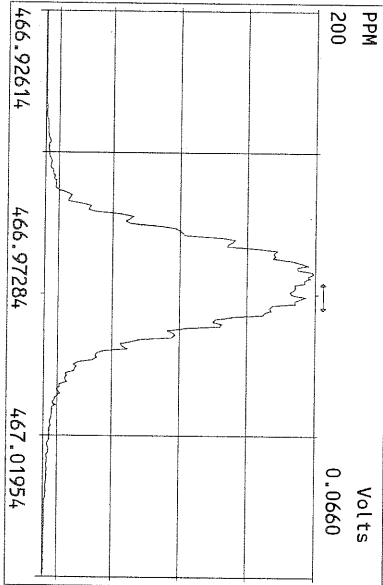
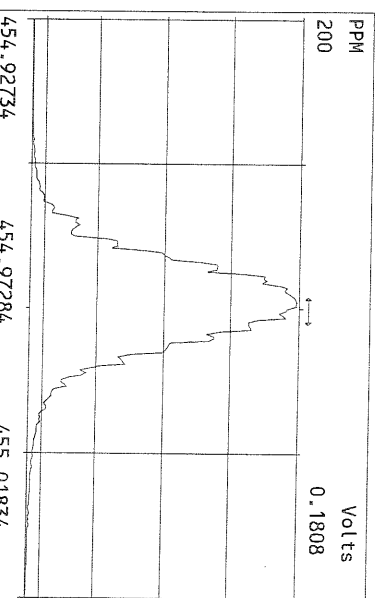
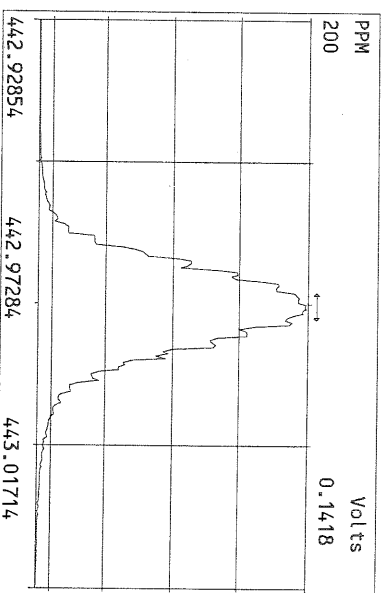
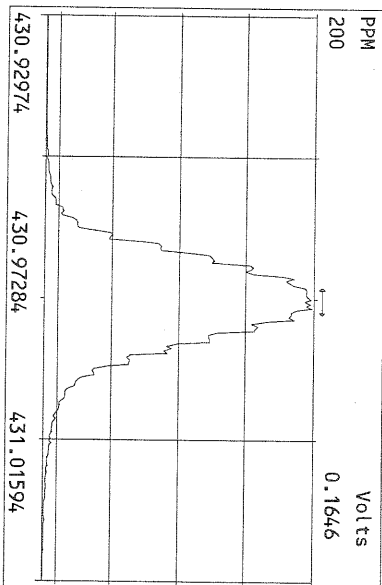












USEPA - ITD

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: 12NOV10M Sam:6

Analysis Date: 12-NOV-10 18:40:27

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	0.77	0.65-0.89	y	10.4	7.80 - 12.9 ✓
1,2,3,7,8-PeCDD	M+2/M+4	1.68	1.32-1.78	y	50.6	39.0 - 65.0 ✓
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	47.9	39.0 - 64.0 ✓
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	50.6	39.0 - 64.0 ✓
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	53.5	41.0 - 61.0 ✓
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	45.9	43.0 - 58.0 ✓
OCDD	M+2/M+4	0.92	0.76-1.02	y	106	79.0 - 126 ✓
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.32	8.40 - 12.0 ✓
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	y	56.4	41.0 - 60.0 ✓
2,3,4,7,8-PeCDF	M+2/M+4	1.51	1.32-1.78	y	54.2	41.0 - 60.0 ✓
1,2,3,4,7,8-HxCDF	M+2/M+4	1.19	1.05-1.43	y	54.1	45.0 - 56.0 ✓
1,2,3,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	54.0	44.0 - 57.0 ✓
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	54.3	44.0 - 57.0 ✓
1,2,3,7,8,9-HxCDF	M+2/M+4	1.20	1.05-1.43	y	54.9	45.0 - 56.0 ✓
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.07	0.88-1.20	y	47.5	45.0 - 55.0 ✓
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.06	0.88-1.20	y	47.6	43.0 - 58.0 ✓
OCDF	M+2/M+4	0.87	0.76-1.02	y	113	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: JDate: 11/15/10

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: 12NOV10M Sam:6 Analysis Date: 12-NOV-10 18:40:27

LABELLED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	100	82.0 - 121 ✓
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.74	1.32-1.78	y	116	62.0 - 160 ✓
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	y	101	85.0 - 117 ✓
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.19	1.05-1.43	y	89.6	85.0 - 118 ✓
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	108	72.0 - 138 ✓
13C-OCDD	M+2/M+4	0.87	0.76-1.02	y	227	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	1.75	1.32-1.78	y	115	76.0 - 130 ✓
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.73	1.32-1.78	y	118	77.0 - 130 ✓
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	93.3	76.0 - 131 ✓
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	89.3	70.0 - 143 ✓
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	90.6	73.0 - 137 ✓
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	97.4	74.0 - 135 ✓
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	115	78.0 - 129 ✓
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	129	77.0 - 129 ✓
13C-OCDF	M+2/M+4	0.96	0.76-1.02	y	237	96.0 - 415 ✓
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.78	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: 11/15/10

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: 12-NOV-10 18:40:27

CS3 or VER Data Filename: 12NOV10M

Sam:6

NATIVE ANALYTES	RETENTION TIME		RRT	RRT
	REFERENCE	RRT	QC LIMITS (1)	
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002 ✓	
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	1.000	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		1.240	1.000-1.567 ✓	
13C-1,2,3,7,8-PeCDF		1.175	0.923-1.203 ✓	
13C-2,3,4,7,8-PeCDF		1.225	0.923-1.303 ✓	

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

Analyst: J

Date: 11/15/10

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: 12-NOV-10 18:40:27

CS3 or VER Data Filename: 12NOV10M

Sam:6

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	1.000	0.997-1.005 ✓
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001 ✓
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001 ✓
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	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	1.001	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		0.989	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:

Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 105 WHO 1998 Tox: 130 WHO 2005 Tox: 118

Name	Resp	RA	RT	RRF	Conc	Qual	Fac Noise-1	Noise-2	DL	Rec	#Hom
2,3,7,8-TCDD	2.18e+06	0.77 y	27:21	1.11	10.4		2.50	-	-	*	
1,2,3,7,8-PeCDD	1.00e+07	1.68 y	33:11	1.10	50.6		2.50	-	-	*	
1,2,3,4,7,8-HxCDD	1.04e+07	1.25 y	38:32	1.37	47.9		2.50	-	-	*	
1,2,3,6,7,8-HxCDD	9.14e+06	1.26 y	38:42	1.37	50.6		2.50	-	-	*	
1,2,3,7,8,9-HxCDD	1.05e+07	1.27 y	39:09	1.36	53.5		2.50	-	-	*	
1,2,3,4,6,7,8-HpCDD	8.99e+06	1.06 y	44:08	1.45	45.9		2.50	-	-	*	
OCDD	1.36e+07	0.92 y	49:41	1.43	106		2.50	-	-	*	
2,3,7,8-TCDF	4.39e+06	0.77 y	26:36	1.50	9.32		2.50	-	-	*	
1,2,3,7,8-PeCDF	1.58e+07	1.53 y	31:27	0.94	56.4		2.50	-	-	*	
2,3,4,7,8-PeCDF	1.50e+07	1.51 y	32:46	0.94	54.2		2.50	-	-	*	
1,2,3,4,7,8-HxCDF	1.26e+07	1.19 y	37:09	0.93	54.1		2.50	-	-	*	
1,2,3,6,7,8-HxCDF	1.46e+07	1.20 y	37:20	0.82	54.0		2.50	-	-	*	
2,3,4,6,7,8-HxCDF	1.32e+07	1.20 y	38:17	0.92	54.3		2.50	-	-	*	
1,2,3,7,8,9-HxCDF	1.57e+07	1.20 y	39:43	1.00	54.9		2.50	-	-	*	
1,2,3,4,6,7,8-HpCDF	1.22e+07	1.07 y	42:14	1.39	47.5		2.50	-	-	*	
1,2,3,4,7,8,9-HpCDF	9.75e+06	1.06 y	45:04	1.36	47.6		2.50	-	-	*	
OCDF	1.66e+07	0.87 y	50:03	0.79	113		2.50	-	-	*	
13C-2,3,7,8-TCDD	1.88e+07	0.80 y	27:19	1.02	100					100	
13C-1,2,3,7,8-PeCDD	1.79e+07	1.74 y	33:10	0.84	116					116	
13C-1,2,3,4,7,8-HxCDD	1.58e+07	1.20 y	38:31	1.07	101					101	
13C-1,2,3,6,7,8-HxCDD	1.32e+07	1.19 y	38:42	1.01	89.6					89.6	
13C-1,2,3,4,6,7,8-HpCDD	1.35e+07	1.07 y	44:07	0.86	108					108	
13C-OCDD	1.80e+07	0.87 y	49:39	0.55	227					113	
13C-2,3,7,8-TCDF	3.13e+07	0.88 y	26:35	0.99	102					102	
13C-1,2,3,7,8-PeCDF	2.98e+07	1.75 y	31:25	0.84	115					115	
13C-2,3,4,7,8-PeCDF	2.95e+07	1.73 y	32:45	0.81	118					118	
13C-1,2,3,4,7,8-HxCDF	2.51e+07	0.51 y	37:08	1.85	93.3					93.3	
13C-1,2,3,6,7,8-HxCDF	3.29e+07	0.51 y	37:19	2.54	89.3					89.3	
13C-2,3,4,6,7,8-HxCDF	2.65e+07	0.53 y	38:16	2.01	90.6					90.6	
13C-1,2,3,7,8,9-HxCDF	2.87e+07	0.52 y	39:43	2.03	97.4					97.4	
13C-1,2,3,4,6,7,8-HpCDF	1.85e+07	0.44 y	42:12	1.11	115					115	
13C-1,2,3,4,7,8,9-HpCDF	1.51e+07	0.44 y	45:02	0.80	129					129	
13C-OCDF	3.73e+07	0.96 y	50:02	1.08	237					118	
37Cl-2,3,7,8-TCDD	1.23e+06		27:21	0.69	9.78					97.8	
13C-1,2,3,4-TCDD	1.84e+07	0.80 y	26:45	-	40.8						
13C-1,2,3,4-TCDF	3.09e+07	0.87 y	25:29	-	42.7						
13C-1,2,3,7,8,9-HxCDD	1.45e+07	1.21 y	39:08	-	52.7						
Total Tetra-Dioxins	1.19e+07		22:47	1.11	56.8		2.50	-	-	*	33
Total Penta-Dioxins	2.12e+07		30:12	1.10	107		2.50	-	-	*	14
Total Hexa-Dioxins	3.42e+07		36:04	1.37	173		2.50	-	-	*	15
Total Hepta-Dioxins	1.90e+07		42:44	1.45	96.9		2.50	-	-	*	7
Total Tetra-Furans	2.06e+07		22:46	1.50	43.8		2.50	-	-	*	31
1st Fn. Tot Penta-Furans	1.43e+07		28:21	0.94	51.2		2.50	-	-	*	PeCDF 5
Total Penta-Furans	4.54e+07		30:08	0.94	163		2.50	-	-	*	214 13
Total Hexa-Furans	6.45e+07		35:11	0.91	250		2.50	-	-	*	20
Total Hepta-Furans	2.23e+07		42:14	1.38	96.6		2.50	-	-	*	5

Analyst: J

Date: 11/15/10

Frontier Analytical Laboratory - Acquisition Log

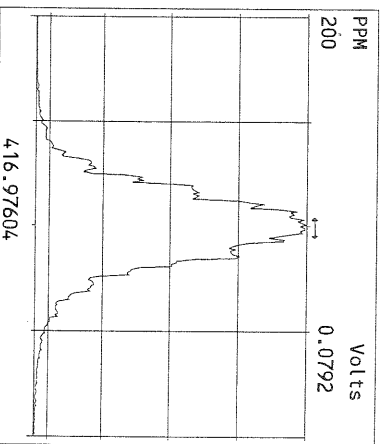
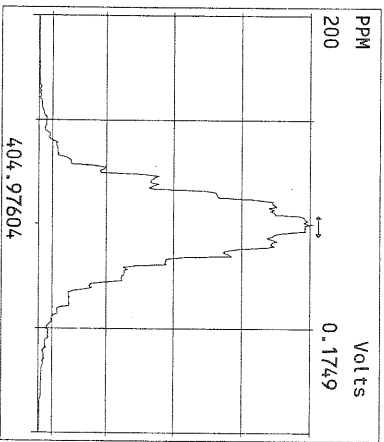
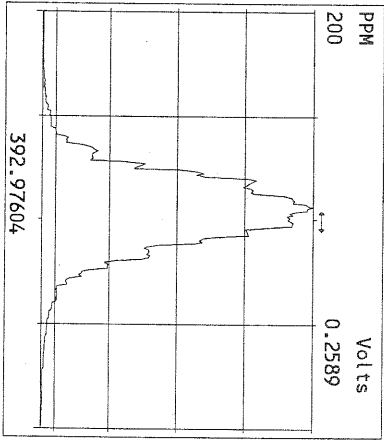
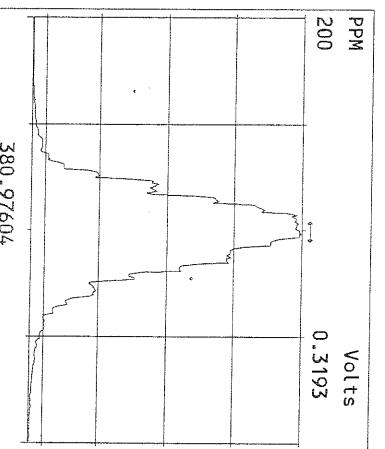
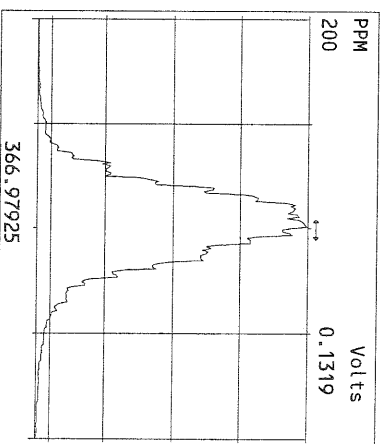
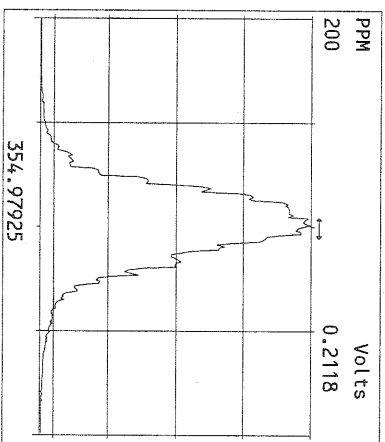
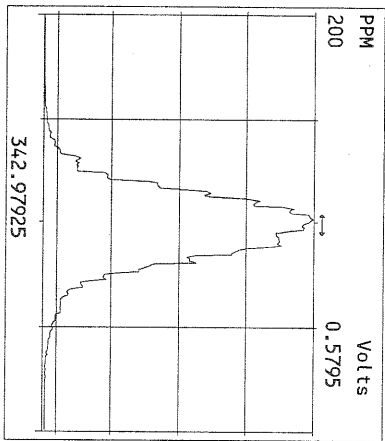
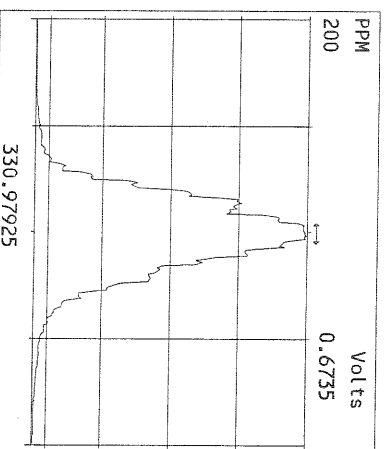
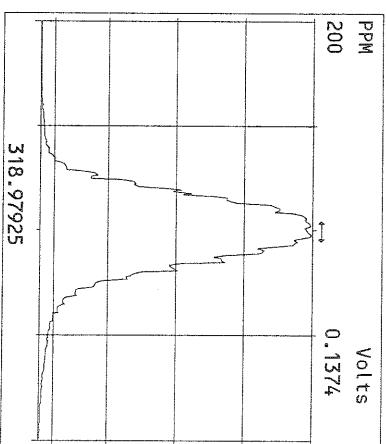
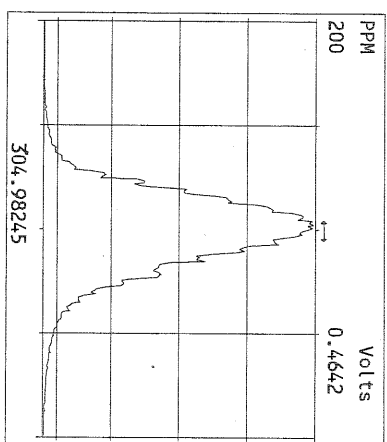
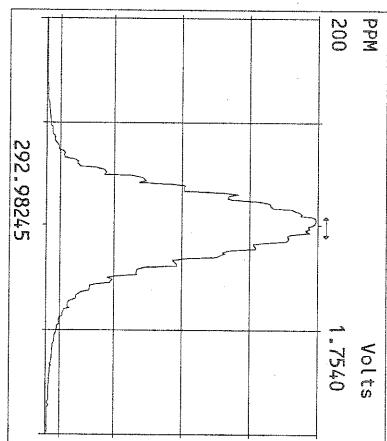
Run Name:12NOV10M Instrument: FAL3 GC: DB5 Experiment:OCDD

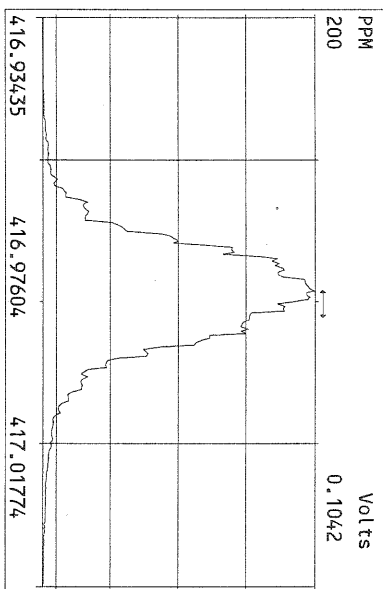
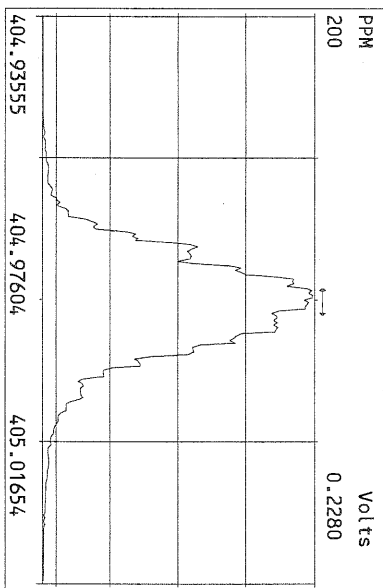
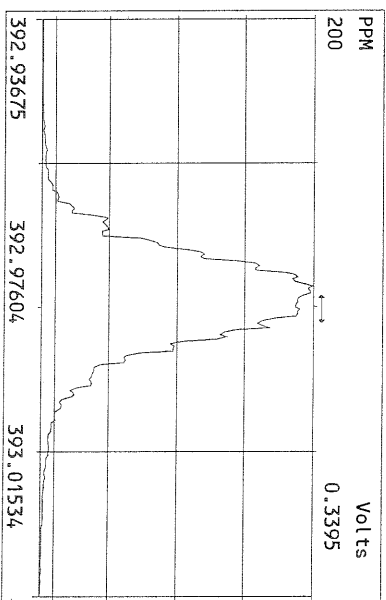
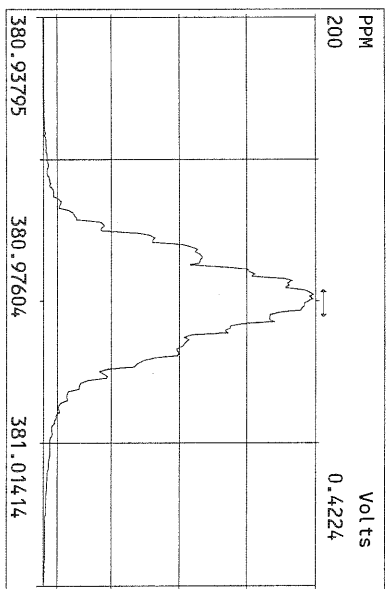
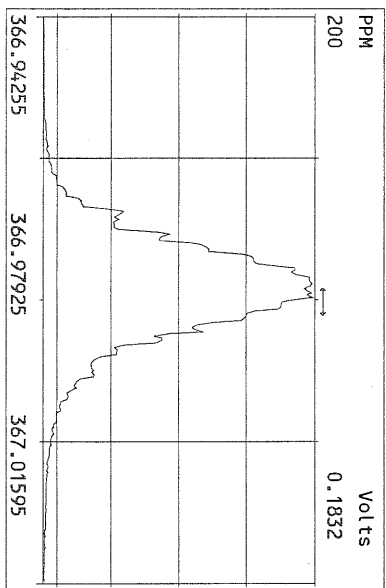
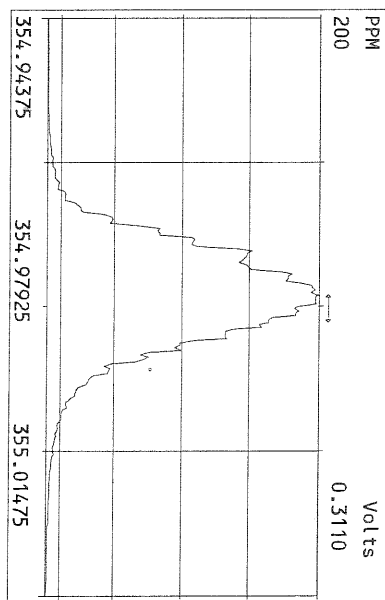
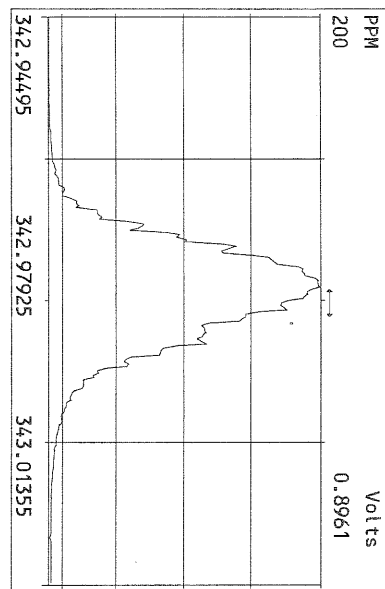
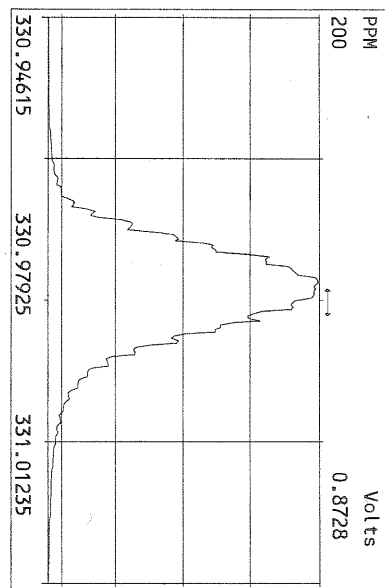
Data File S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
12NOV10M 1	ST111210M1	1613 CS3 100511J	12-NOV-10 14:03:46	ST111210M1	ST111210M2	BS
12NOV10M 2	2149-001-0001-OPR	OPR	12-NOV-10 14:59:04	ST111210M1	ST111210M2	BS
12NOV10M 3	2149-001-0001-MB	Method Blank	12-NOV-10 15:54:22	ST111210M1	ST111210M2	BS
12NOV10M 4	6418-001-0001-SA	PSB10-14-15-073010	12-NOV-10 16:49:45	ST111210M1	ST111210M2	BS
12NOV10M 5	SB111210Z1	Solvent Blank	12-NOV-10 17:45:08	ST111210M1	ST111210M2	BS
12NOV10M 6	ST111210M2	1613 CS3 100511J	12-NOV-10 18:40:27	ST111210M2	ST111210M3	BS
12NOV10M 7	2155-001-0001-OPR	OPR	12-NOV-10 19:35:46	ST111210M2	ST111210M3	BS
12NOV10M 8	2155-001-0001-MB	Method Blank	12-NOV-10 20:31:04	ST111210M2	ST111210M3	BS
12NOV10M 9	6415-001-0001-SA	IWTP - Effluent	12-NOV-10 21:26:23	ST111210M2	ST111210M3	BS
12NOV10M 10	6417-001-0001-SA	IN-4894	12-NOV-10 22:21:41	ST111210M2	ST111210M3	BS
12NOV10M 11	6417-002-0001-SA	IN-4895	12-NOV-10 23:16:56	ST111210M2	ST111210M3	BS
12NOV10M 12	6420-001-0001-SA	T001186-01	13-NOV-10 00:12:15	ST111210M2	ST111210M3	BS
12NOV10M 13	6421-001-0001-SA	0101075-01	13-NOV-10 01:07:38	ST111210M2	ST111210M3	BS
12NOV10M 14	6421-002-0001-SA	0101075-03	13-NOV-10 02:02:56	ST111210M2	ST111210M3	BS
12NOV10M 15	6424-001-0001-SA	DDS1-20101028	13-NOV-10 02:58:15	ST111210M2	ST111210M3	BS
12NOV10M 16	6424-001-0002-MS	DDS1-20101028	13-NOV-10 03:53:37	ST111210M2	ST111210M3	BS
12NOV10M 17	6424-001-0002-MSD	DDS1-20101028	13-NOV-10 04:48:51	ST111210M2	ST111210M3	BS
12NOV10M 18	SB111210Z2	Solvent Blank	13-NOV-10 05:44:10	ST111210M2	ST111210M3	BS
12NOV10M 19	ST111210M3	1613 CS3 100511J	13-NOV-10 06:39:36	ST111210M2	ST111210M3	BS

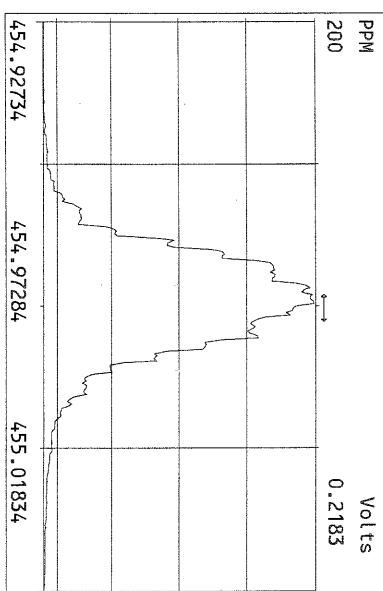
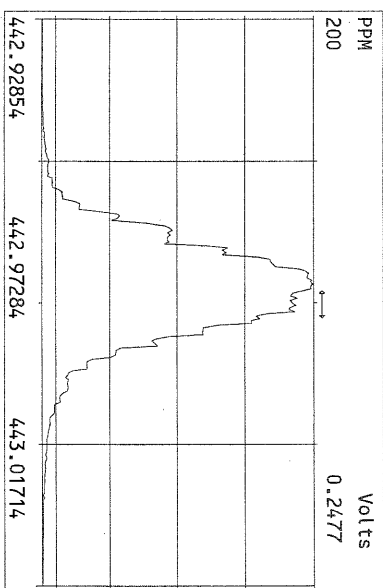
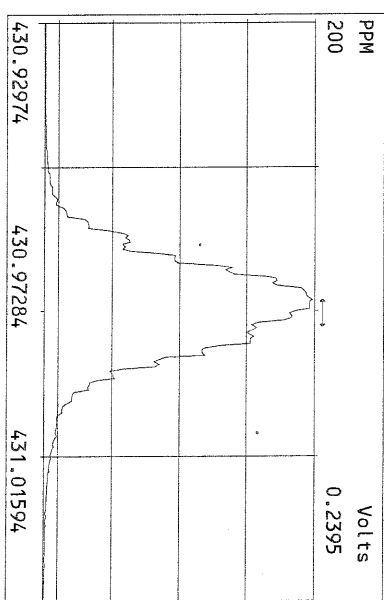
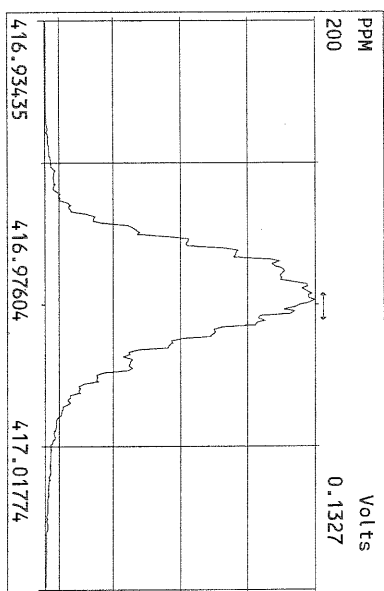
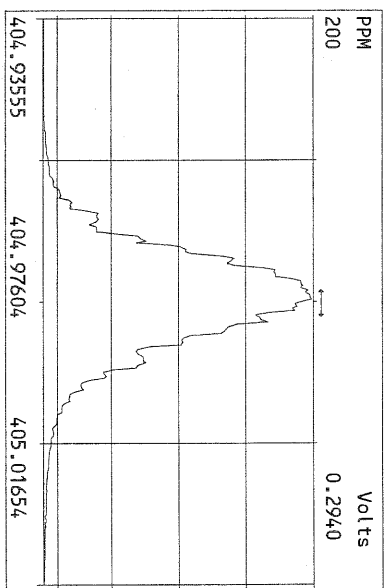
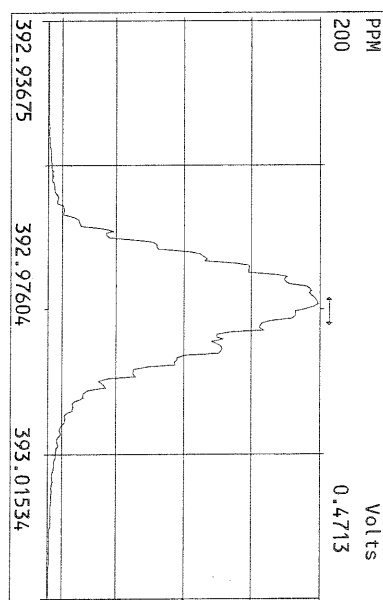
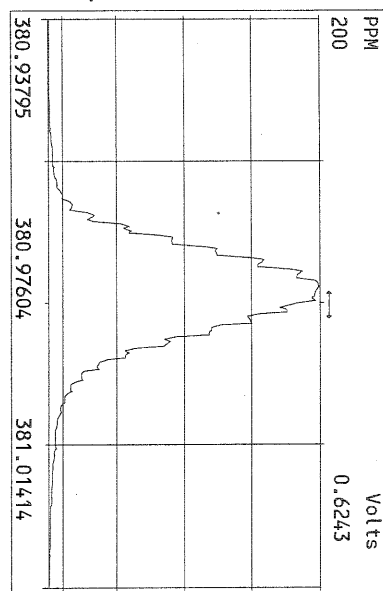
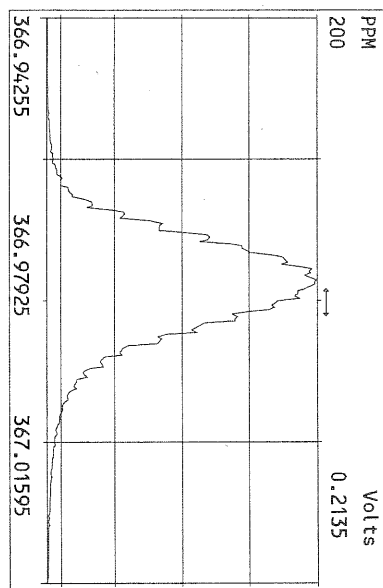
6/11/10

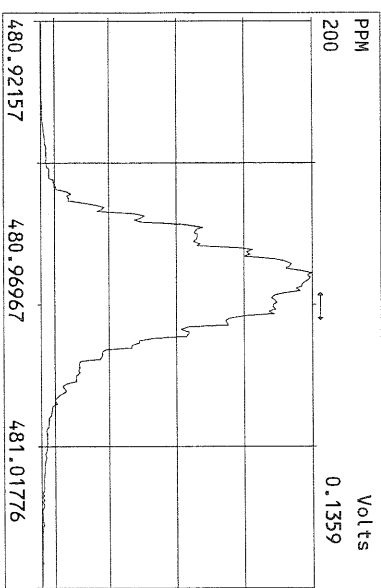
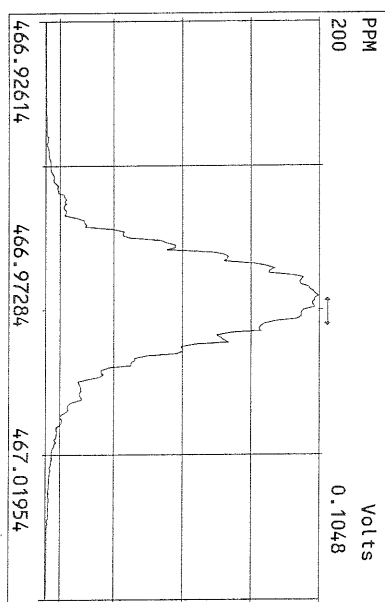
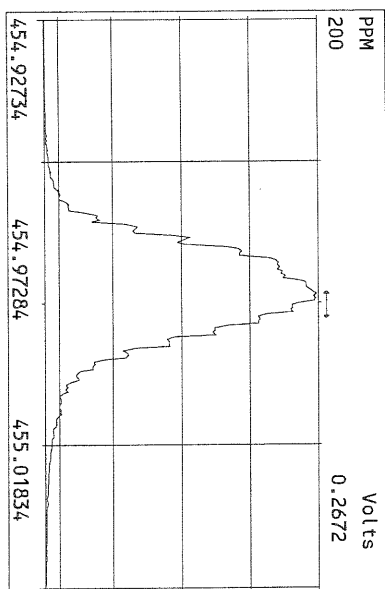
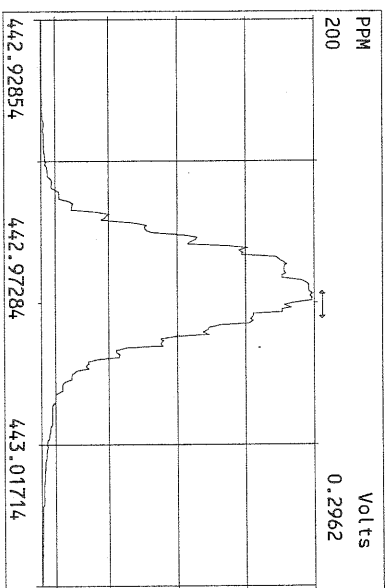
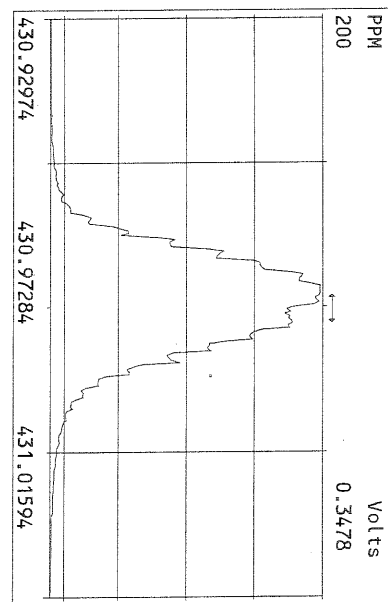
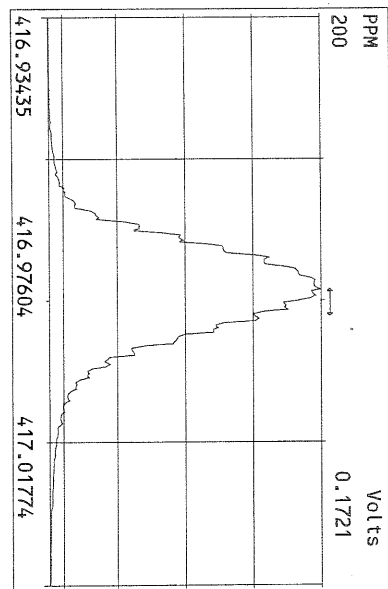
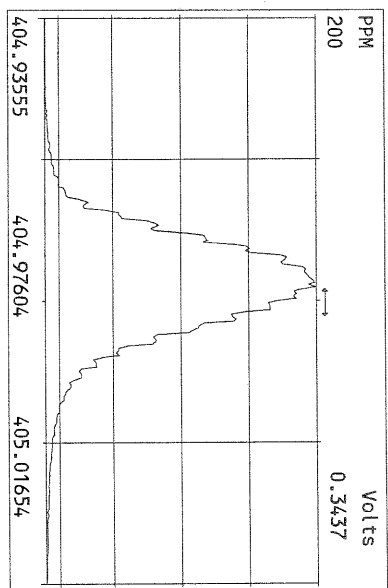
Data Backed Up: _____

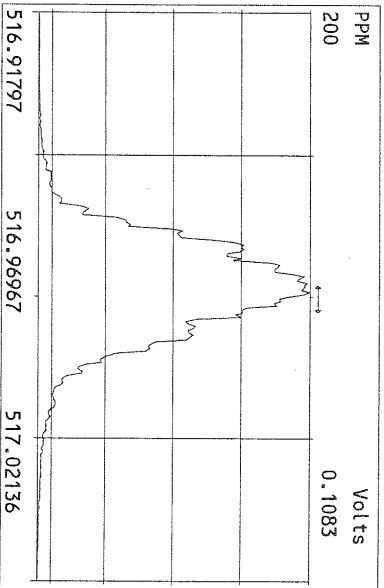
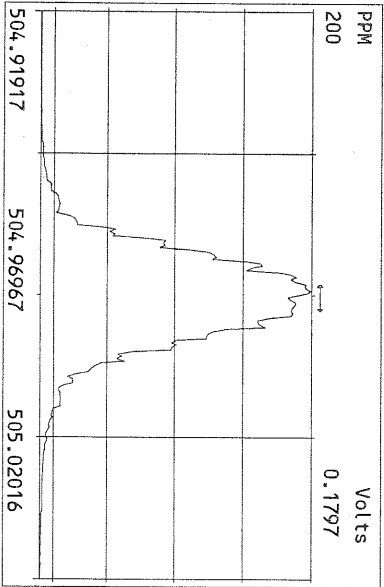
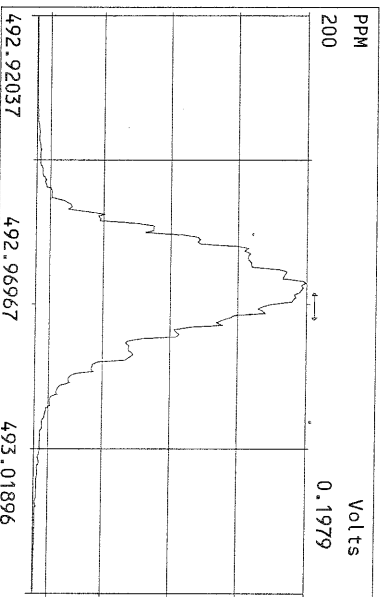
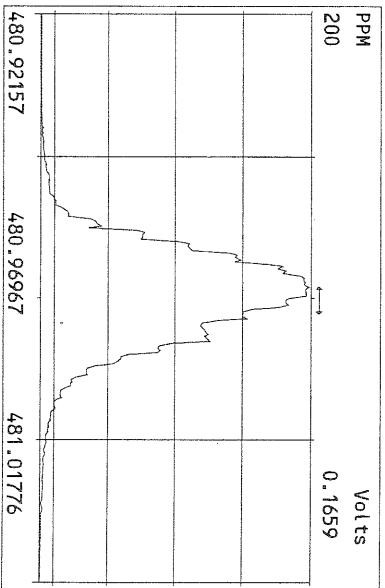
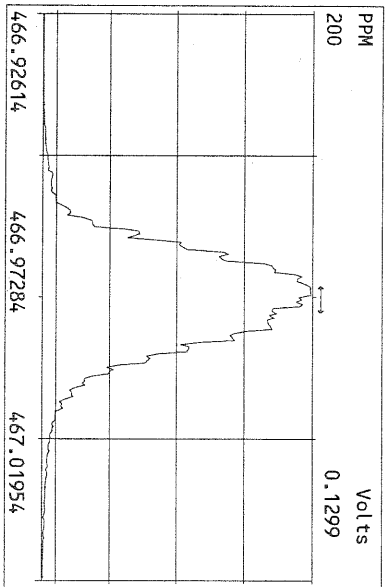
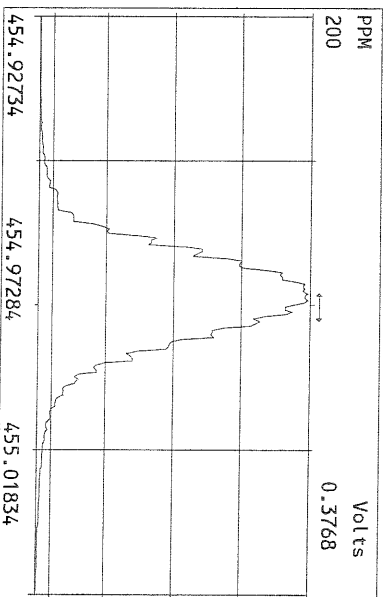
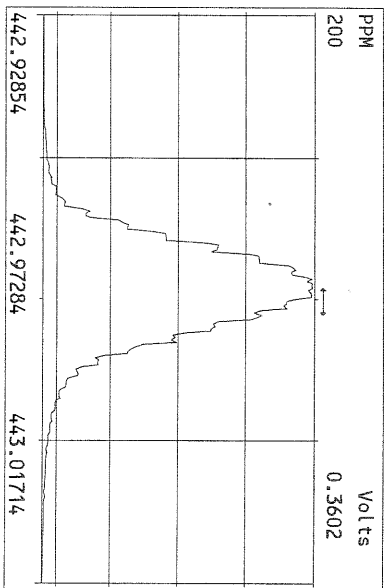
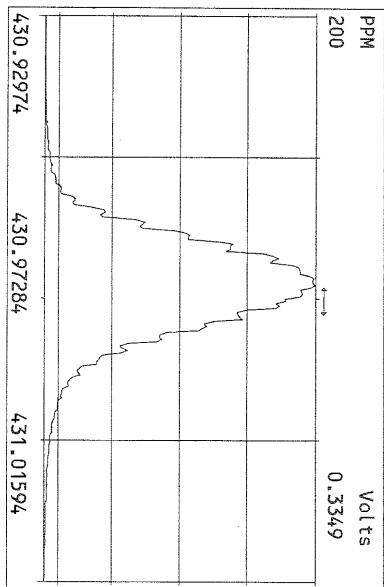
Date: _____



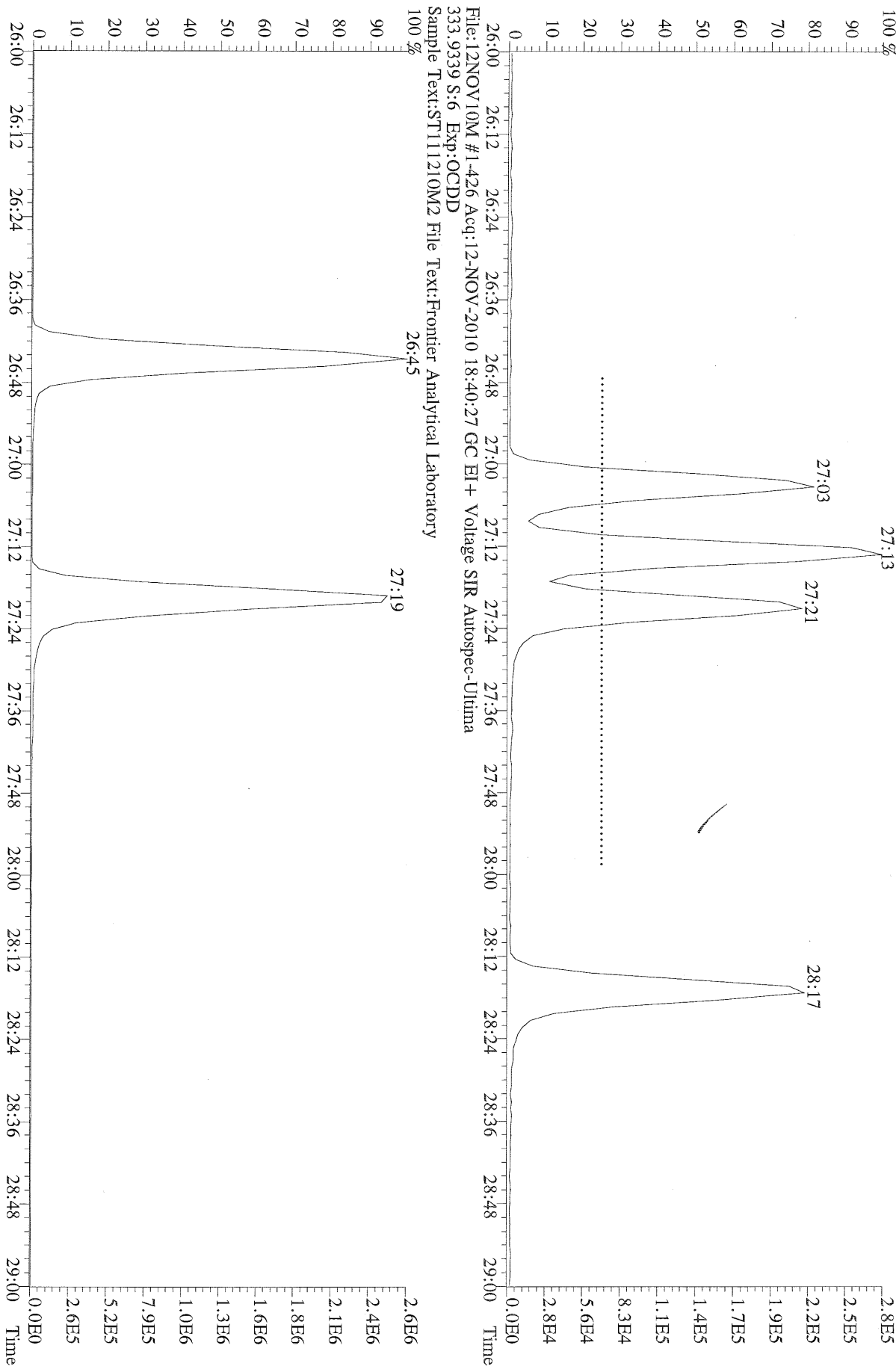




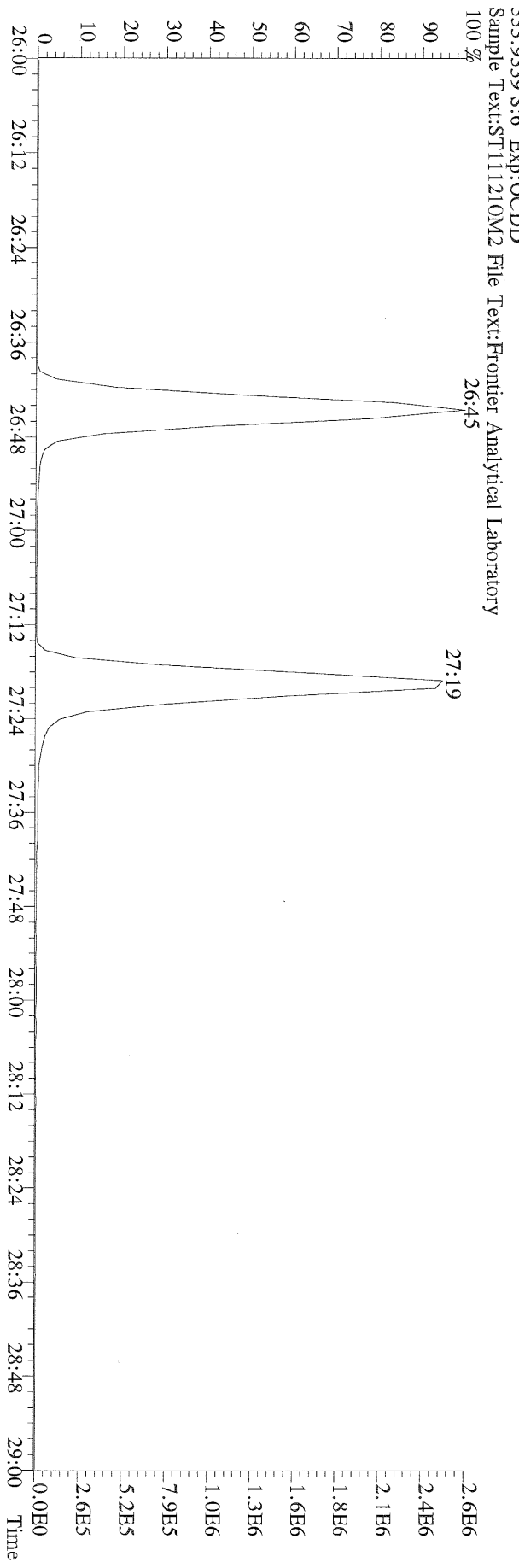




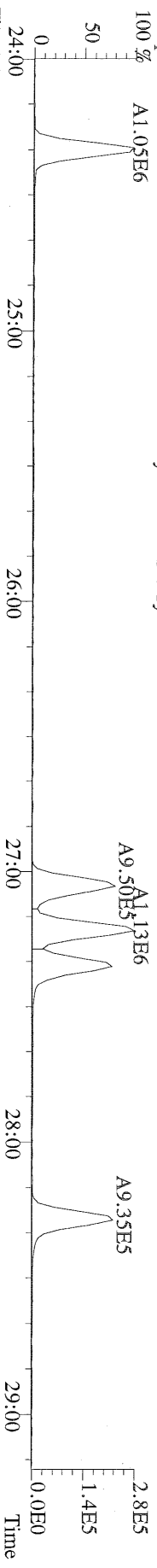
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 %



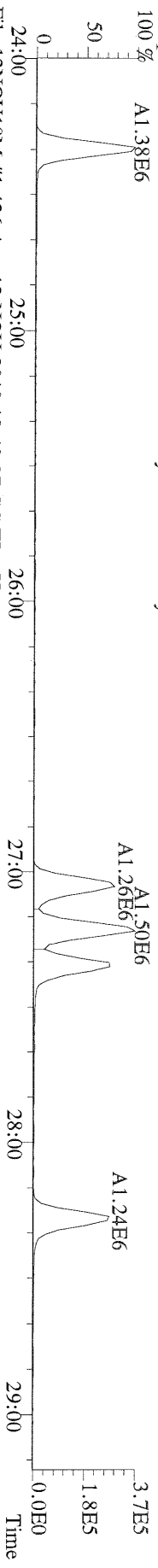
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 %



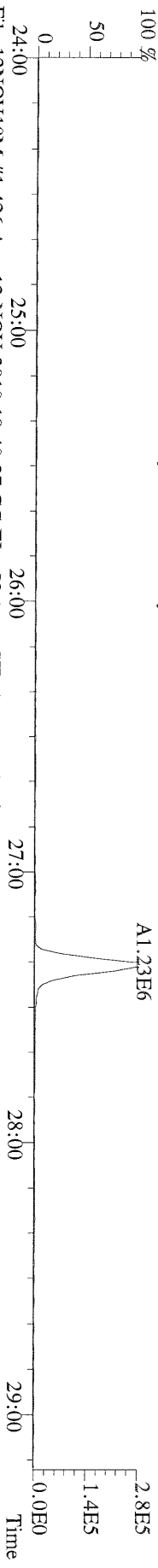
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 % A1.05E6



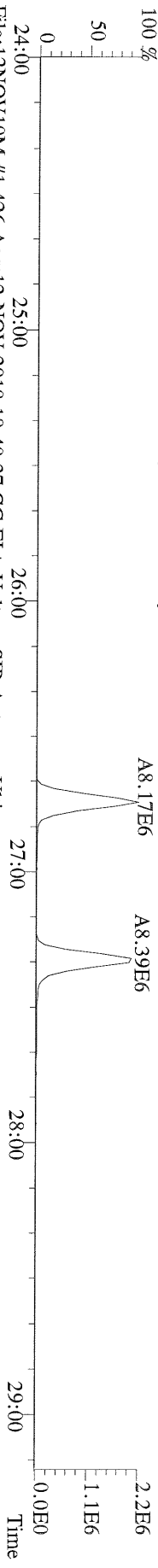
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 % A1.38E6



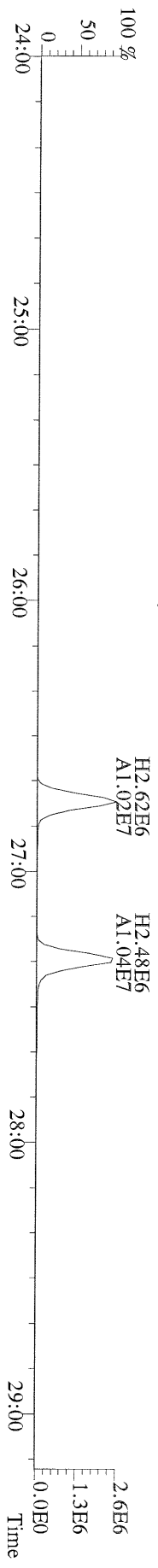
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 %



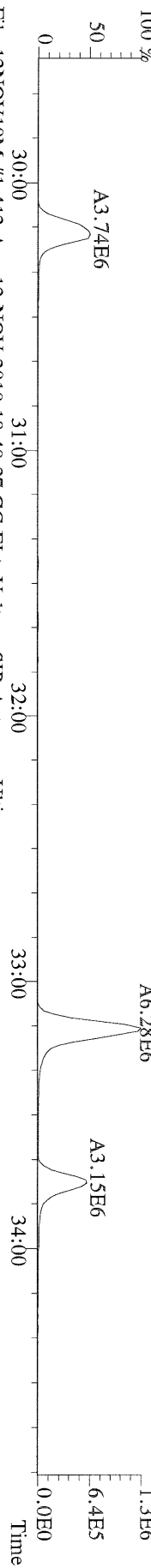
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 %



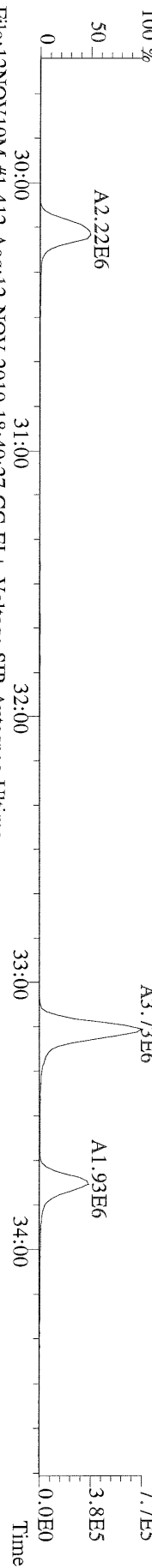
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



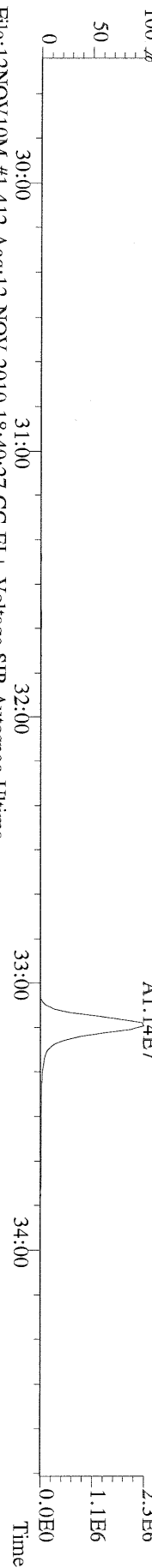
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
 100 %



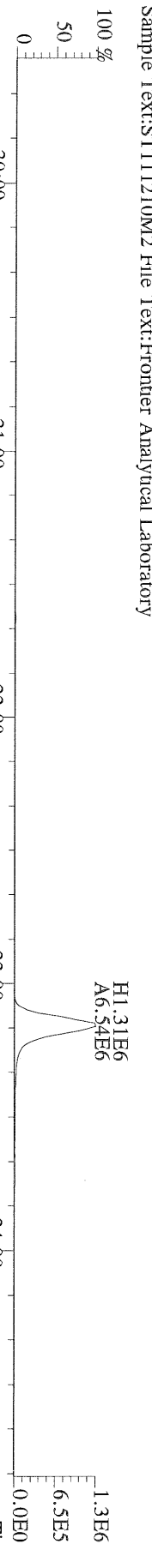
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
 100 %



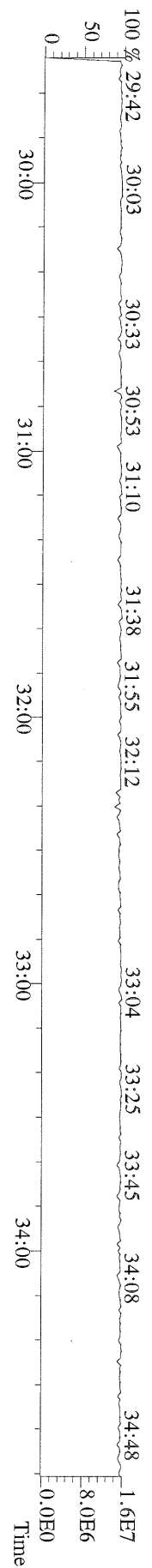
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
 100 %



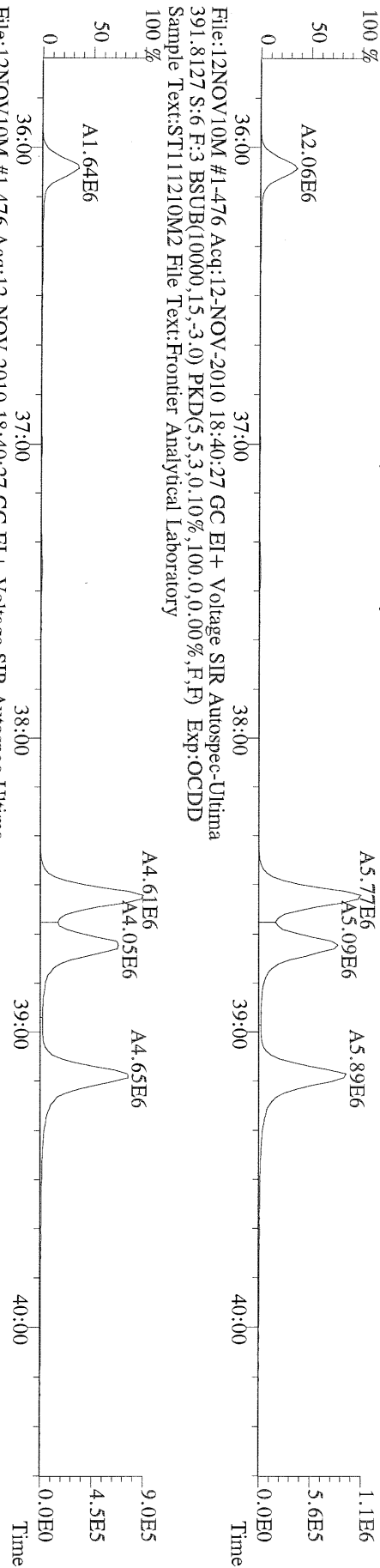
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



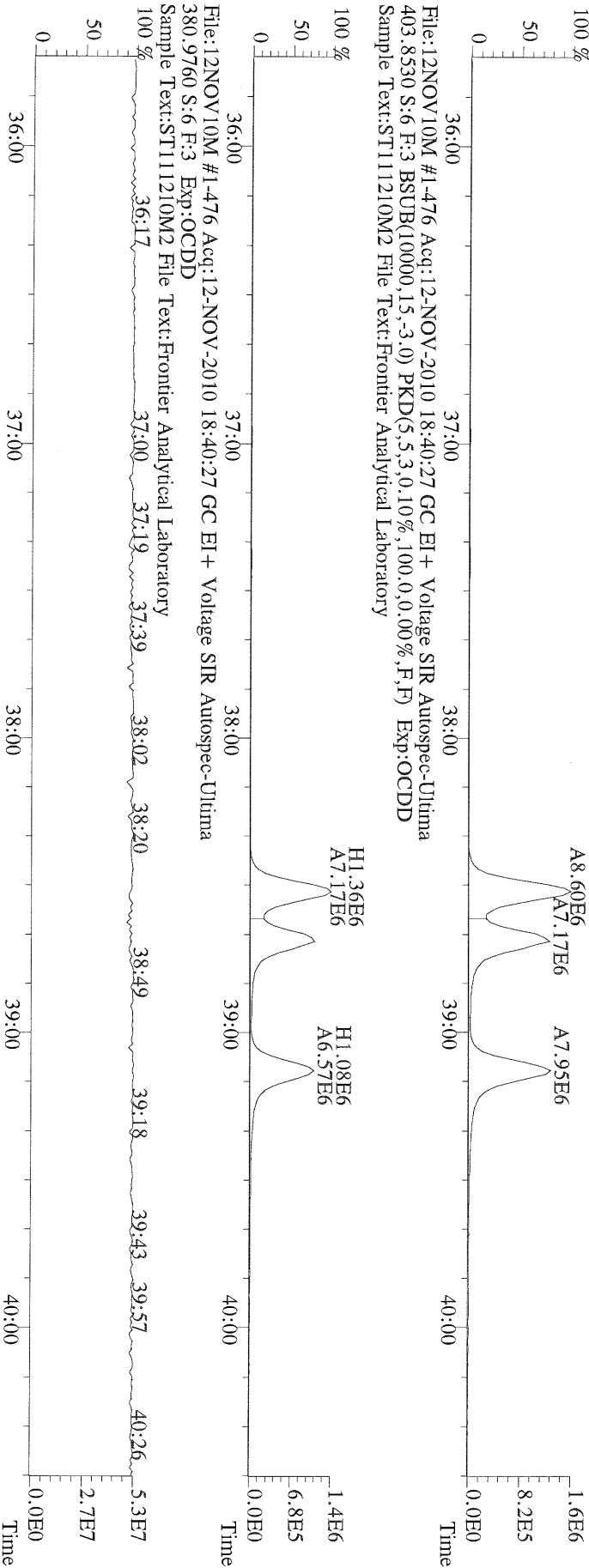
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 366.9792 S:6 F:2 Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



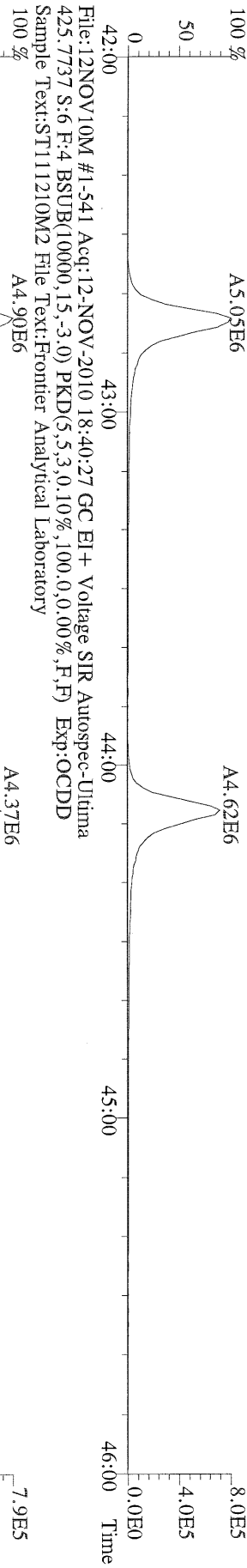
File:12NOV10M #1-476 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



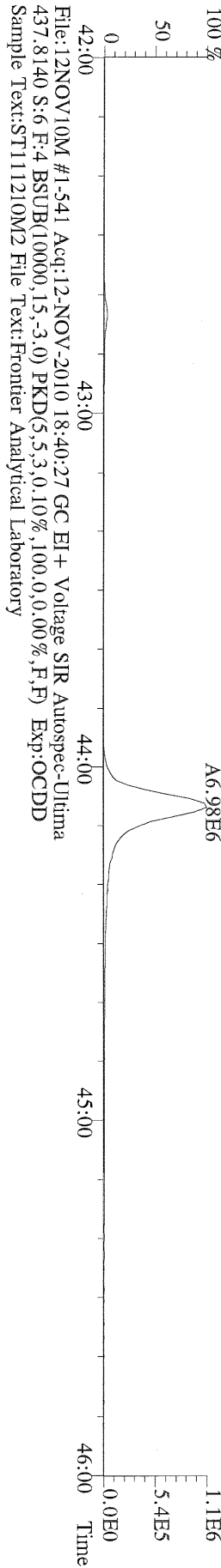
File:12NOV10M #1-476 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



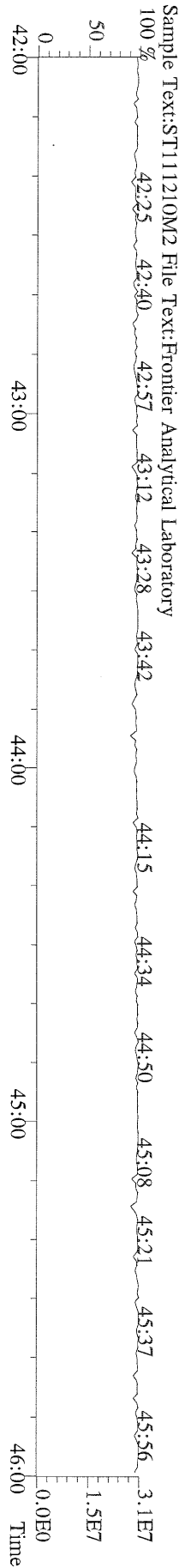
File:12NOV10M #1-541 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



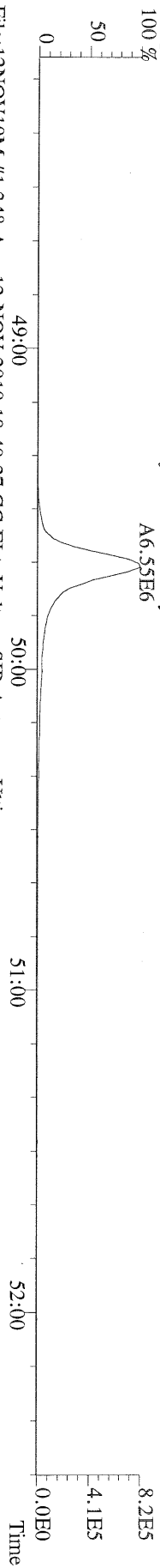
File:12NOV10M #1-541 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



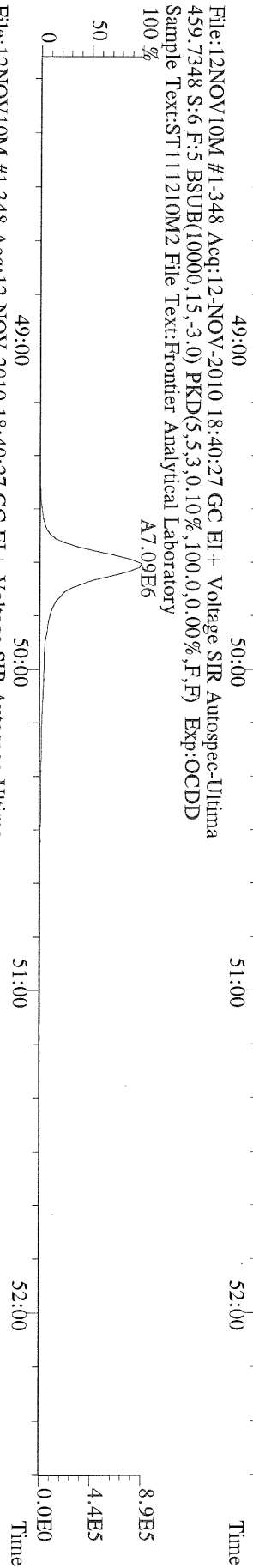
File:12NOV10M #1-541 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



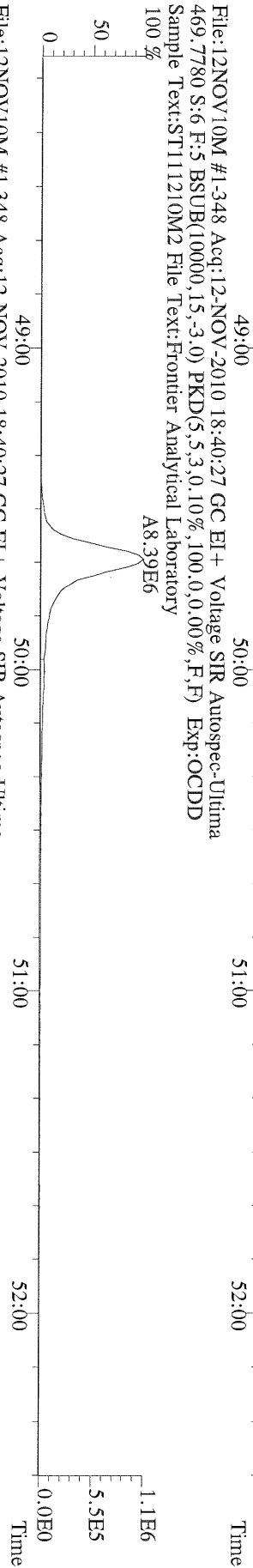
File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 %



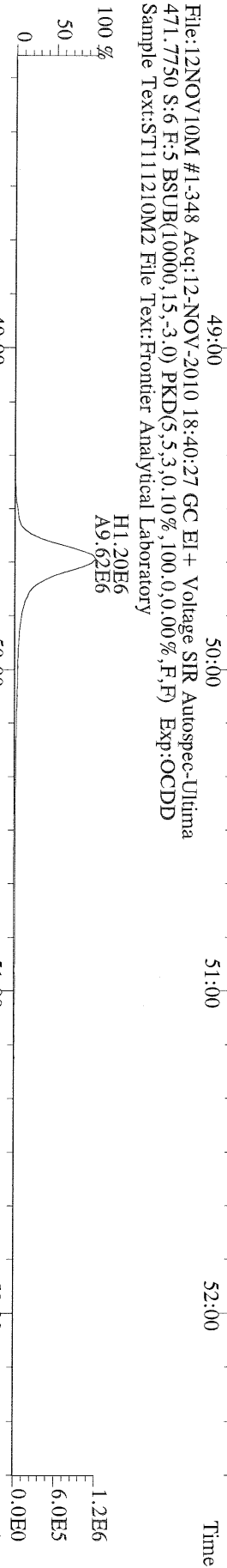
File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 %



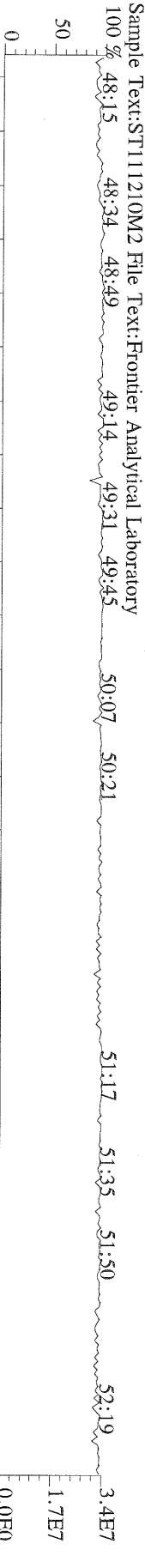
File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 %



File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 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:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory

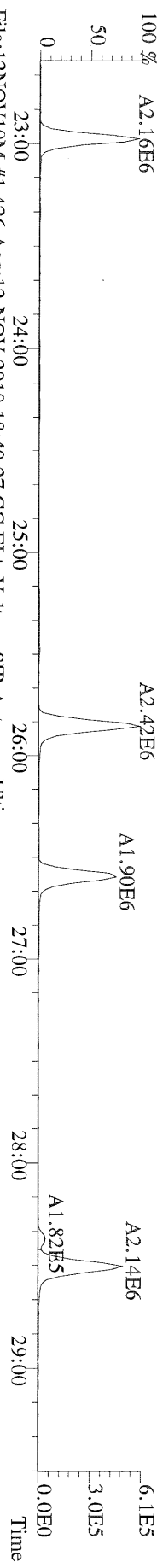


File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:OCDD

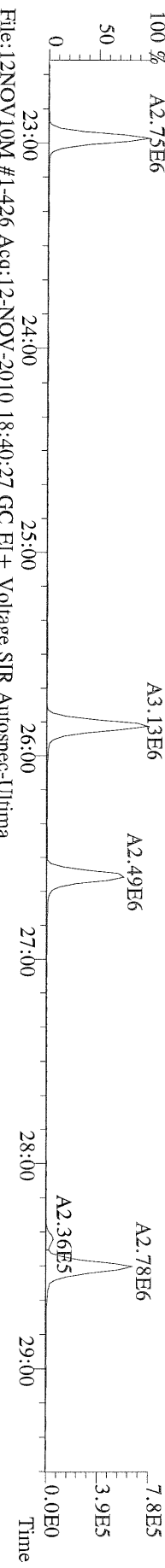


Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
100 % 48:15 48:34 48:49 49:14 49:31 49:45 50:07 50:21 51:17 51:35 51:50 52:19
Time 0.0E0 1.7E7 3.4E7

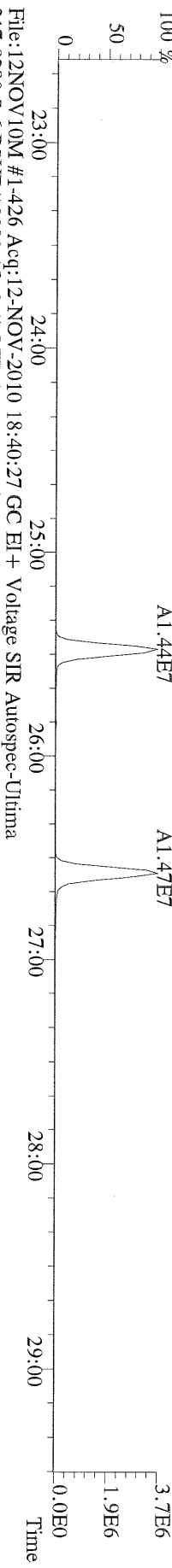
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory



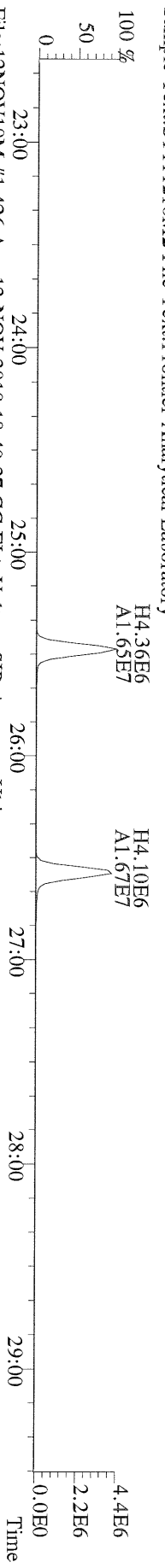
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory



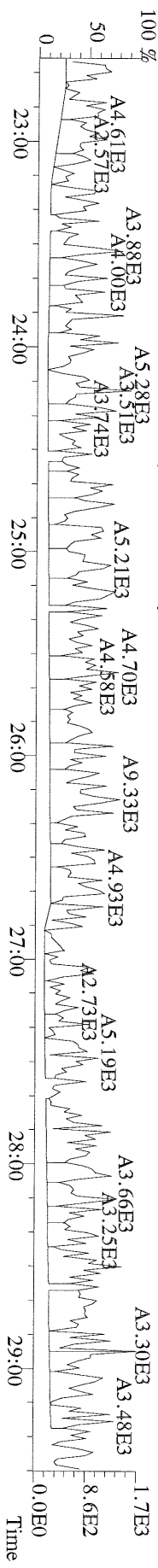
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory



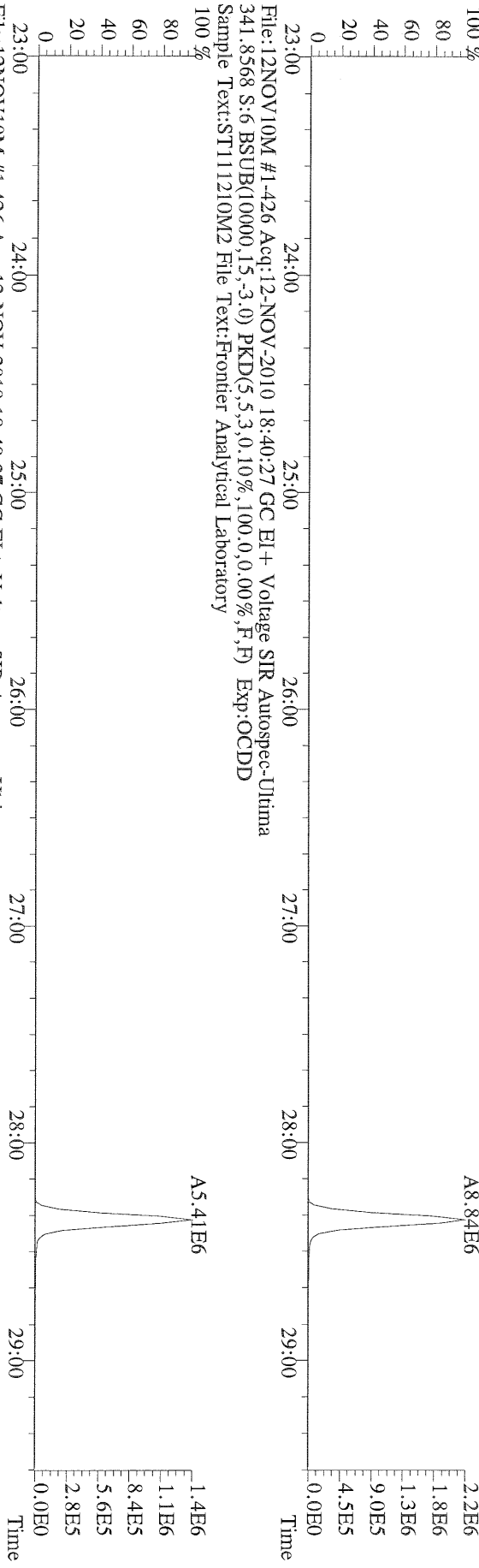
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory



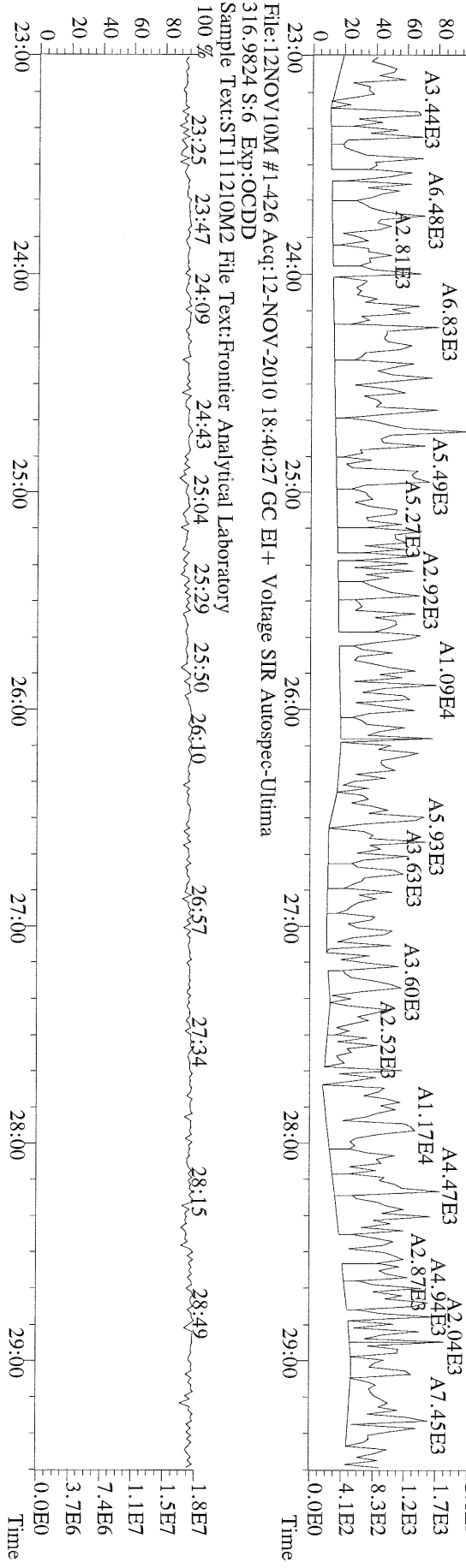
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory



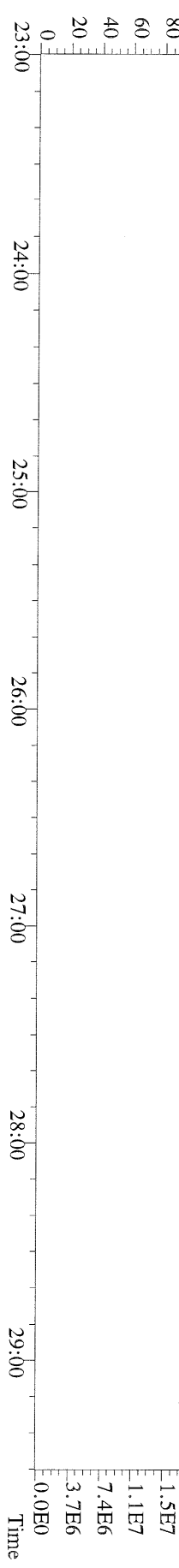
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



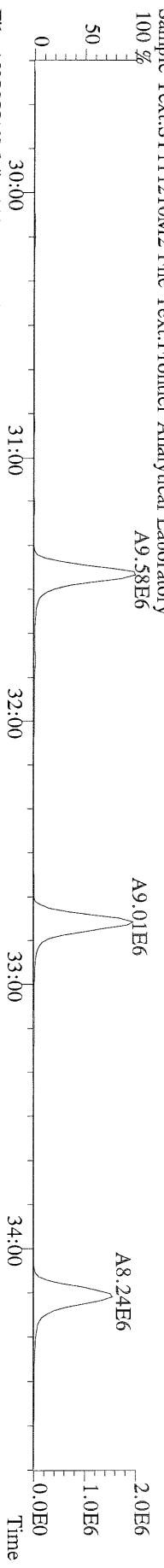
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



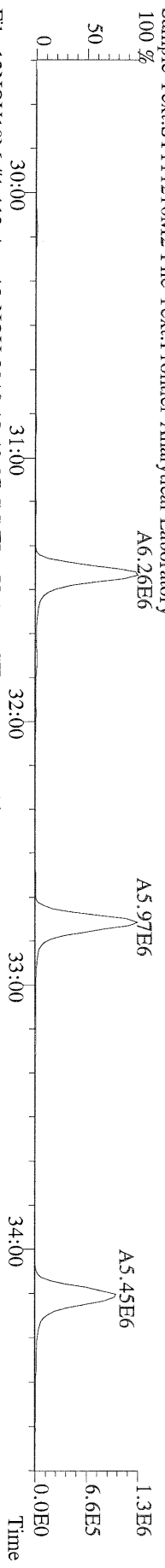
File:12NOV10M #1-426 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 316.9824 S:6 Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



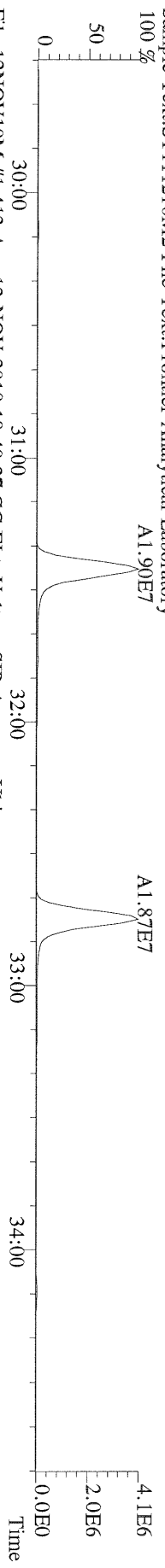
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



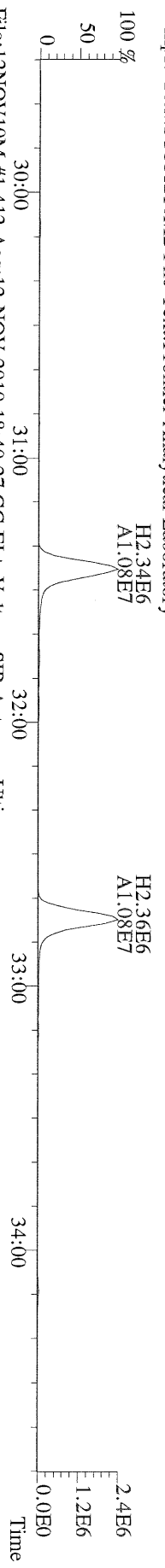
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



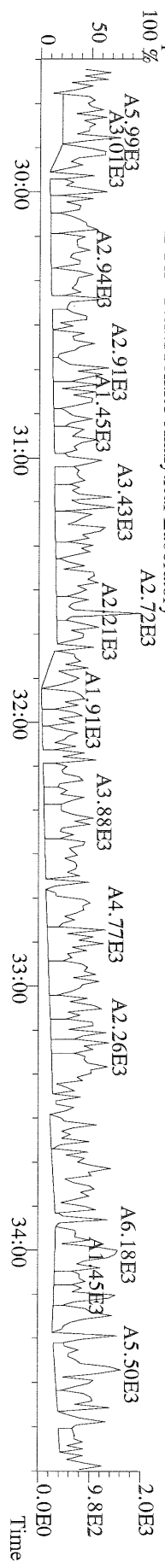
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



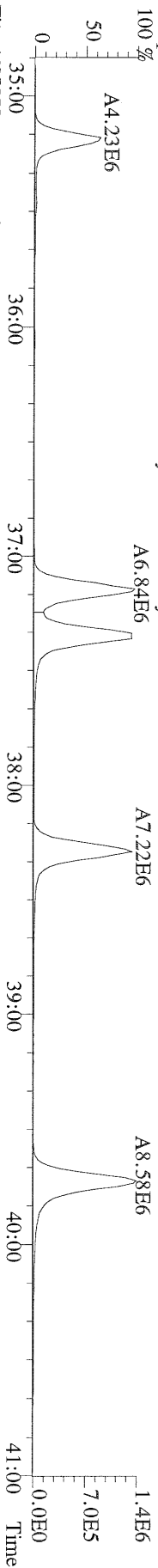
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



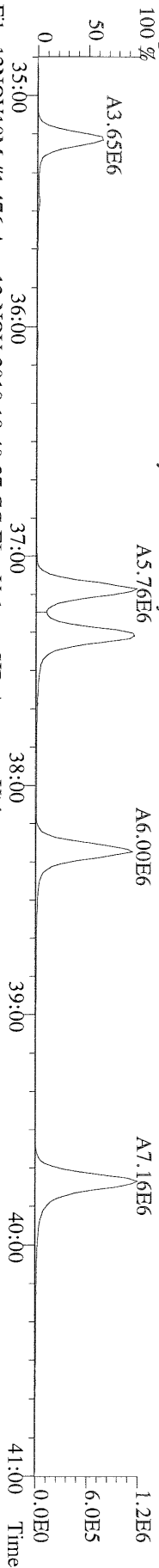
File:12NOV10M #1-412 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



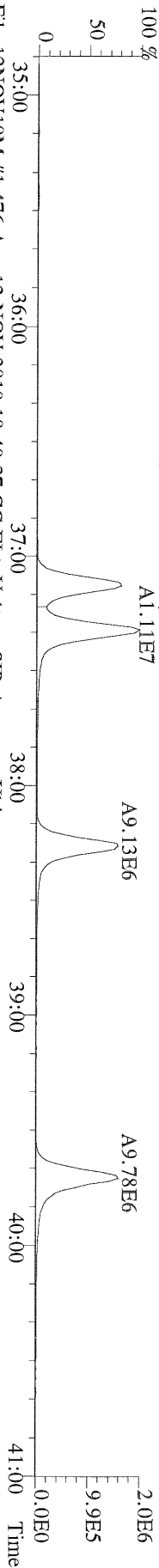
File:12NOV10M #1-476 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



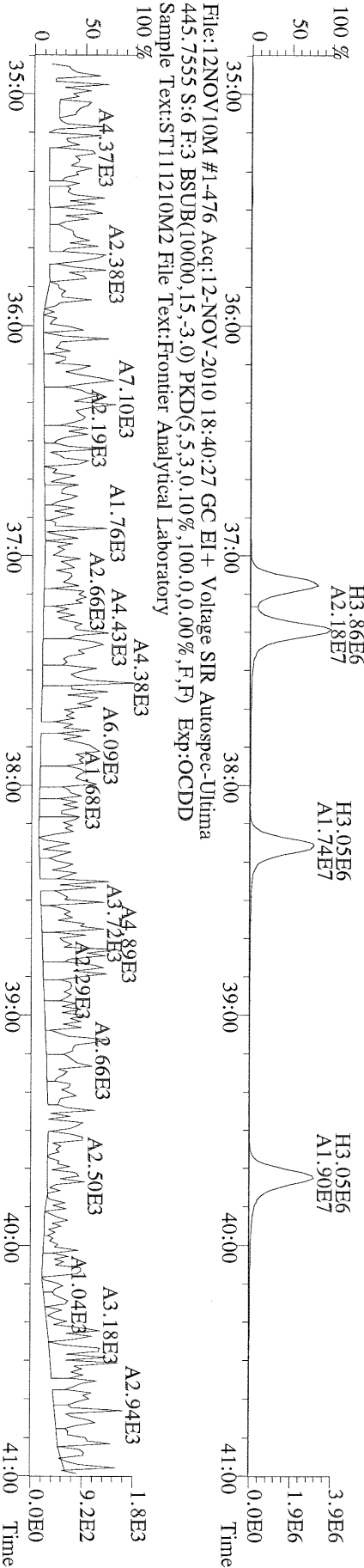
File:12NOV10M #1-476 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



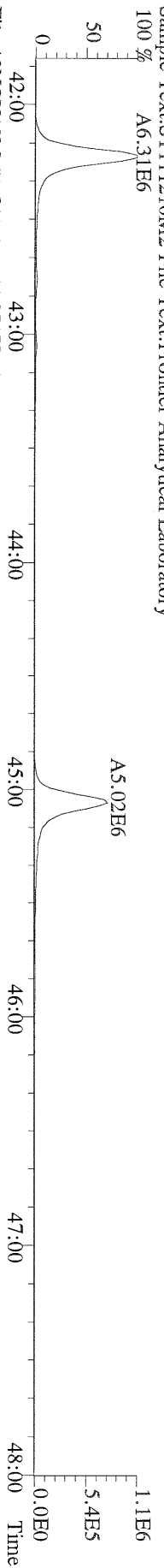
File:12NOV10M #1-476 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



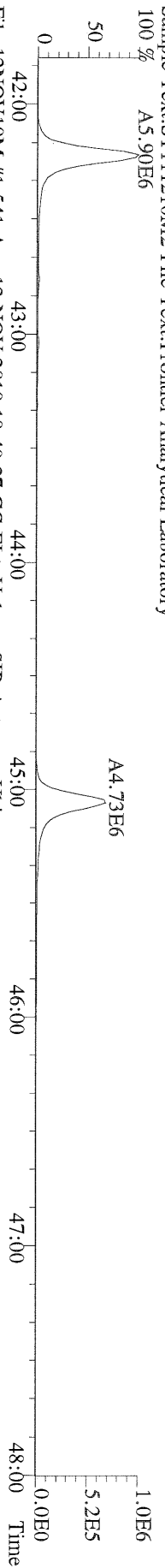
File:12NOV10M #1-476 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



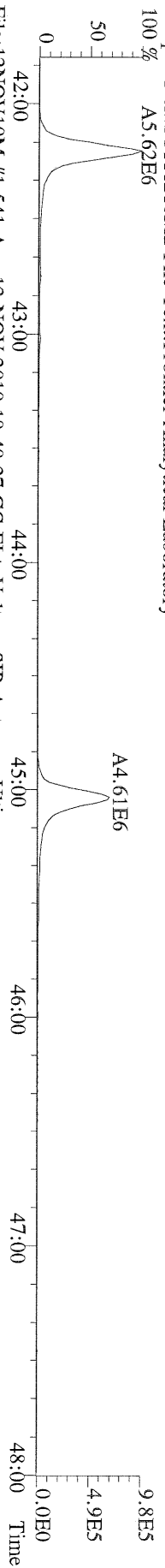
File:12NOV10M #1-541 Acq:12-NOV-2010 18:40:27 GC EI + Voltage SIR Autospec-Ultima
 407.7818 S:6 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
 100 % A6.31E6



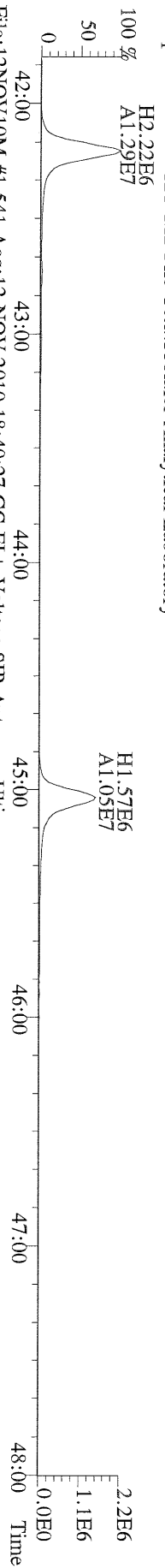
File:12NOV10M #1-541 Acq:12-NOV-2010 18:40:27 GC EI + Voltage SIR Autospec-Ultima
 409.7788 S:6 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
 100 % A5.90E6



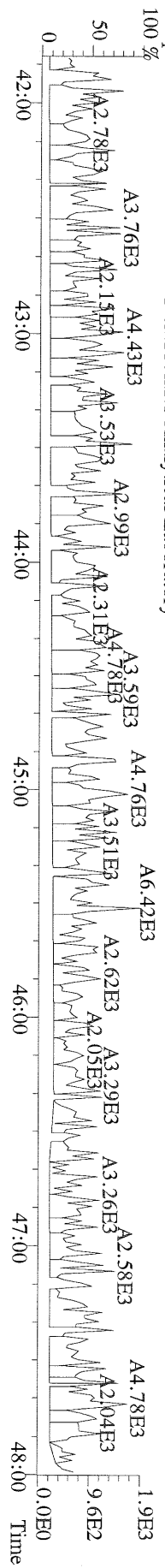
File:12NOV10M #1-541 Acq:12-NOV-2010 18:40:27 GC EI + Voltage SIR Autospec-Ultima
 417.8253 S:6 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory
 100 % A5.62E6



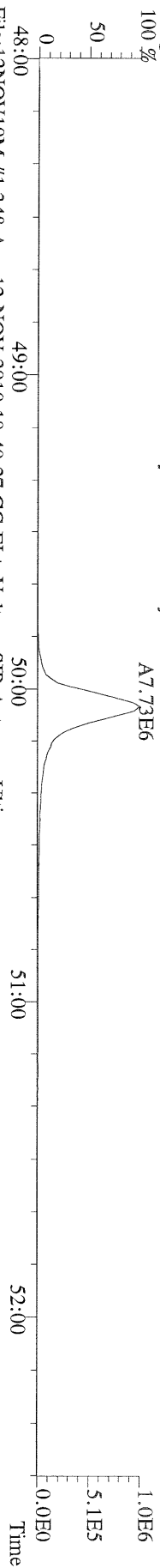
File:12NOV10M #1-541 Acq:12-NOV-2010 18:40:27 GC EI + Voltage SIR Autospec-Ultima
 419.8220 S:6 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



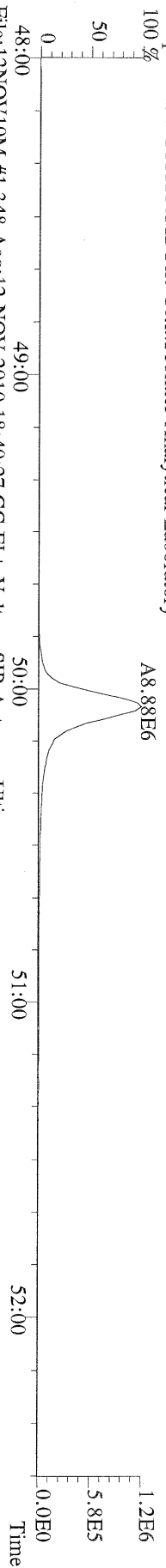
File:12NOV10M #1-541 Acq:12-NOV-2010 18:40:27 GC EI + Voltage SIR Autospec-Ultima
 479.7165 S:6 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M2 File Text:Frontier Analytical Laboratory



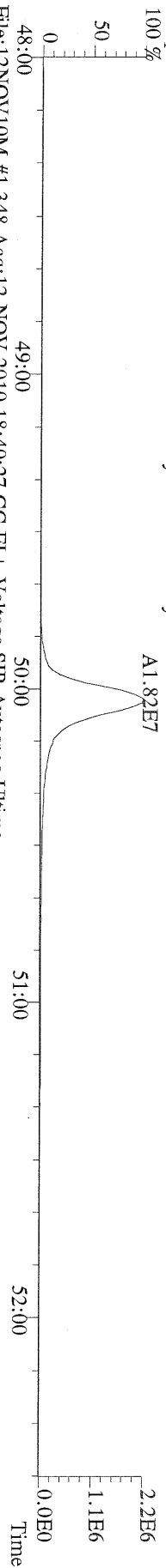
File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory
100 %



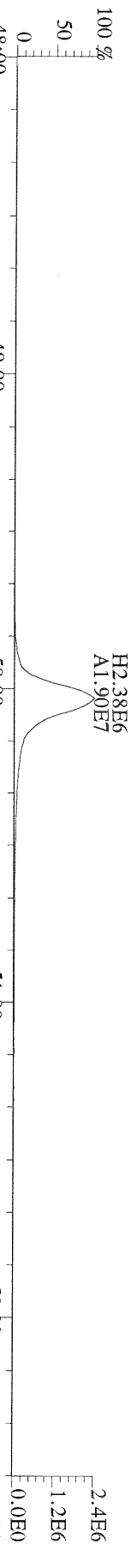
File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory
100 %



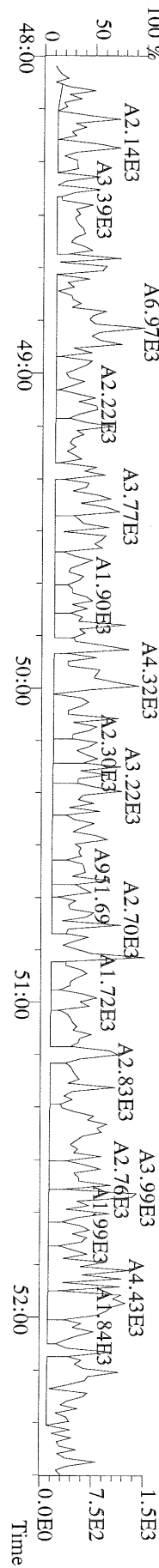
File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory
100 %



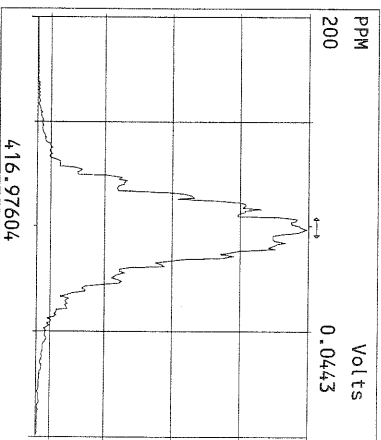
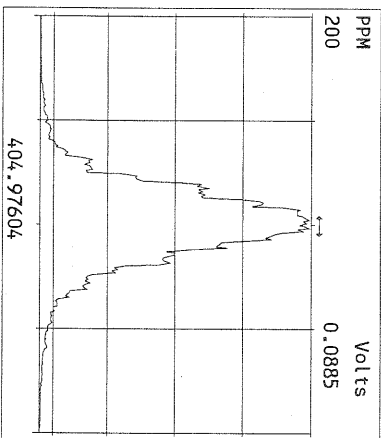
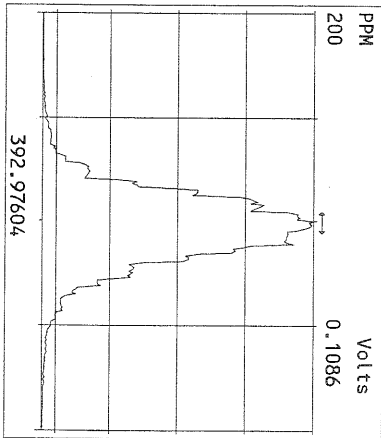
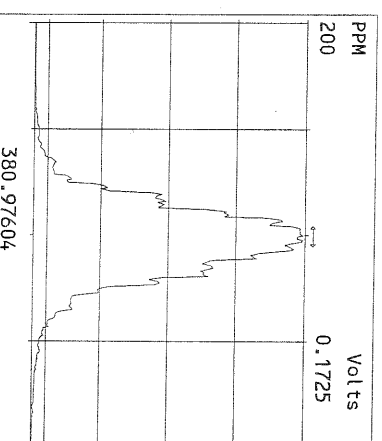
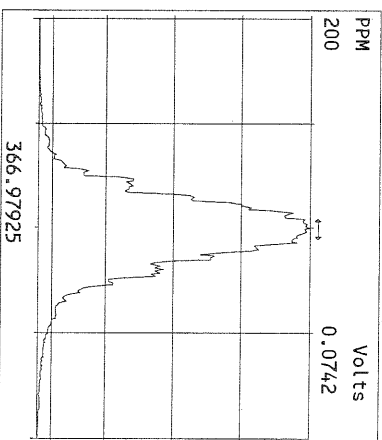
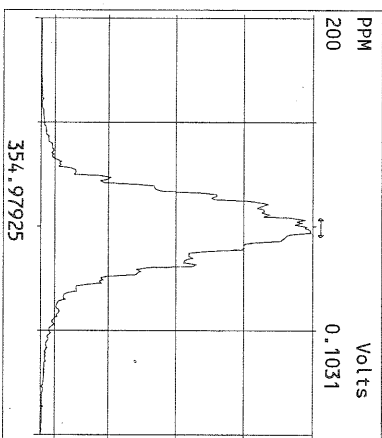
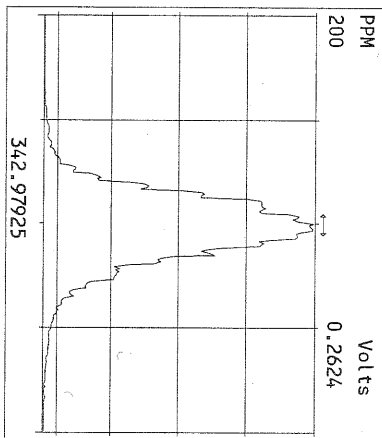
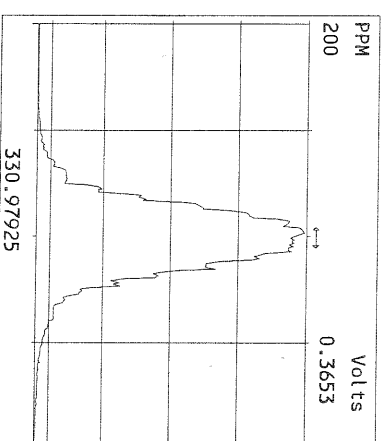
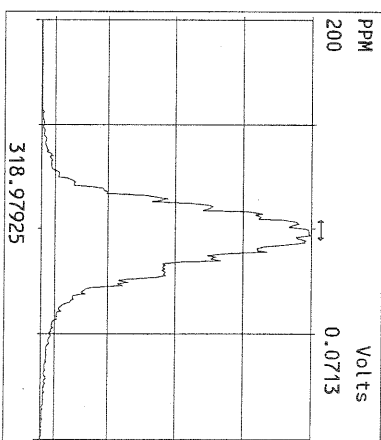
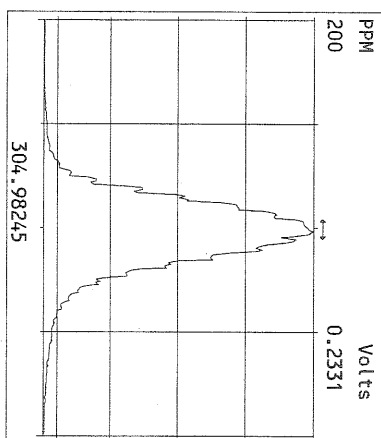
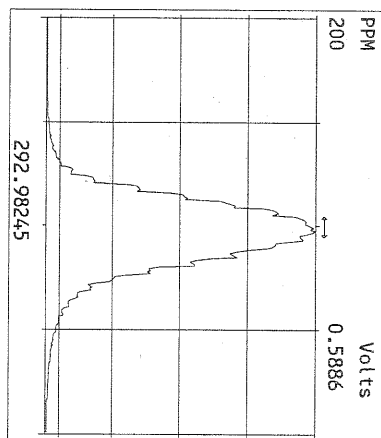
File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory

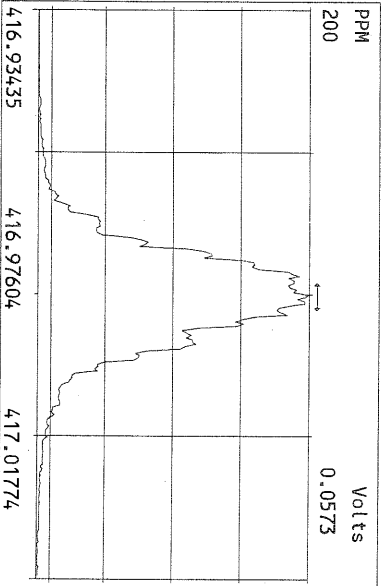
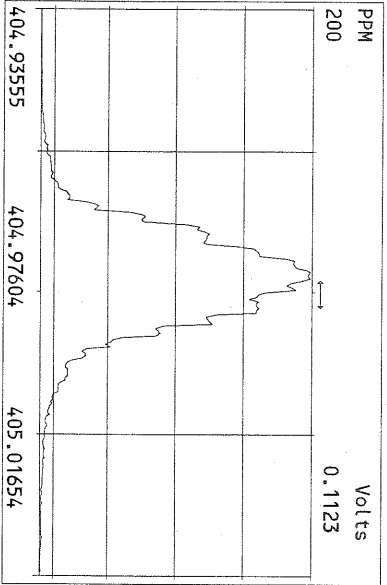
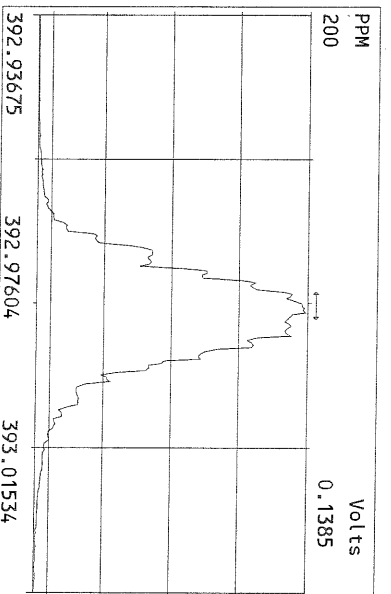
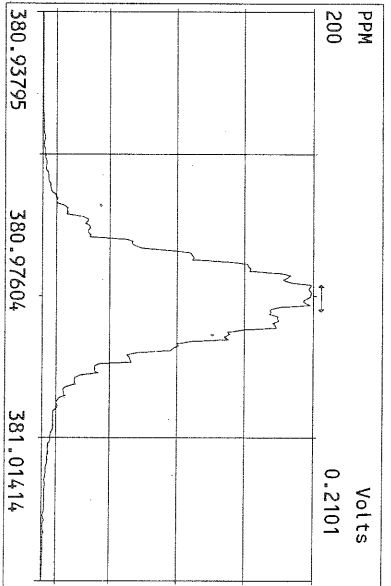
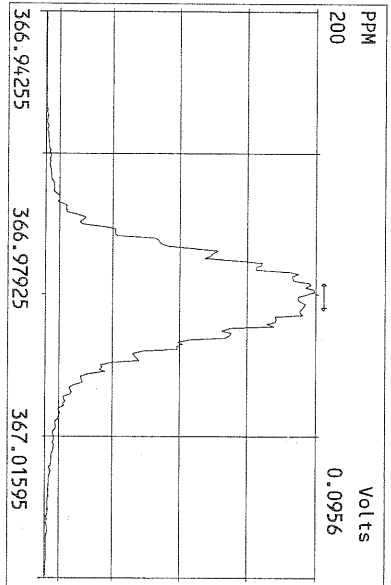
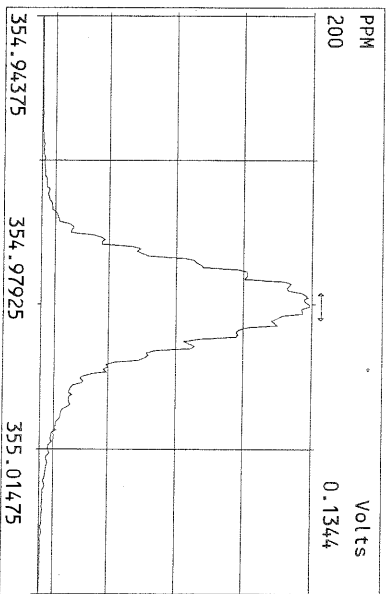
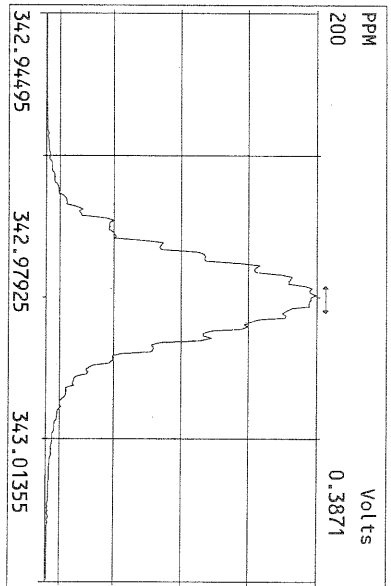
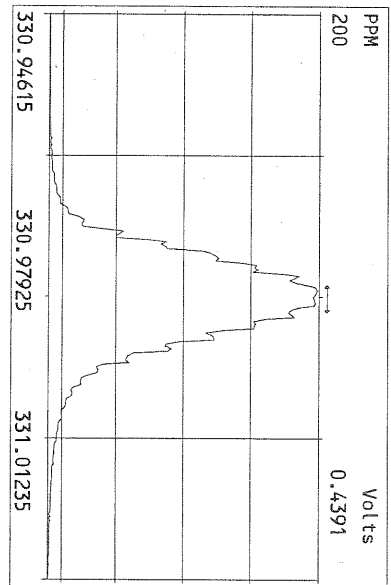


File:12NOV10M #1-348 Acq:12-NOV-2010 18:40:27 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M2 File Text:Fronter Analytical Laboratory

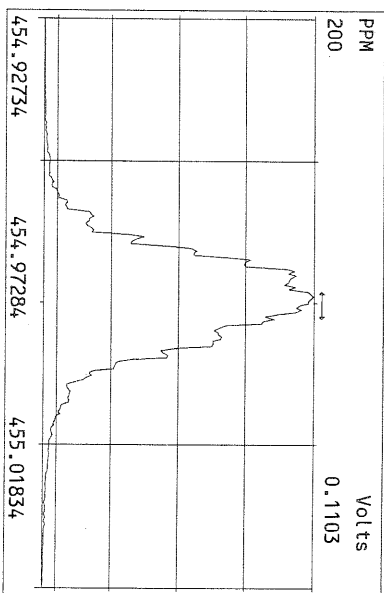
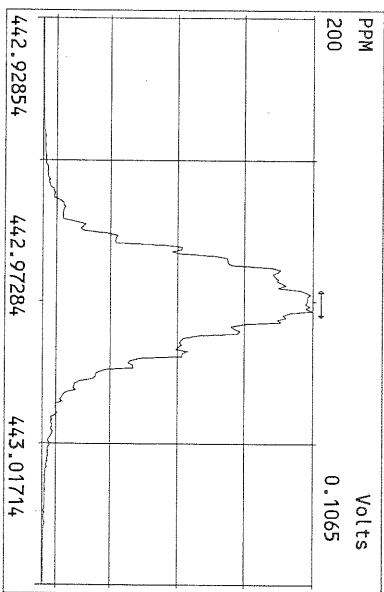
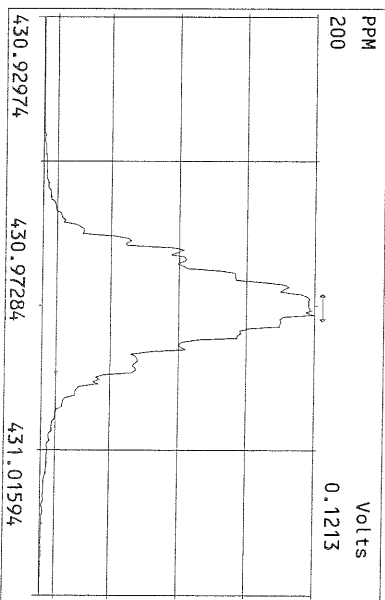
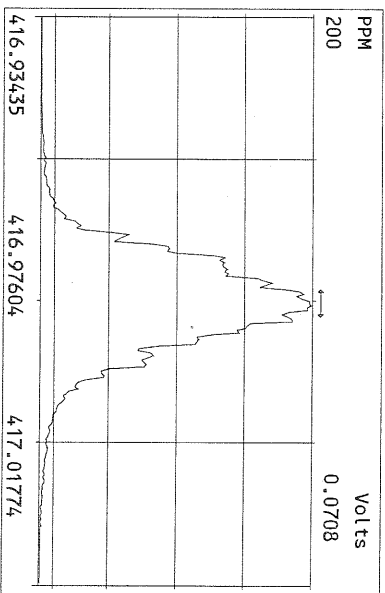
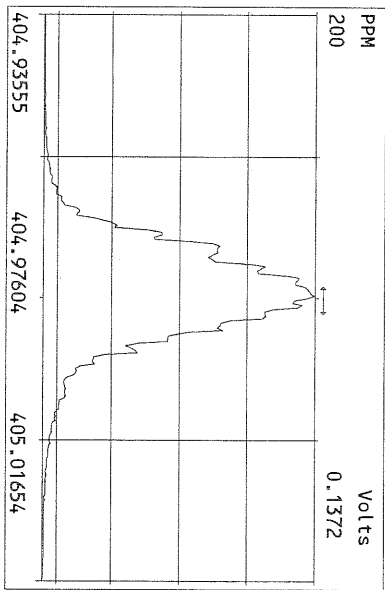
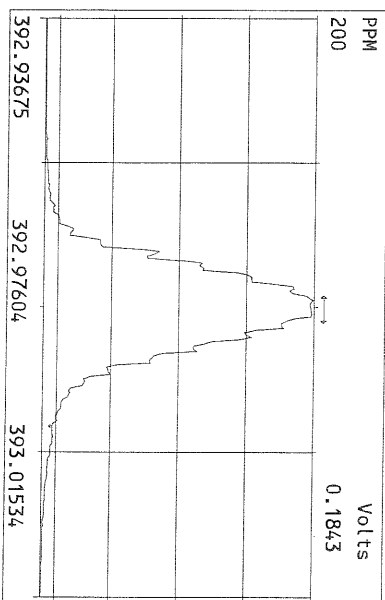
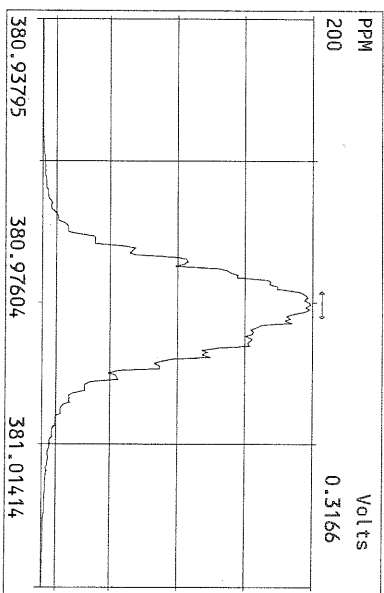
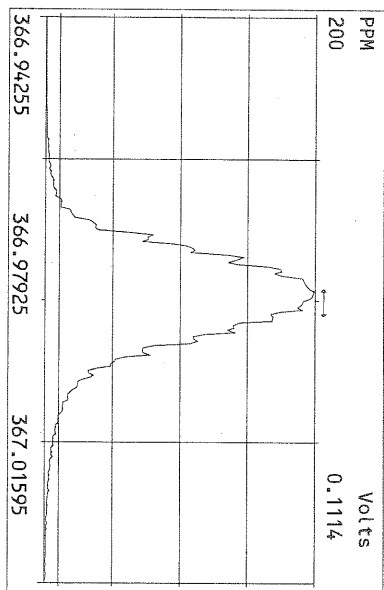


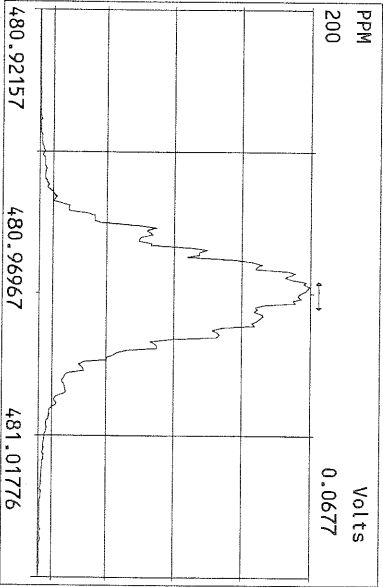
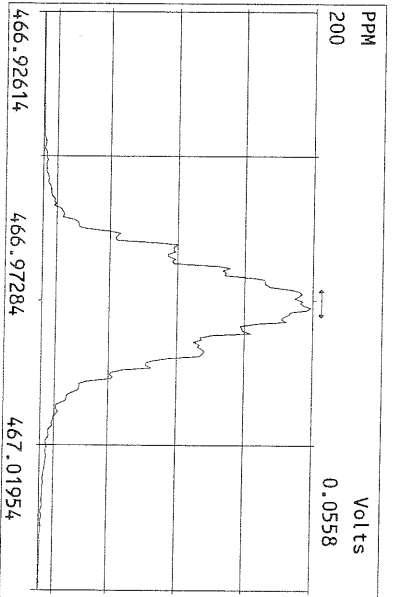
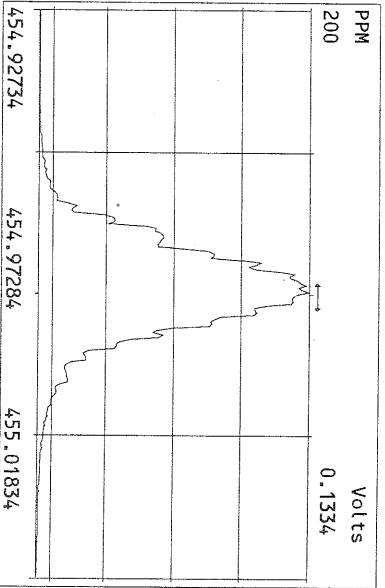
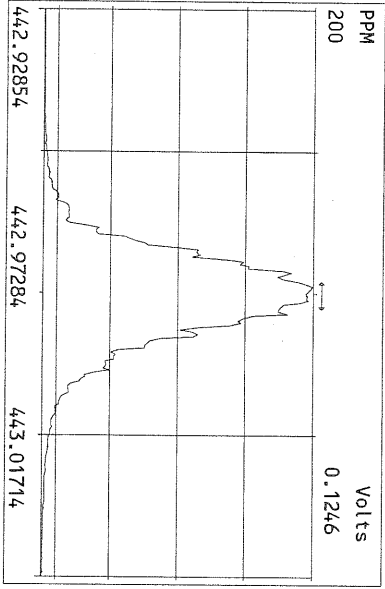
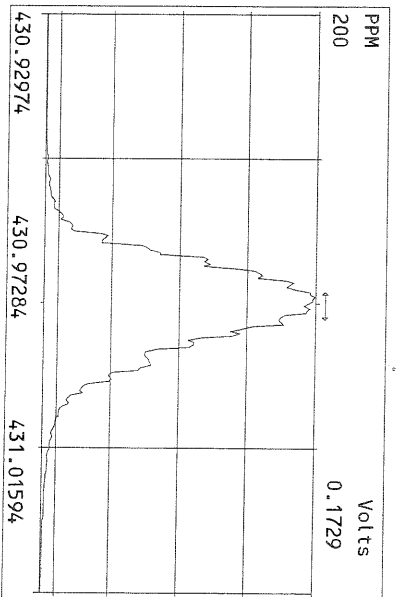
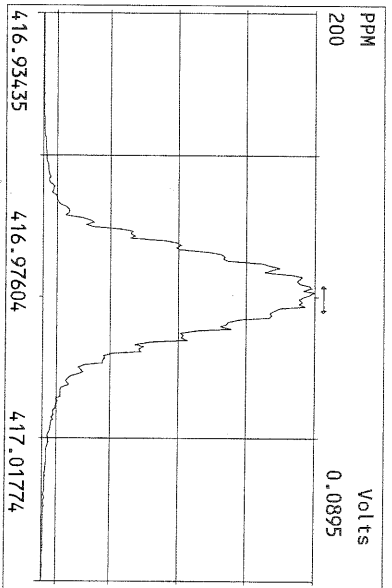
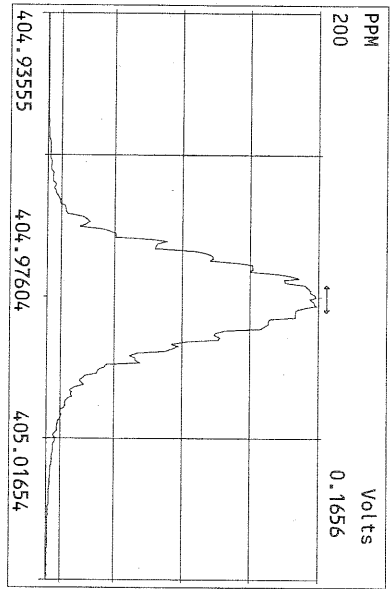
Peak Locate Examination: 13-NOV-2010:07:37 File: 12NOV10M_RES_CHECK
Experiment: OCDD Function: 1 Reference: PFK

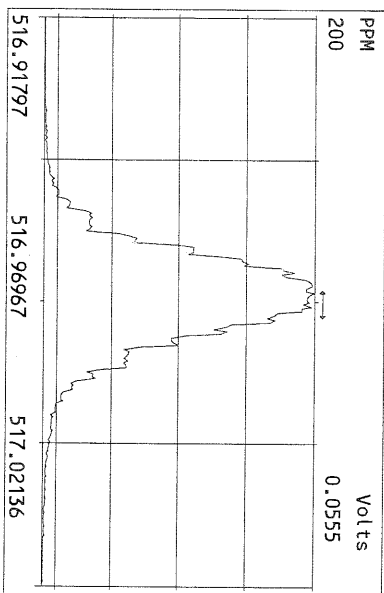
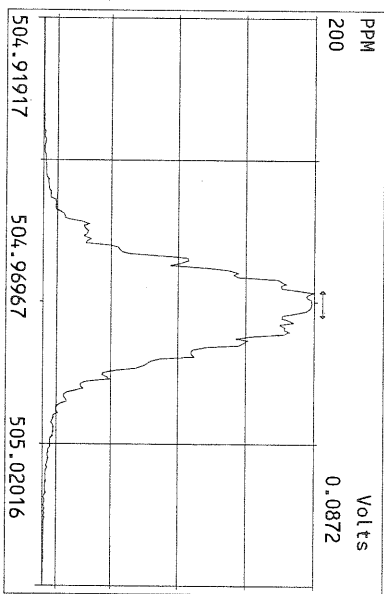
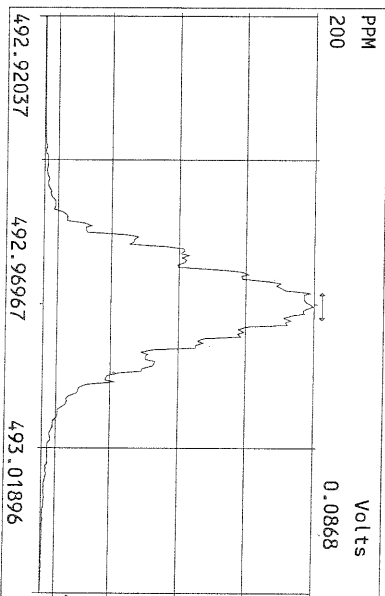
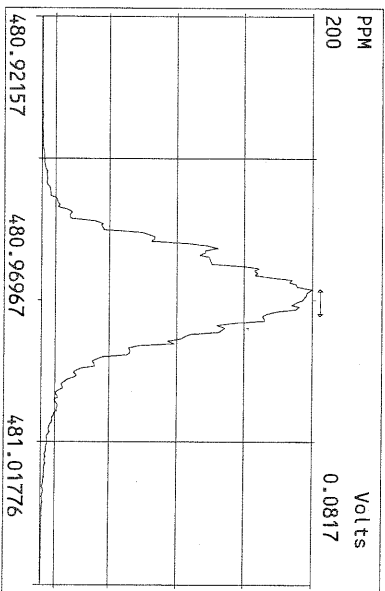
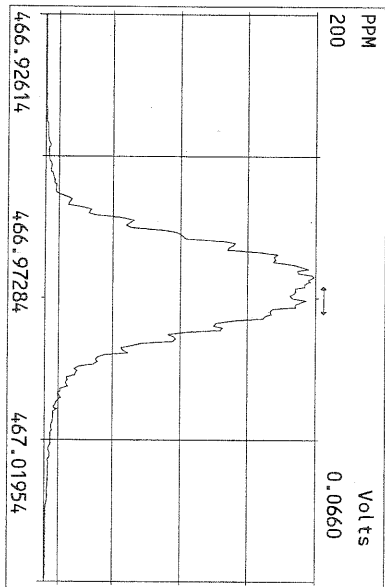
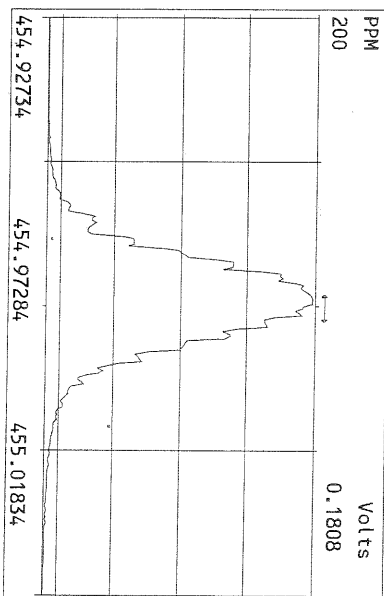
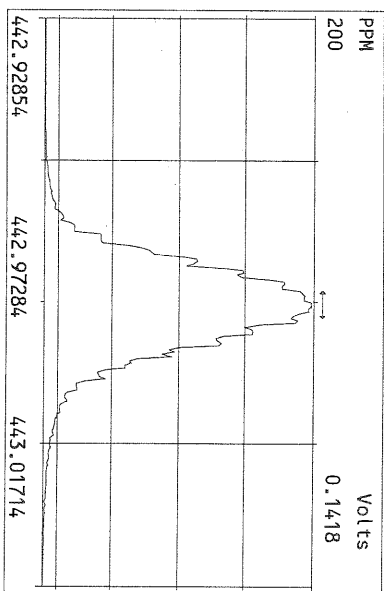
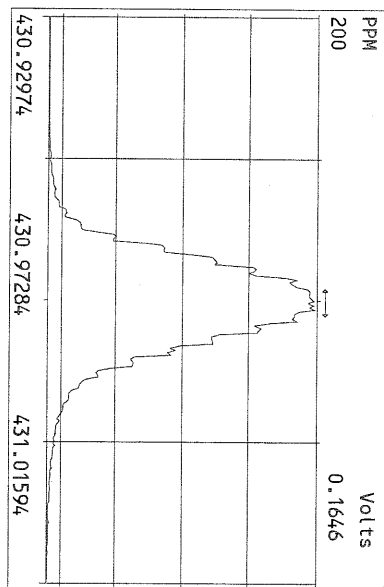




Peak Locate Examination:13-NOV-2010:07:41 File:12NOV10M_RES_CHECK
Experiment:OCDD Function:3 Reference:PFK







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: 12NOV10M Sam:19

Analysis Date: 13-NOV-10 06:39:36

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	0.75	0.65-0.89	y	10.6	7.80 - 12.9 ✓
1,2,3,7,8-PeCDD	M+2/M+4	1.68	1.32-1.78	y	50.6	39.0 - 65.0 ✓
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	48.3	39.0 - 64.0 ✓
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	47.8	39.0 - 64.0 ✓
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	52.7	41.0 - 61.0 ✓
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	44.9	43.0 - 58.0 ✓
OCDD	M+2/M+4	0.93	0.76-1.02	y	105	79.0 - 126 ✓
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.49	8.40 - 12.0 ✓
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	y	57.1	41.0 - 60.0 ✓
2,3,4,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	y	56.6	41.0 - 60.0 ✓
1,2,3,4,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	53.9	45.0 - 56.0 ✓
1,2,3,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	55.1	44.0 - 57.0 ✓
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	54.8	44.0 - 57.0 ✓
1,2,3,7,8,9-HxCDF	M+2/M+4	1.18	1.05-1.43	y	55.0	45.0 - 56.0 ✓
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.10	0.88-1.20	y	48.2	45.0 - 55.0 ✓
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	0.88-1.20	y	48.5	43.0 - 58.0 ✓
OCDF	M+2/M+4	0.86	0.76-1.02	y	113	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: 11/15/10

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: 12NOV10M

Sam:19

Analysis Date: 13-NOV-10 06:39:36

LABELLED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
13C-2,3,7,8-TCDD	M/M+2	0.83	0.65-0.89	y	102	82.0 - 121 ✓
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.74	1.32-1.78	y	114	62.0 - 160 ✓
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	y	101	85.0 - 117 ✓
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	y	94.8	85.0 - 118 ✓
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	105	72.0 - 138 ✓
13C-OCDD	M+2/M+4	0.95	0.76-1.02	y	221	96.0 - 415 ✓
13C-2,3,7,8-TCDF	M/M+2	0.85	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	117	76.0 - 130 ✓
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.75	1.32-1.78	y	116	77.0 - 130 ✓
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	96.0	76.0 - 131 ✓
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	88.2	70.0 - 143 ✓
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	90.4	73.0 - 137 ✓
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	96.4	74.0 - 135 ✓
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	109	78.0 - 129 ✓
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	119	77.0 - 129 ✓
13C-OCDF	M+2/M+4	0.93	0.76-1.02	y	219	96.0 - 415 ✓
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.98	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: JDate: 11/15/10

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

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

RT Window Data Filename: 12NOV10M Sam:19 Analysis Date: 13-NOV-10 Time: 06:39:36

DB-5 IS Data Filename: 12NOV10M Sam:19 Analysis Date: 13-NOV-10 Time: 06:39:36

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)	24:20 ✓	1,3,6,8-TCDF (F)	22:58 ✓
1,2,8,9-TCDD (L)	28:17 ✓	1,2,8,9-TCDF (L)	28:30 ✓
1,2,4,7,9-PeCDD (F)	30:11 ✓	1,3,4,6,8-PeCDF (F)	28:21 ✓
1,2,3,8,9-PeCDD (L)	33:45 ✓	1,2,3,8,9-PeCDF (L)	34:10 ✓
1,2,4,6,7,9-HxCDD (F)	36:04 ✓	1,2,3,4,6,8-HxCDF (F)	35:11 ✓
1,2,3,7,8,9-HxCDD (L)	39:09 ✓	1,2,3,7,8,9-HxCDF (L)	39:44 ✓
1,2,3,4,6,7,9-HpCDD (F)	42:44 ✓	1,2,3,4,6,7,8-HpCDF (F)	42:13 ✓
1,2,3,4,6,7,8-HpCDD (L)	44:07 ✓	1,2,3,4,7,8,9-HpCDF (L)	45:03 ✓

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

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

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

Analyst: *g*

Date: 11/15/10

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: 13-NOV-10 06:39:36

CS3 or VER Data Filename: 12NOV10M

Sam: 19

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	1.000	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		1.240	1.000-1.567 ✓
13C-1,2,3,7,8-PeCDF		1.175	0.923-1.203 ✓
13C-2,3,4,7,8-PeCDF		1.225	0.923-1.303 ✓

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

Analyst: JDate: 11/15/10

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: 13-NOV-10 06:39:36

CS3 or VER Data Filename: 12NOV10M

Sam:19

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	1.001	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	1.000	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	1.001	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		0.989	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		1.278	1.000-1.311 ✓

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

Analyst: 8Date: 11/15/10

Frontier Analytical Laboratory - Acquisition Log

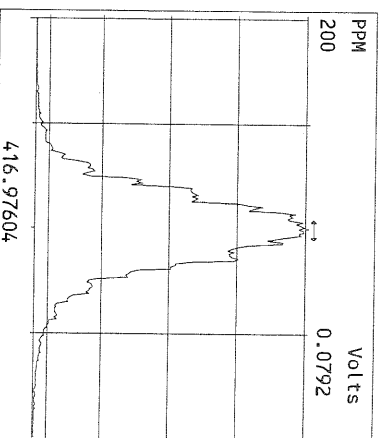
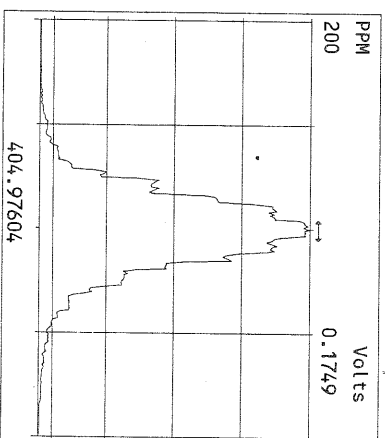
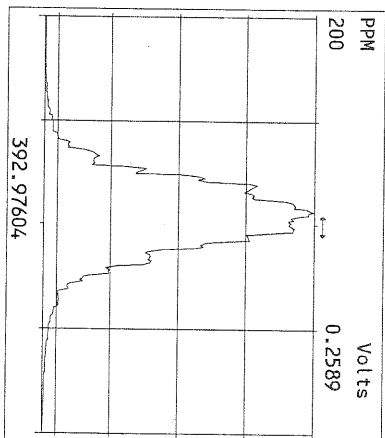
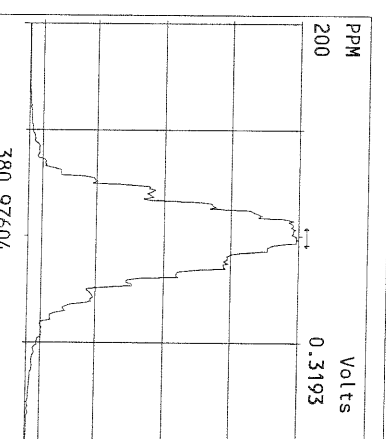
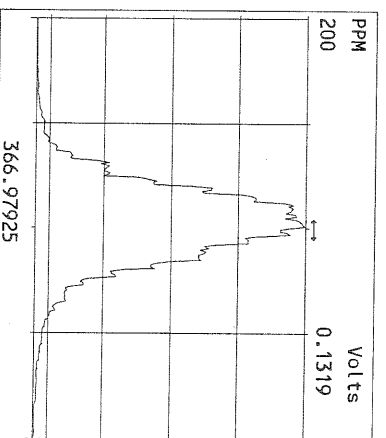
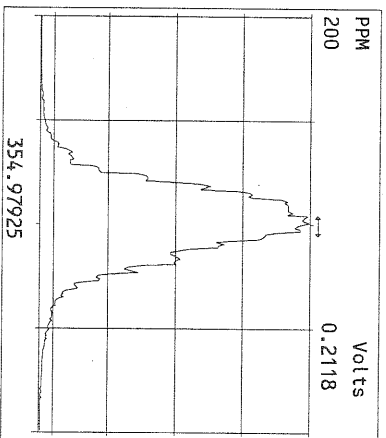
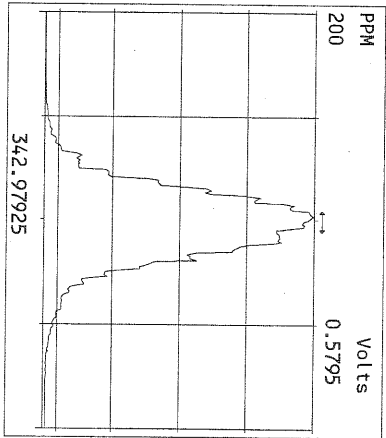
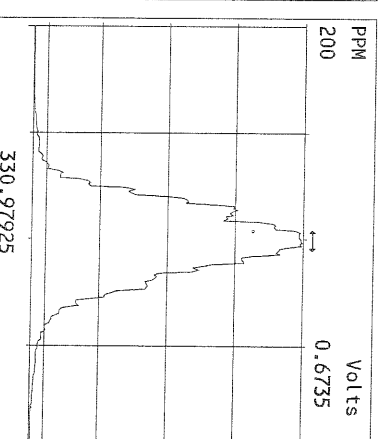
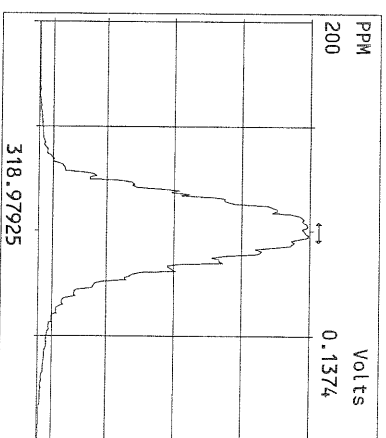
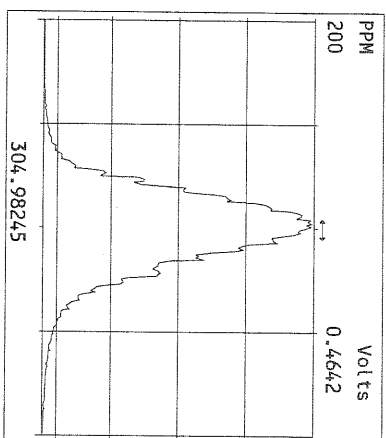
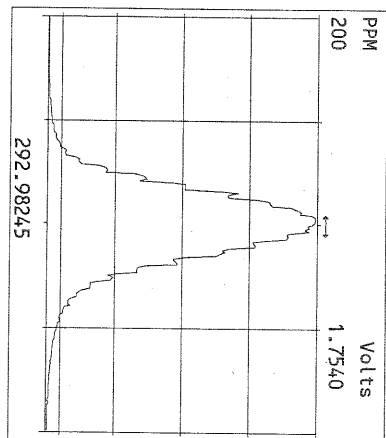
Run Name: 12NOV10M Instrument: FAL3 GC: DB5 Experiment: OCDD

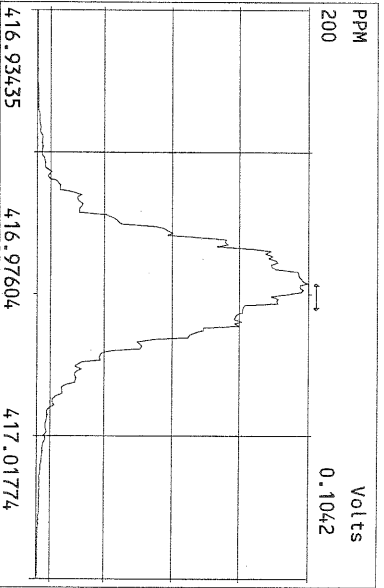
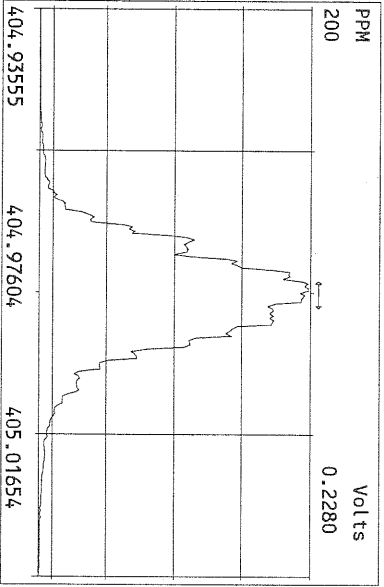
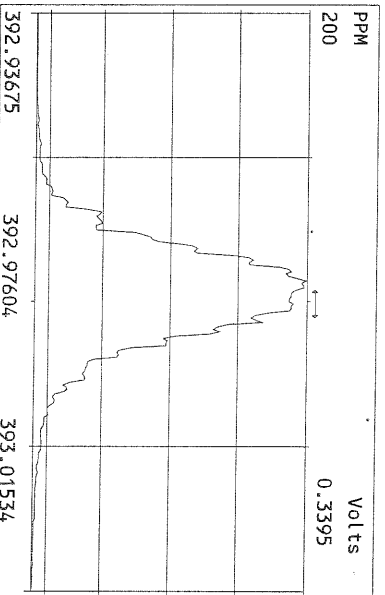
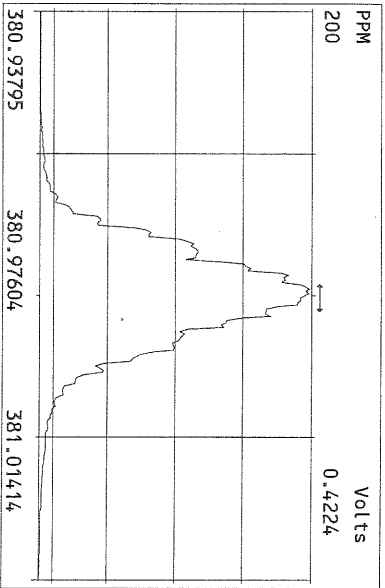
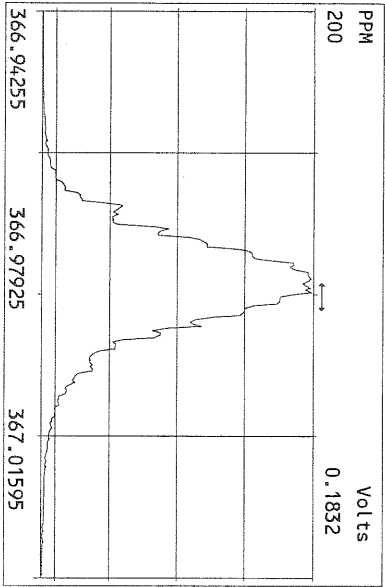
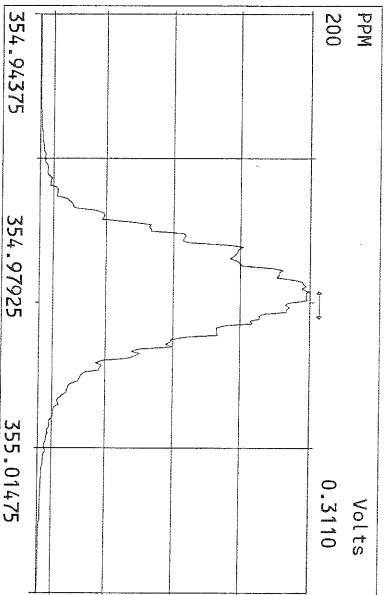
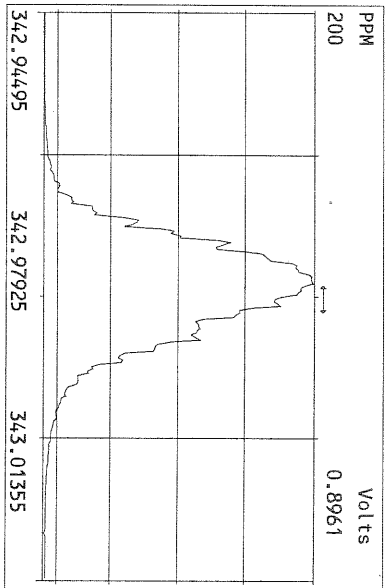
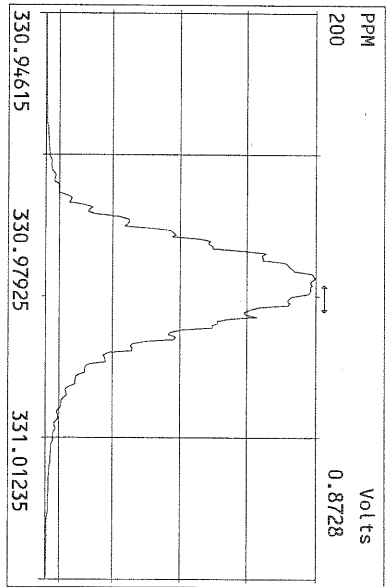
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
12NOV10M	1	ST111210M1	1613 CS3 100511J	12-NOV-10 14:03:46	ST111210M1	ST111210M2	BS
12NOV10M	2	2149-001-0001-OPR	OPR	12-NOV-10 14:59:04	ST111210M1	ST111210M2	BS
12NOV10M	3	2149-001-0001-MB	Method Blank	12-NOV-10 15:54:22	ST111210M1	ST111210M2	BS
12NOV10M	4	6418-001-0001-SA	PSB10-14-15-073010	12-NOV-10 16:49:45	ST111210M1	ST111210M2	BS
12NOV10M	5	SB111210Z1	Solvent Blank	12-NOV-10 17:45:08	ST111210M1	ST111210M2	BS
12NOV10M	6	ST111210M2	1613 CS3 100511J	12-NOV-10 18:40:27	ST111210M2	ST111210M3	BS
12NOV10M	7	2155-001-0001-OPR	OPR	12-NOV-10 19:35:46	ST111210M2	ST111210M3	BS
12NOV10M	8	2155-001-0001-MB	Method Blank	12-NOV-10 20:31:04	ST111210M2	ST111210M3	BS
12NOV10M	9	6415-001-0001-SA	IWTP - Effluent	12-NOV-10 21:26:23	ST111210M2	ST111210M3	BS
12NOV10M	10	6417-001-0001-SA	IN-4894	12-NOV-10 22:21:41	ST111210M2	ST111210M3	BS
12NOV10M	11	6417-002-0001-SA	IN-4895	12-NOV-10 23:16:56	ST111210M2	ST111210M3	BS
12NOV10M	12	6420-001-0001-SA	T001186-01	13-NOV-10 00:12:15	ST111210M2	ST111210M3	BS
12NOV10M	13	6421-001-0001-SA	0101075-01	13-NOV-10 01:07:38	ST111210M2	ST111210M3	BS
12NOV10M	14	6421-002-0001-SA	0101075-03	13-NOV-10 02:02:56	ST111210M2	ST111210M3	BS
12NOV10M	15	6424-001-0001-SA	DDS1-20101028	13-NOV-10 02:58:15	ST111210M2	ST111210M3	BS
12NOV10M	16	6424-001-0002-MS	DDS1-20101028	13-NOV-10 03:53:37	ST111210M2	ST111210M3	BS
12NOV10M	17	6424-001-0002-MSD	DDS1-20101028	13-NOV-10 04:48:51	ST111210M2	ST111210M3	BS
12NOV10M	18	SB111210Z2	Solvent Blank	13-NOV-10 05:44:10	ST111210M2	ST111210M3	BS
12NOV10M	19	ST111210M3	1613 CS3 100511J	13-NOV-10 06:39:36	ST111210M2	ST111210M3	BS

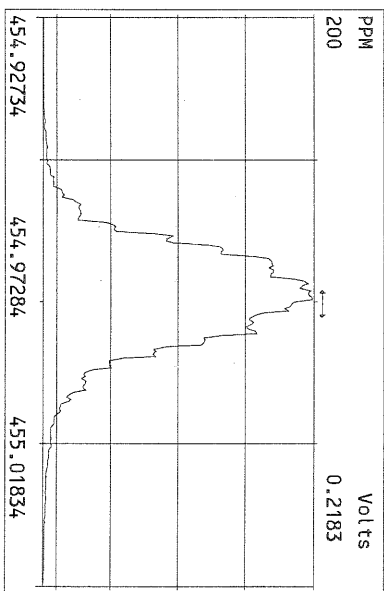
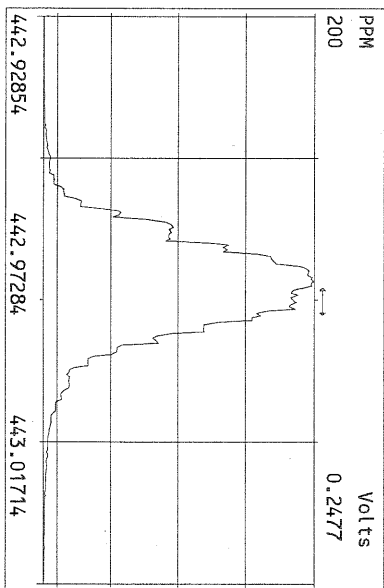
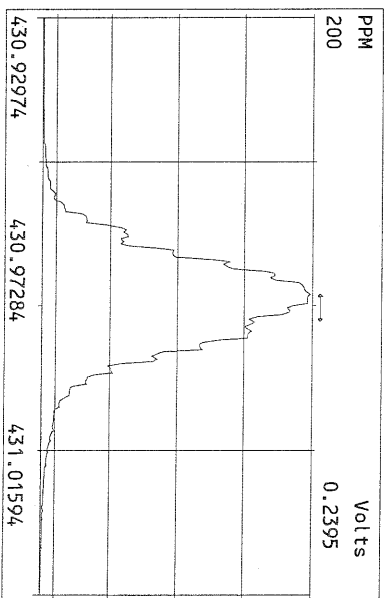
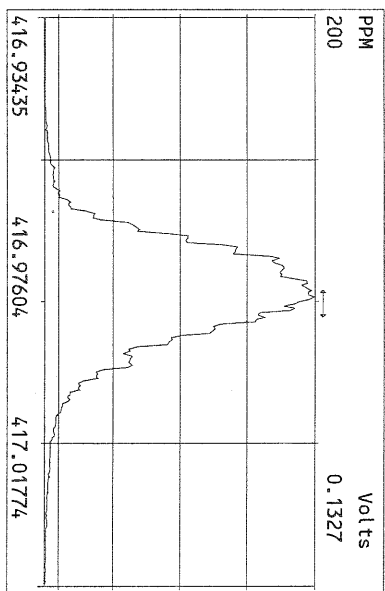
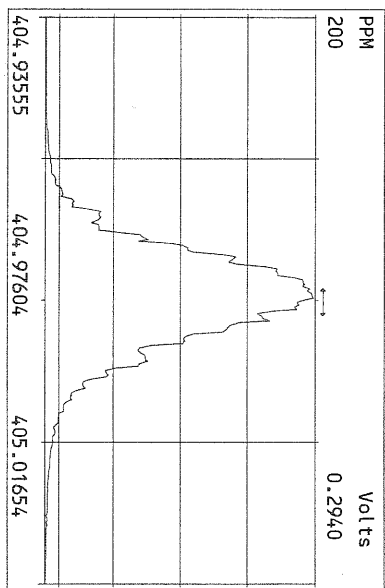
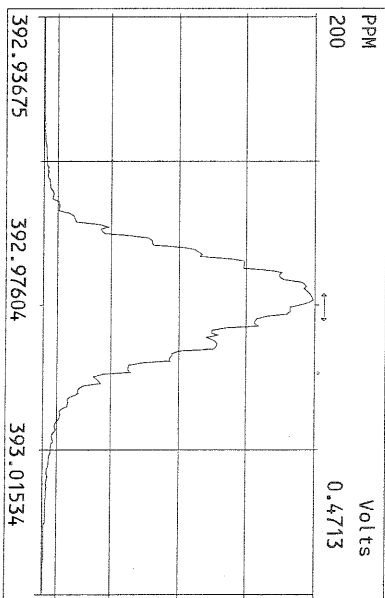
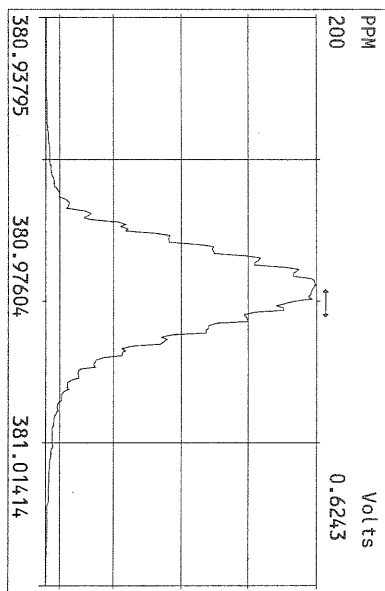
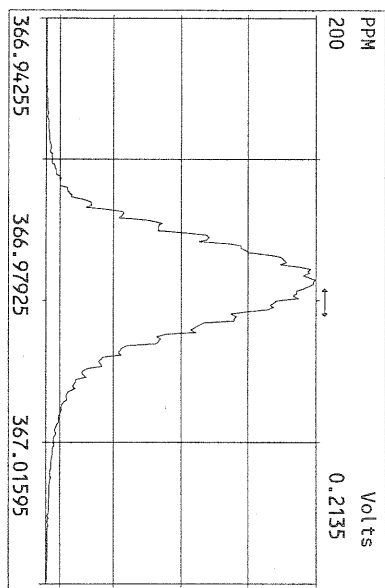
6/11/10

Data Backed Up: _____

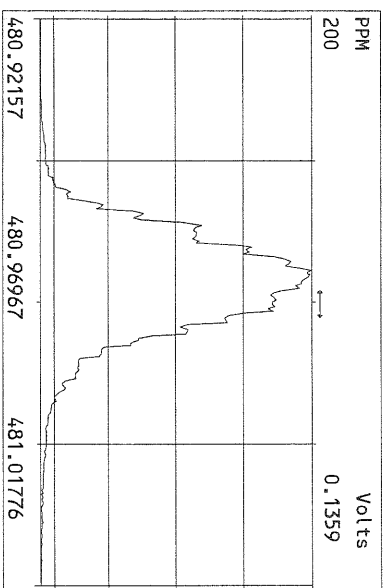
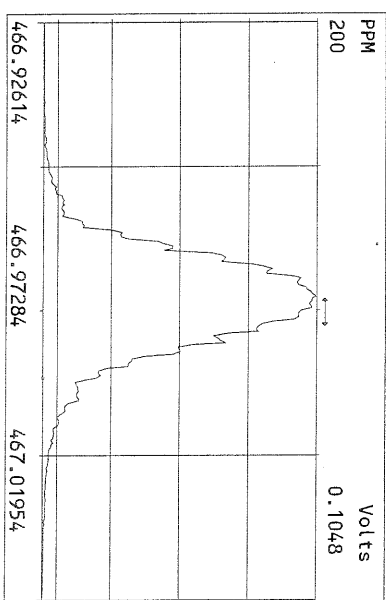
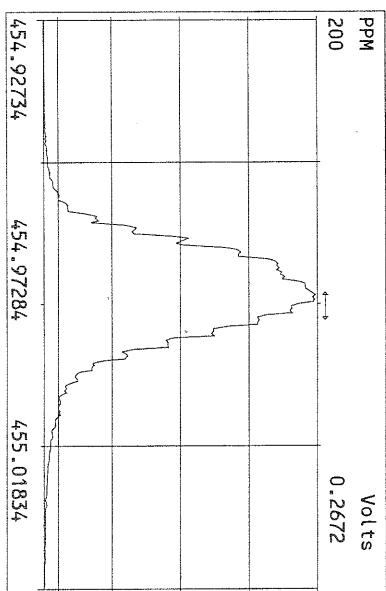
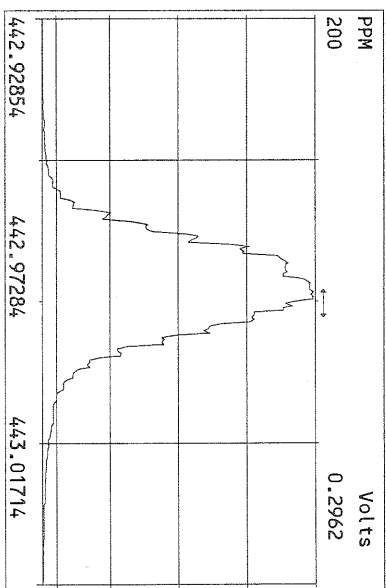
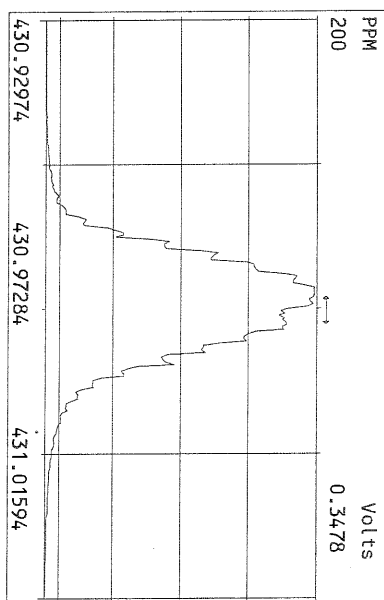
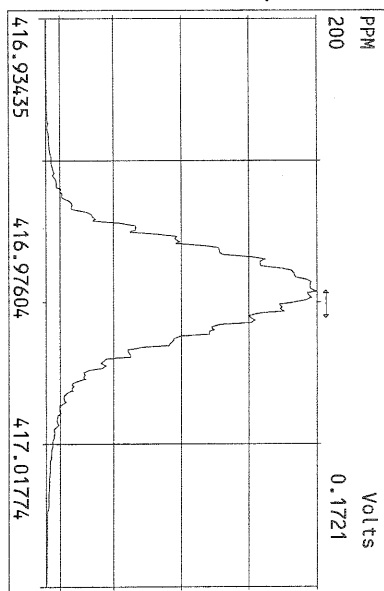
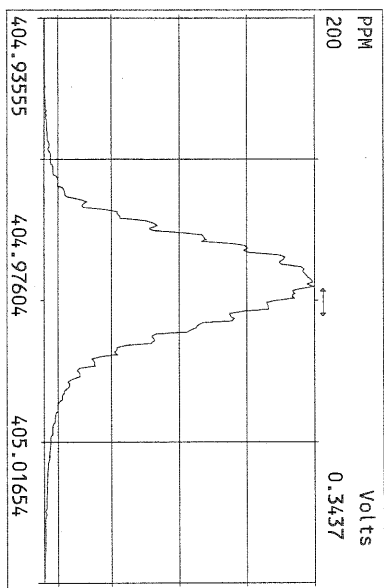
Date: _____

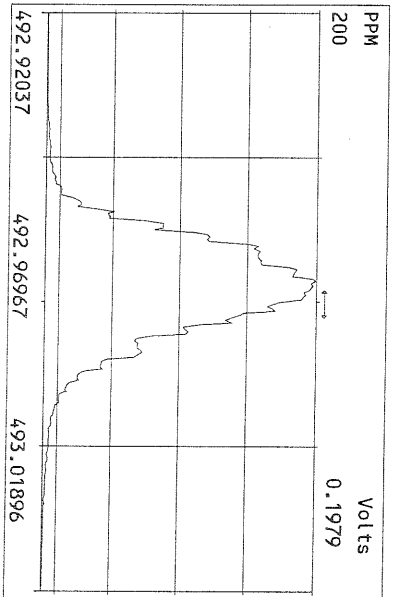
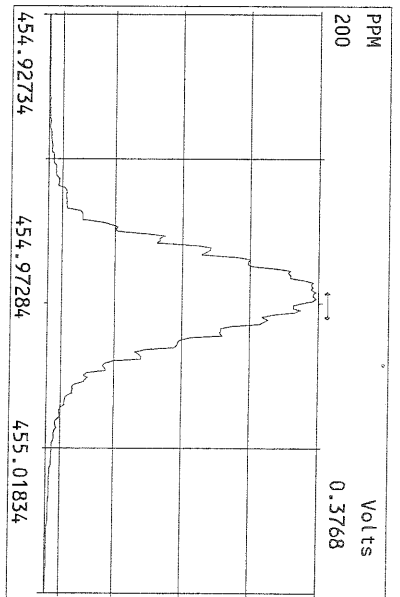
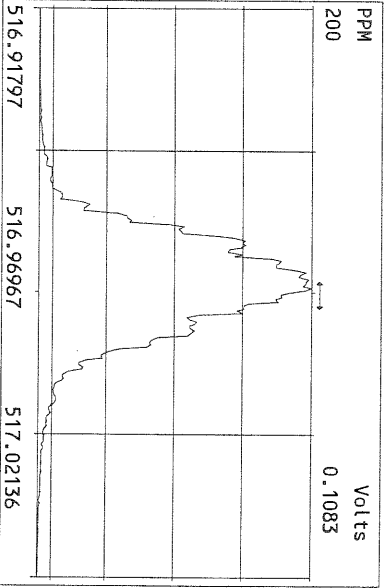
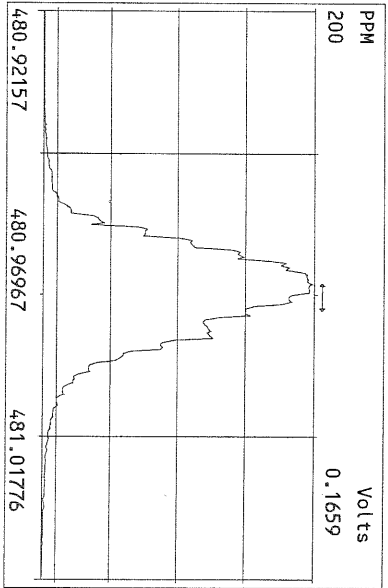
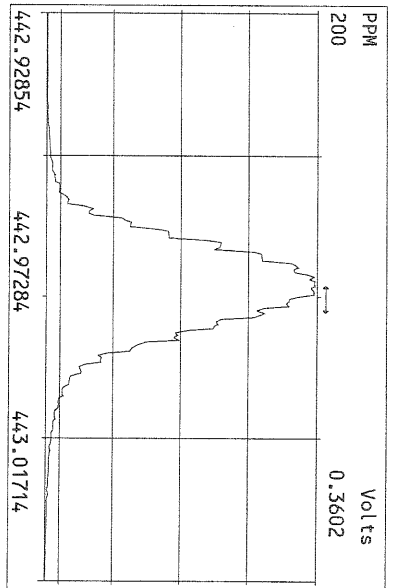
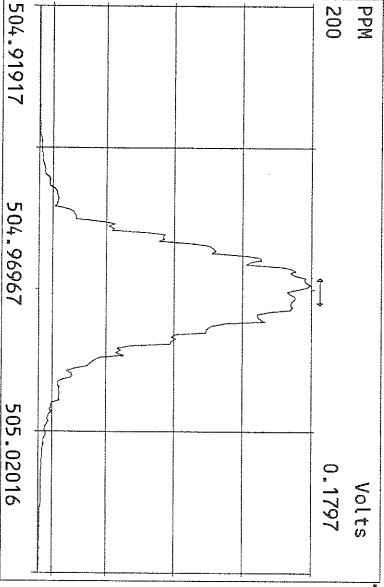
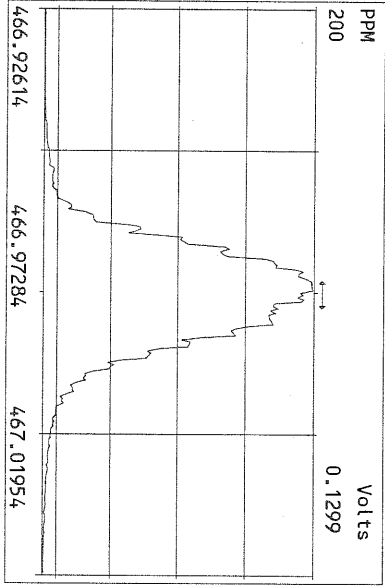
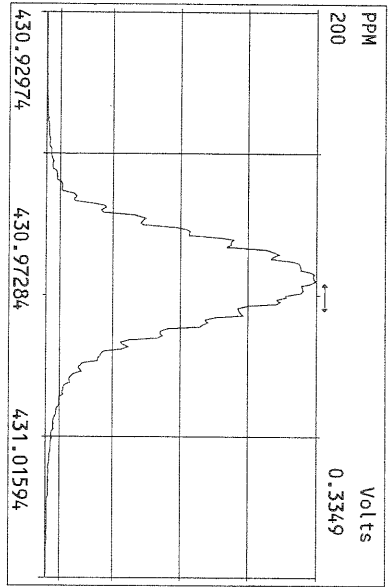




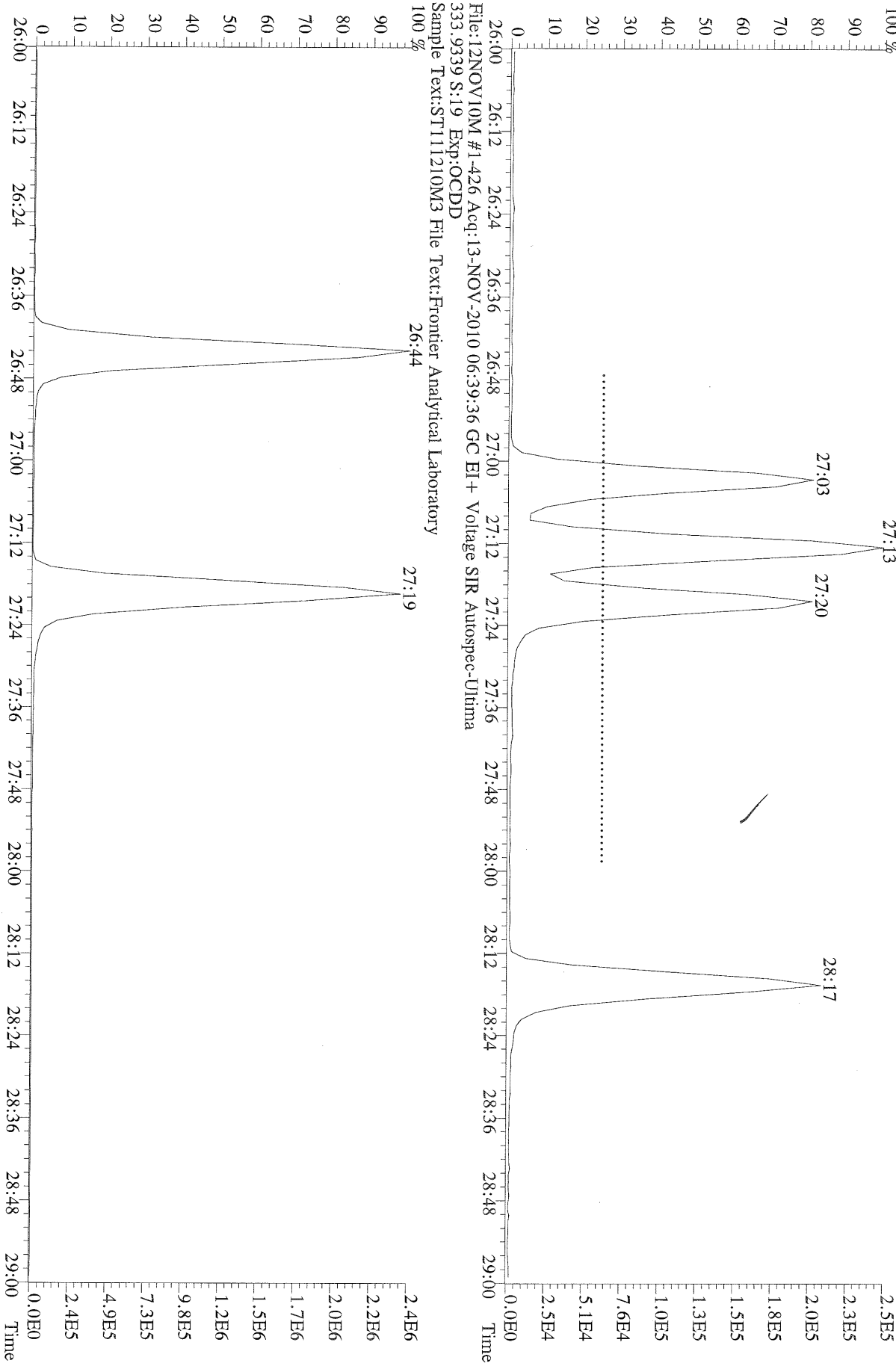


Peak Locate Examination:12-NOV-2010:14:02 File:12NOV10M
Experiment:OCDD Function:4 Reference:PFK

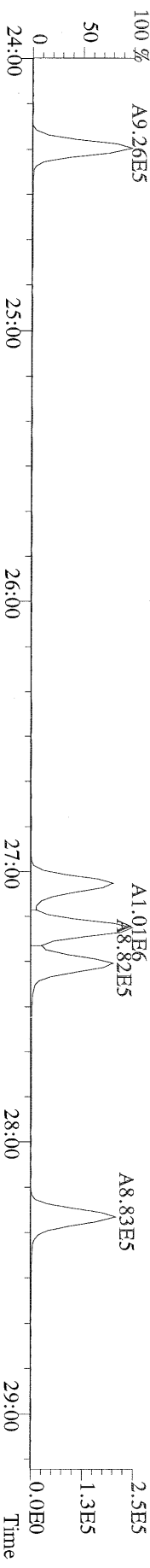




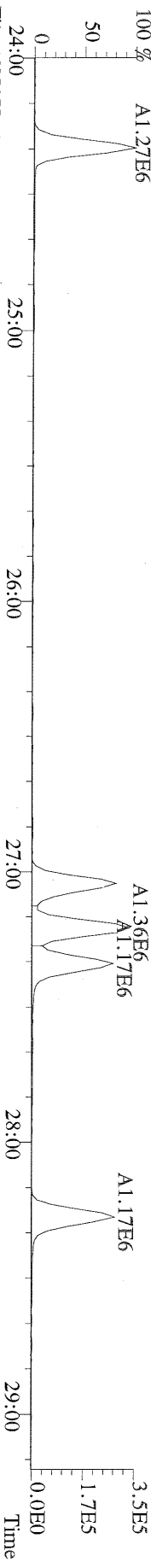
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:19 Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100 %



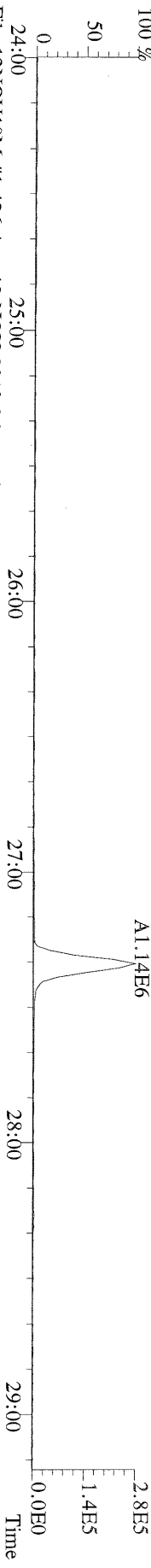
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:19 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100% A9.26E5



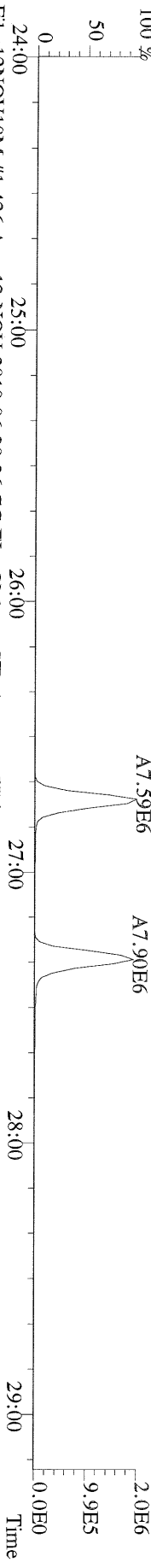
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:19 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100% A1.27E6



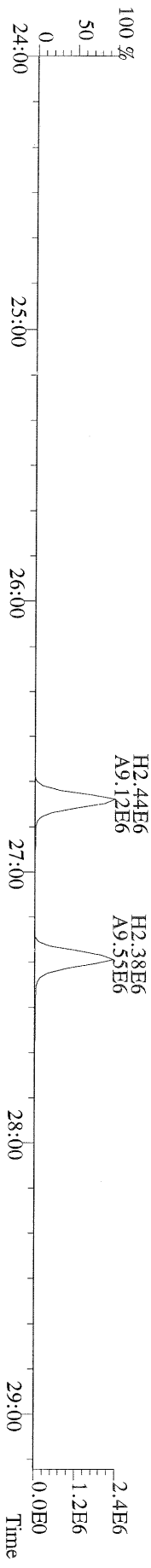
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:19 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100% A1.14E6



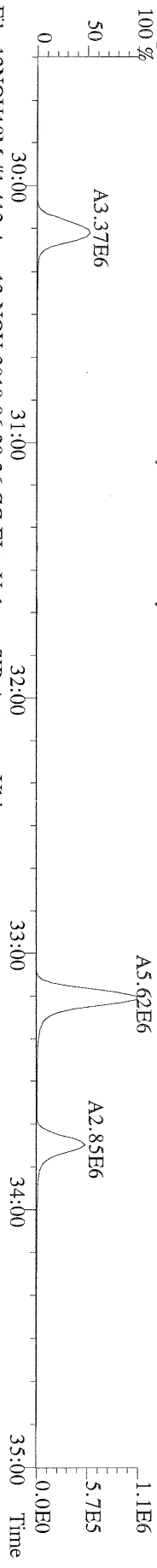
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:19 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100% A7.59E6



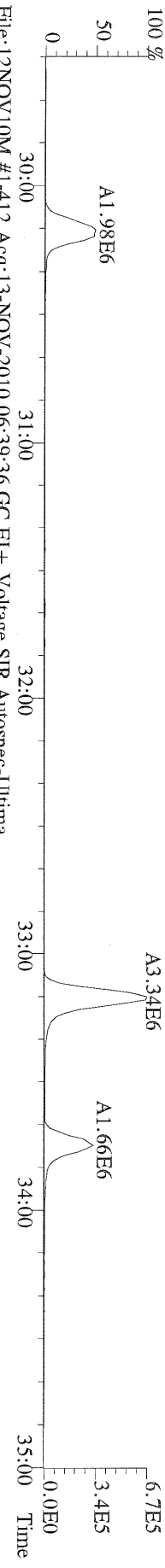
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:19 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



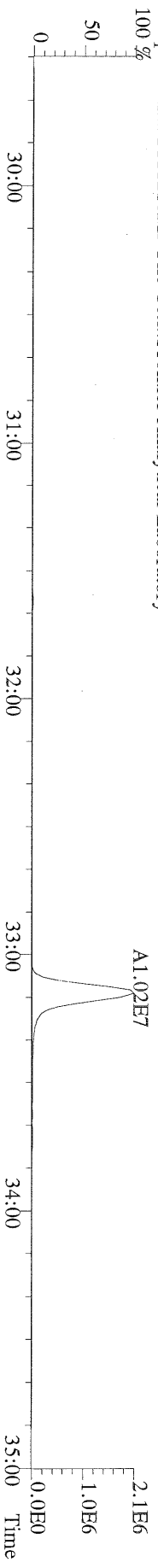
File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 355.8546 S:19 F:2 BSTUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



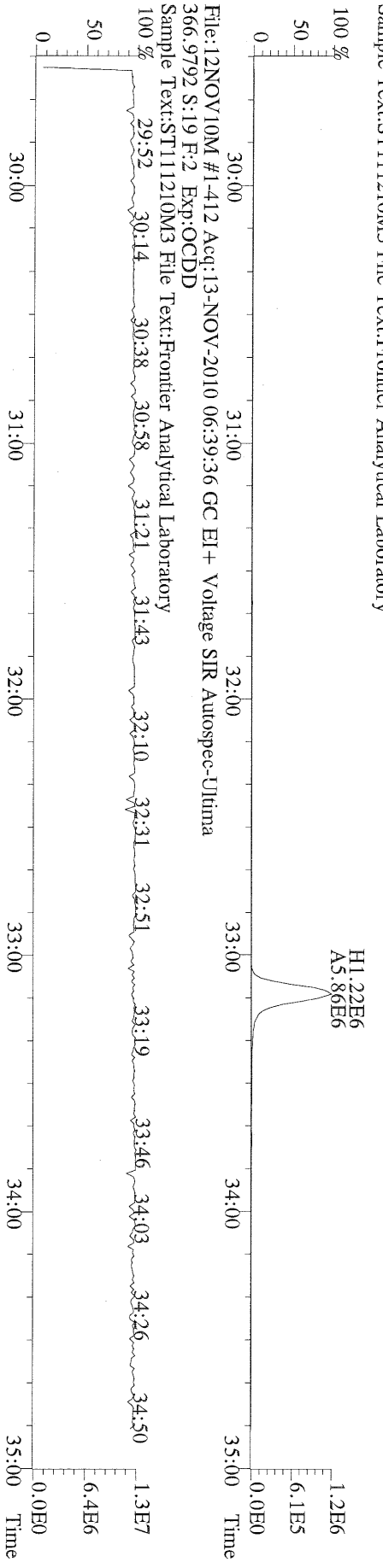
File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 357.8517 S:19 F:2 BSTUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 367.8949 S:19 F:2 BSTUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

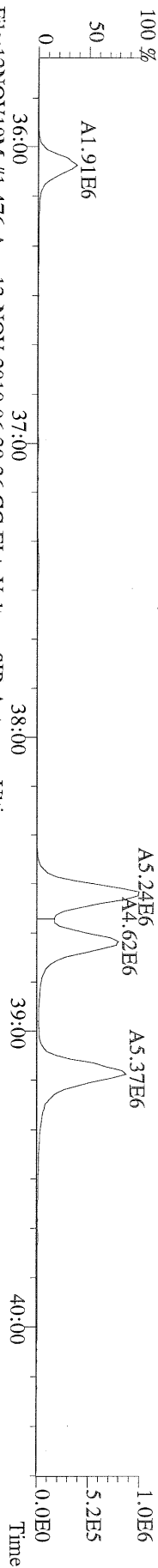


File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 369.8919 S:19 F:2 BSTUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

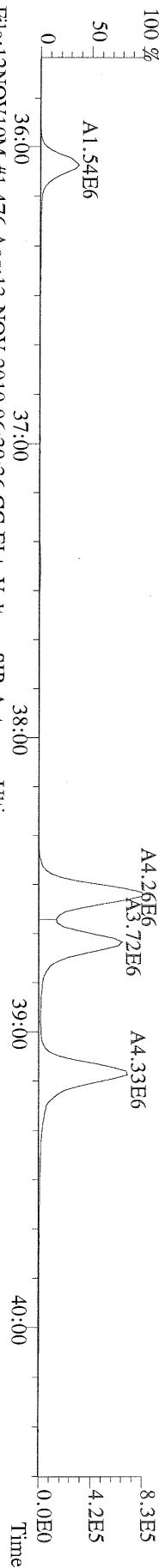


File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 366.9792 S:19 F:2 Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

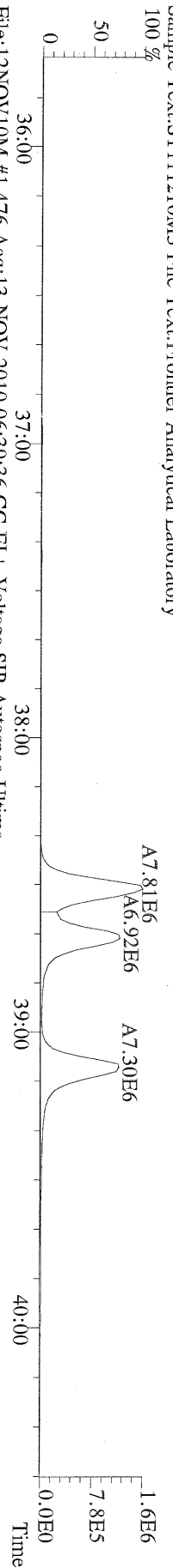
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



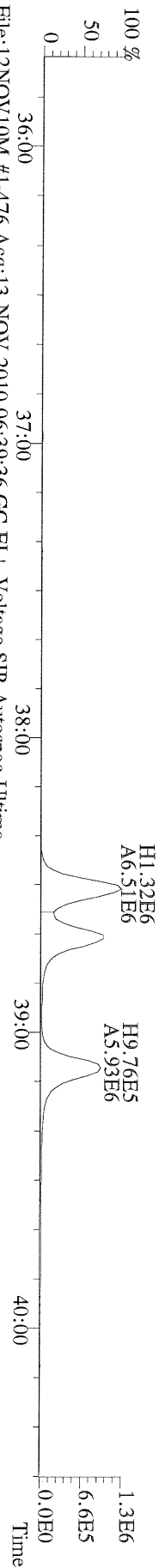
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



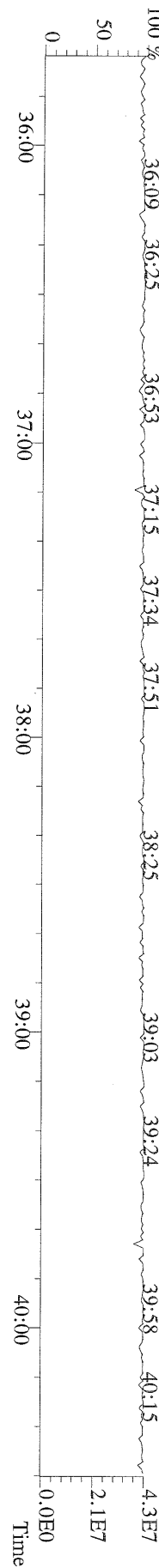
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



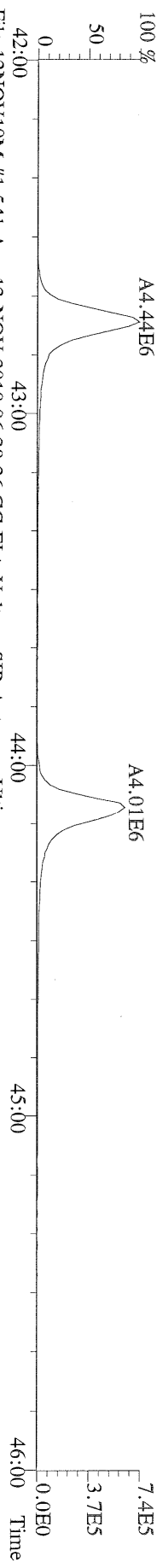
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:19 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



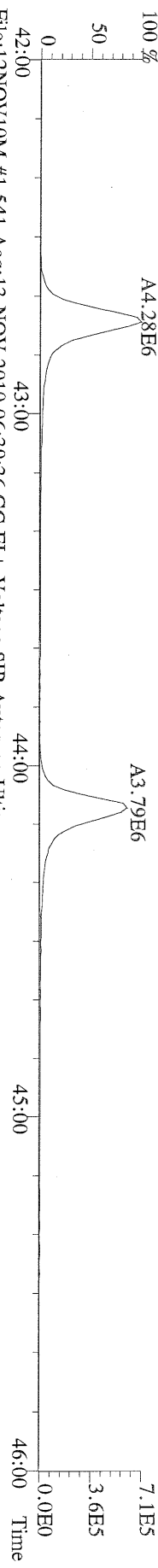
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:19 F:3 Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



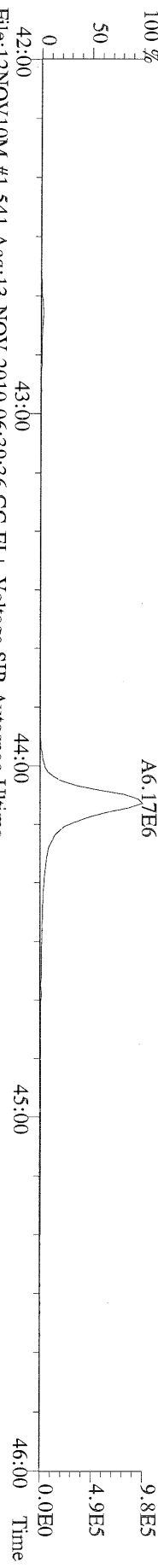
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



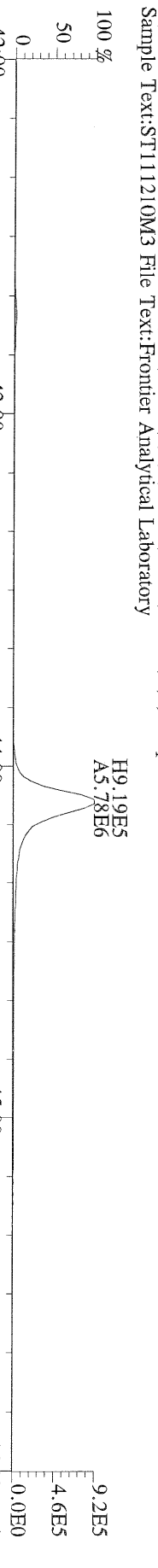
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



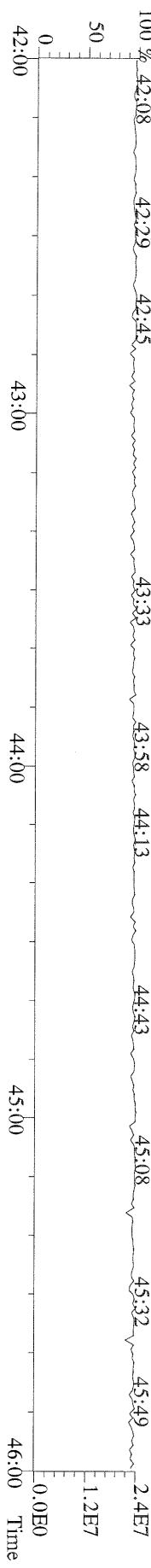
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



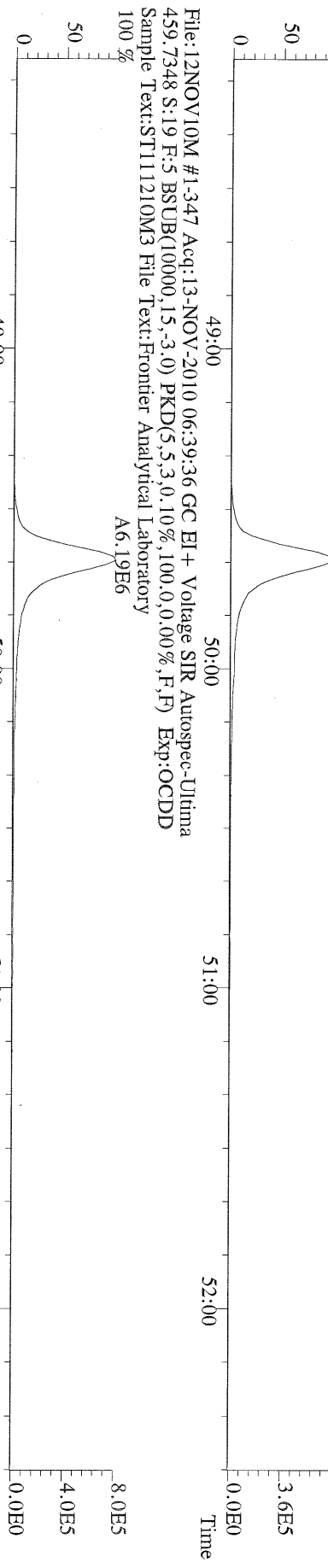
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



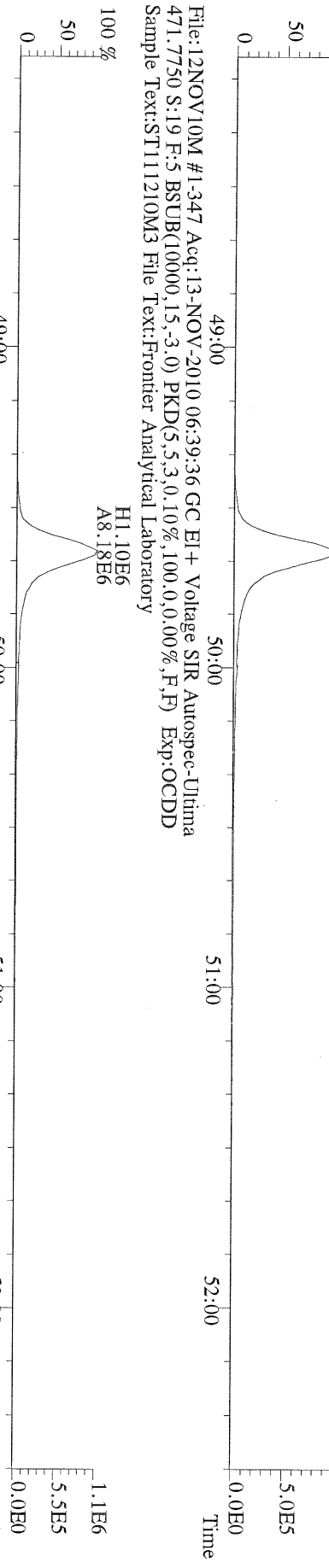
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:19 F:4 Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



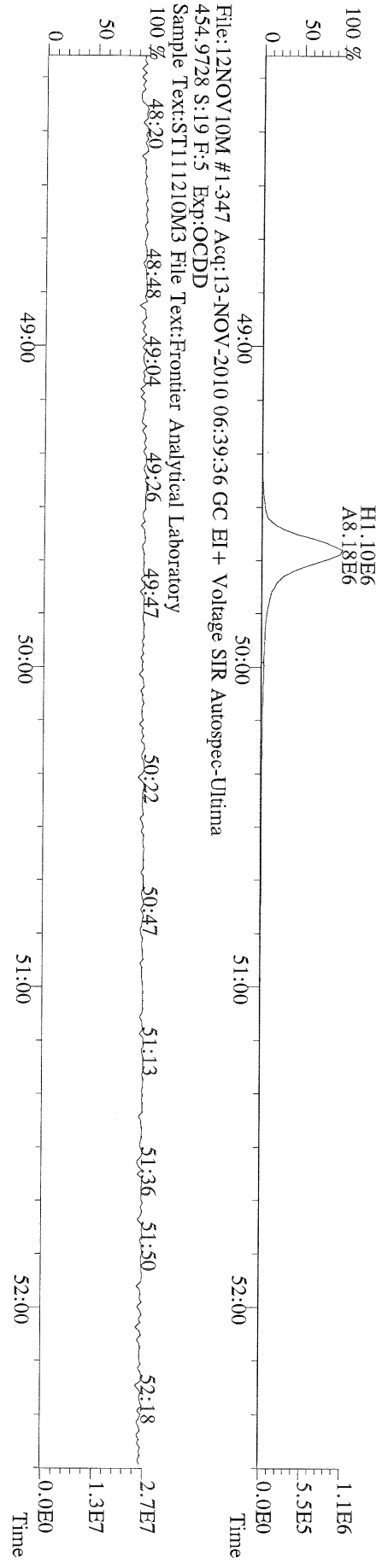
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100 %



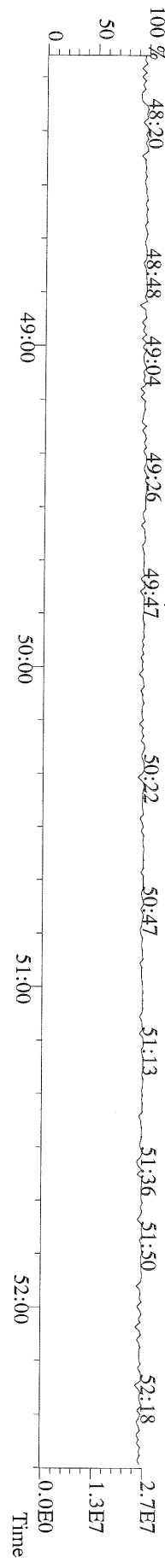
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100 %



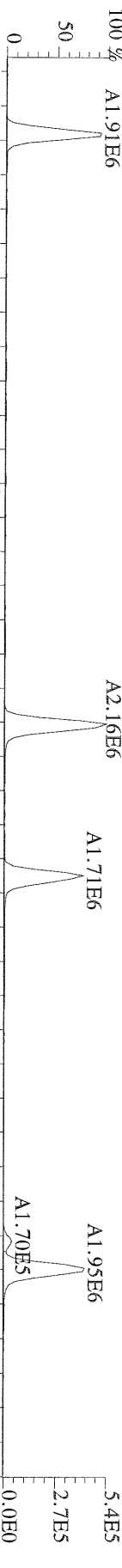
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,100,0,0,00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



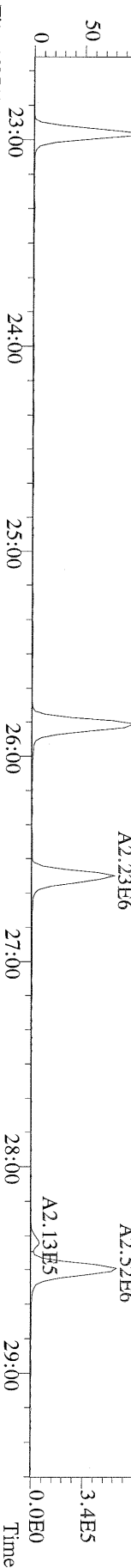
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:19 F:5 Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100 %



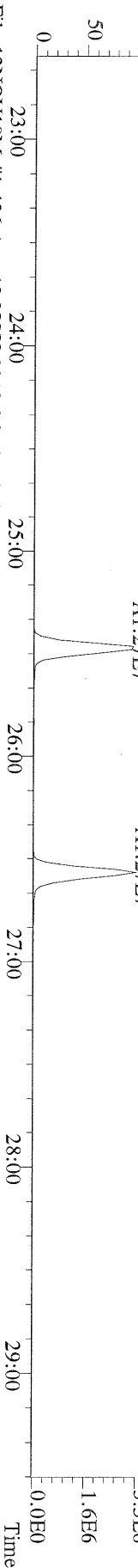
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



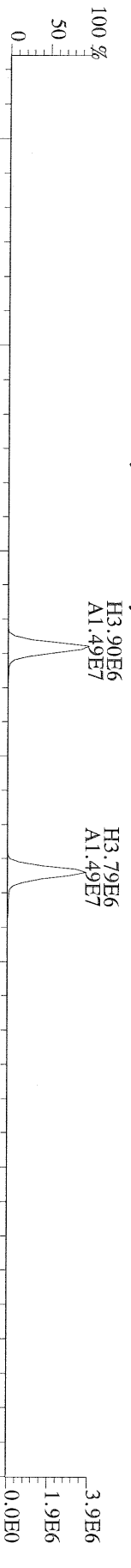
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



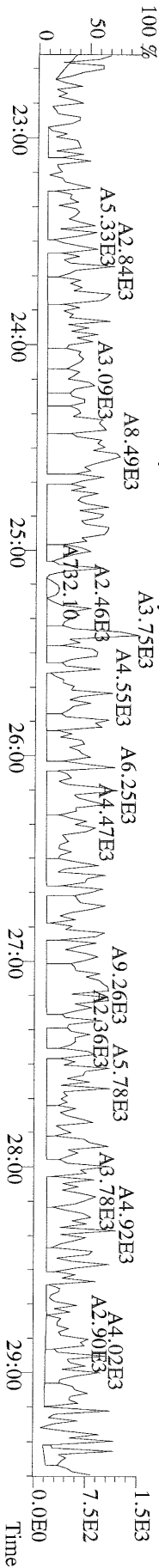
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



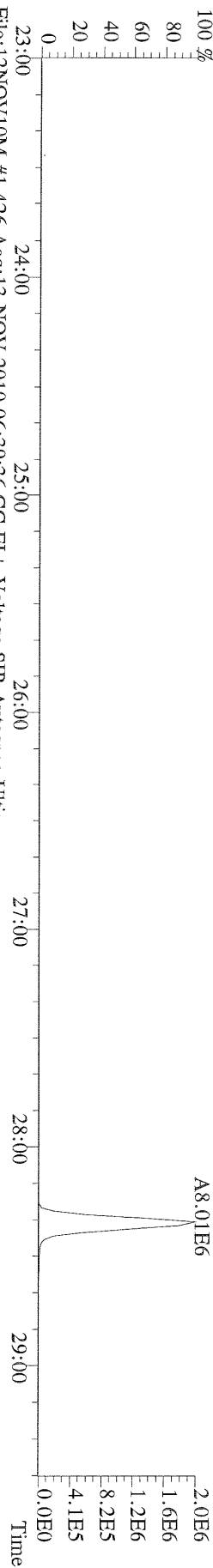
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



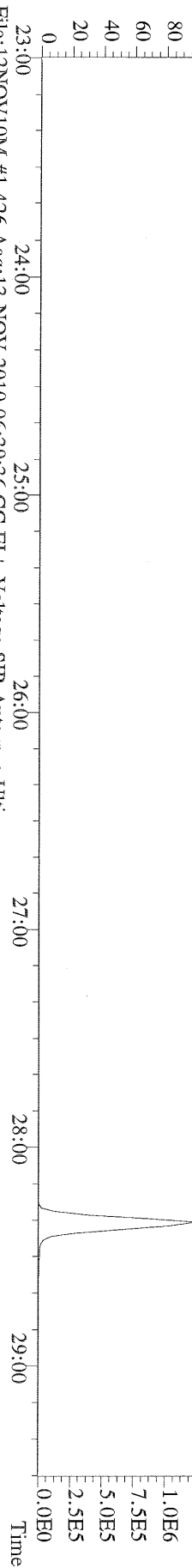
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



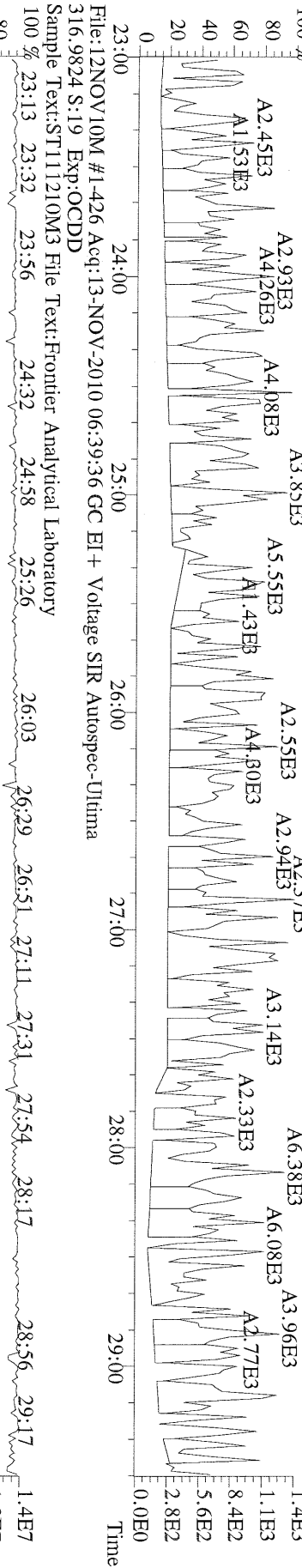
File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

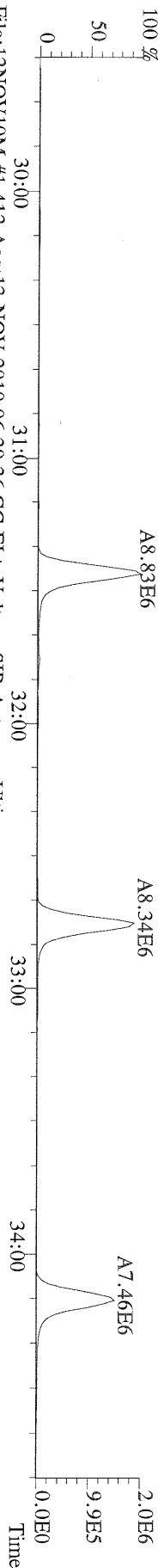


File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

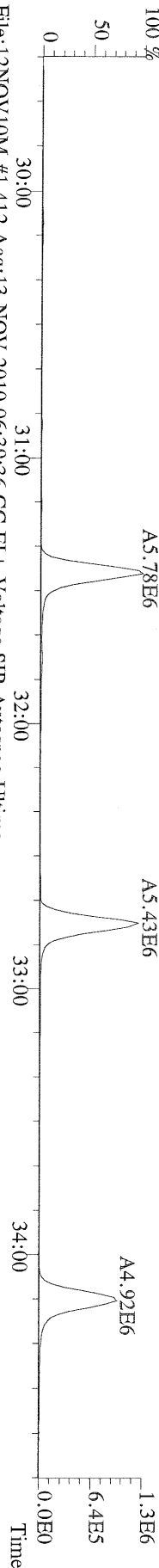


File:12NOV10M #1-426 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 316.9824 S:19 Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

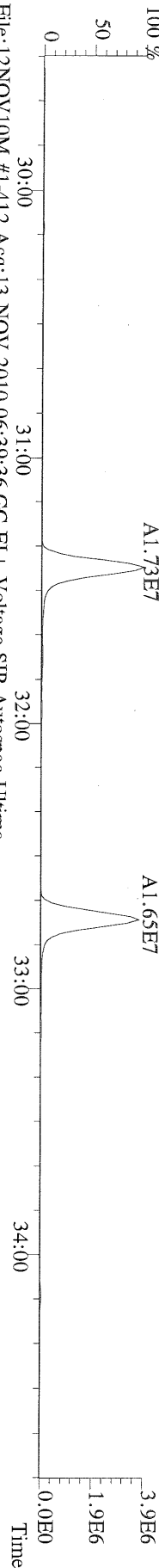
File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:19 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



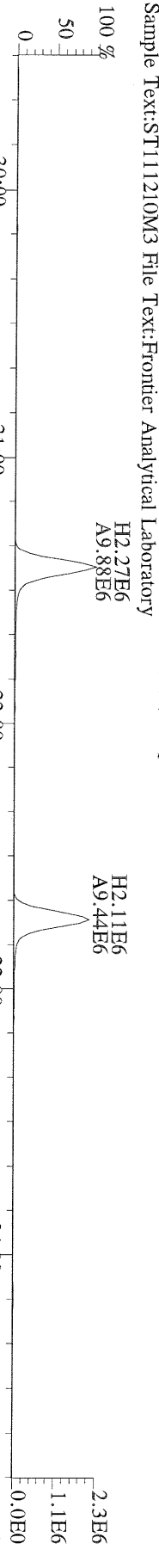
File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:19 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



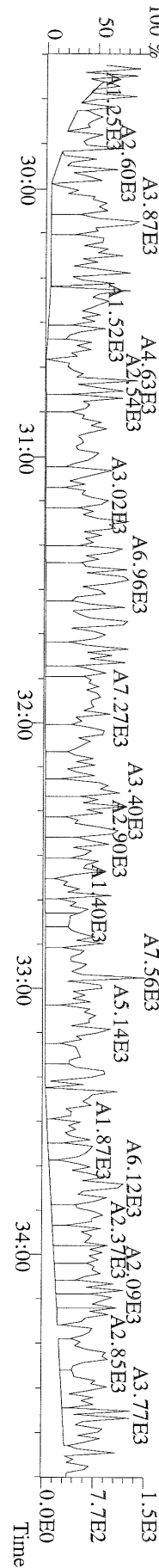
File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 351.9000 S:19 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



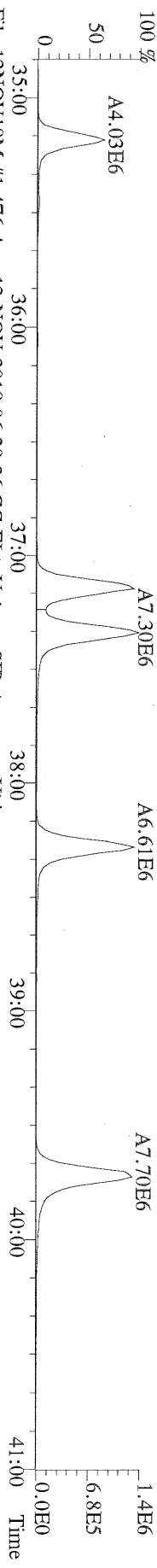
File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 353.8970 S:19 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



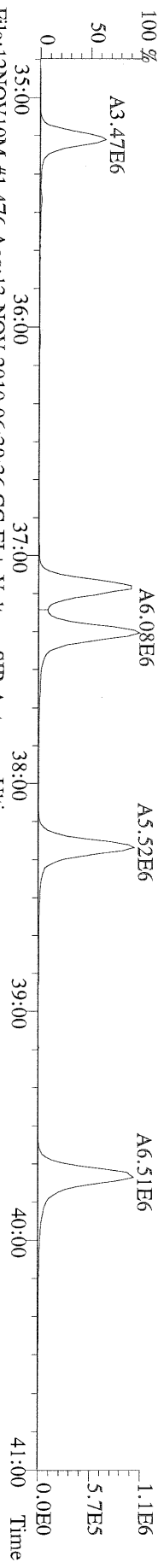
File:12NOV10M #1-412 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:19 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



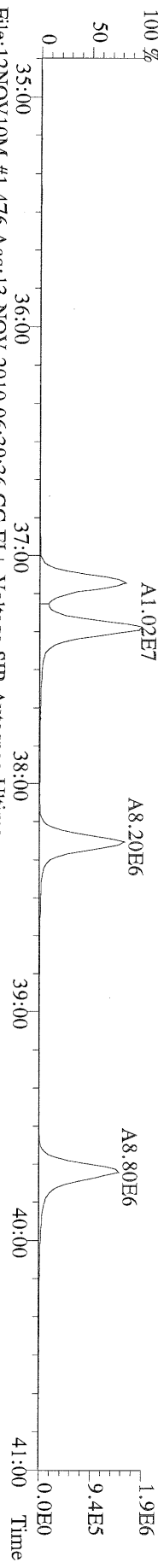
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



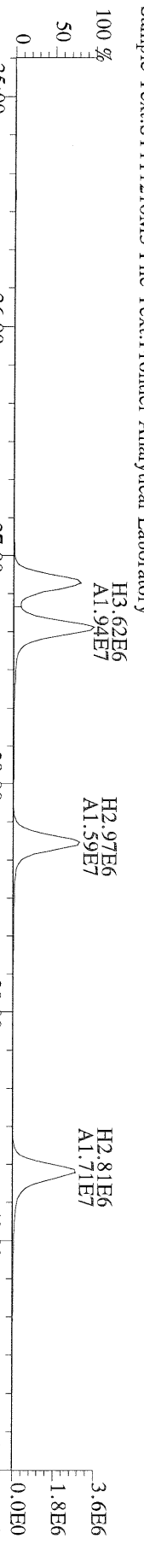
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



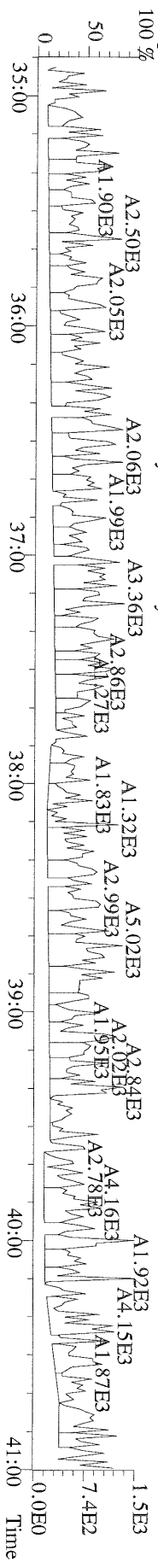
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



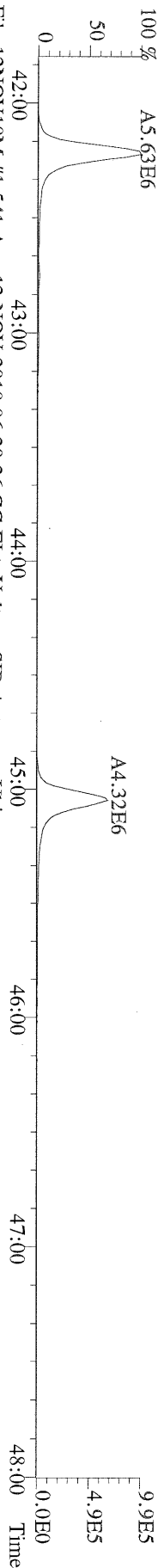
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



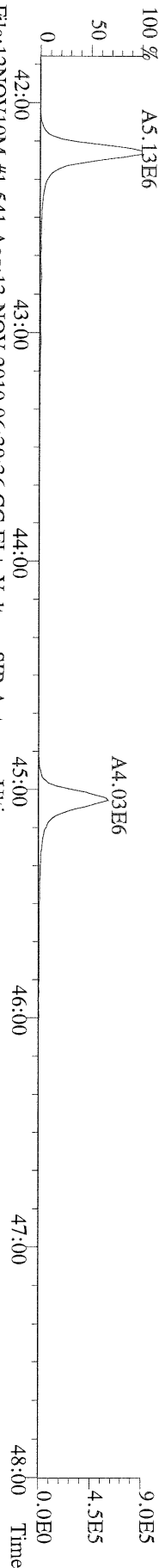
File:12NOV10M #1-476 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



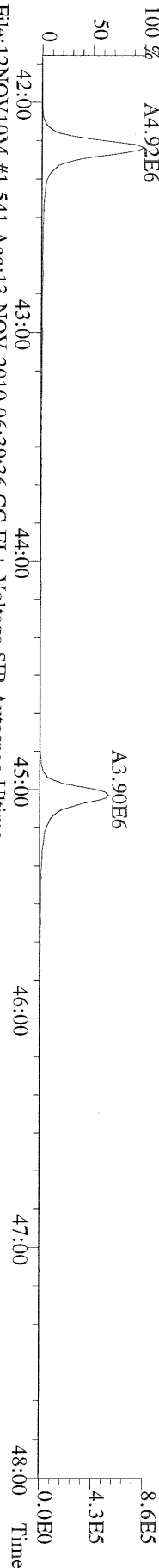
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100 %



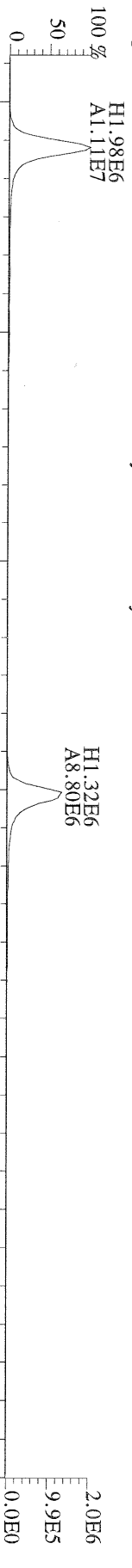
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100 %



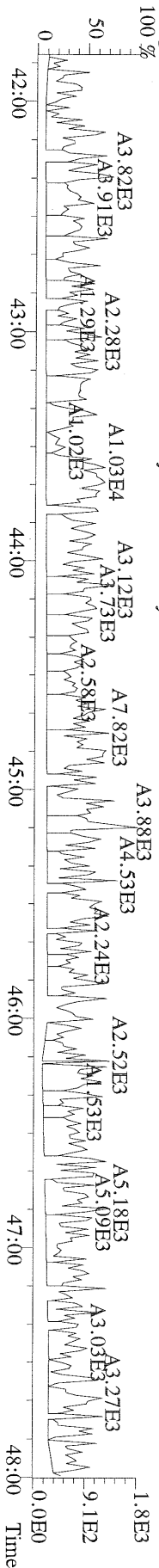
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory
100 %



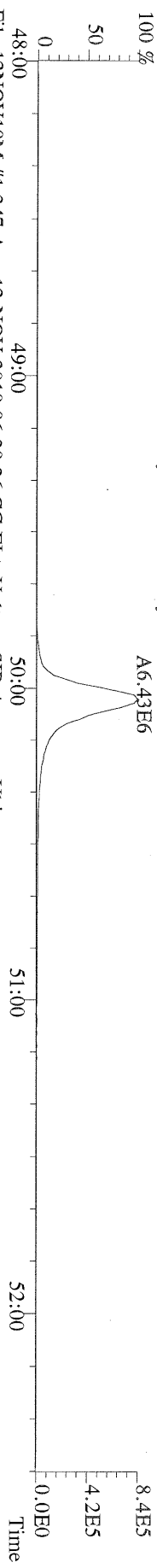
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



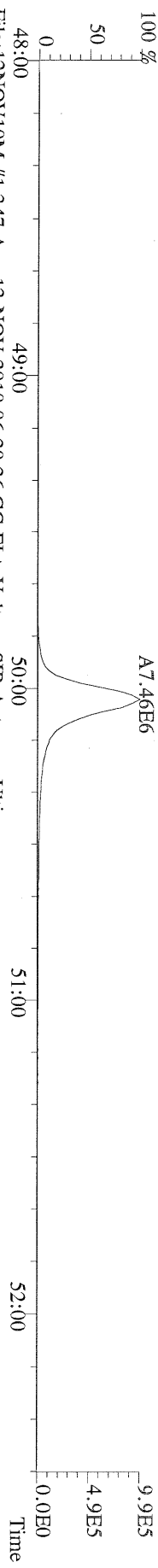
File:12NOV10M #1-541 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:19 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



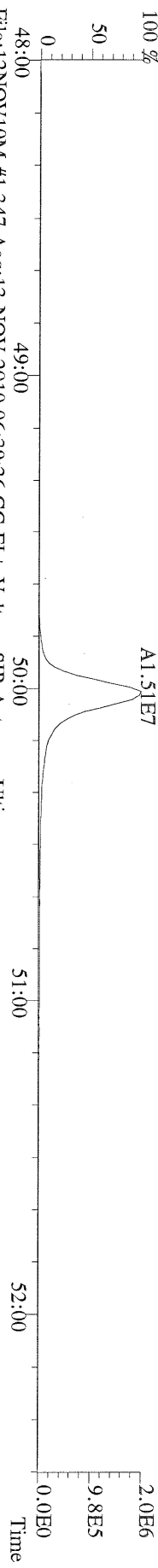
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 441.7428 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



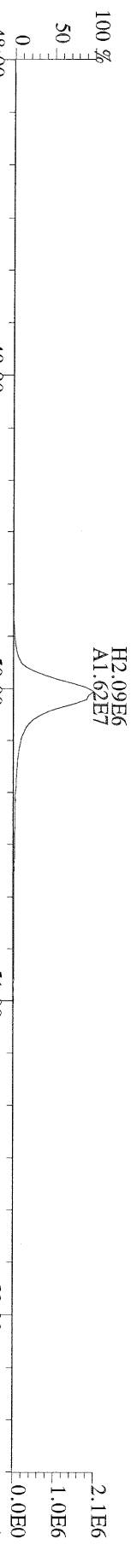
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 443.7398 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory



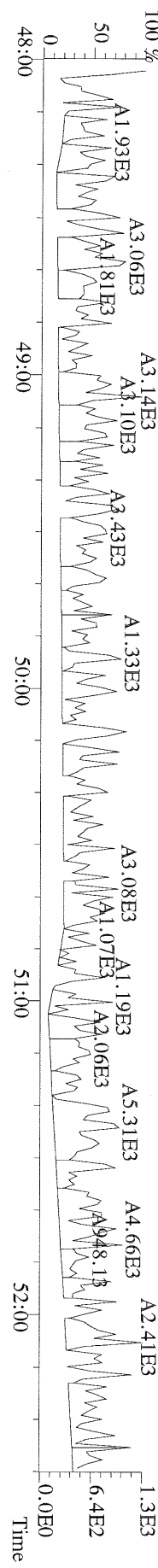
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 453.7831 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

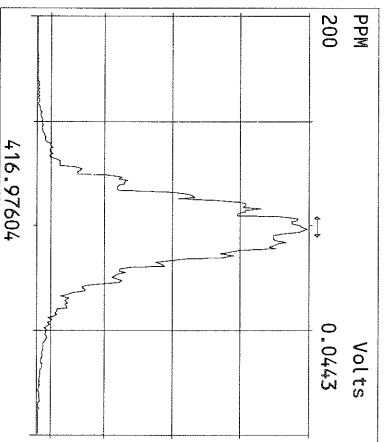
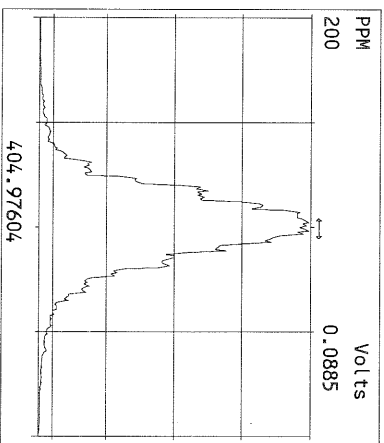
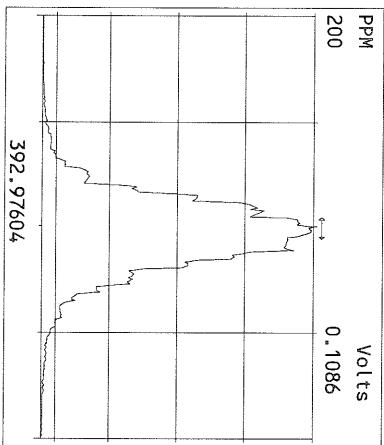
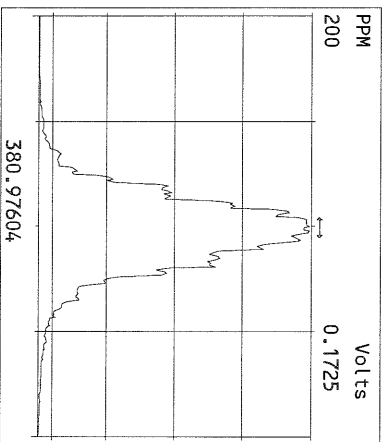
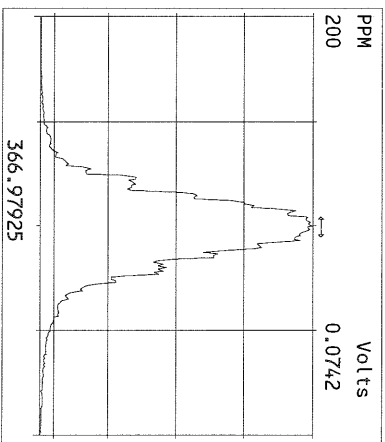
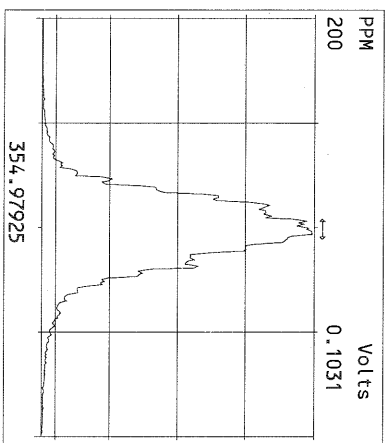
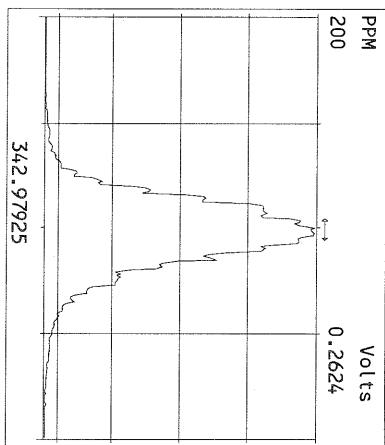
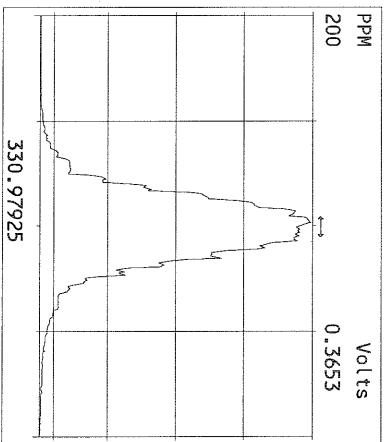
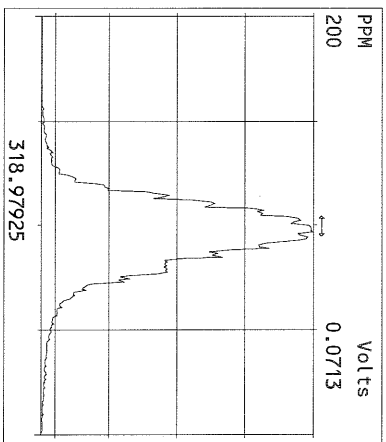
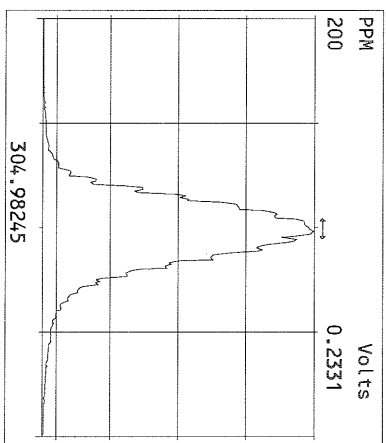
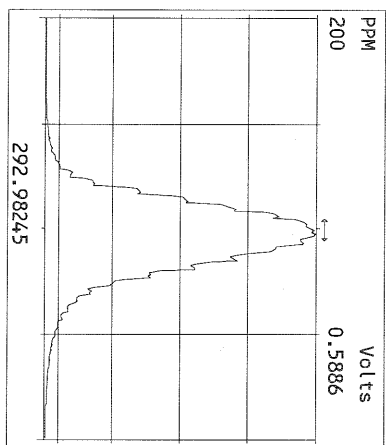


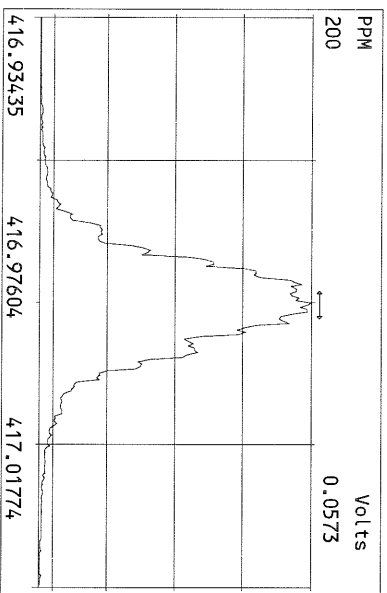
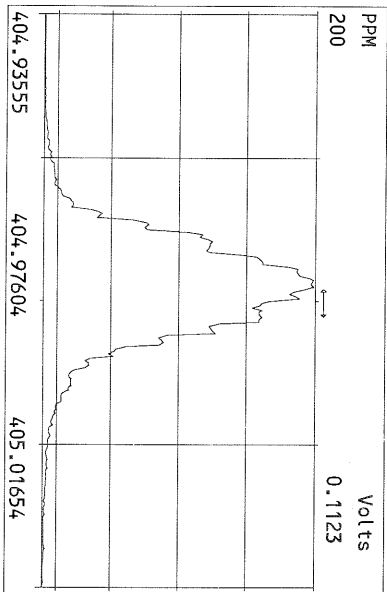
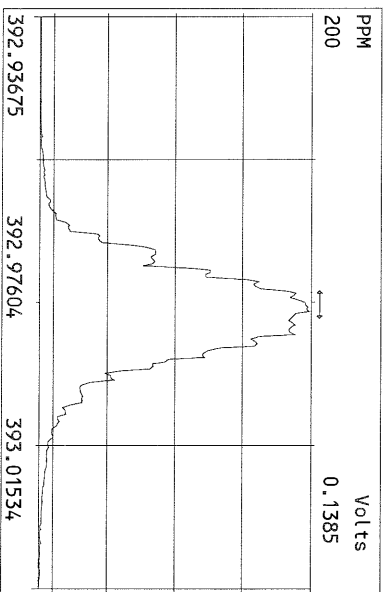
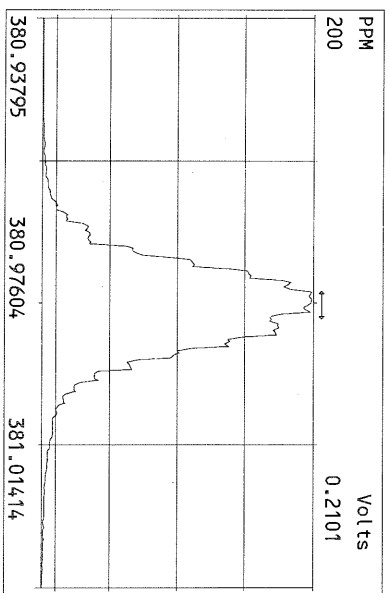
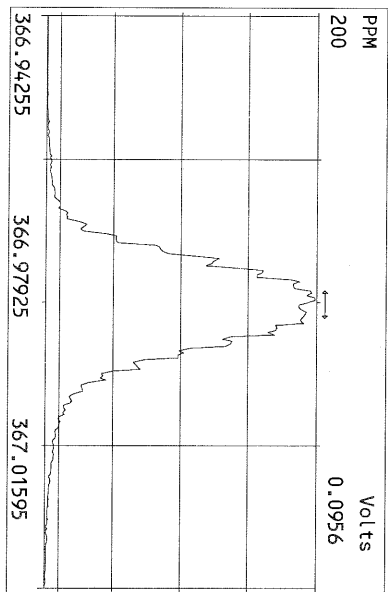
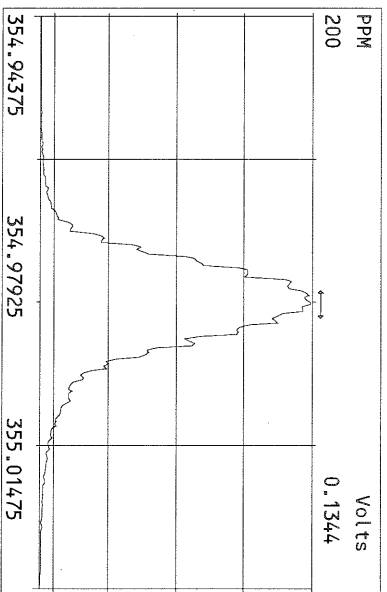
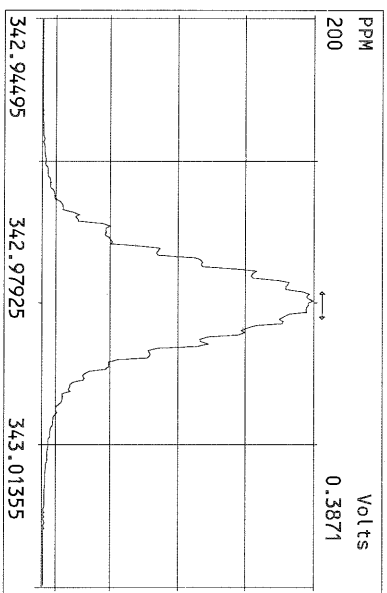
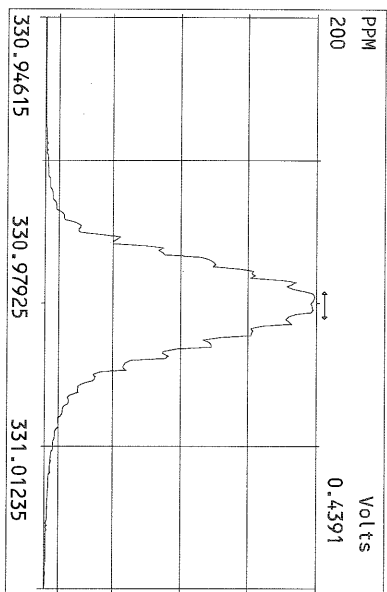
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 455.7801 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

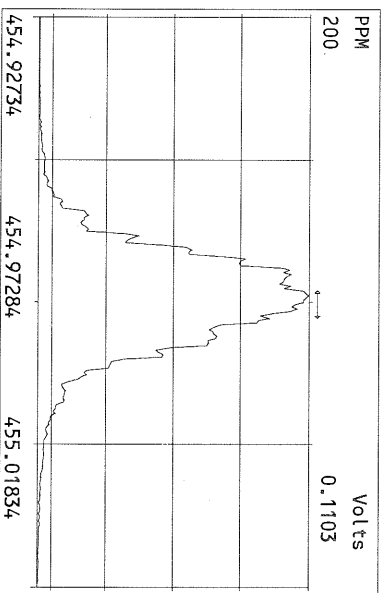
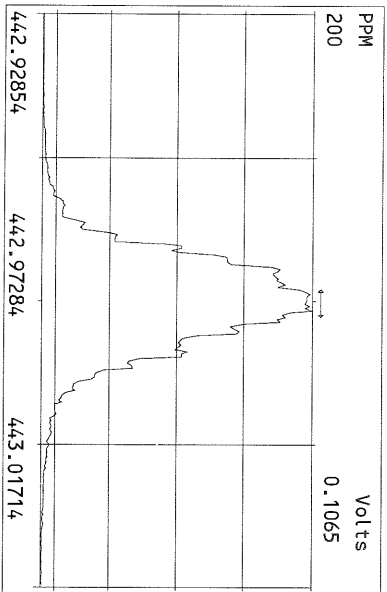
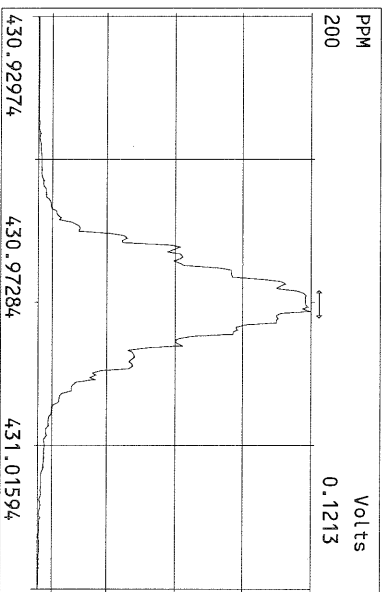
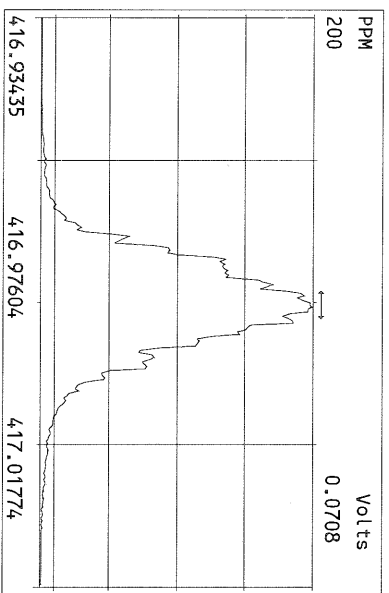
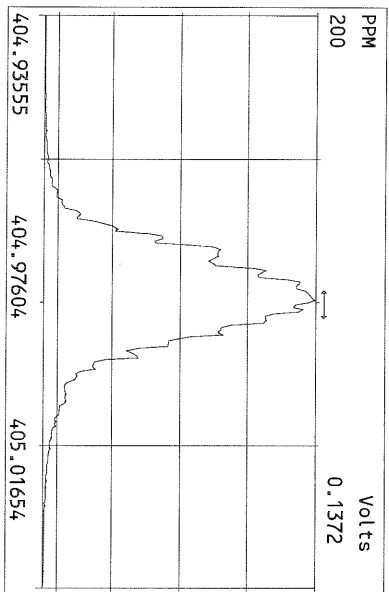
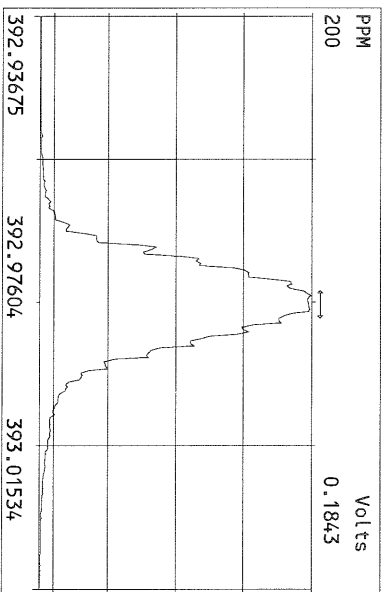
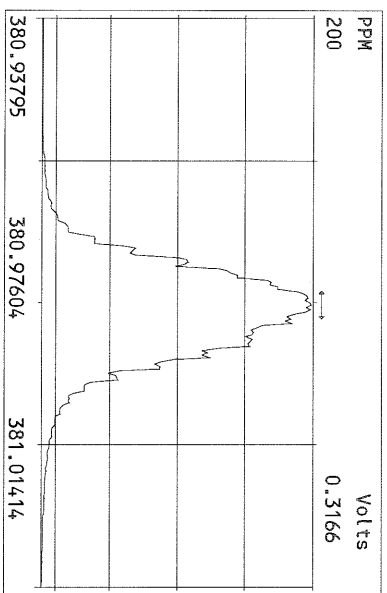
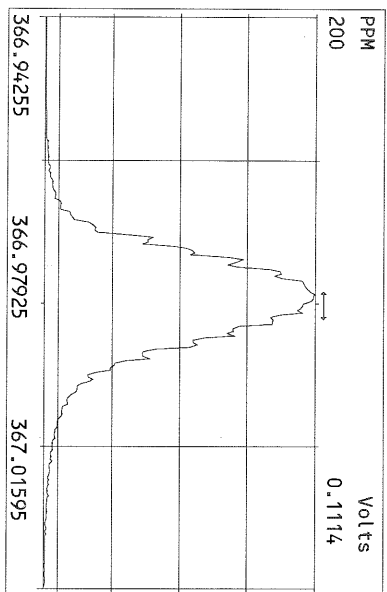


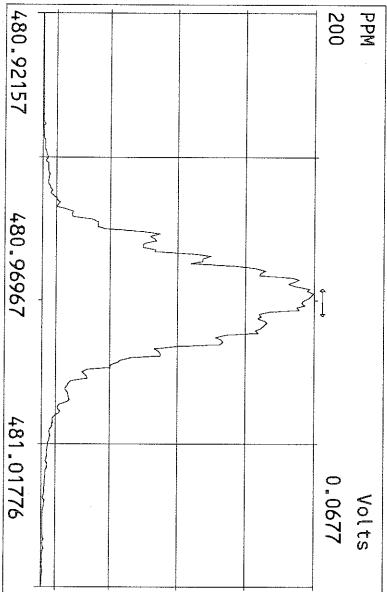
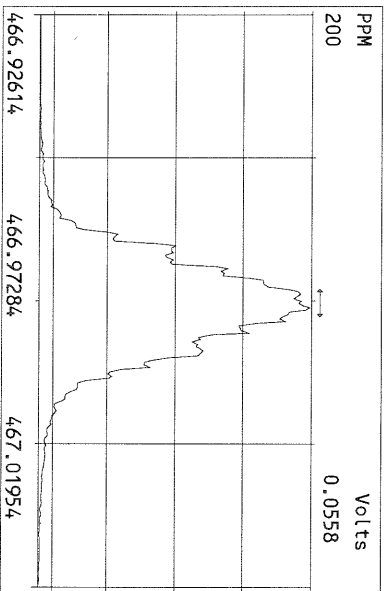
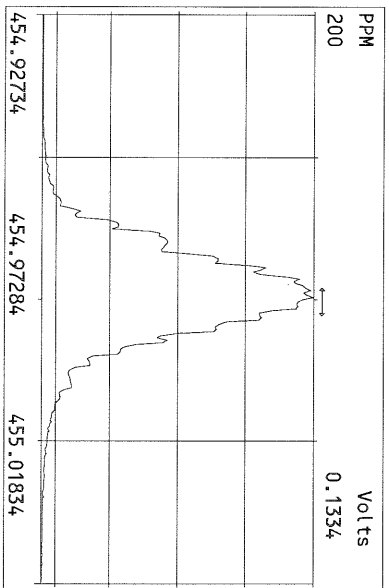
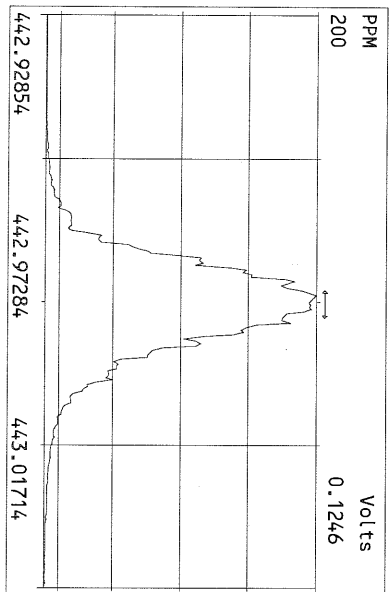
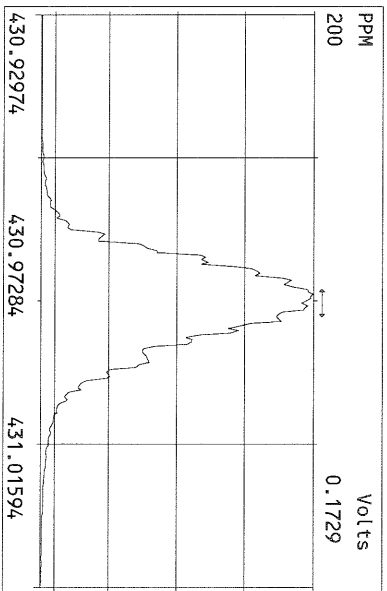
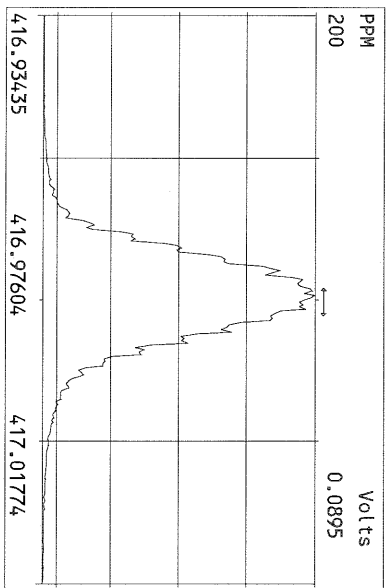
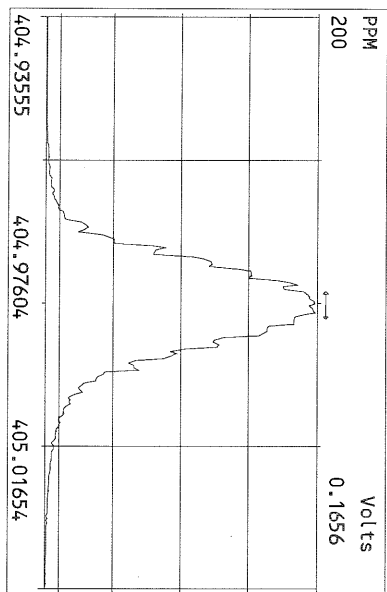
File:12NOV10M #1-347 Acq:13-NOV-2010 06:39:36 GC EI+ Voltage SIR Autospec-Ultima
 513.6775 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:ST111210M3 File Text:Frontier Analytical Laboratory

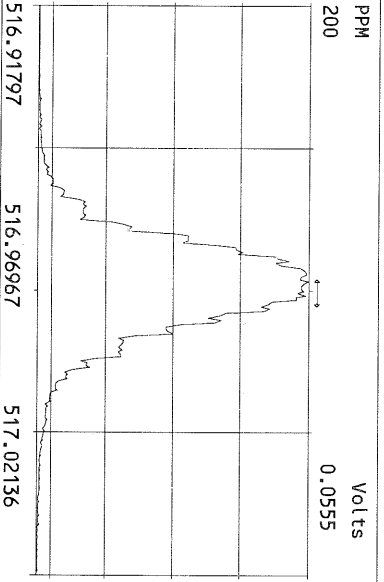
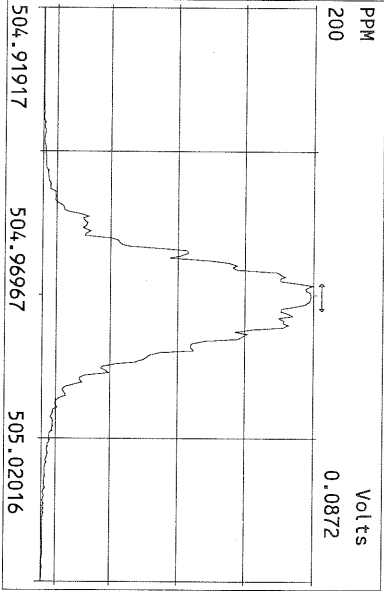
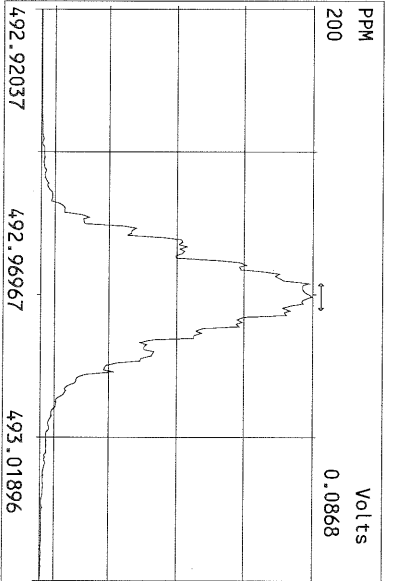
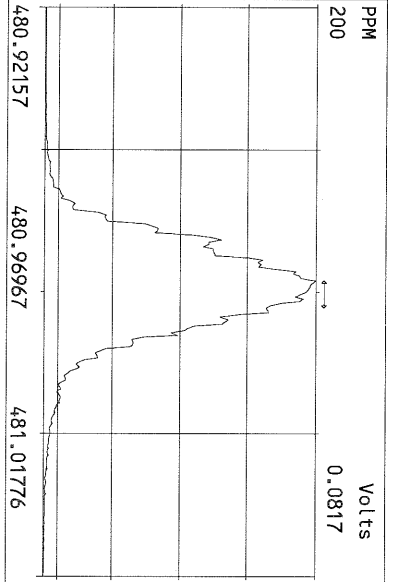
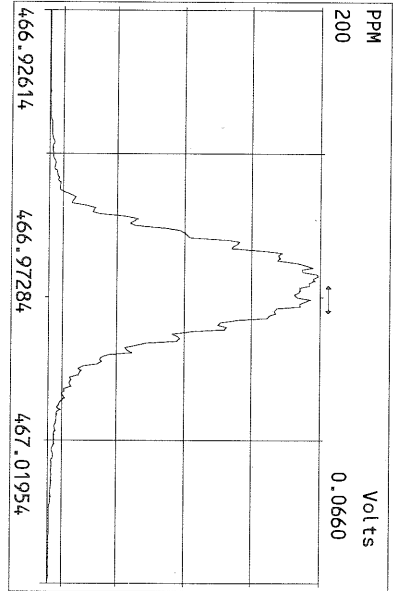
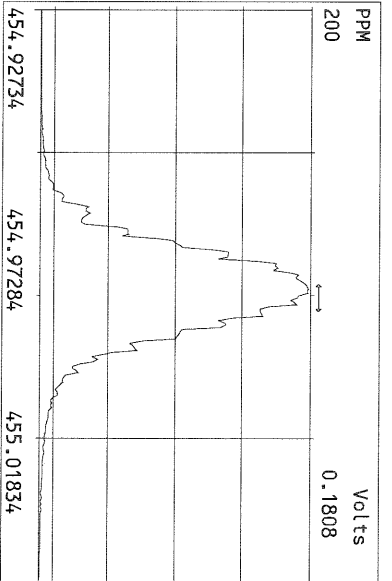
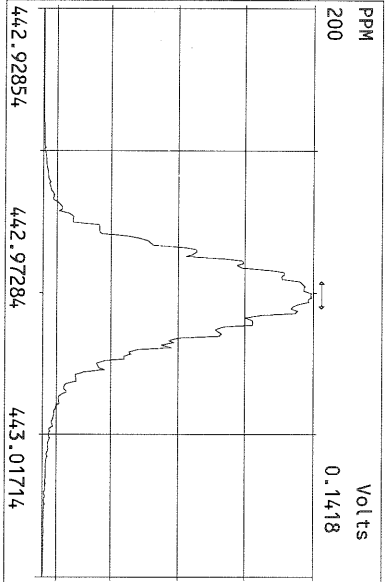
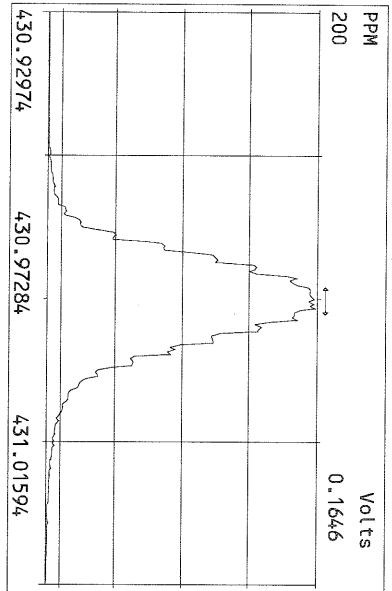












USEPA - ITD

FORM 4A
TCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 9/3/10

Instrument ID: FAL1

GC Column ID: DB225

VER Data Filename: 09NOV10A Sam:1

Analysis Date: 9-NOV-10 Time: 15:00:05

	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	0.77	0.65-0.89	y	8.45	8.40 - 12.0 ✓
LABELED COMPOUNDS						
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	86.9	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: 11/10/10

FAL ID: ST110910A1 Filename: 09NOV10A Sam:1 Acquired: 9-NOV-10 15:00:05 ICal: tcdffal1-9-3-10
Client ID: 1613 CS3 100511J ConCal: ST110910A1 EndCal: ST110910A2
Results: GC Column: DB225 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	#Hom
2,3,7,8-TCDF	1.46e+07	0.77 y	19:28	1.10	8.45		2.50	-	-	1
13C-2,3,7,8-TCDF	1.58e+08	0.77 y	19:27	1.06	86.9					
13C-1,2,3,4-TCDF	1.72e+08	0.78 y	16:53	-	120					

Rec
86.9

Analyst: 

Date: 11/10/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:09NOV10A

Instrument: FAL1

GC: DB225

Experiment:TCDF

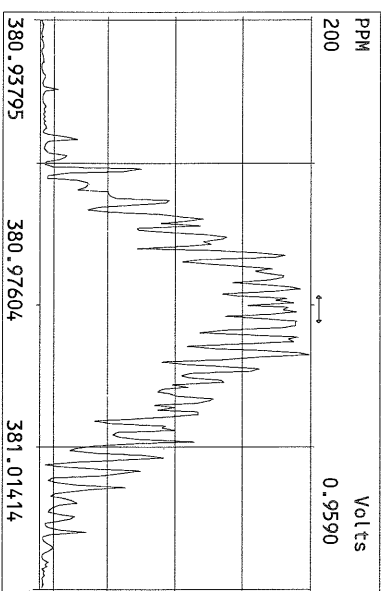
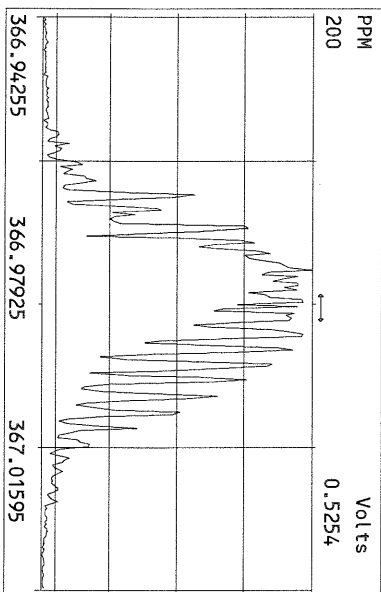
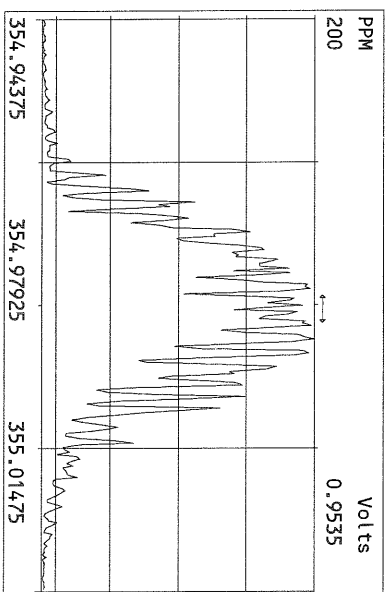
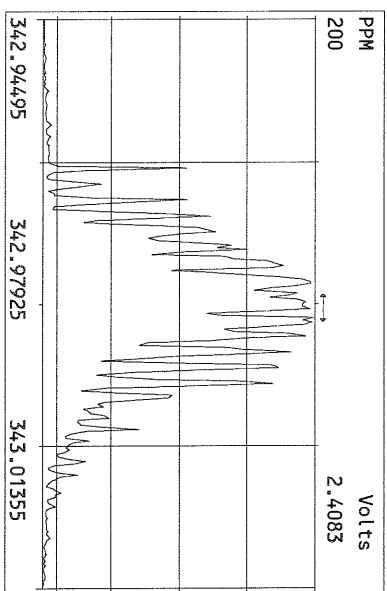
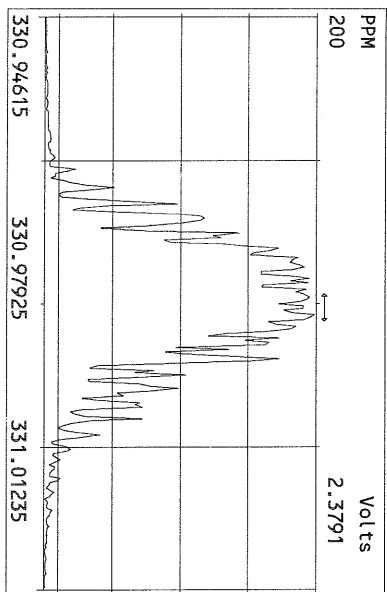
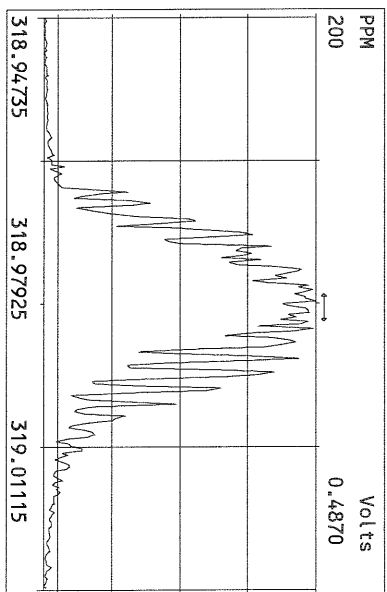
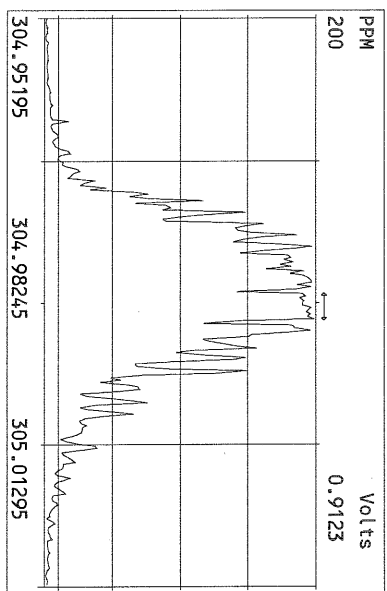
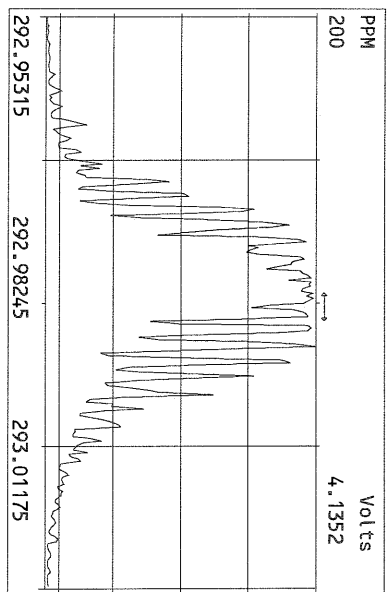
Data File S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
09NOV10A 1	ST110910A1	1613 CS3 100511J	9-NOV-10 15:00:05	ST110910A1	ST110910A2	TC
09NOV10A 2	6418-003-0001-SA	PSB11-14-16-073010	9-NOV-10 15:35:08	ST110910A1	ST110910A2	TC
09NOV10A 3	6418-002-0001-SA	PSB11-11-13-073010	9-NOV-10 16:10:13	ST110910A1	ST110910A2	TC
09NOV10A 4	SB110910A1	Solvent Blank	9-NOV-10 16:45:16	ST110910A1	ST110910A2	TC
09NOV10A 5	ST110910A2	1613 CS3 100511J	9-NOV-10 17:20:21	ST110910A1	ST110910A2	TC



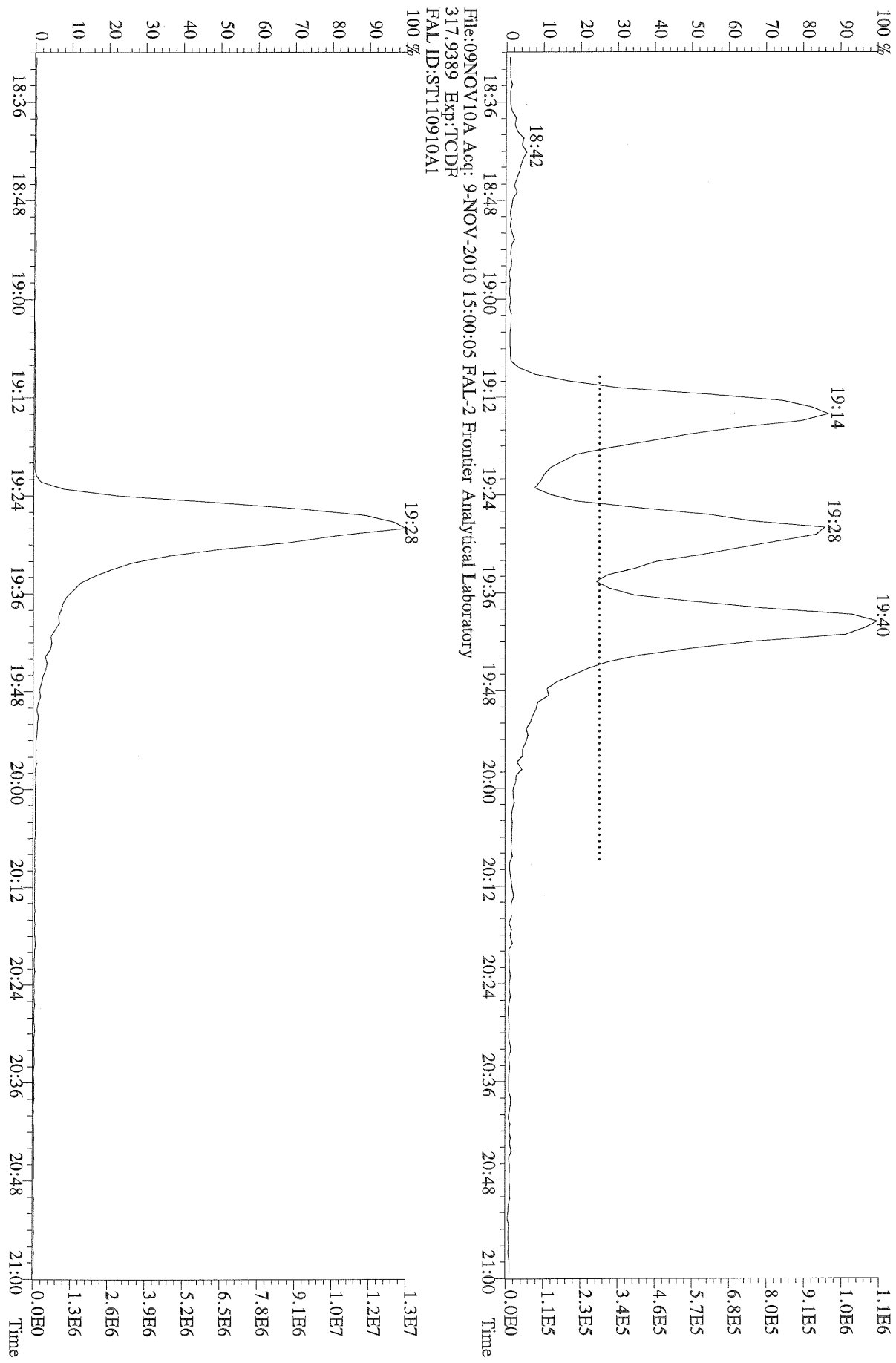
11/10/10

Data Backed Up: _____

Date: _____



File:09NOV10A Acq: 9-NOV-2010 15:00:05 FAL-2 Frontier Analytical Laboratory
303.9016 Exp:TCDF
FAL ID:ST110910A1

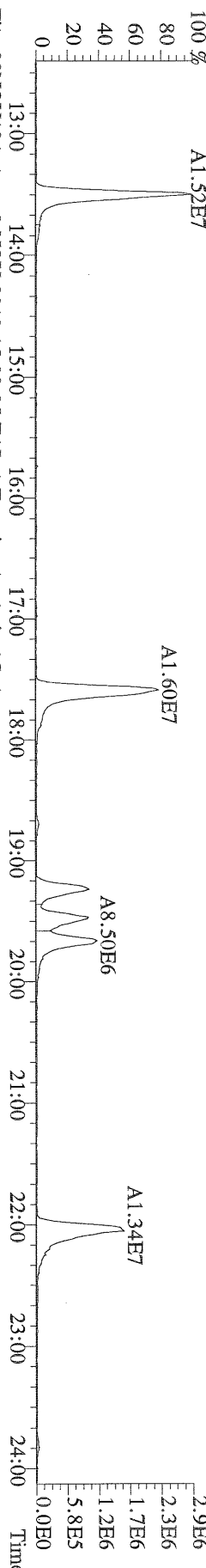


File:09NOV10A Acq: 9-NOV-2010 15:00:05 FAL-2 Frontier Analytical Laboratory
317.9389 Exp:TCDF
FAL ID:ST110910A1

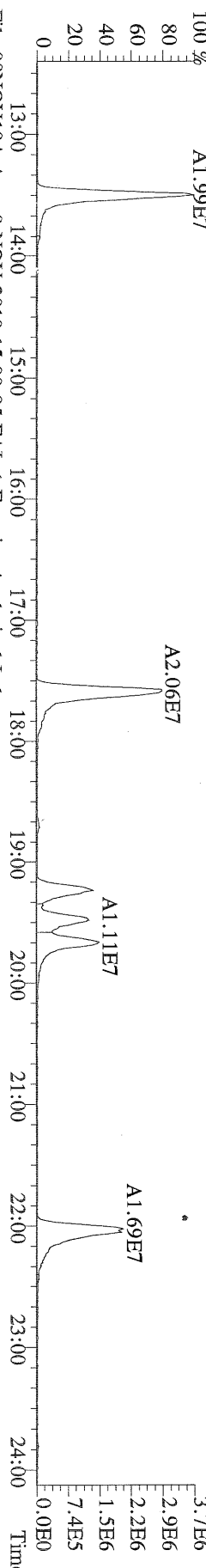
1.1E6
1.0E6
9.1E5
8.0E5
6.8E5
5.7E5
4.6E5
3.4E5
2.3E5
1.1E5
0.0E0
Time

1.3E7
1.2E7
1.0E7
9.1E6
7.8E6
6.5E6
5.2E6
3.9E6
2.6E6
1.3E6
0.0E0
Time

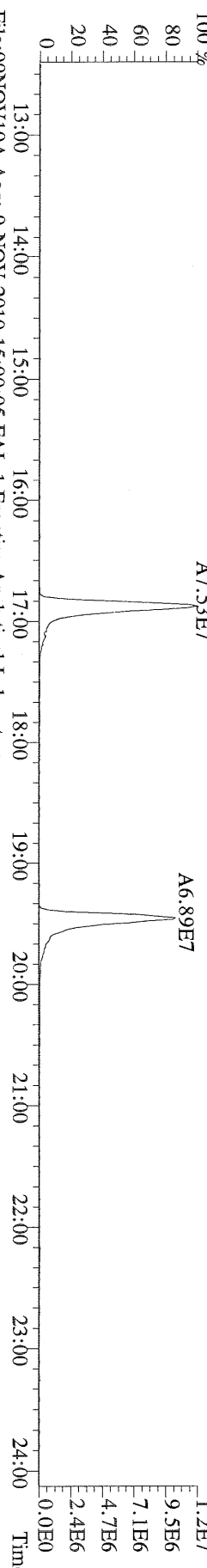
File:09NOV10A Acq: 9-NOV-2010 15:00:05 FAL-1 Frontier Analytical Laboratory
303.9016 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
FAL ID:ST110910A1



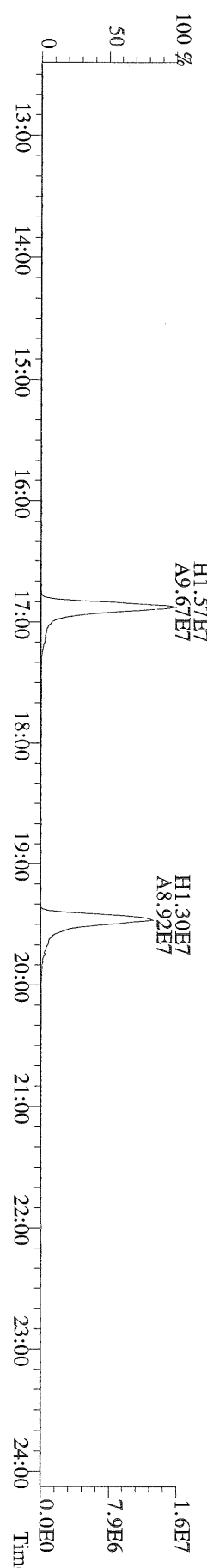
File:09NOV10A Acq: 9-NOV-2010 15:00:05 FAL-1 Frontier Analytical Laboratory
305.8987 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
FAL ID:ST110910A1

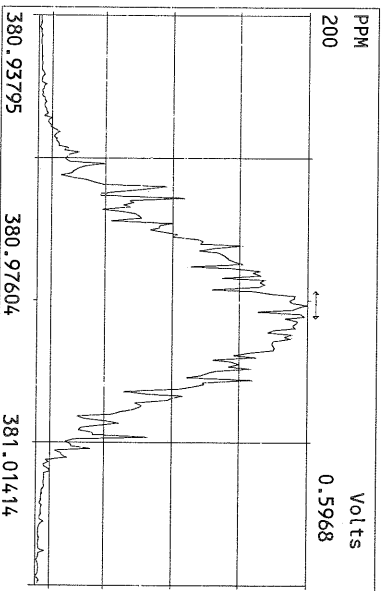
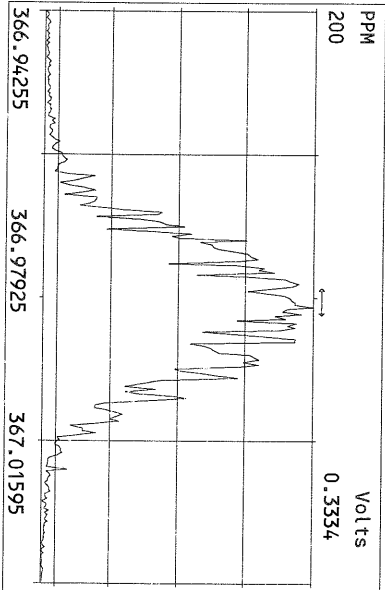
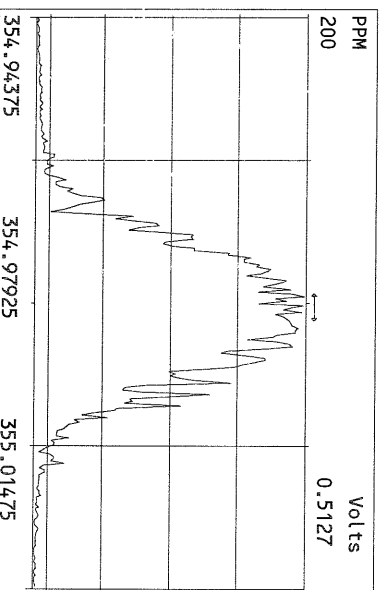
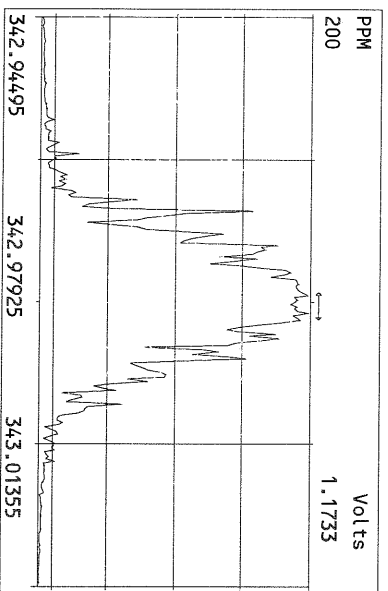
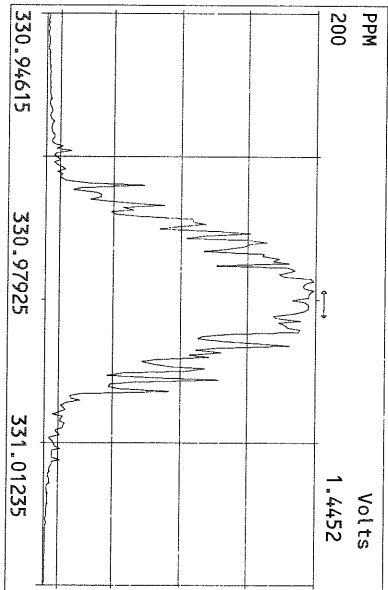
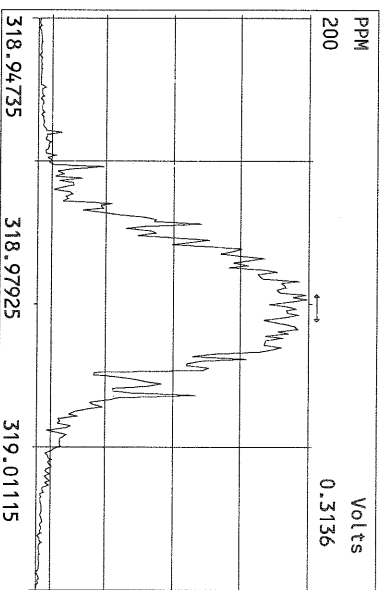
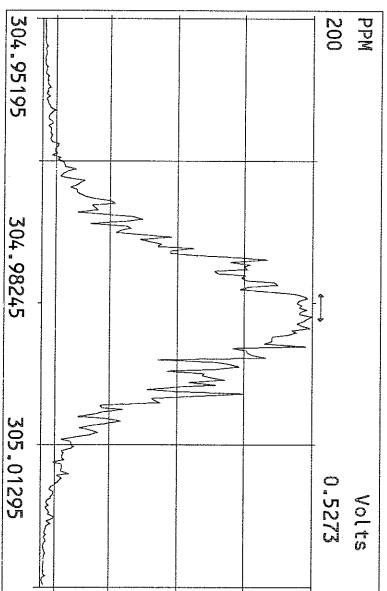
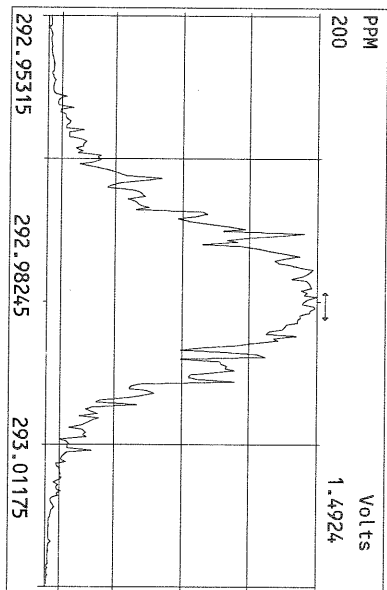


File:09NOV10A Acq: 9-NOV-2010 15:00:05 FAL-1 Frontier Analytical Laboratory
315.9419 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
FAL ID:ST110910A1



File:09NOV10A Acq: 9-NOV-2010 15:00:05 FAL-1 Frontier Analytical Laboratory
317.9389 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:TCDF
FAL ID:ST110910A1





USEPA - ITD

FORM 4A
TCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:


Initial Calibration Date: 9/3/10

Instrument ID: FAL1 GC Column ID: DB225

VER Data Filename: 09NOV10A Sam:5 Analysis Date: 9-NOV-10 Time: 17:20:21

	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	0.81	0.65-0.89	y	8.73	8.40 - 12.0 ✓
LABELED COMPOUNDS						
13C-2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	y	96.6	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: 11/10/10

FAL ID: ST110910A2 Filename: 09NOV10A Sam:5 Acquired: 9-NOV-10 17:20:21 ICal: tcdffal1-9-3-10
Client ID: 1613 CS3 100511J ConCal: ST110910A1 EndCal: ST110910A2
Results: GC Column: DB225 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	#Hom	Rec
2,3,7,8-TCDF	1.75e+07	0.81 y	19:17	1.10	8.73		2.50	-	-	1	
13C-2,3,7,8-TCDF	1.83e+08	0.75 y	19:17	1.06	96.6						96.6
13C-1,2,3,4-TCDF	1.79e+08	0.78 y	16:42	-	125						

Analyst: 

Date: 11/10/10

Frontier Analytical Laboratory - Acquisition Log

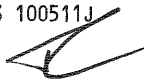
Run Name:09NOV10A

Instrument: FAL1

GC: DB225

Experiment:TCDF

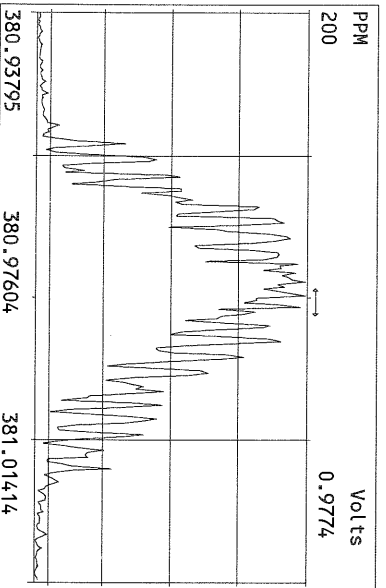
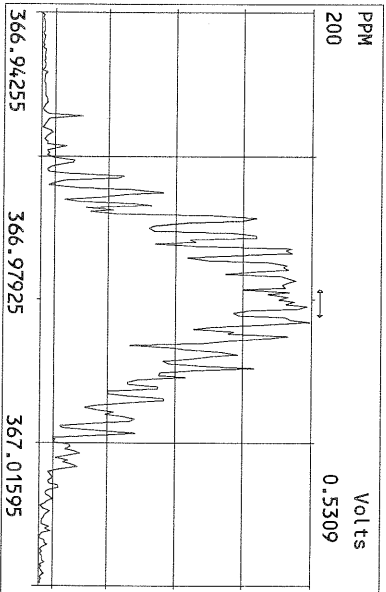
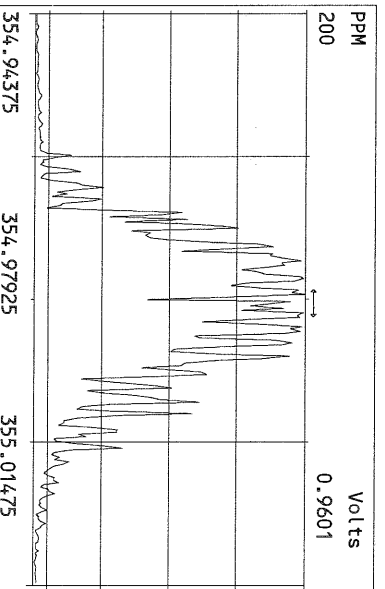
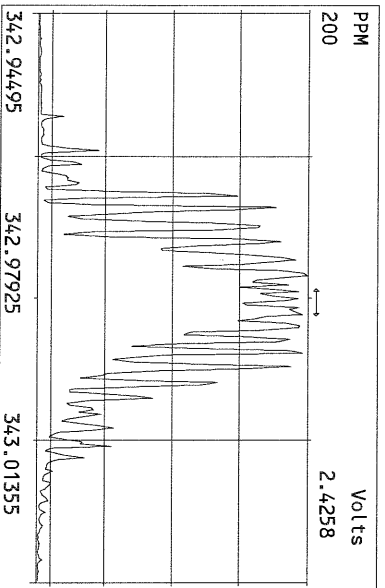
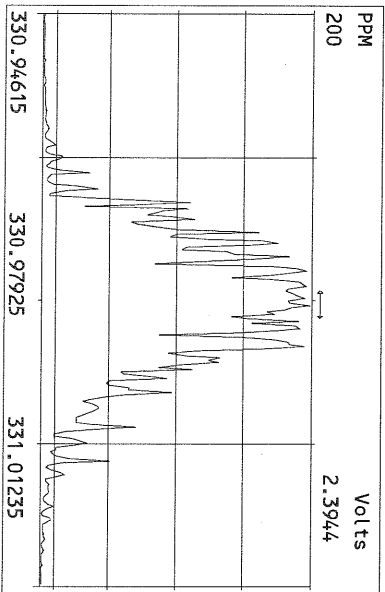
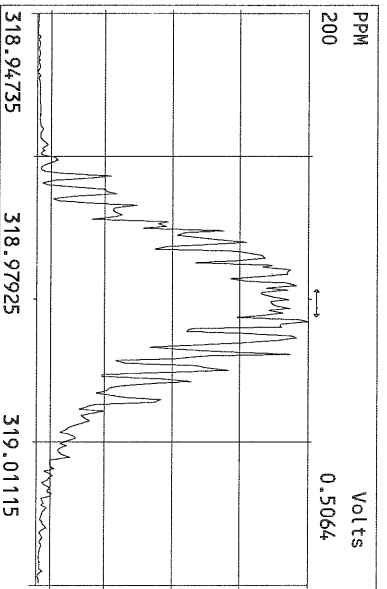
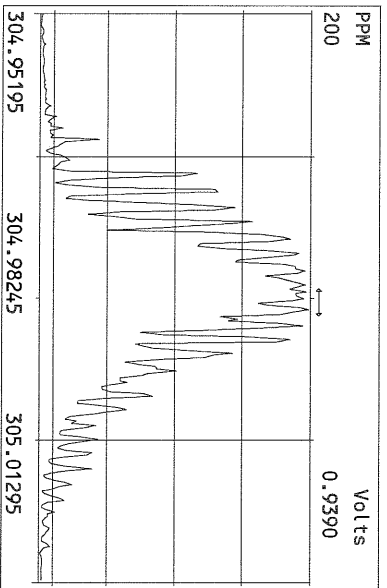
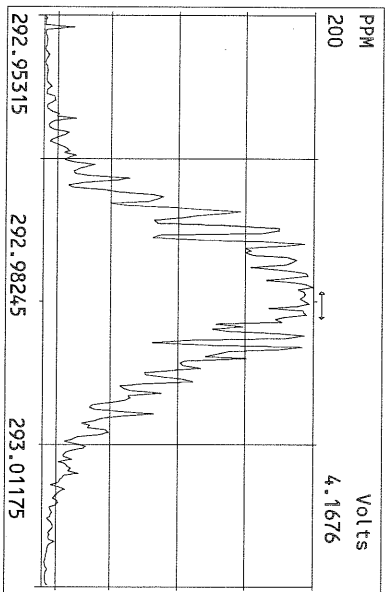
Data File S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
09NOV10A 1	ST110910A1	1613 CS3 100511J	9-NOV-10 15:00:05	ST110910A1	ST110910A2	TC
09NOV10A 2	6418-003-0001-SA	PSB11-14-16-073010	9-NOV-10 15:35:08	ST110910A1	ST110910A2	TC
09NOV10A 3	6418-002-0001-SA	PSB11-11-13-073010	9-NOV-10 16:10:13	ST110910A1	ST110910A2	TC
09NOV10A 4	SB110910A1	Solvent Blank	9-NOV-10 16:45:16	ST110910A1	ST110910A2	TC
09NOV10A 5	ST110910A2	1613 CS3 100511J	9-NOV-10 17:20:21	ST110910A1	ST110910A2	TC



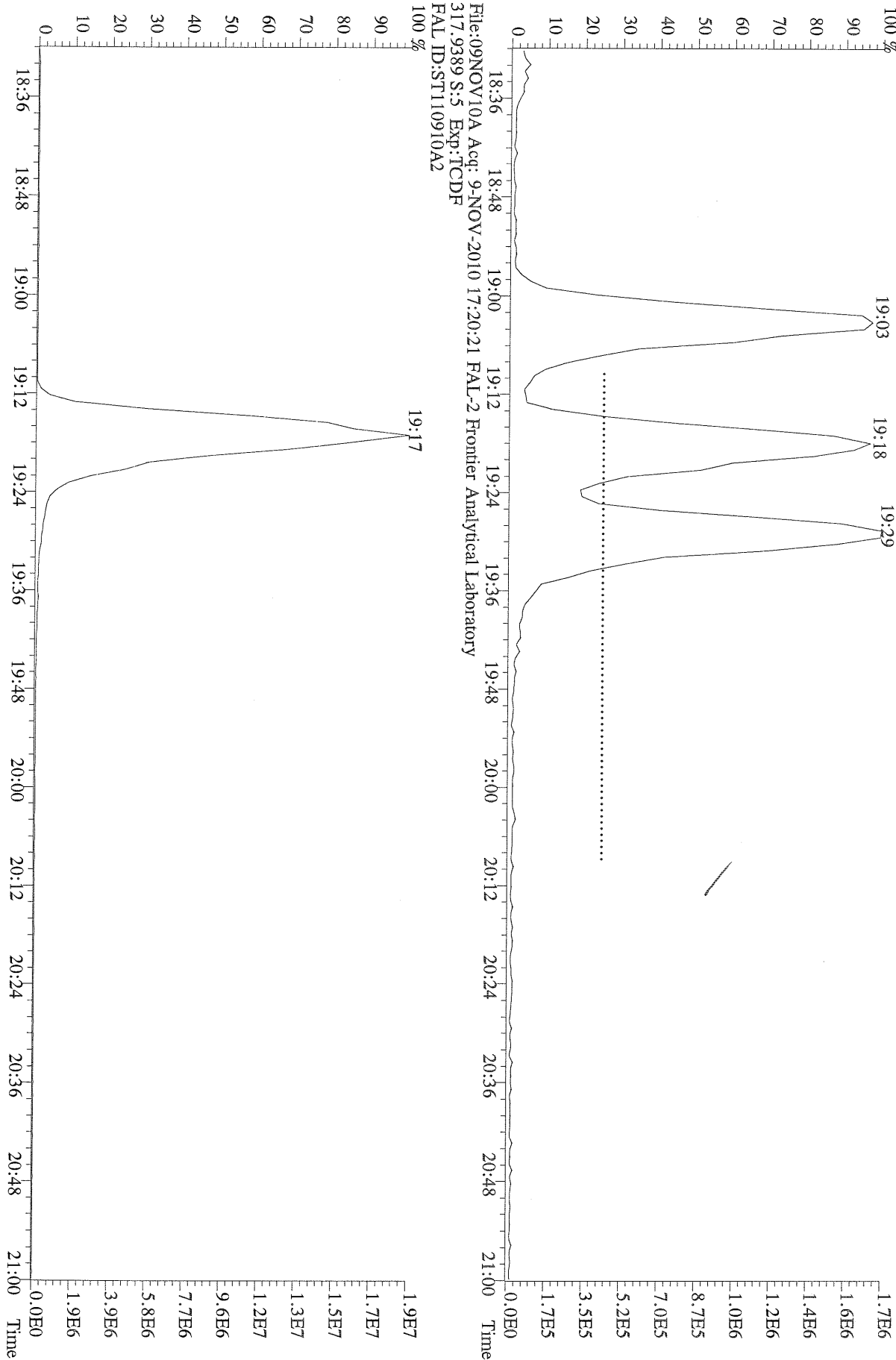
u/ro/ro

Data Backed Up: _____

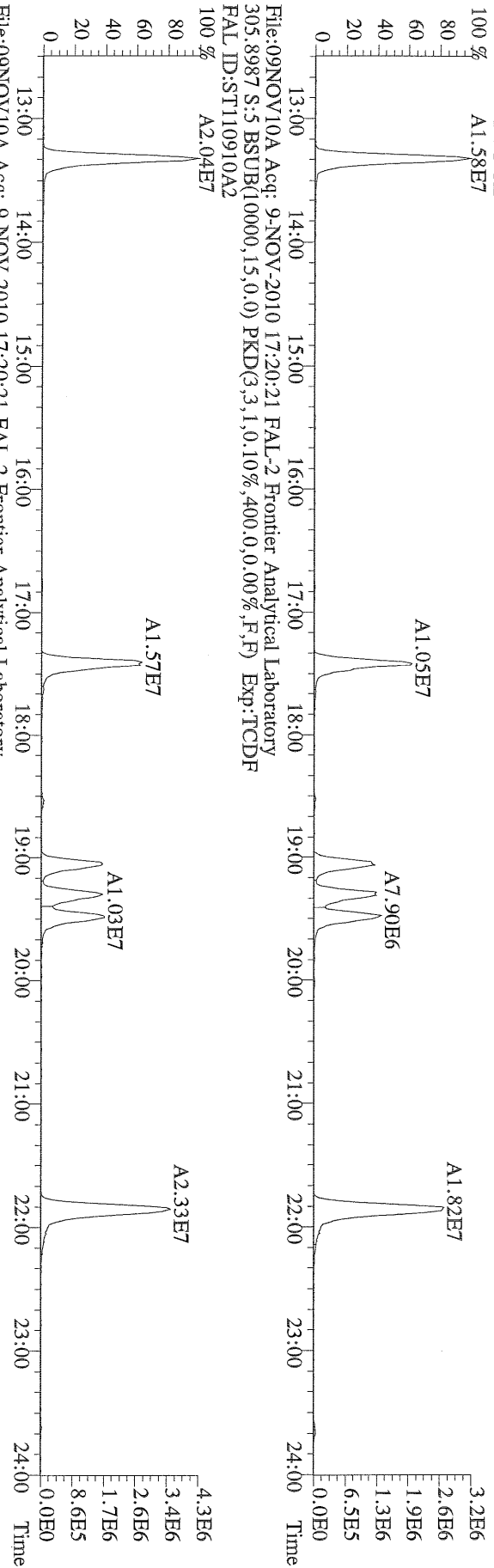
Date: _____



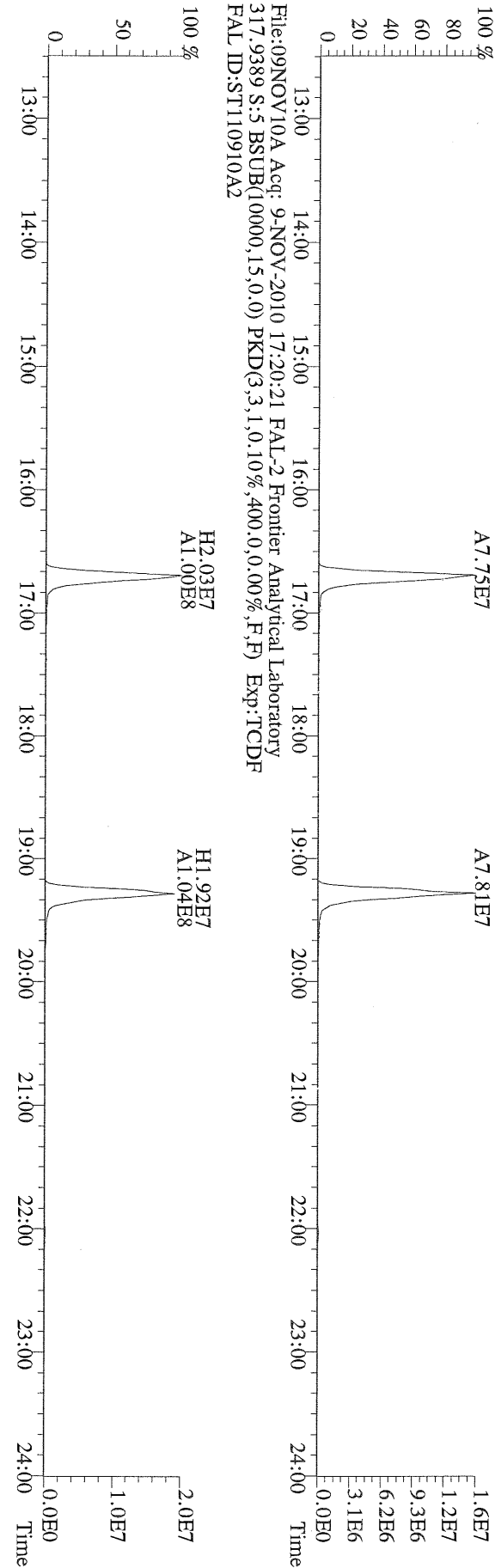
File:09NOV10A Acq: 9-NOV-2010 17:20:21 FAL-2 Frontier Analytical Laboratory
305.8987 S:5 Exp:TCDF
FAL ID:ST110910A2



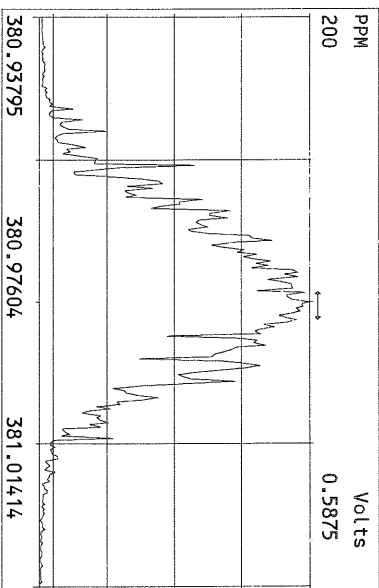
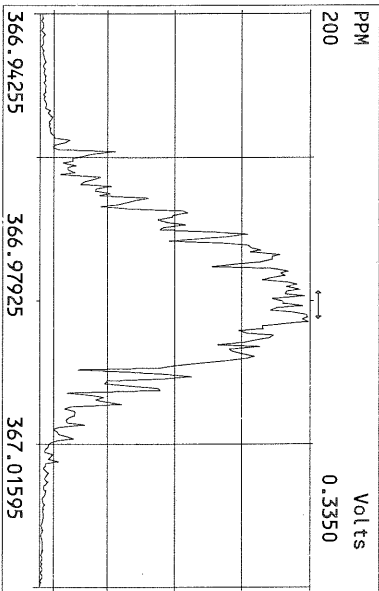
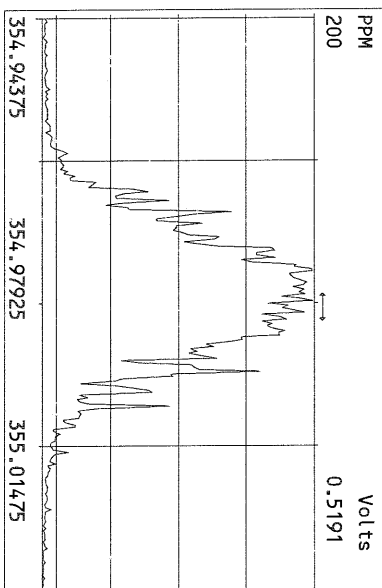
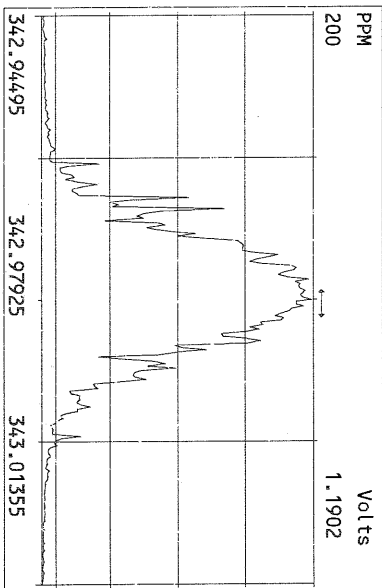
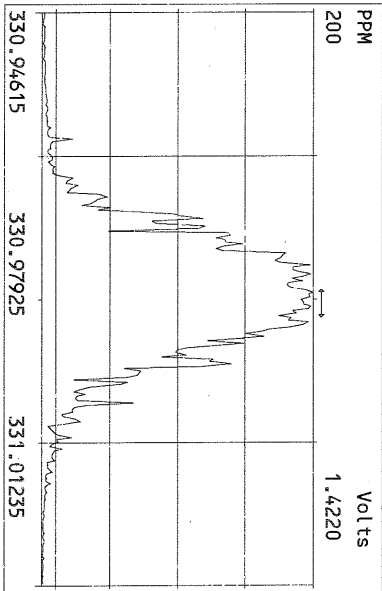
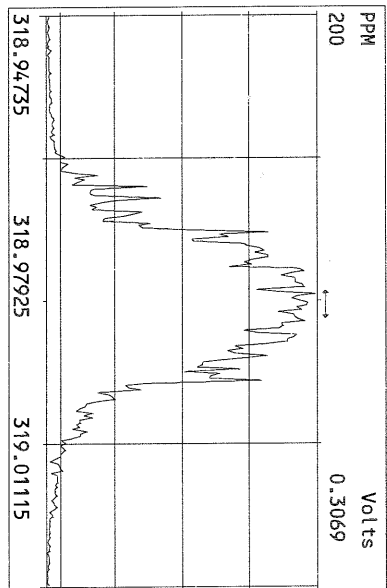
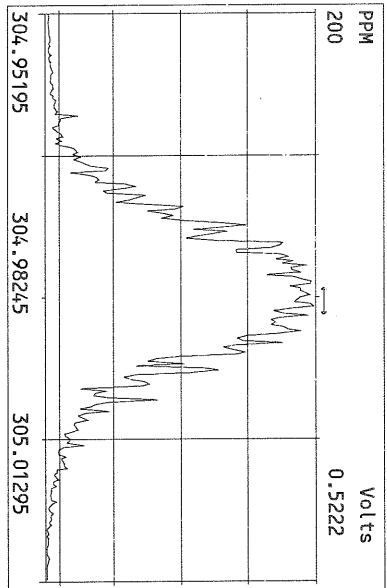
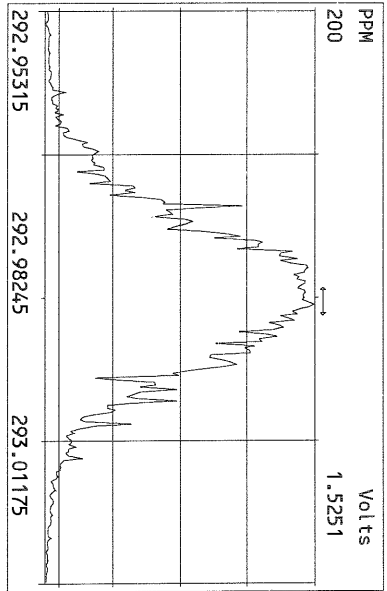
File:09NOV10A Acq: 9-NOV-2010 17:20:21 FAL-2 Frontier Analytical Laboratory
303.9016 S:5 BSUB(10000,15,0.0) PKD(3,3,1,0.10%,400.0,0.00%,F,F) Exp:TCDF
FAL ID:ST110910A2



File:09NOV10A Acq: 9-NOV-2010 17:20:21 FAL-2 Frontier Analytical Laboratory
315.9419 S:5 BSUB(10000,15,0.0) PKD(3,3,1,0.10%,400.0,0.00%,F,F) Exp:TCDF
FAL ID:ST110910A2



File:09NOV10A Acq: 9-NOV-2010 17:20:21 FAL-2 Frontier Analytical Laboratory
317.9389 S:5 BSUB(10000,15,0.0) PKD(3,3,1,0.10%,400.0,0.00%,F,F) Exp:TCDF
FAL ID:ST110910A2



USEPA - ITD

FORM 4A

TCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 9/3/10

Instrument ID: FAL1

GC Column ID: DB225

VER Data Filename: 11NOV10A Sam:1

Analysis Date: 11-NOV-10 Time: 10:04:19

	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	0.78	0.65-0.89	y	8.53	8.40 - 12.0 ✓
LABELED COMPOUNDS						
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	91.6	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: 11/11/10

FAL ID: ST111110A1 Filename: 11NOV10A Sam:1 Acquired: 11-NOV-10 10:04:19 ICal: tcdfal1-9-3-10
Client ID: 1613 CS3 100511J ConCal: ST111110A1 EndCal: ST111110A2
Results: 6418TCDF GC Column: DB225 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	#Hom	Rec
2,3,7,8-TCDF	1.87e+07	0.78 y	19:22	1.10	8.53		2.50	-	-	1	
13C-2,3,7,8-TCDF	2.00e+08	0.78 y	19:21	1.06	91.6						91.6
13C-1,2,3,4-TCDF	2.06e+08	0.79 y	16:46	-	144						

Analyst: 

Date: 11/11/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:11NOV10A Instrument: FAL1 GC: DB225 Experiment:TCDF

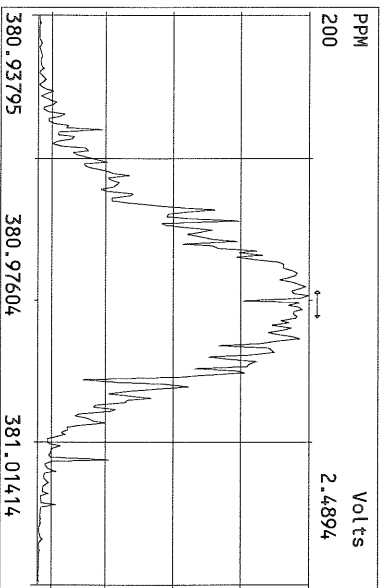
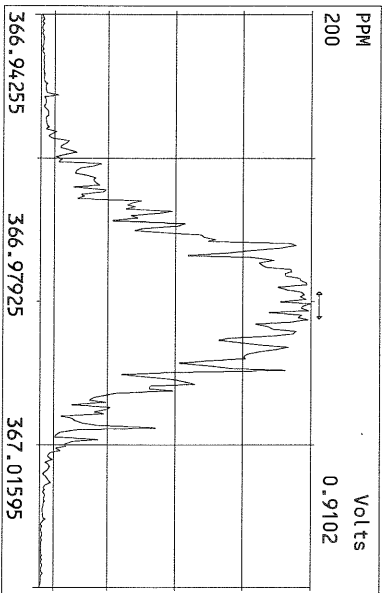
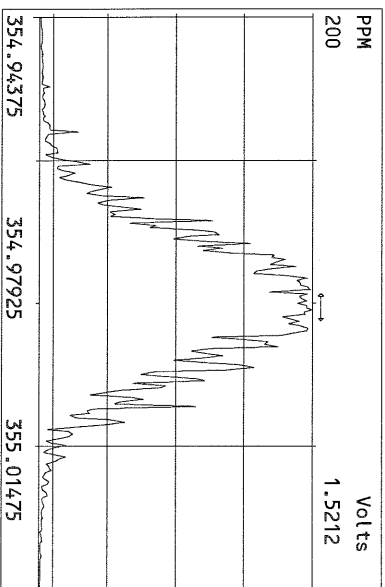
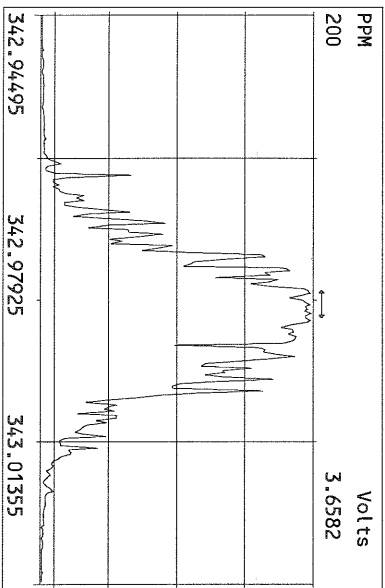
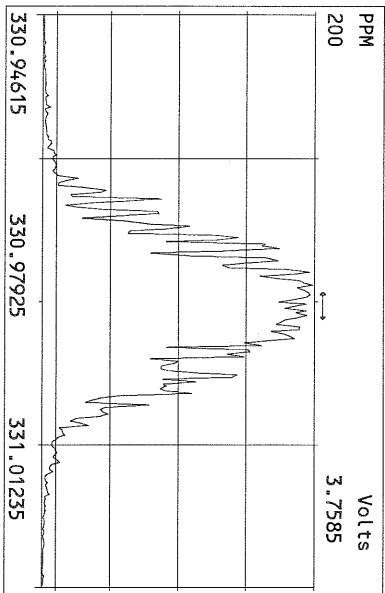
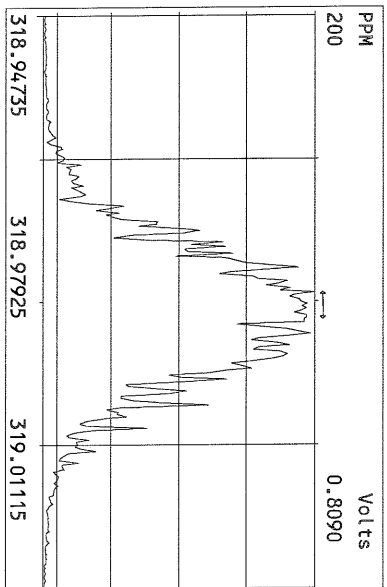
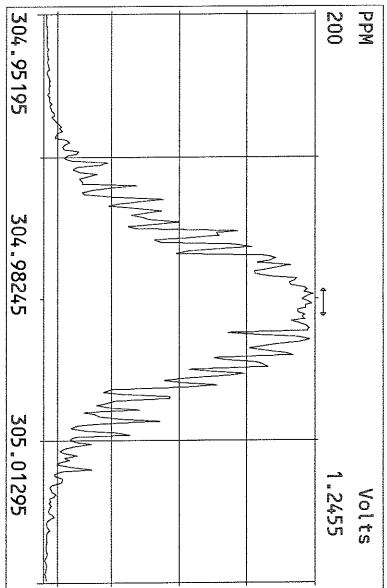
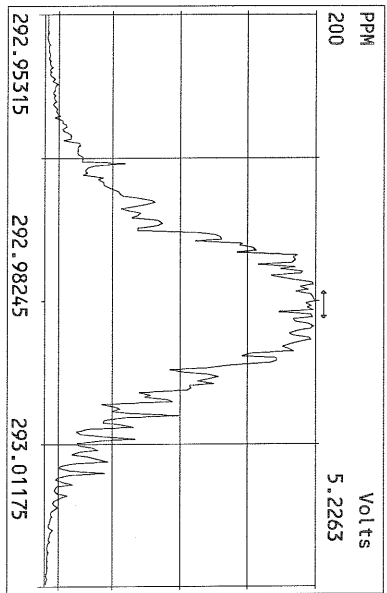
Data File S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
11NOV10A 1	ST111110A1	1613 CS3 100511J	11-NOV-10 10:04:19	ST111110A1	ST111110A2	TC
11NOV10A 2	6436-002-0001-SA	SSB-7-10-11.5	11-NOV-10 10:39:22	ST111110A1	ST111110A2	TC
11NOV10A 3	6418-009-0001-SA	PSB27-1.5-2-082610	11-NOV-10 11:14:27	ST111110A1	ST111110A2	TC
11NOV10A 4	6422-001-0001-SA	0101082-01	11-NOV-10 11:49:30	ST111110A1	ST111110A2	TC
11NOV10A 5	ST111110A2	1613 CS3 100511J	11-NOV-10 12:24:34	ST111110A1	ST111110A2	TC



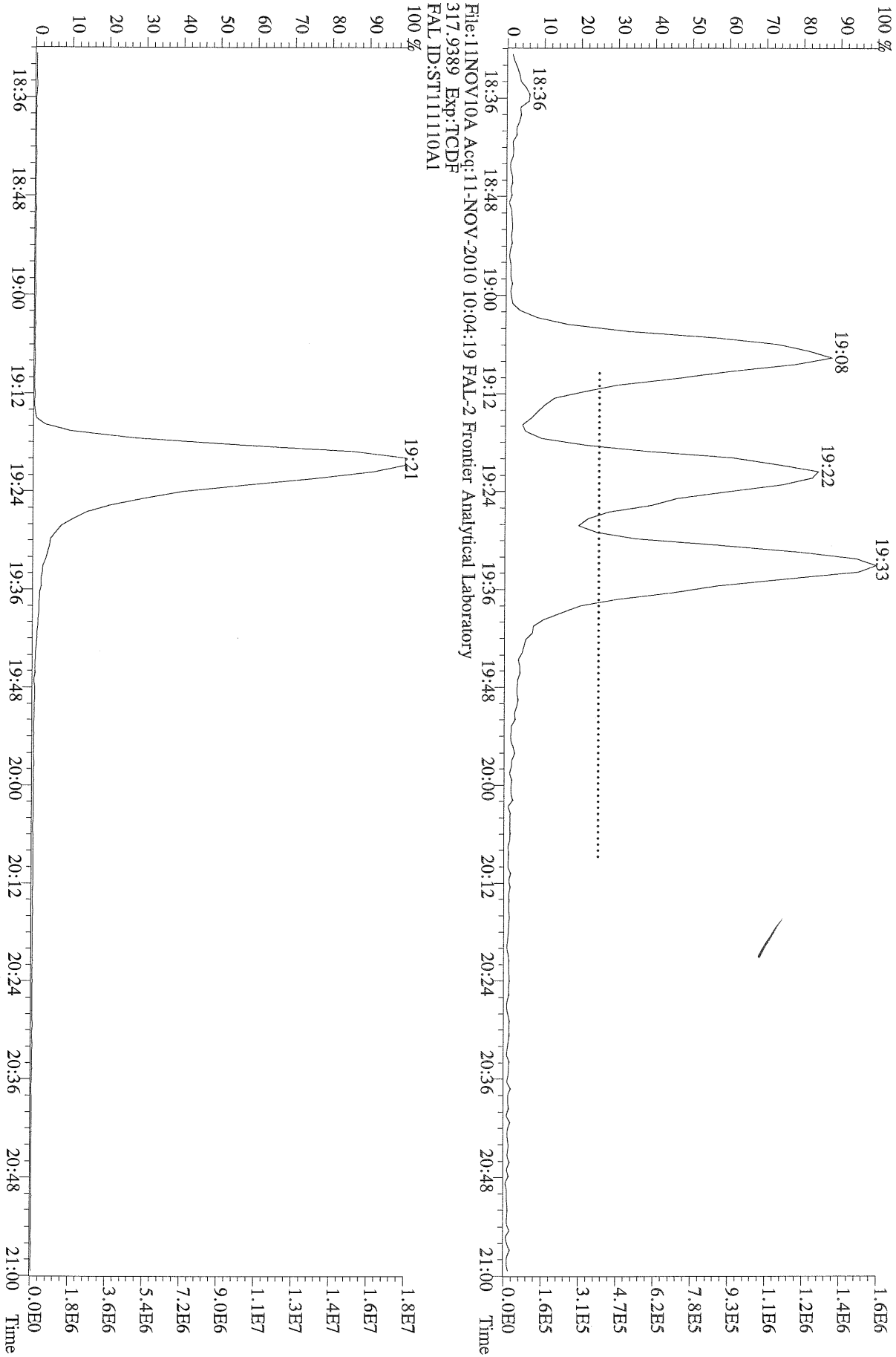
cc/u/10

Data Backed Up: _____

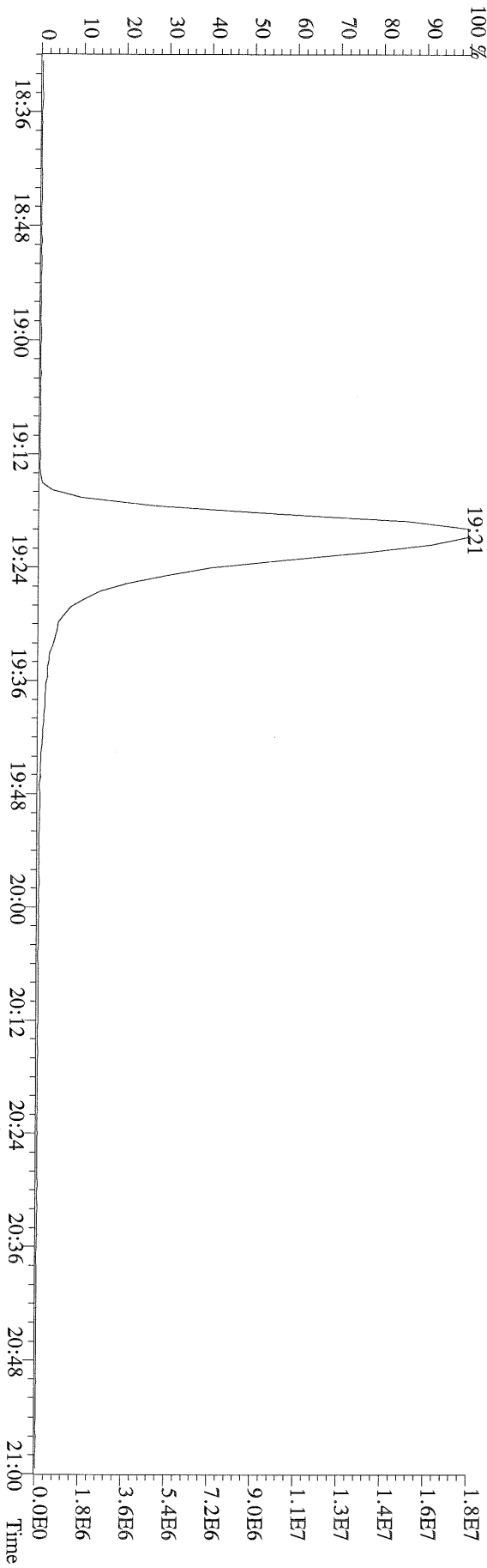
Date: _____



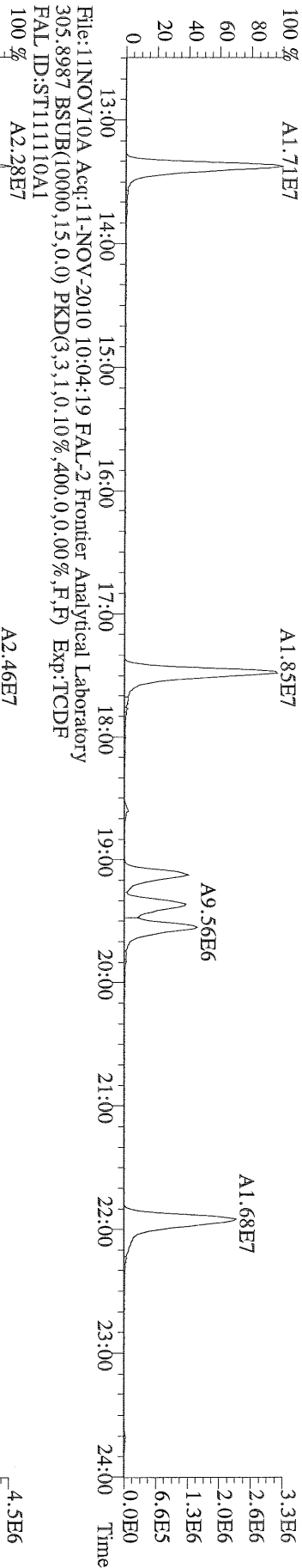
File:11NOV10A Acq:11-NOV-2010 10:04:19 FAL-2 Frontier Analytical Laboratory
303.9016 Exp:TCDF
FAL ID:ST111110A1
100%



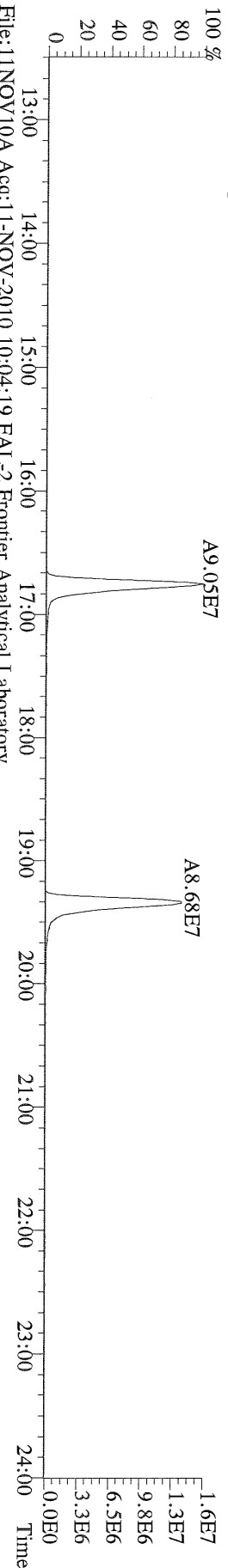
File:11NOV10A Acq:11-NOV-2010 10:04:19 FAL-2 Frontier Analytical Laboratory
317.9389 Exp:TCDF
FAL ID:ST111110A1
100%



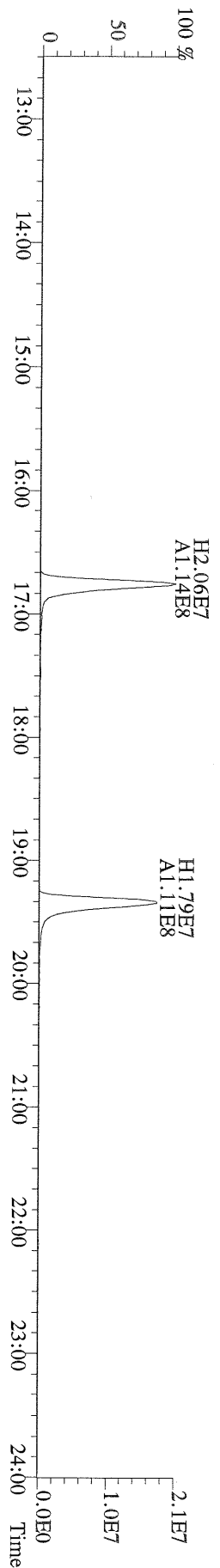
File: 11NOV10A Acq: 11-NOV-2010 10:04:19 FAL-2 Frontier Analytical Laboratory
303.9016 BSUB(10000,15,0,0) PKD(3,3,1,0,10%,400,0,0,0,0,0,0,0) Exp: TCDF
FAL ID: ST111110A1

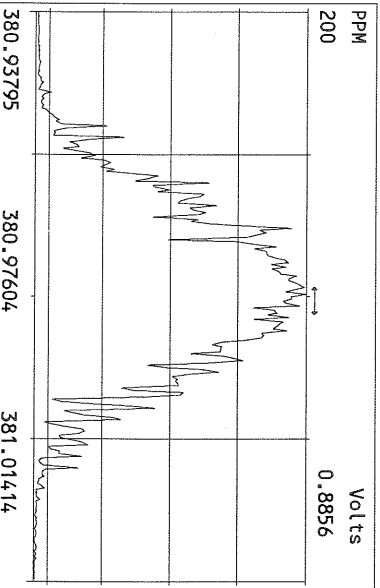
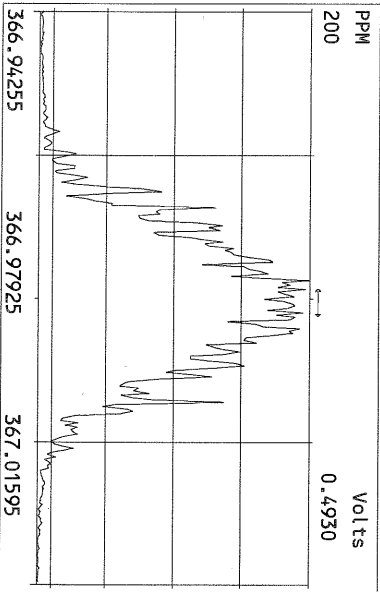
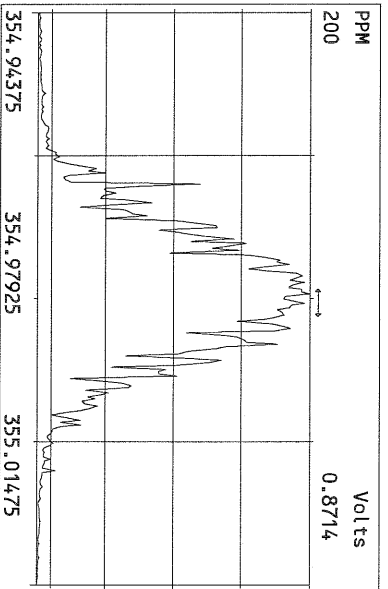
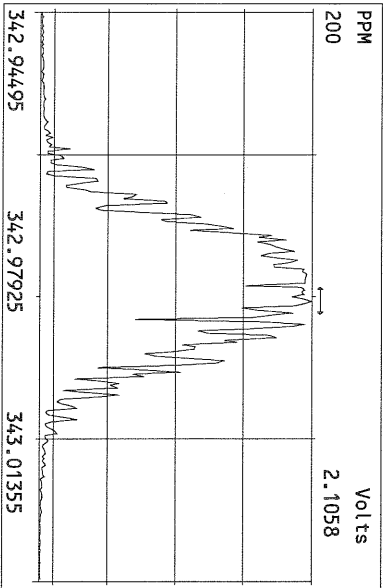
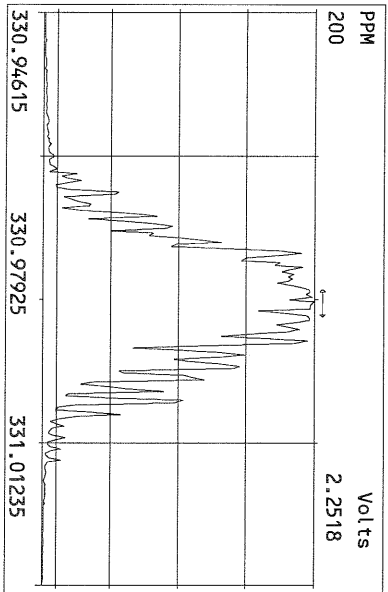
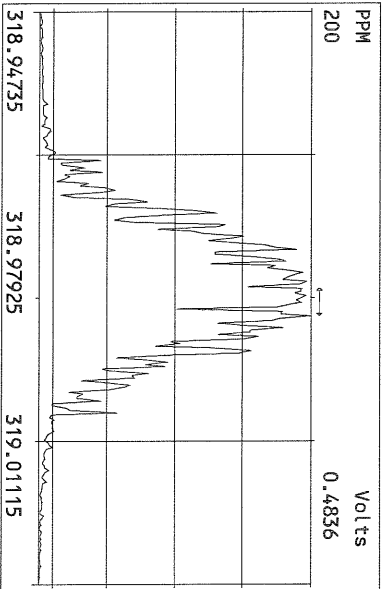
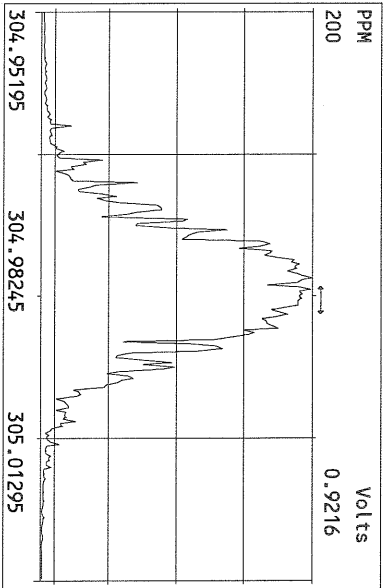
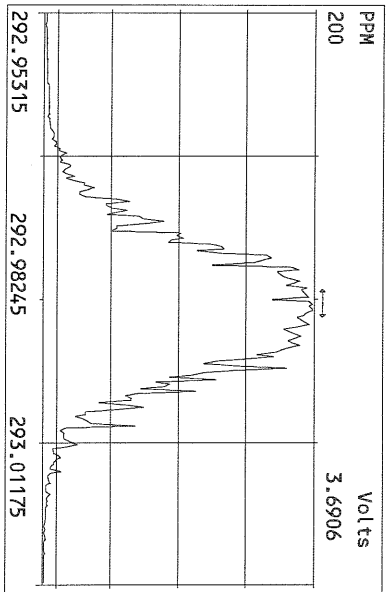


File: 11NOV10A Acq: 11-NOV-2010 10:04:19 FAL-2 Frontier Analytical Laboratory
315.9419 BSUB(10000,15,0,0) PKD(3,3,1,0,10%,400,0,0,0,0,0,0,0) Exp: TCDF
FAL ID: ST111110A1



File: 11NOV10A Acq: 11-NOV-2010 10:04:19 FAL-2 Frontier Analytical Laboratory
317.9389 BSUB(10000,15,0,0) PKD(3,3,1,0,10%,400,0,0,0,0,0,0,0) Exp: TCDF
FAL ID: ST111110A1





USEPA - ITD

FORM 4A
TCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 9/3/10

Instrument ID: FAL1

GC Column ID: DB225

VER Data Filename: 11NOV10A Sam:5

Analysis Date: 11-NOV-10 Time: 12:24:34

	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	0.75	0.65-0.89	y	8.95	8.40 - 12.0 ✓
LABELED COMPOUNDS						
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	95.2	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: 11/11/10

FAL ID: ST111110A2 Filename: 11NOV10A Sam:5 Acquired: 11-NOV-10 12:24:34 ICal: tcdffal1-9-3-10
Client ID: 1613 CS3 100511J ConCal: ST111110A1 EndCal: ST111110A2
Results: 6422TCDF GC Column: DB225 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	#Hom	Rec
2,3,7,8-TCDF	2.22e+07	0.75 y	19:19	1.10	8.95		2.50	-	-	1	
13C-2,3,7,8-TCDF	2.27e+08	0.79 y	19:17	1.06	95.2						95.2
13C-1,2,3,4-TCDF	2.25e+08	0.78 y	16:43	-	157						

Analyst: 

Date: 11/11/10

Frontier Analytical Laboratory - Acquisition Log

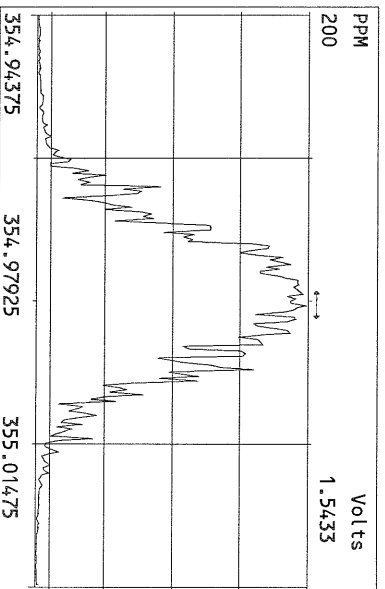
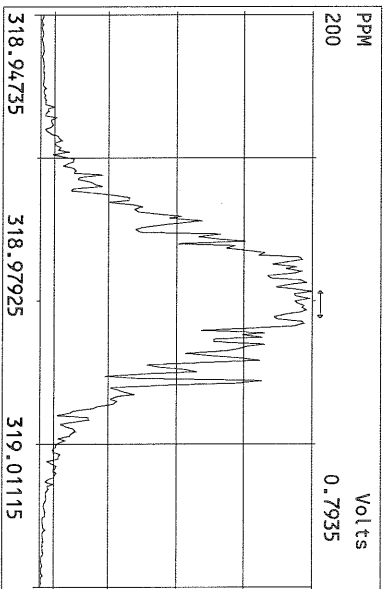
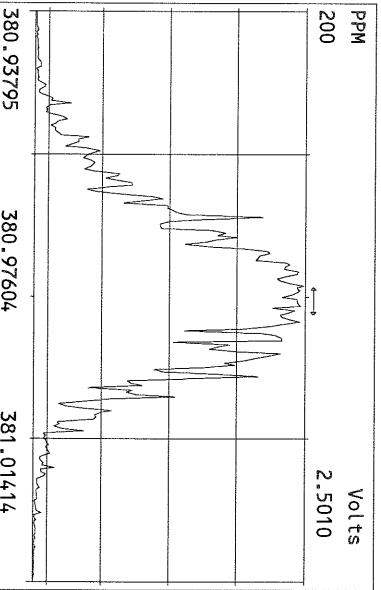
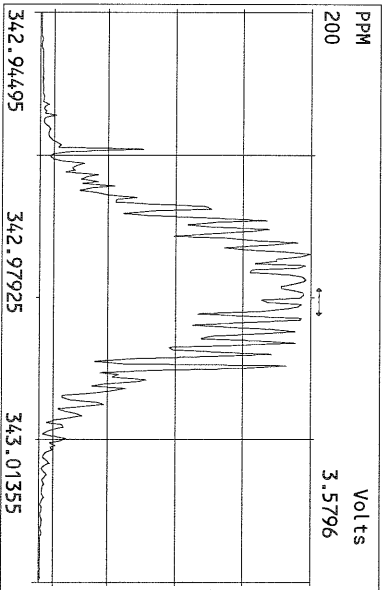
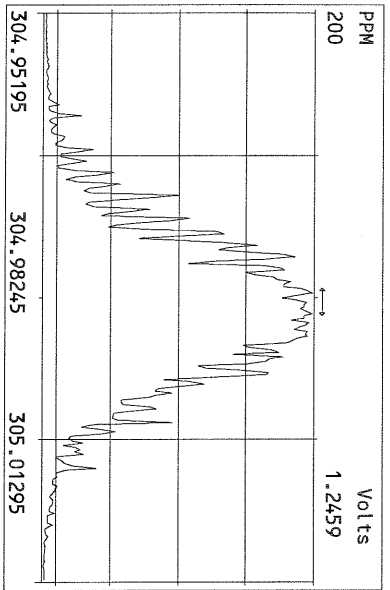
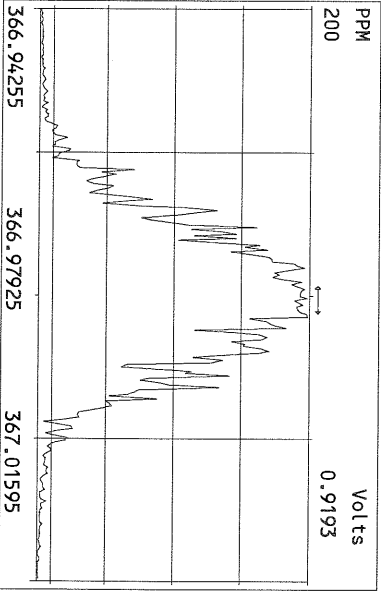
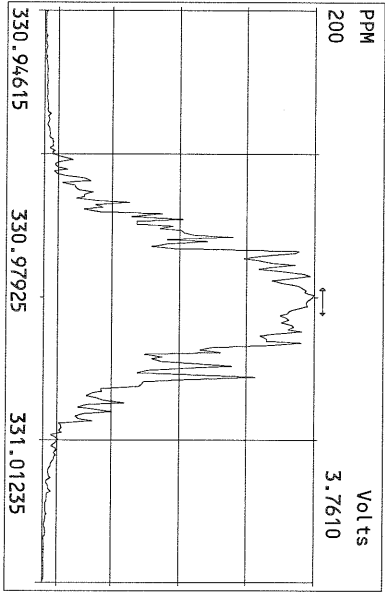
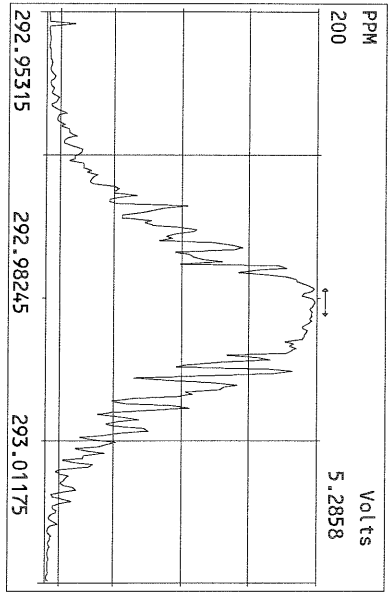
Run Name:11NOV10A Instrument: FAL1 GC: DB225 Experiment:TCDF

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
11NOV10A	1	ST111110A1	1613 CS3 100511J	11-NOV-10 10:04:19	ST111110A1	ST111110A2	TC
11NOV10A	2	6436-002-0001-SA	SSB-7-10-11.5	11-NOV-10 10:39:22	ST111110A1	ST111110A2	TC
11NOV10A	3	6418-009-0001-SA	PSB27-1.5-2-082610	11-NOV-10 11:14:27	ST111110A1	ST111110A2	TC
11NOV10A	4	6422-001-0001-SA	0101082-01	11-NOV-10 11:49:30	ST111110A1	ST111110A2	TC
11NOV10A	5	ST111110A2	1613 CS3 100511J	11-NOV-10 12:24:34	ST111110A1	ST111110A2	TC

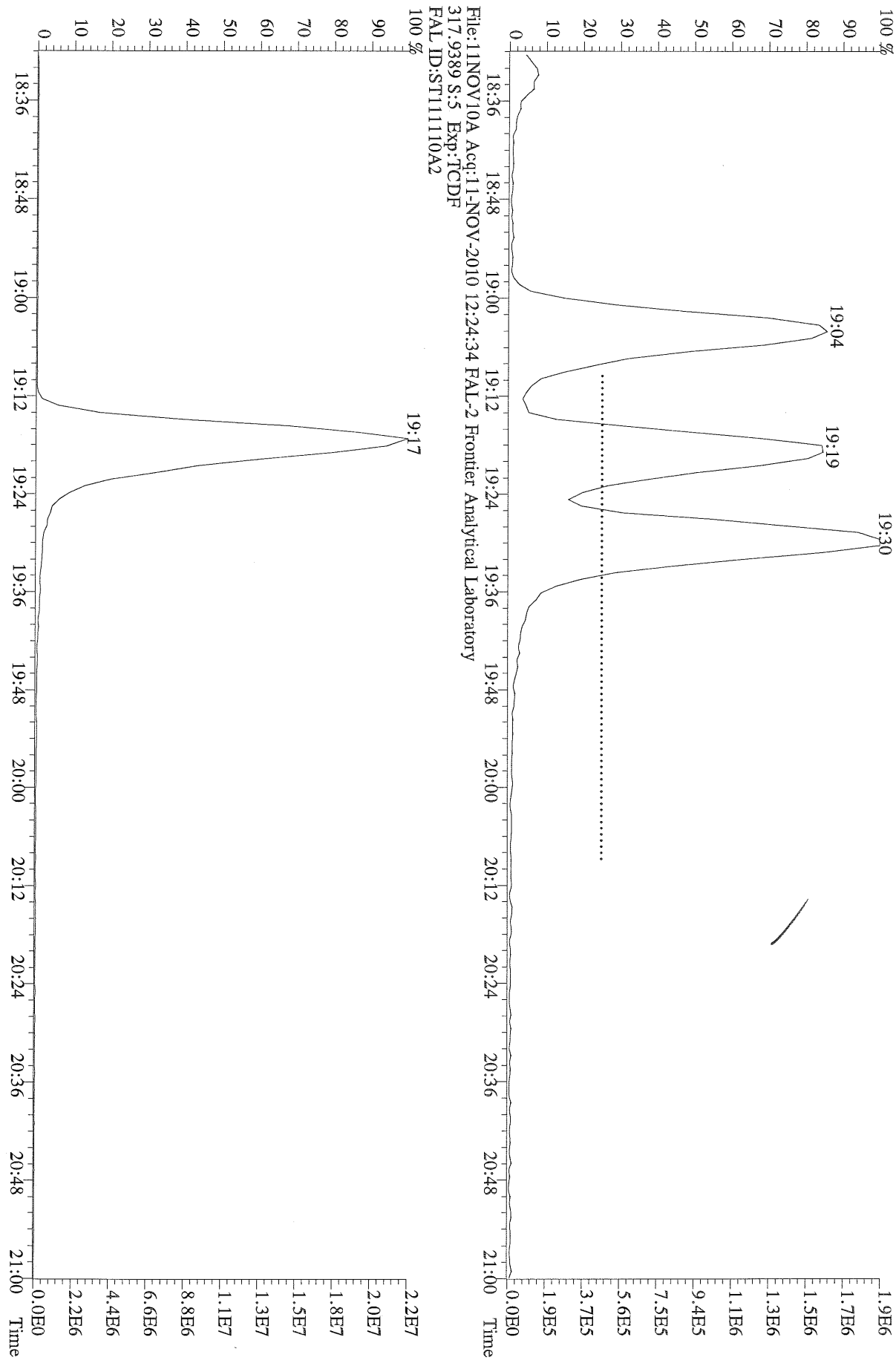
TC 11/11/10

Data Backed Up: _____

Date: _____



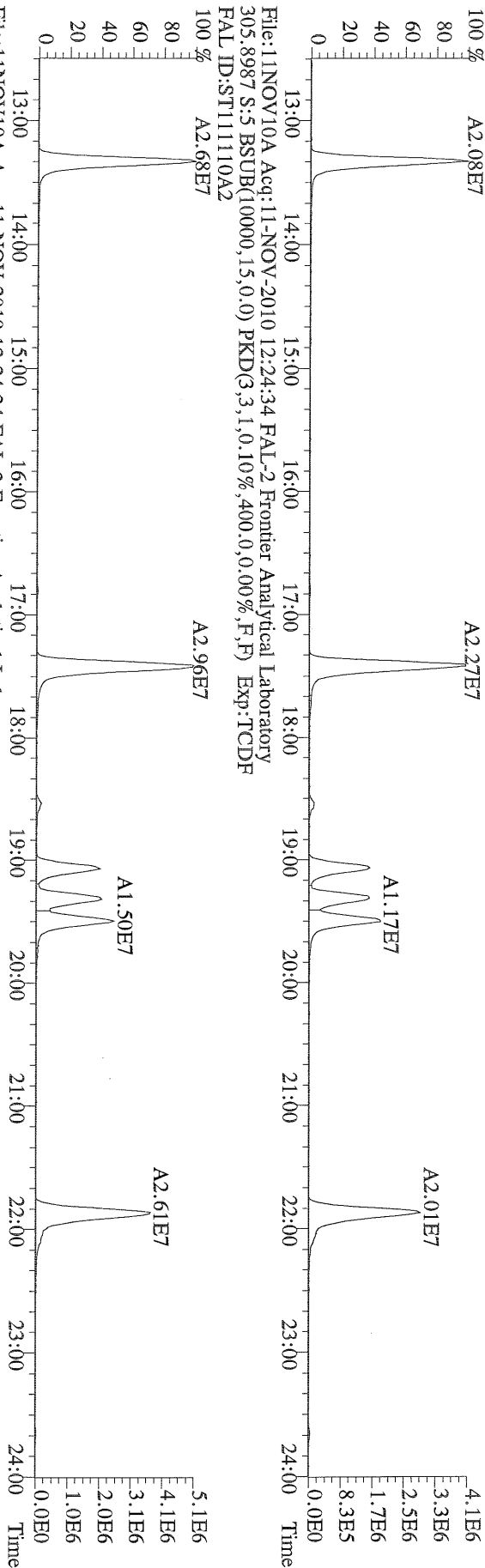
File:11NOV10A Acq:11-NOV-2010 12:24:34 FAL-2 Frontier Analytical Laboratory
303.9016 S:5 Exp:TCDF
FAL ID:ST111110A2



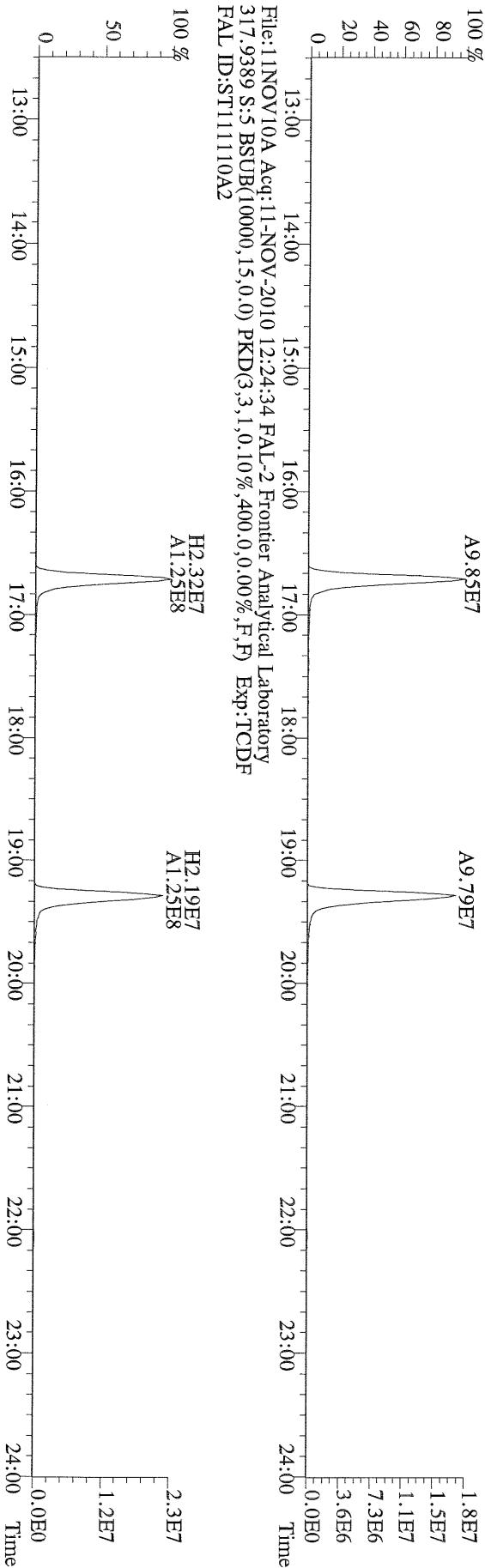
File:11NOV10A Acq:11-NOV-2010 12:24:34 FAL-2 Frontier Analytical Laboratory
317.9389 S:5 Exp:TCDF
FAL ID:ST111110A2

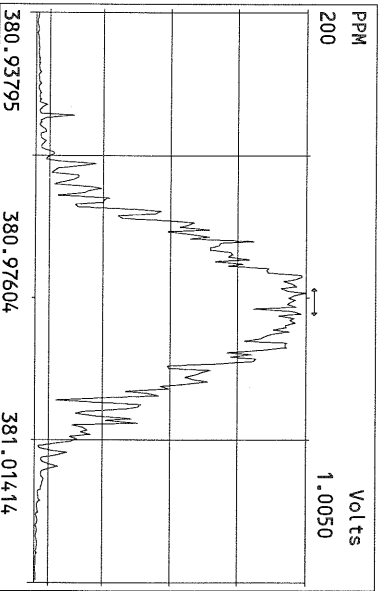
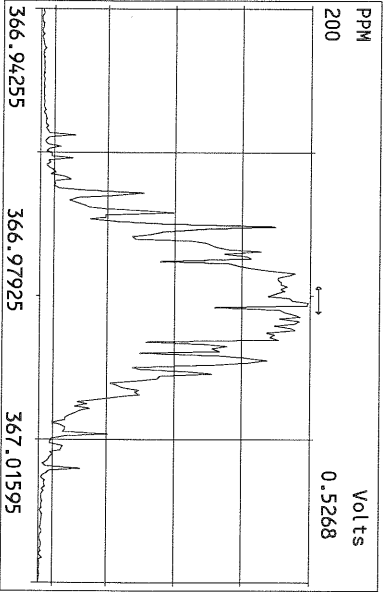
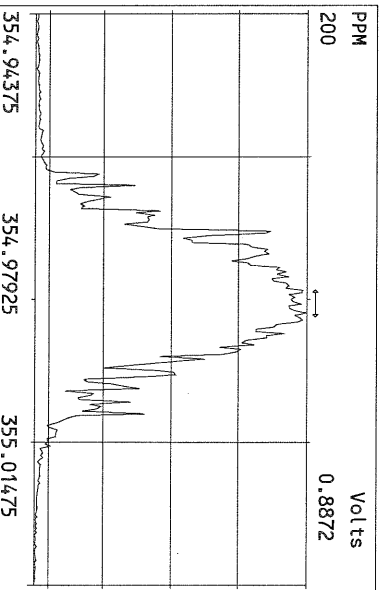
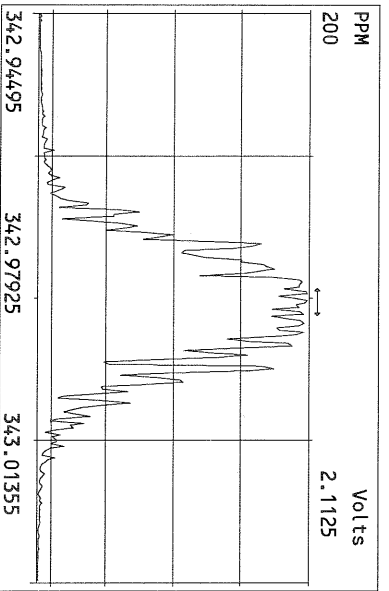
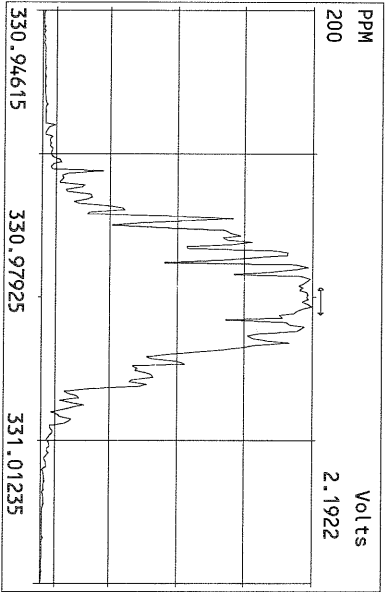
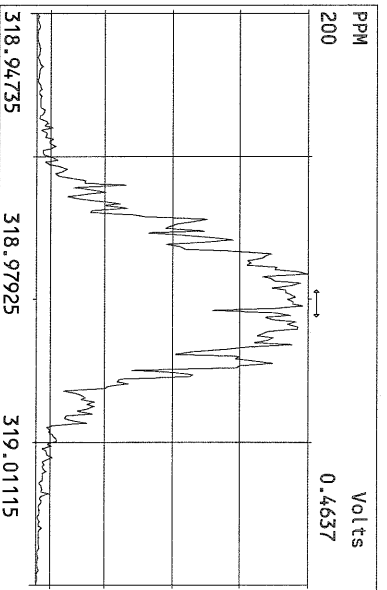
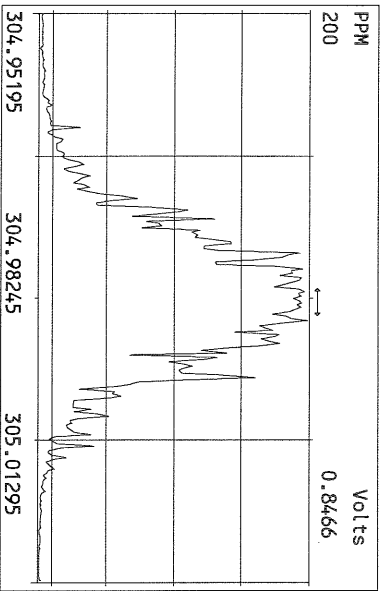
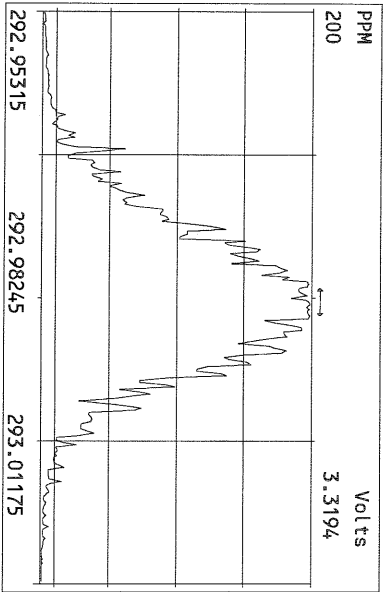
1.9E6
1.7E6
1.5E6
1.3E6
1.1E6
9.4E5
7.5E5
5.6E5
3.7E5
1.9E5
0.0E0
2.2E7
2.0E7
1.8E7
1.5E7
1.3E7
1.1E7
8.8E6
6.6E6
4.4E6
2.2E6
0.0E0
Time

File: 11NOV10A Acq: 11-NOV-2010 12:24:34 FAL-2 Frontier Analytical Laboratory
 303.9016 S:5 BSUB(10000,15,0.0) PKD(3,3,1,0.10%,400.0,0.00%,F,F) Exp:TCDF
 FAL ID:ST111110A2



File: 11NOV10A Acq: 11-NOV-2010 12:24:34 FAL-2 Frontier Analytical Laboratory
 315.9419 S:5 BSUB(10000,15,0.0) PKD(3,3,1,0.10%,400.0,0.00%,F,F) Exp:TCDF
 FAL ID:ST111110A2





February 15, 2011

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

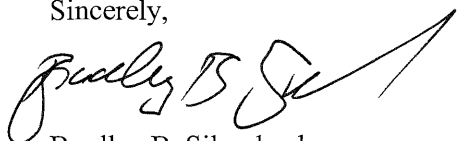
Dear Ms. Dunning,

Enclosed are the results for Frontier Analytical Laboratory project **6556**. This corresponds to your **Lora Lake RI** project under ARI project number **RG59**. One soil sample was received on 2/3/2011 in good condition. This sample was 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. Analytical Resources Incorporated requested a Level IV data package and a turnaround time of fifteen business days for project **6556**.

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 sample 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 **6556**, 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

Sample Tracking Log

FAL Project ID: 6556

Received on: 02/03/2011

Project Due: 02/25/2011 Storage: R1

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
6556-001-SA	0	RG59	PSB05-4-5-072810	EPA 1613 D/F	Soil	07/28/2010	09:03 am	07/28/2011

EPA Method 1613
PCDD/F



FAL ID: 6556-001-MB
Client ID: Method Blank
Matrix: Soil
Batch No: X2216

Date Extracted: 02-10-2011
Date Received: NA
Amount: 5.00 g

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

Acquired: 02-11-2011
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.274		-	0.0262				
1,2,3,7,8-PeCDD	ND	0.330		-	0.0442				
1,2,3,4,7,8-HxCDD	ND	0.389		-	0.0486				
1,2,3,6,7,8-HxCDD	ND	0.512		-	0.0586	Total TCDD	ND	0.274	
1,2,3,7,8,9-HxCDD	ND	0.449		-	0.0529	Total PeCDD	ND	0.330	
1,2,3,4,6,7,8-HpCDD	ND	0.443		-	0.0954	Total HxCDD	ND	0.512	
OCDD	ND	1.07		-	0.154	Total HpCDD	ND	0.443	
2,3,7,8-TCDF	ND	0.156		-	0.0205				
1,2,3,7,8-PeCDF	ND	0.279		-	0.0298				
2,3,4,7,8-PeCDF	ND	0.307		-	0.0313				
1,2,3,4,7,8-HxCDF	ND	0.290		-	0.0308				
1,2,3,6,7,8-HxCDF	ND	0.294		-	0.0317				
2,3,4,6,7,8-HxCDF	ND	0.345		-	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.336		-	0.0387	Total TCDF	ND	0.156	
1,2,3,4,6,7,8-HpCDF	ND	0.380		-	0.0418	Total PeCDF	ND	0.307	
1,2,3,4,7,8,9-HpCDF	ND	0.414		-	0.0429	Total HxCDF	ND	0.345	
OCDF	ND	1.09		-	0.105	Total HpCDF	ND	0.414	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	95.9	25.0 - 164	
13C-1,2,3,7,8-PeCDD	113	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	101	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	89.6	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	93.7	23.0 - 140	
13C-OCDD	75.9	17.0 - 157	
13C-2,3,7,8-TCDF	91.2	24.0 - 169	
13C-1,2,3,7,8-PeCDF	101	24.0 - 185	
13C-2,3,4,7,8-PeCDF	96.3	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	96.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	87.6	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	80.6	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	88.0	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	83.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	112	26.0 - 138	
13C-OCDF	75.7	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD 95.9 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: [Signature]

Date: 2/14/11

Reviewed By: [Signature]

Date: 2/15/11

EPA Method 1613
PCDD/F



FAL ID: 6556-001-OPR
Client ID: OPR
Matrix: Soil
Batch No: X2216

Date Extracted: 02-10-2011
Date Received: NA
Amount: 5.00 g

ICal: PCDDFAL3-8-23-10
GC Column: DB5
Units: ng/ml

Acquired: 02-11-2011
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	10.6	6.70 - 15.8	
1,2,3,7,8-PeCDD	51.0	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	51.2	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	53.7	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	53.6	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	46.3	35.0 - 70.0	
OCDD	102	78.0 - 144	
2,3,7,8-TCDF	9.06	7.50 - 15.8	
1,2,3,7,8-PeCDF	50.8	40.0 - 67.0	
2,3,4,7,8-PeCDF	51.2	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	53.6	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	54.0	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	54.4	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	55.1	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	51.7	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	52.0	39.0 - 69.0	
OCDF	111	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	99.3	20.0 - 175	
13C-1,2,3,7,8-PeCDD	112	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	105	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	96.4	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	100	26.0 - 166	
13C-OCDD	89.5	13.0 - 198	
13C-2,3,7,8-TCDF	99.2	22.0 - 152	
13C-1,2,3,7,8-PeCDF	105	21.0 - 192	
13C-2,3,4,7,8-PeCDF	102	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	98.5	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	89.6	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	87.9	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	95.4	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	89.7	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	121	20.0 - 186	
13C-OCDF	87.1	13.0 - 198	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	95.0	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: [Signature]

Date: 2/14/11

Reviewed By: [Signature]

Date: 2/15/11

EPA Method 1613
PCDD/F



FAL ID: 6556-001-SA
Client ID: PSB05-4-5-072810
Matrix: Soil
Batch No: X2216

Date Extracted: 02-10-2011
Date Received: 02-03-2011
Amount: 5.00 g
% Solids: 95.09

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

Acquired: 02-11-2011
2005 WHO TEQ: 0.0832

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.291		-	0.0262				
1,2,3,7,8-PeCDD	ND	0.314		-	0.0442				
1,2,3,4,7,8-HxCDD	ND	0.378		-	0.0486				
1,2,3,6,7,8-HxCDD	ND	0.486		-	0.0586	Total TCDD	ND	0.291	
1,2,3,7,8,9-HxCDD	ND	0.431		-	0.0529	Total PeCDD	ND	0.314	
1,2,3,4,6,7,8-HpCDD	5.20	-		0.0520	0.0954	Total HxCDD	ND	0.489	
OCDD	62.7	-		0.0188	0.154	Total HpCDD	10.6	-	
2,3,7,8-TCDF	ND	0.175		-	0.0205				
1,2,3,7,8-PeCDF	ND	0.265		-	0.0298				
2,3,4,7,8-PeCDF	ND	0.278		-	0.0313				
1,2,3,4,7,8-HxCDF	ND	0.228		-	0.0308				
1,2,3,6,7,8-HxCDF	ND	0.234		-	0.0317				
2,3,4,6,7,8-HxCDF	ND	0.257		-	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.241		-	0.0387	Total TCDF	ND	0.175	
1,2,3,4,6,7,8-HpCDF	1.18	-	J	0.0118	0.0418	Total PeCDF	ND	0.278	
1,2,3,4,7,8,9-HpCDF	ND	0.342		-	0.0429	Total HxCDF	1.44	-	J
OCDF	2.08	-	J	0.000624	0.105	Total HpCDF	3.07	-	J

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.8	25.0 - 164	
13C-1,2,3,7,8-PeCDD	98.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	95.3	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	87.5	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	93.1	23.0 - 140	
13C-OCDD	85.5	17.0 - 157	
13C-2,3,7,8-TCDF	85.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	91.5	24.0 - 185	
13C-2,3,4,7,8-PeCDF	88.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	90.5	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	81.7	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	78.6	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	86.4	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	82.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	112	26.0 - 138	
13C-OCDF	79.7	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD 86.9 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: [Signature]
Date: 2/14/11

Reviewed By: [Signature]
Date: 2/15/11

10/5/09

CUSTODY TRANSFER
Printed: 02/02/11
ARI Job No: RG59



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: 07/28/10
Client: Floyd/Snyder	Project: Lora Lake RI	Sample Site: NA	

LOGNUM ARI ID	CLIENT ID	MATRIX	# CONTAINERS	ANALYTICAL REQUEST	ANALYTICAL REQUEST	ANALYTICAL REQUEST	COMMENTS
10-18272 RG590	PSB05-4-5-072810	Soil	1				7-28-10 9:00
10-18273 RG59P	PSB06-2-4-072810	Soil					
10-18274 RG59Q	PSB06-4-6-072810	Soil					

Sue to Kathy: EPA 1613 D/F, L4 + Excel EDD,
2/3/11 KZ

12832 69601 5116 9039

Comments/Special Instructions:	Relinquished By:	Received By:	Relinquished By:
	Printed Name: Anna Pulumba	(Signature)	Printed Name:
	Company: ARI		Company:
	Date/Time: 2/2/11 156		Date/Time:
			Relinquished By: Kathy Zipp
			Printed Name:
			Company:
			Date/Time:

Frontier Analytical Laboratory

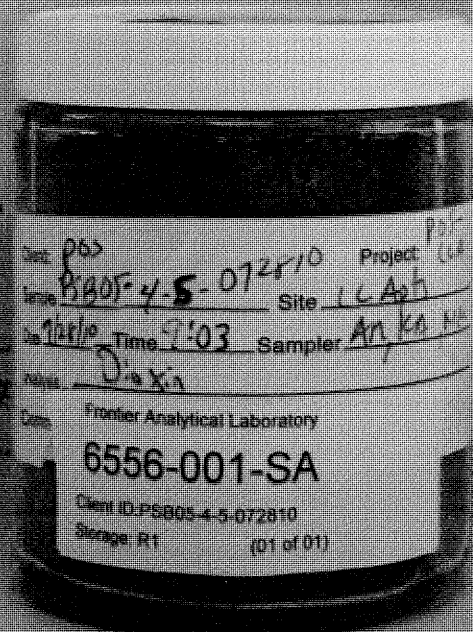
Sample Login Form

FAL Project ID: **6556**

Client:	Analytical Resources Inc. Sue Dunnihoo
Client Project ID:	RG59
Date Received:	02/03/2011
Time Received:	09:40 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	1
Duplicates:	0
Storage Location:	R1

Method of Delivery:	UPS
Tracking Number:	1Z8326950151169039
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	07/28/2011
Adequate Sample Volume	Yes
Anomalies or additional comments:	
L4 DATA PACKAGE & EXCEL EDD.	

LABORATORY SRI ID	CLIENT ID	MATRIX	# CONTAINERS	ANALYTICAL REQUEST	ANALYTICAL REQUEST	ANALYTICAL REQUEST	STANDARD
18-18272 RG590	PSB05-4-5-072810	Soil	1				2.28.10 9:03
18-18273	PSB05-4-5-072810	Soil					
18-18274	PSB05-4-5-072810	Soil					



Sue to Kathy

Excel EDD,
2/3/11 12

12 8:2 696 01

Kathy JPP
Danzon
Frontier
2/3/11 940

Frontier Analytical Laboratory
PROJECT REQUEST SHEET

Project #: 6556 Sample #: 1 Client Manager: BS
Client: Analytical Resources Inc. Sue Dunning Hold Time: 07/28/2011
Matrix: Soil Extraction Batch: 2216 Due Date: 02/25/2011
Method: EPA 1613 D/F Storage: R1
SOP: SOPs: EP2A Rev.8 IP2A Rev.9

COMMENTS/INSTRUCTIONS:

L4 in Excel EDD

Results: 10556

Instrument: Ful3
DB5 _____
DB225 _____
DB1 _____
Other _____

Extract/s located in box: "The Park"

Standards: 10556

Frontier Analytical Laboratory

EXTRACTION SHEET

Project #: 6556 Extraction Date: 2011-02-10 Extraction Chemist: MP

Method/Analysis: EPA 1613 D/F


Procedure: SOX/SDS Solvent: Toluene

Sample ID	Wet wt. (g/L)	Dry wt. (g/L)	IS	NS	CSS
			Amt: 10.0uL ID: 100511A Vial: 3 Chemist/Witness/Date	Amt: 10.0uL ID: 100511B Vial: 1 Chemist/Witness/Date	Amt: 10.0uL ID: 100511C Vial: 3 Chemist/Witness/Date
2216-001-0001-MB	(5.00 g)	(5.00 g)	MP ↙ 2-10-11	N/A	MP ↙ 2-11-11
2216-001-0001-OPR	(5.00 g)	(5.00 g)	↓	MP ↙ 2-10-11	↓
6556-001-0001-SA	5.28 g	5.00 g	↓	N/A	↓

AX-21 Charcoal Cleaned	031210	Acetone	105790	Acid Alumina	A0284730	Hexane	106411
Hydrochloric Acid	B08505	Methanol	105561	Methylene Chloride (DCM)	50267	Silica Gel	TA1592834
Sodium Hydroxide	0062836	Sodium Sulfate	1750C277	Sulfuric Acid	106111	Tetradecane	086237
Toluene	104811	Water	50229	C-18 Empore Discs	320552	Cyclohexane	48151

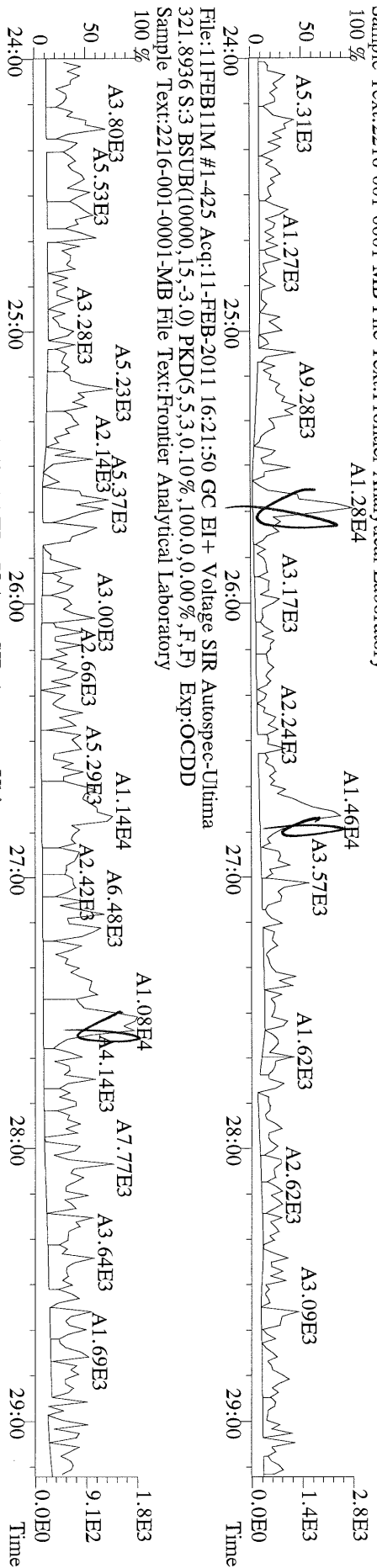
Comments:

Name	Resp	RA	RT	RRF	Conc	Qual	Fac Noise-1	Noise-2	DL	DL	
2,3,7,8-TCDD	*	* n	NotFnd	1.11	*		2.50	736	804	0.274	
1,2,3,7,8-PeCDD	*	* n	NotFnd	1.10	*		2.50	924	688	0.330	
1,2,3,4,7,8-HxCDD	*	* n	NotFnd	1.37	*		2.50	916	988	0.389	
1,2,3,6,7,8-HxCDD	*	* n	NotFnd	1.37	*		2.50	916	988	0.512	
1,2,3,7,8,9-HxCDD	*	* n	NotFnd	1.36	*		2.50	916	988	0.449	
1,2,3,4,6,7,8-HpCDD	*	* n	NotFnd	1.45	*		2.50	784	724	0.443	
OCDD	*	* n	NotFnd	1.43	*		2.50	700	668	1.07	
2,3,7,8-TCDF	*	* n	NotFnd	1.50	*		2.50	928	1150	0.156	
1,2,3,7,8-PeCDF	*	* n	NotFnd	0.94	*		2.50	916	1000	0.279	
2,3,4,7,8-PeCDF	*	* n	NotFnd	0.94	*		2.50	916	1000	0.307	
1,2,3,4,7,8-HxCDF	*	* n	NotFnd	0.93	*		2.50	844	744	0.290	
1,2,3,6,7,8-HxCDF	*	* n	NotFnd	0.82	*		2.50	844	744	0.294	
2,3,4,6,7,8-HxCDF	*	* n	NotFnd	0.92	*		2.50	844	744	0.345	
1,2,3,7,8,9-HxCDF	*	* n	NotFnd	1.00	*		2.50	844	744	0.336	
1,2,3,4,6,7,8-HpCDF	*	* n	NotFnd	1.39	*		2.50	688	708	0.380	
1,2,3,4,7,8,9-HpCDF	*	* n	NotFnd	1.36	*		2.50	688	708	0.414	
OCDF	*	* n	NotFnd	0.79	*		2.50	700	804	1.09	
Rec											
13C-2,3,7,8-TCDD	2.36e+07	0.75 y	27:30	1.02	384					95.9	
13C-1,2,3,7,8-PeCDD	2.28e+07	1.73 y	33:21	0.84	452					113	
13C-1,2,3,4,7,8-HxCDD	1.83e+07	1.25 y	38:44	1.07	403					101	
13C-1,2,3,6,7,8-HxCDD	1.53e+07	1.25 y	38:54	1.01	358					89.6	
13C-1,2,3,4,6,7,8-HpCDD	1.36e+07	1.01 y	44:21	0.86	375					93.7	
13C-OCDD	1.40e+07	0.96 y	49:58	0.55	607					75.9	
13C-2,3,7,8-TCDF	4.01e+07	0.87 y	26:46	0.99	365					91.2	
13C-1,2,3,7,8-PeCDF	3.73e+07	1.70 y	31:37	0.84	402					101	
13C-2,3,4,7,8-PeCDF	3.46e+07	1.66 y	32:57	0.81	385					96.3	
13C-1,2,3,4,7,8-HxCDF	3.02e+07	0.52 y	37:21	1.85	385					96.4	
13C-1,2,3,6,7,8-HxCDF	3.75e+07	0.50 y	37:33	2.54	350					87.6	
13C-2,3,4,6,7,8-HxCDF	2.74e+07	0.51 y	38:30	2.01	322					80.6	
13C-1,2,3,7,8,9-HxCDF	3.03e+07	0.52 y	39:56	2.03	352					88.0	
13C-1,2,3,4,6,7,8-HpCDF	1.57e+07	0.47 y	42:27	1.11	334					83.5	
13C-1,2,3,4,7,8,9-HpCDF	1.52e+07	0.46 y	45:17	0.80	446					112	
13C-OCDF	2.77e+07	0.95 y	50:22	1.08	606					75.7	
37Cl-2,3,7,8-TCDD	6.32e+06		27:32	0.69	153					95.9	
13C-1,2,3,4-TCDD	2.40e+07	0.75 y	26:55	-	10.7						
13C-1,2,3,4-TCDF	4.43e+07	0.87 y	25:39	-	12.2						
13C-1,2,3,7,8,9-HxCDD	1.69e+07	1.26 y	39:21	-	12.3						
							Fac Noise-1	Noise-2	DL	#Hom	
Total Tetra-Dioxins	*		NotFnd	1.11	*		2.50	736	804	0.274	0
Total Penta-Dioxins	*		NotFnd	1.10	*		2.50	924	688	0.330	0
Total Hexa-Dioxins	*		NotFnd	1.37	*		2.50	916	988	0.512	0
Total Hepta-Dioxins	*		NotFnd	1.45	*		2.50	784	724	0.443	0
Total Tetra-Furans	*		NotFnd	1.50	*		2.50	928	1150	0.156	0
1st Fn. Tot Penta-Furans	*		NotFnd	0.94	*		2.50	916	1000	0.307	PeCDF 0
Total Penta-Furans	*		NotFnd	0.94	*		2.50	916	1000	0.307	* 0
Total Hexa-Furans	*		NotFnd	0.91	*		2.50	844	744	0.345	0
Total Hepta-Furans	*		NotFnd	1.38	*		2.50	688	708	0.414	0

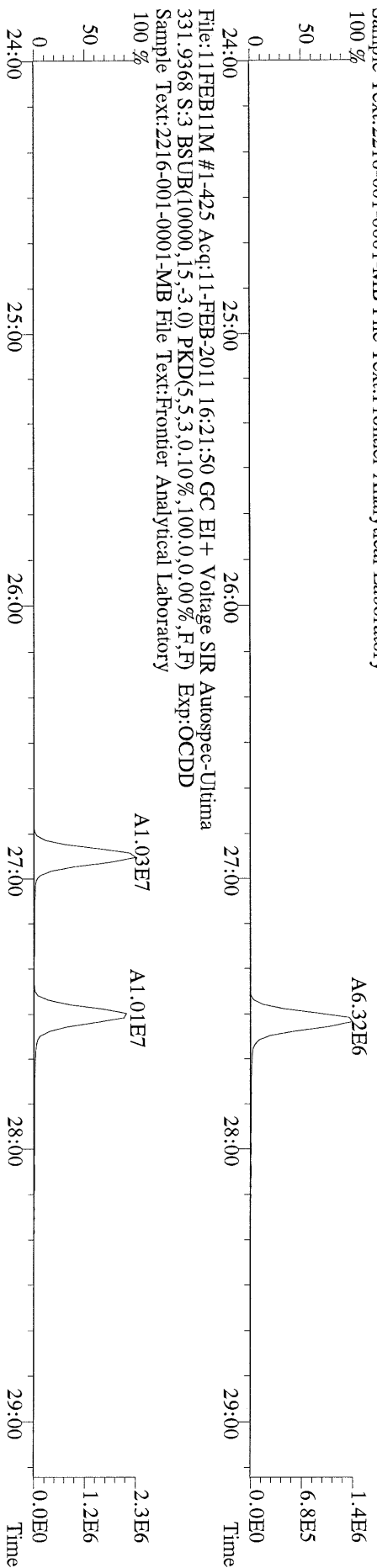
Analyst: 

Date: 2/14/11

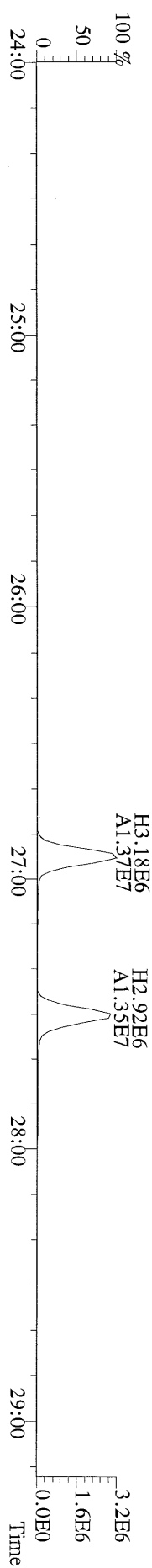
File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



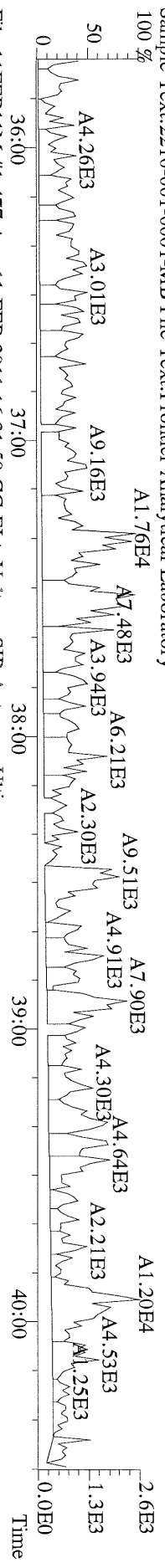
File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



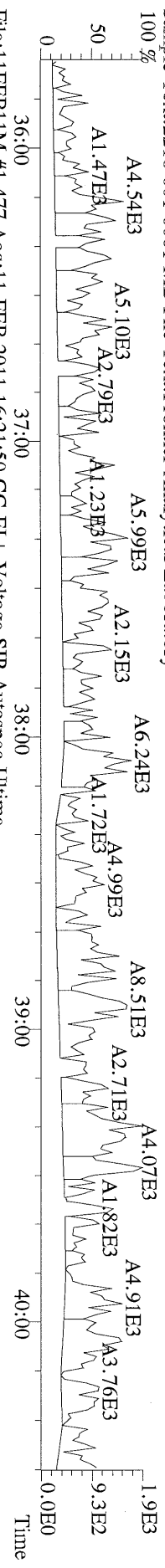
File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



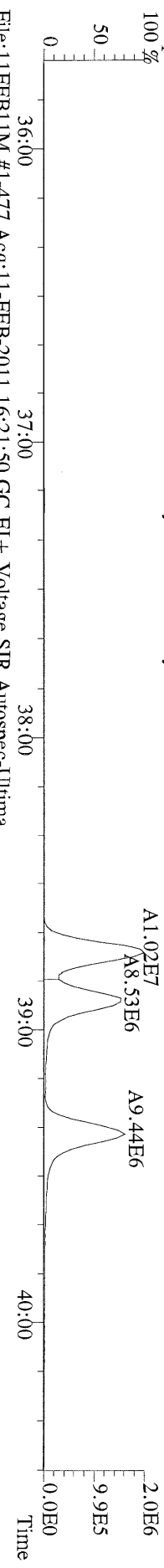
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



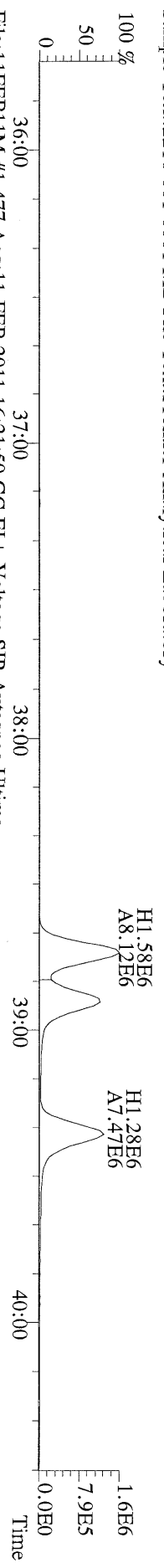
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



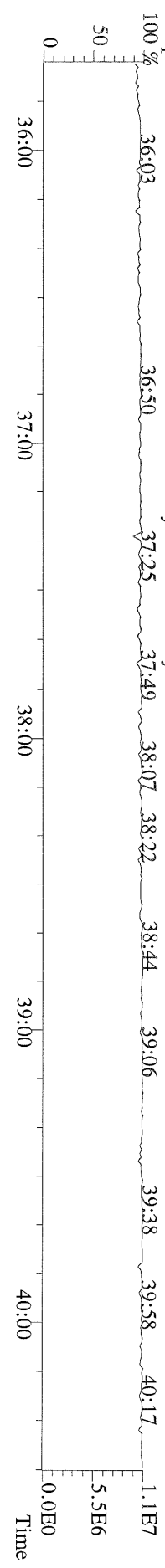
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



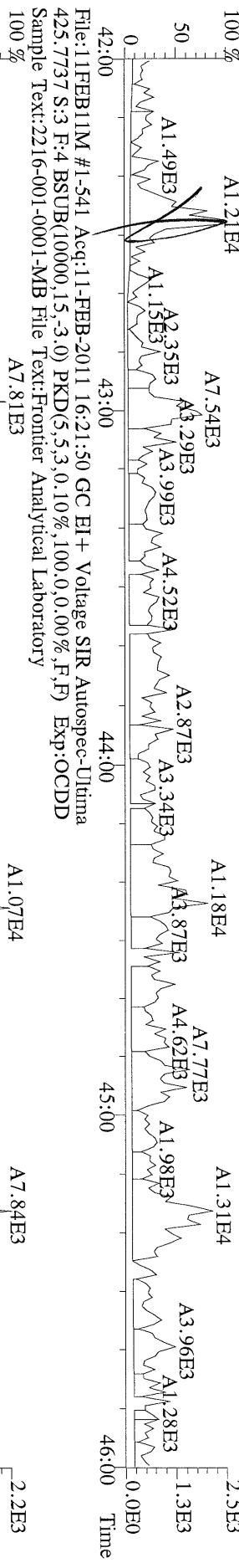
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



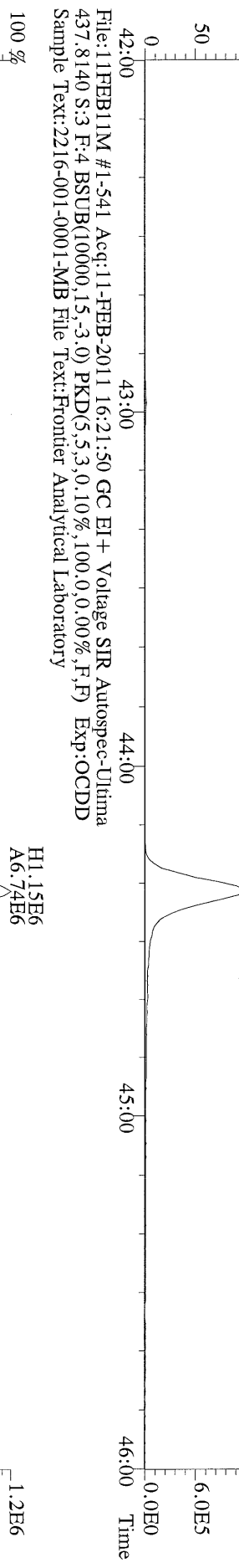
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



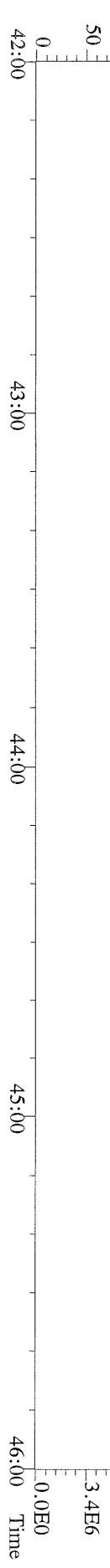
File:11FEB11M #1-541 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Utima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



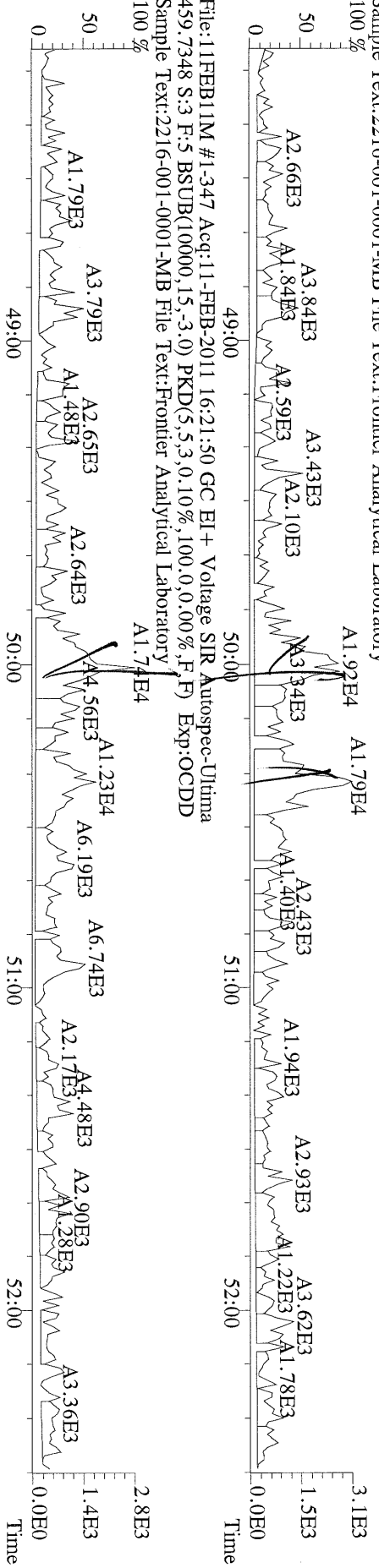
File:11FEB11M #1-541 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Utima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



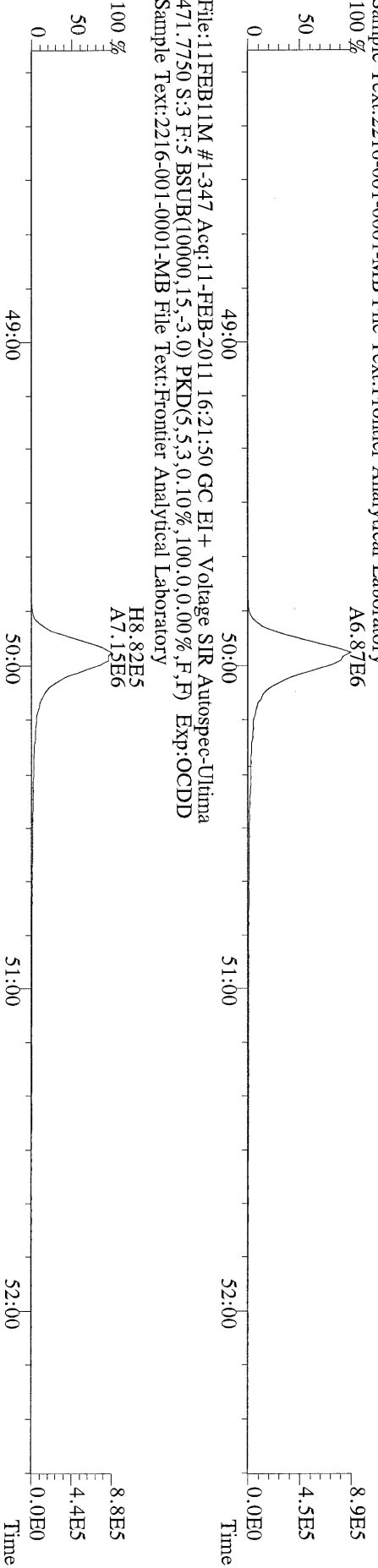
File:11FEB11M #1-541 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Utima
430.9728 S:3 F:4 Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



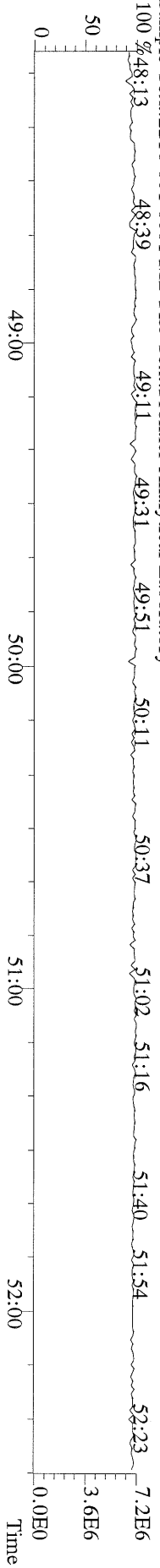
File:11FEB11M #1-347 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



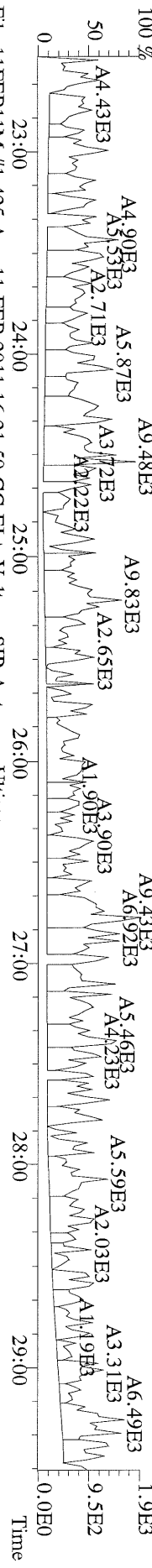
File:11FEB11M #1-347 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



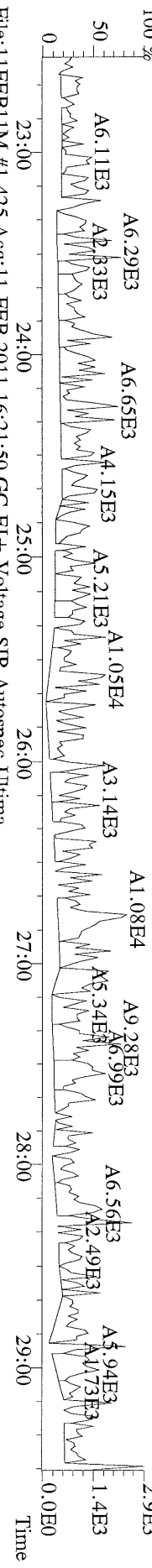
File:11FEB11M #1-347 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



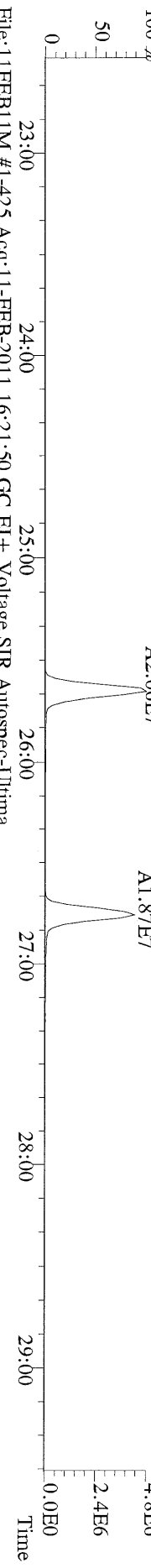
File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



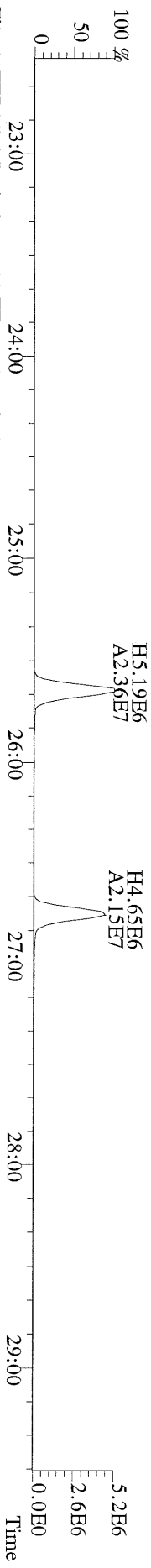
File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



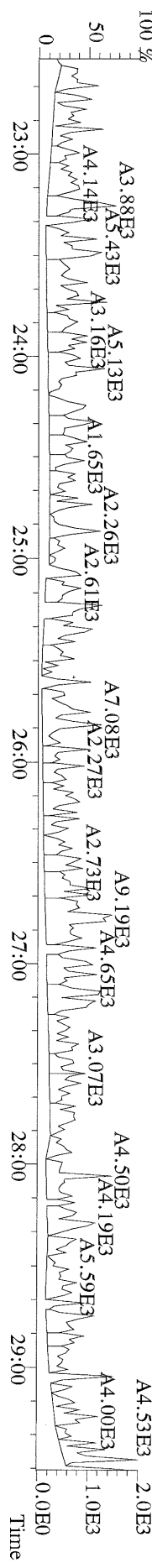
File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



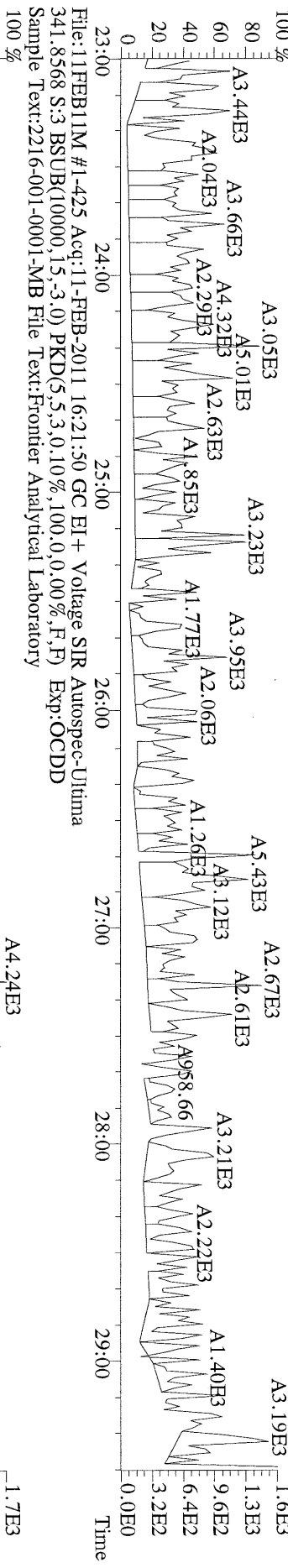
File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



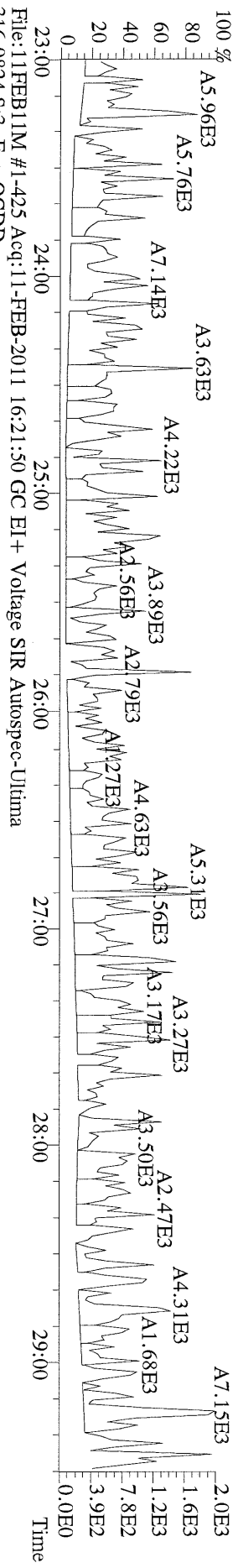
File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 339.8597 S:3 BSUBR(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory

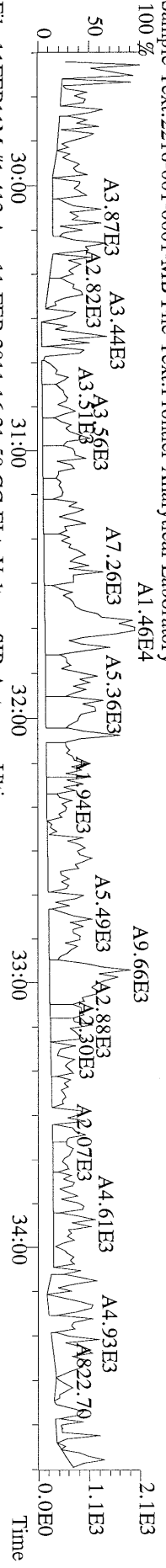


File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 341.8568 S:3 BSUBR(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory

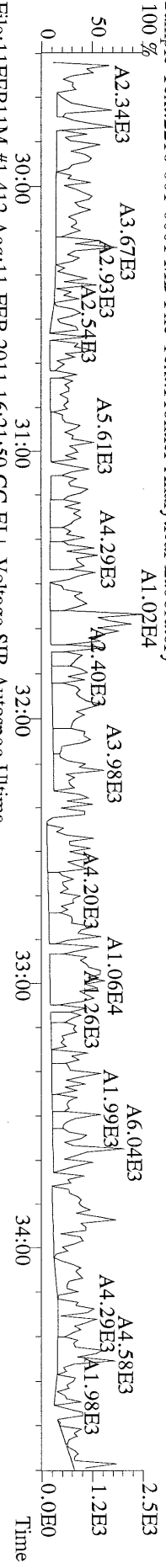


File:11FEB11M #1-425 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 316.9824 S:3 Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory

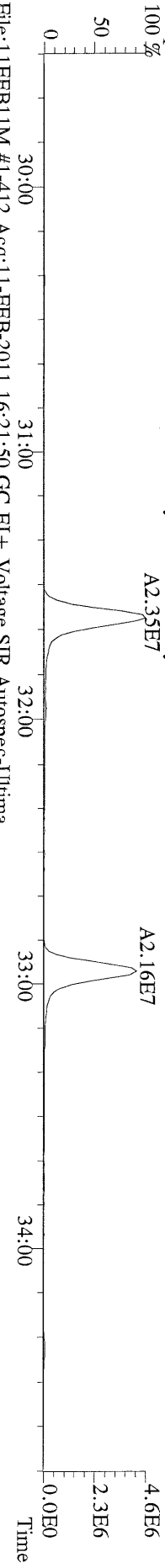
File:11FEB11M #1-412 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



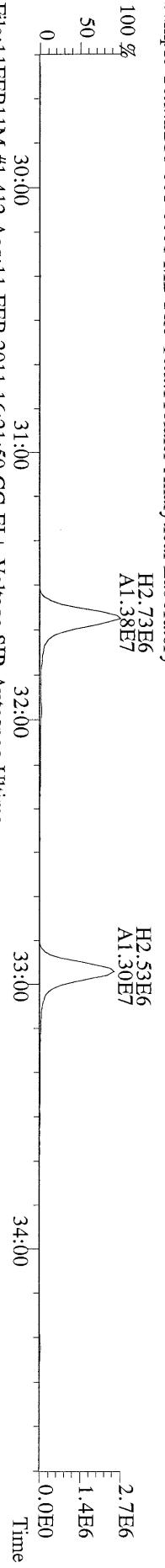
File:11FEB11M #1-412 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



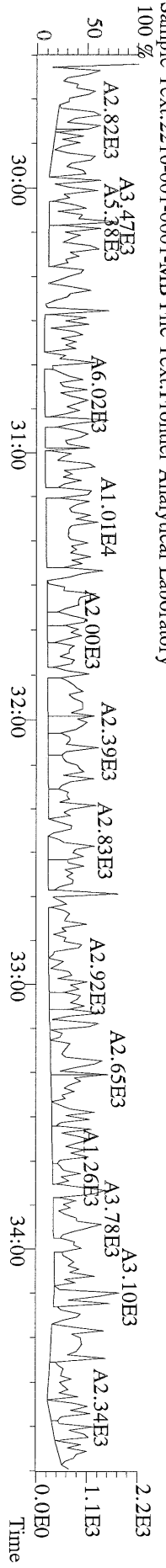
File:11FEB11M #1-412 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



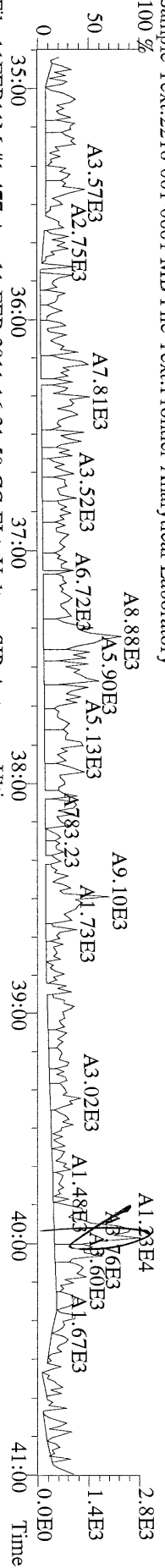
File:11FEB11M #1-412 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



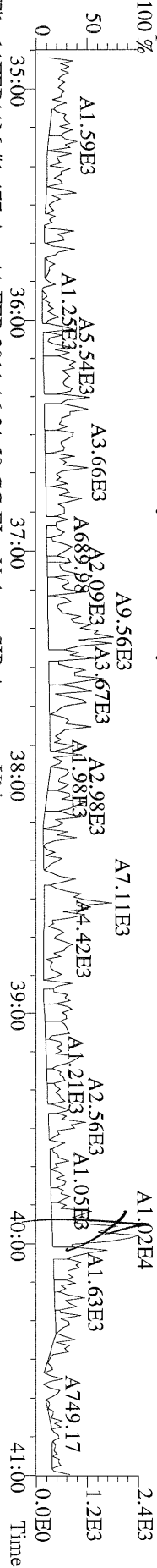
File:11FEB11M #1-412 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



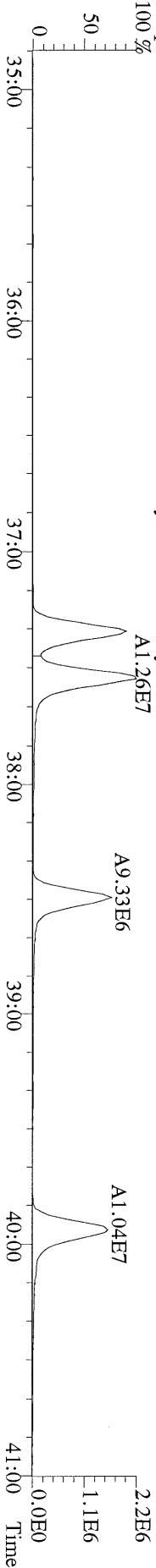
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
 373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



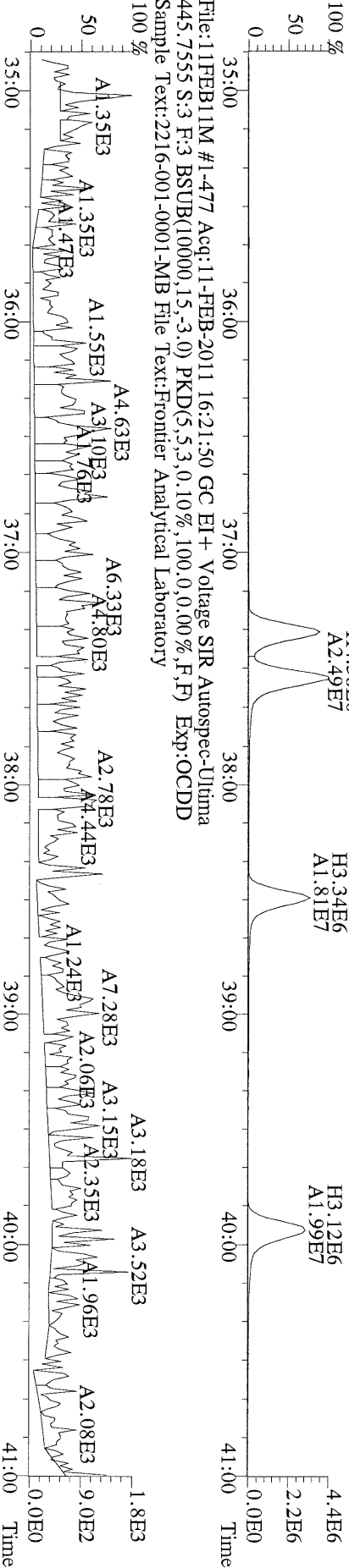
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
 375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



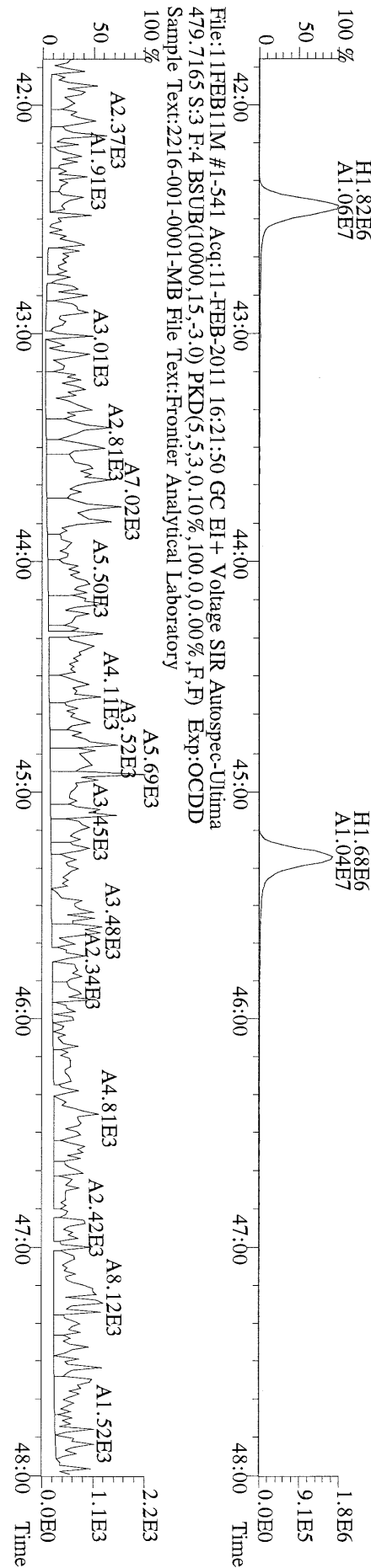
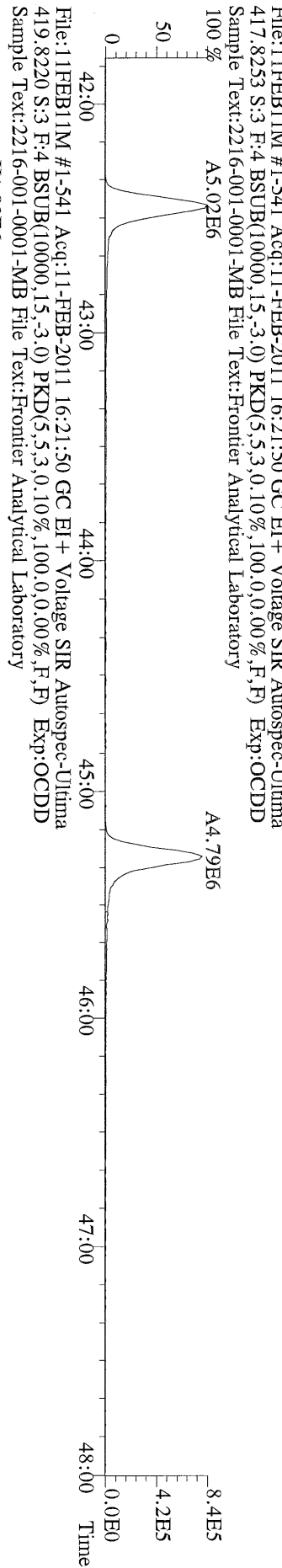
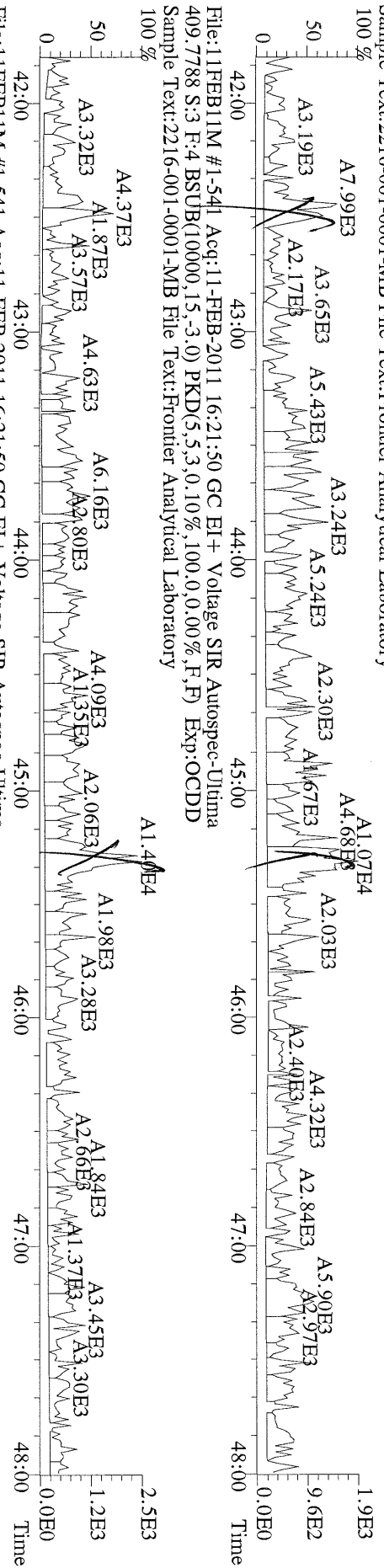
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
 385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



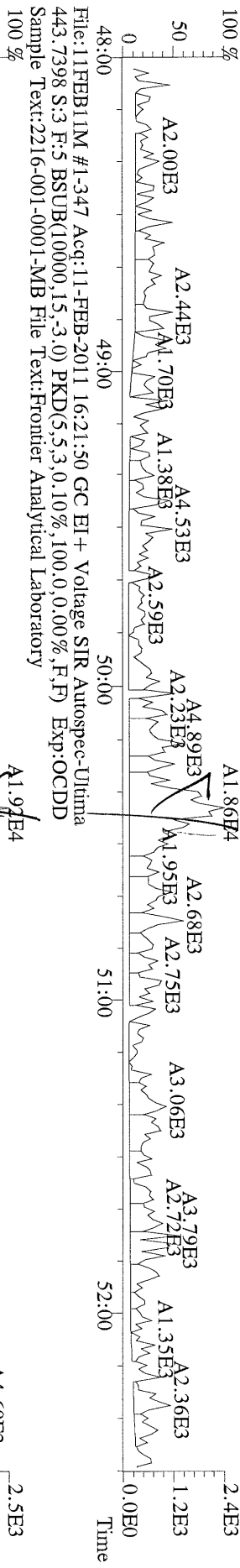
File:11FEB11M #1-477 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
 445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



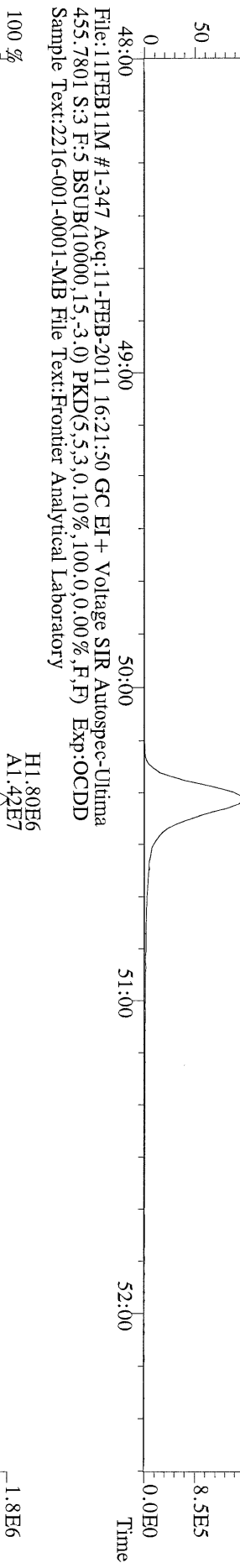
File:11FEB11M #1-541 Acq:11-FEB-2011 16:21:50 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



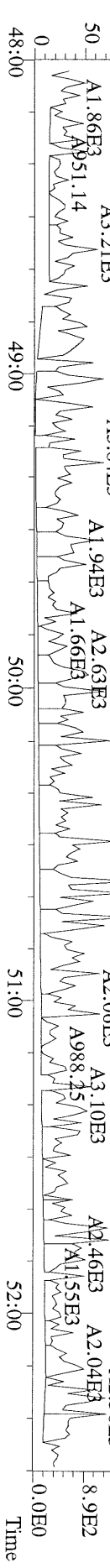
File:11FEB11M #1-347 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



File:11FEB11M #1-347 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



File:11FEB11M #1-347 Acq:11-FEB-2011 16:21:50 GC EI + Voltage SIR Autospec-Ultima
 513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-MB File Text:Frontier Analytical Laboratory



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: 11FEB11M Sam:2

Ext. Date: 2/10/11 Shift: Day Analysis Date: 11-FEB-11 15:25:09

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	10.6	6.70 - 15.8
1,2,3,7,8-PeCDD	50	51.0	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	51.2	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	53.7	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	53.6	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	46.3	35.0 - 70.0
OCDD	100	102	78.0 - 144
2,3,7,8-TCDF	10	9.06	7.50 - 15.8
1,2,3,7,8-PeCDF	50	50.8	40.0 - 67.0
2,3,4,7,8-PeCDF	50	51.2	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	53.6	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	54.0	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	54.4	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	55.1	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	51.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	52.0	39.0 - 69.0
OCDF	100	111	63.0 - 170

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

Analyst:  Date: 2/14/11

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: 11FEB11M Sam:2

Ext. Date: 2/10/11 Shift: Day Analysis Date: 11-FEB-11 15:25:09

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	99.3	20.0 - 175
13C-1,2,3,7,8-PeCDD	100	112	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	100	105	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	100	96.4	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	100	100	26.0 - 166
13C-OCDD	200	179	26.0 - 397
13C-2,3,7,8-TCDF	100	99.2	22.0 - 152
13C-1,2,3,7,8-PeCDF	100	105	21.0 - 192
13C-2,3,4,7,8-PeCDF	100	102	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	100	98.5	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	89.6	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	100	87.9	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	95.4	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	100	89.7	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	100	121	20.0 - 186
13C-OCDF	200	174	26.0 - 397
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	38.0	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: 

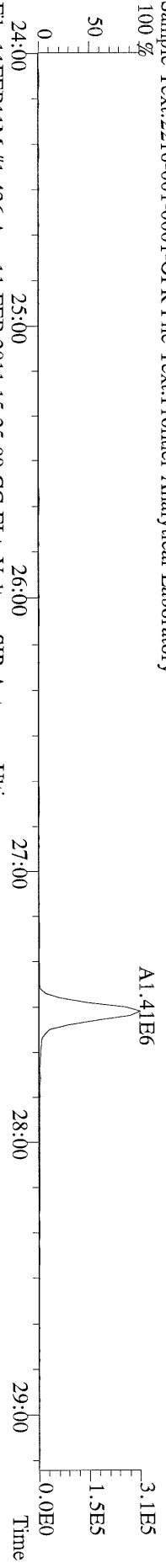
Date: 2/14/11

Name	Resp	RA	RT	RRF	Conc	Qual	Fac Noise-1	Noise-2	DL	#Hom
2,3,7,8-TCDD	3.22e+06	0.78 y	27:31	1.11	10.6		2.50	-	*	
1,2,3,7,8-PeCDD	1.42e+07	1.52 y	33:22	1.10	51.0		2.50	-	*	
1,2,3,4,7,8-HxCDD	1.42e+07	1.28 y	38:45	1.37	51.2		2.50	-	*	
1,2,3,6,7,8-HxCDD	1.28e+07	1.29 y	38:54	1.37	53.7		2.50	-	*	
1,2,3,7,8,9-HxCDD	1.37e+07	1.27 y	39:22	1.36	53.6		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	1.03e+07	0.99 y	44:22	1.45	46.3		2.50	-	*	
OCDD	1.28e+07	0.90 y	49:58	1.43	102		2.50	-	*	
2,3,7,8-TCDF	6.12e+06	0.69 y	26:46	1.50	9.06		2.50	-	*	
1,2,3,7,8-PeCDF	1.92e+07	1.54 y	31:38	0.94	50.8		2.50	-	*	
2,3,4,7,8-PeCDF	1.81e+07	1.54 y	32:58	0.94	51.2		2.50	-	*	
1,2,3,4,7,8-HxCDF	1.62e+07	1.24 y	37:22	0.93	53.6		2.50	-	*	
1,2,3,6,7,8-HxCDF	1.80e+07	1.25 y	37:33	0.82	54.0		2.50	-	*	
2,3,4,6,7,8-HxCDF	1.58e+07	1.24 y	38:30	0.92	54.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	1.90e+07	1.24 y	39:57	1.00	55.1		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	1.28e+07	1.07 y	42:28	1.39	51.7		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	1.22e+07	1.08 y	45:18	1.36	52.0		2.50	-	*	
OCDF	1.47e+07	0.94 y	50:22	0.79	111		2.50	-	*	
Rec										
13C-2,3,7,8-TCDD	2.72e+07	0.81 y	27:30	1.02	99.3				99.3	
13C-1,2,3,7,8-PeCDD	2.53e+07	1.73 y	33:21	0.84	112				112	
13C-1,2,3,4,7,8-HxCDD	2.02e+07	1.27 y	38:44	1.07	105				105	
13C-1,2,3,6,7,8-HxCDD	1.74e+07	1.25 y	38:54	1.01	96.4				96.4	
13C-1,2,3,4,6,7,8-HpCDD	1.53e+07	1.00 y	44:21	0.86	100				100	
13C-OCDD	1.75e+07	0.98 y	49:58	0.55	179				89.5	
13C-2,3,7,8-TCDF	4.50e+07	0.88 y	26:45	0.99	99.2				99.2	
13C-1,2,3,7,8-PeCDF	4.02e+07	1.67 y	31:37	0.84	105				105	
13C-2,3,4,7,8-PeCDF	3.78e+07	1.69 y	32:57	0.81	102				102	
13C-1,2,3,4,7,8-HxCDF	3.26e+07	0.51 y	37:21	1.85	98.5				98.5	
13C-1,2,3,6,7,8-HxCDF	4.05e+07	0.50 y	37:32	2.54	89.6				89.6	
13C-2,3,4,6,7,8-HxCDF	3.16e+07	0.51 y	38:29	2.01	87.9				87.9	
13C-1,2,3,7,8,9-HxCDF	3.46e+07	0.52 y	39:56	2.03	95.4				95.4	
13C-1,2,3,4,6,7,8-HpCDF	1.78e+07	0.47 y	42:27	1.11	89.7				89.7	
13C-1,2,3,4,7,8,9-HpCDF	1.73e+07	0.46 y	45:17	0.80	121				121	
13C-OCDF	3.37e+07	0.95 y	50:21	1.08	174				87.1	
37Cl-2,3,7,8-TCDD	6.98e+06		27:31	0.69	38.0				95.0	
13C-1,2,3,4-TCDD	2.68e+07	0.79 y	26:54	-	59.6					
13C-1,2,3,4-TCDF	4.56e+07	0.88 y	25:39	-	63.1					
13C-1,2,3,7,8,9-HxCDD	1.78e+07	1.27 y	39:21	-	64.7					
Total Tetra-Dioxins	3.45e+06		22:52	1.11	11.4		2.50	-	*	32
Total Penta-Dioxins	1.43e+07		31:51	1.10	51.4		2.50	-	*	7
Total Hexa-Dioxins	4.10e+07		38:45	1.37	159		2.50	-	*	9
Total Hepta-Dioxins	1.11e+07		42:59	1.45	49.8		2.50	-	*	31
Total Tetra-Furans	6.40e+06		24:03	1.50	9.47		2.50	-	*	19
1st Fn. Tot Penta-Furans	2.03e+05		22:49	0.94	0.555		2.50	-	*	PeCDF 36
Total Penta-Furans	3.87e+07		30:22	0.94	106		2.50	-	*	106 14
Total Hexa-Furans	6.92e+07		35:25	0.91	218		2.50	-	*	12
Total Hepta-Furans	2.53e+07		42:28	1.38	105		2.50	-	*	10

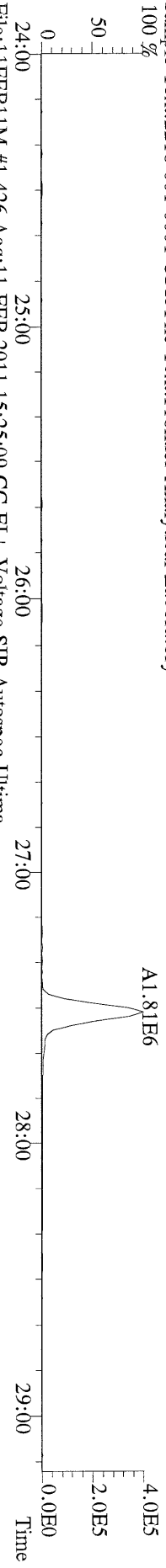
Analyst: 

Date: 

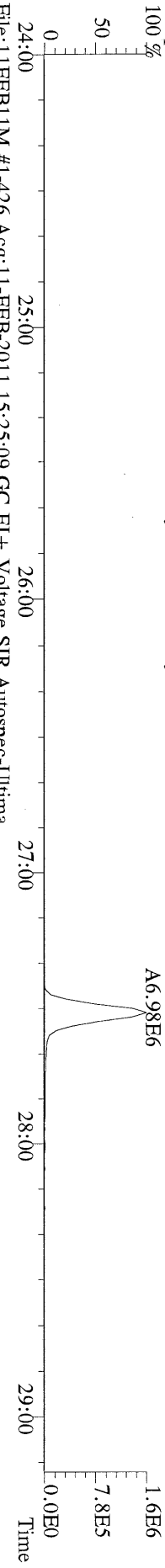
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



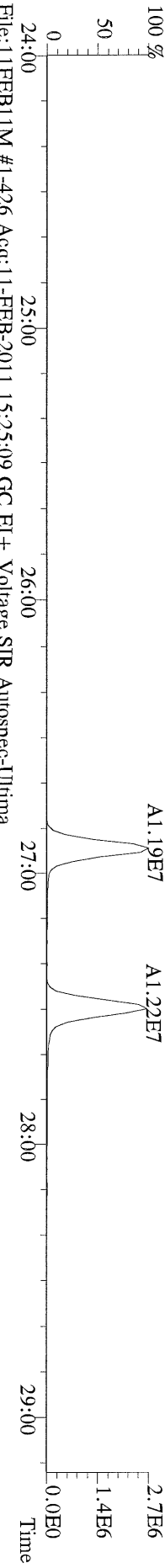
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



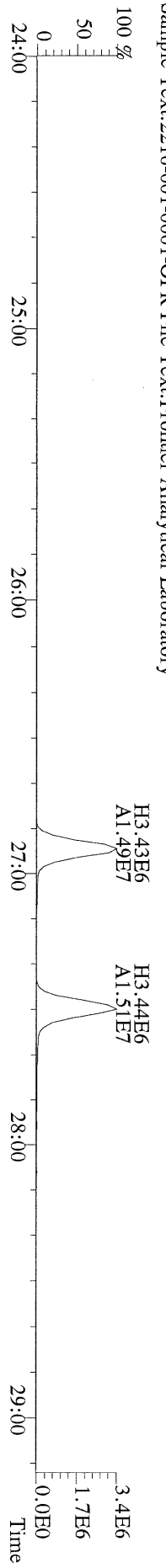
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



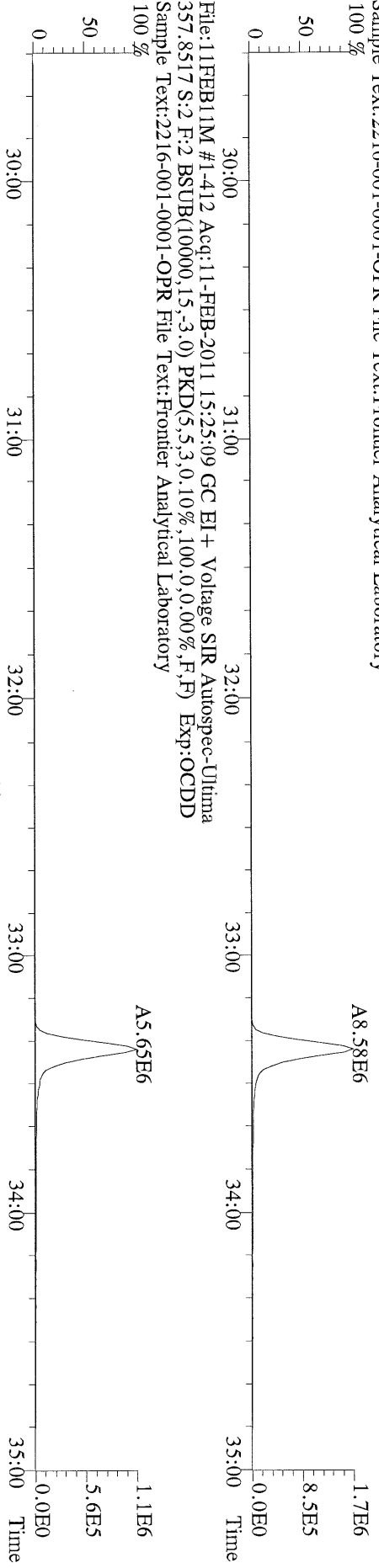
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



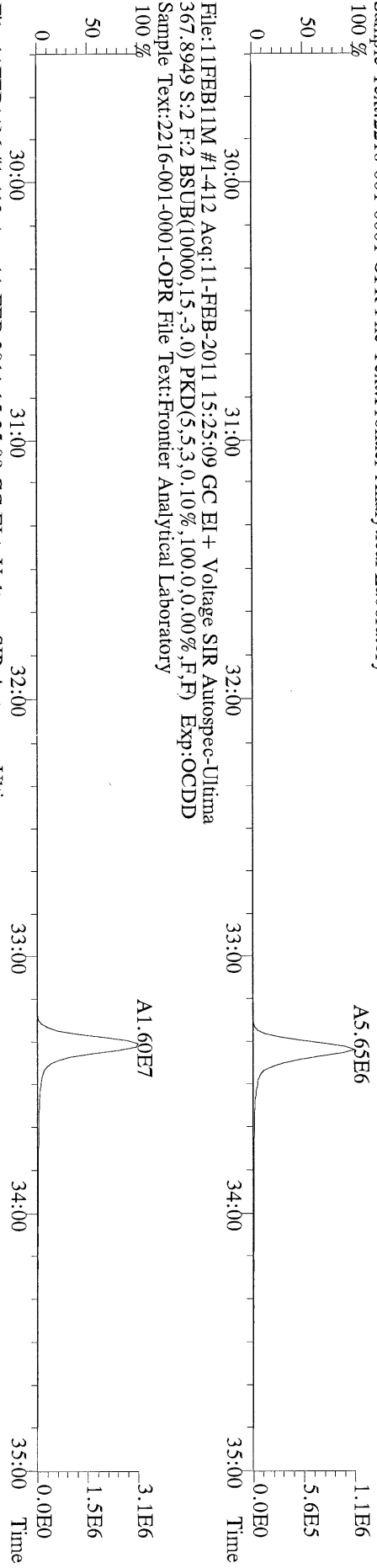
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



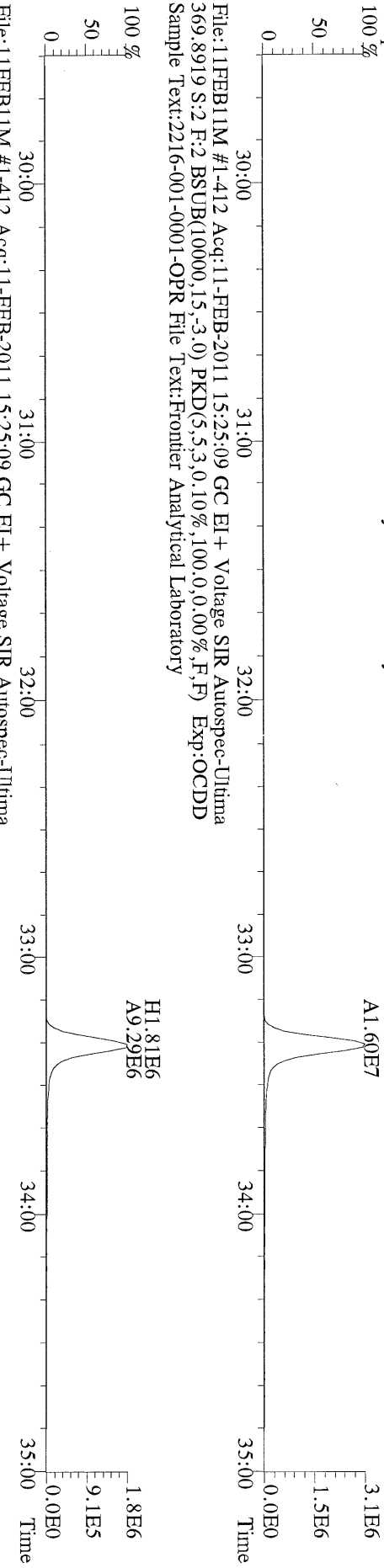
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



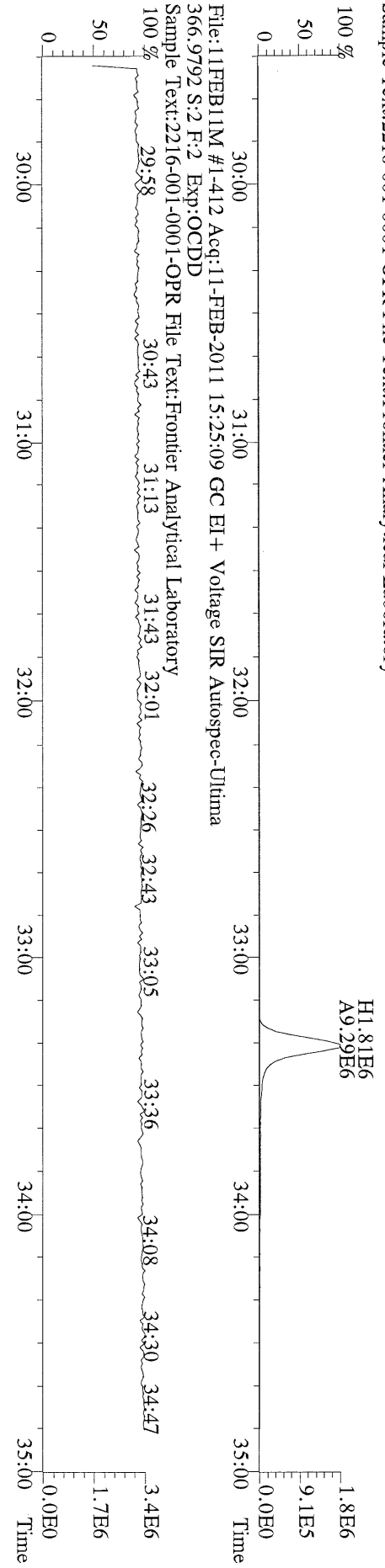
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



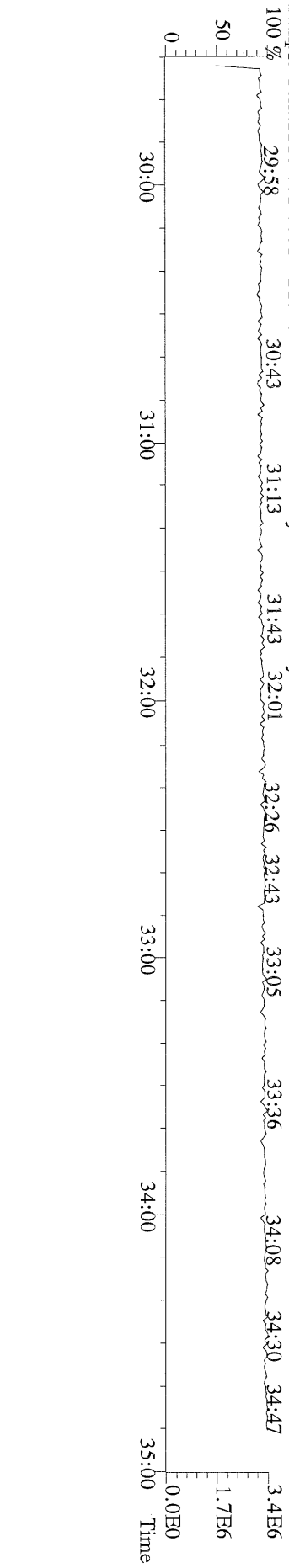
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



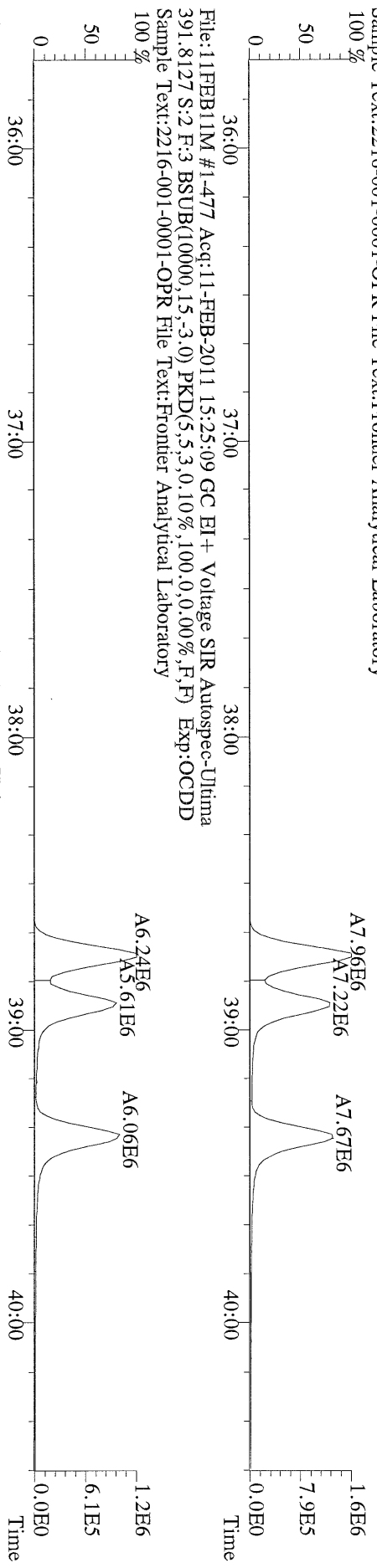
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



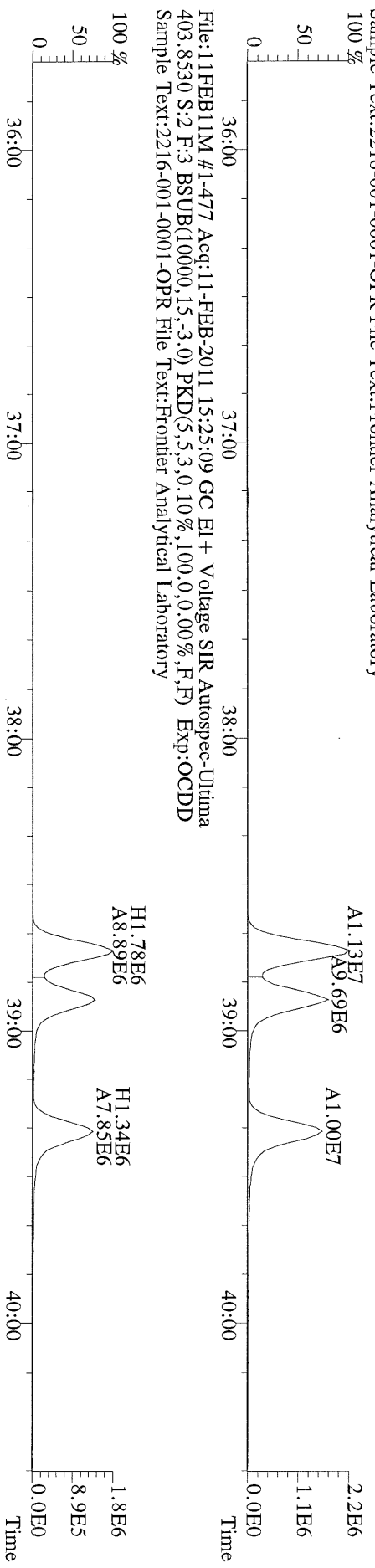
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



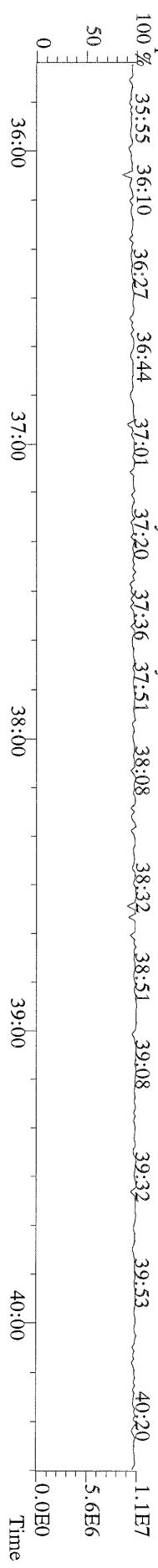
File:11FEB11M #1-477 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



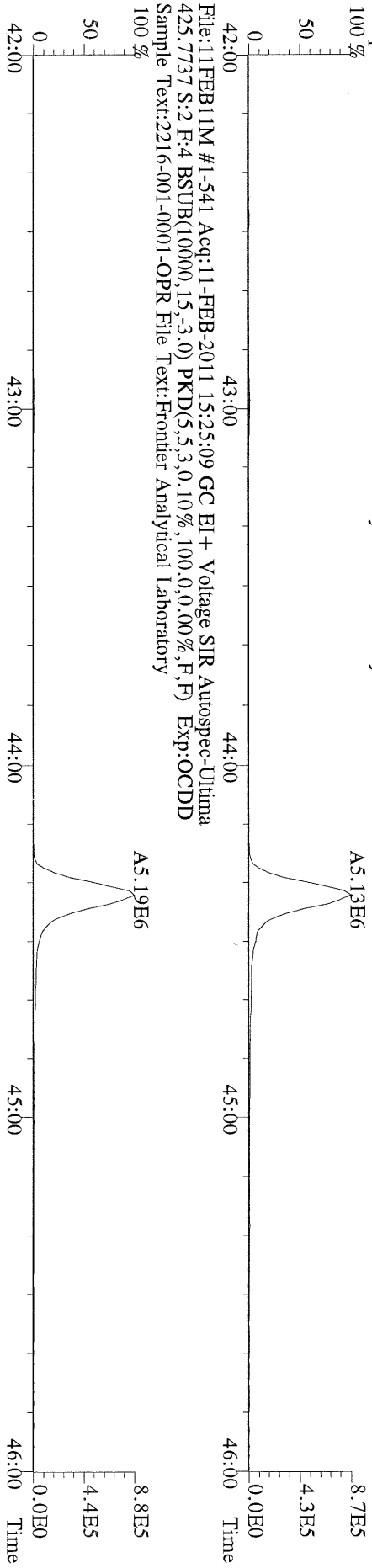
File:11FEB11M #1-477 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



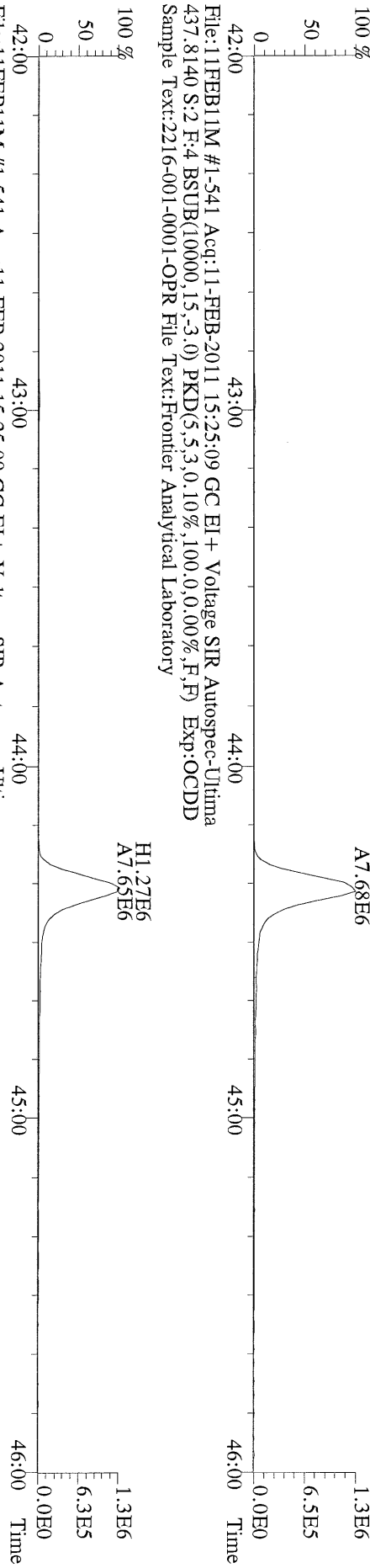
File:11FEB11M #1-477 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 380.9760 S:2 F:3 Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



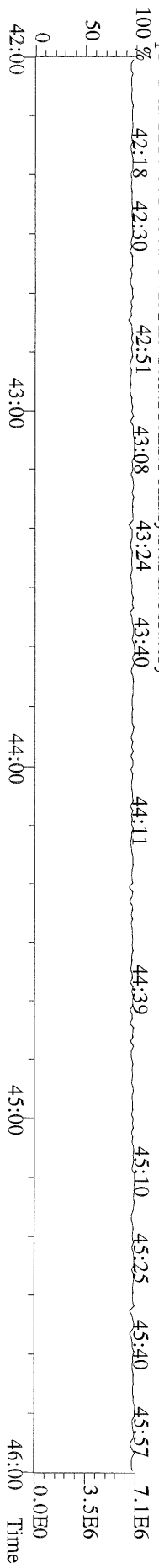
File:11FEB11M #1-541 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



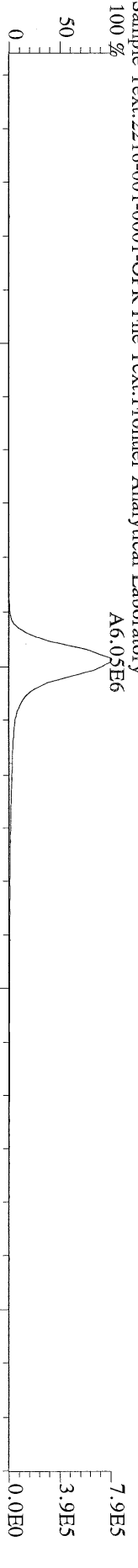
File:11FEB11M #1-541 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



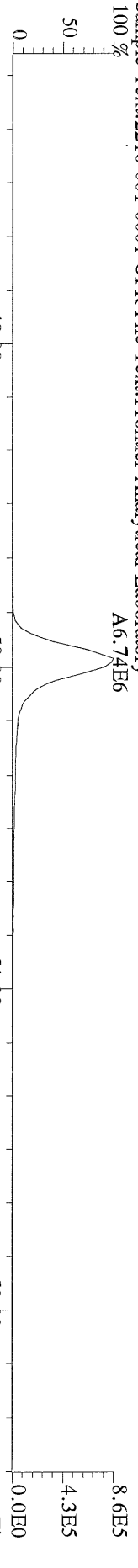
File:11FEB11M #1-541 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



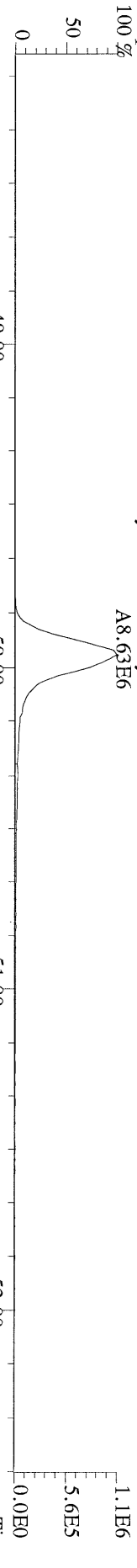
File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



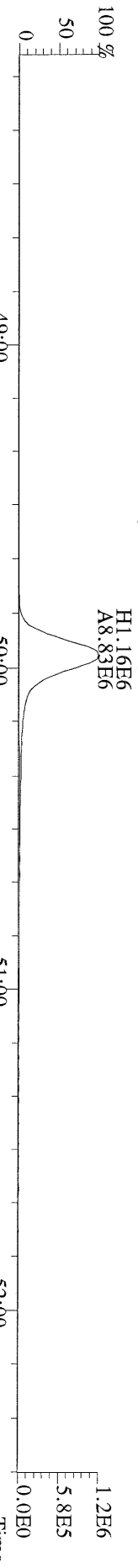
File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



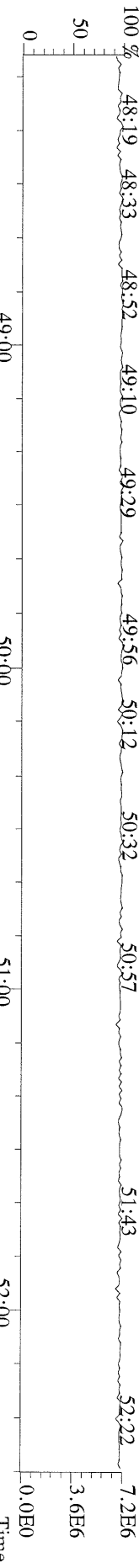
File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



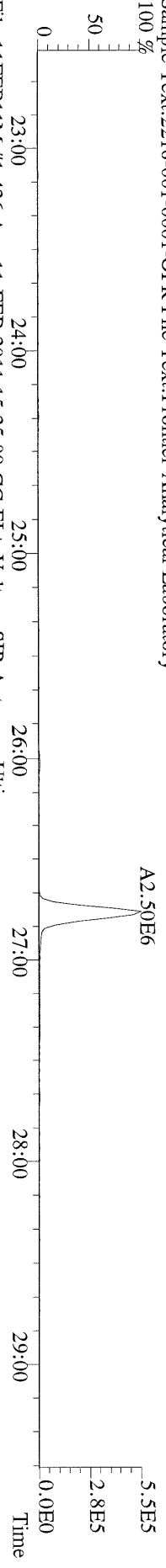
File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



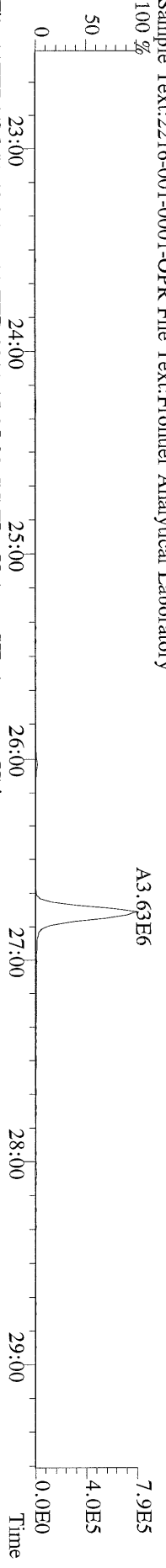
File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



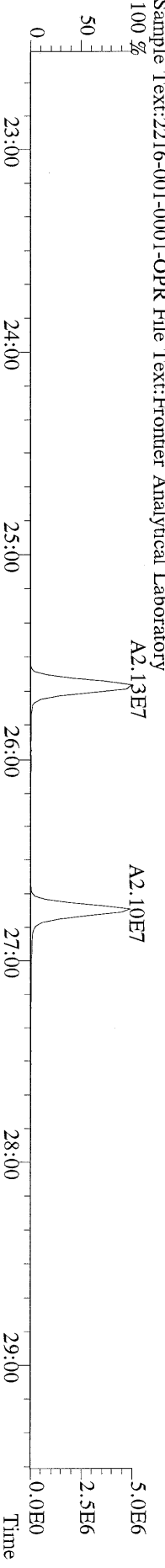
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



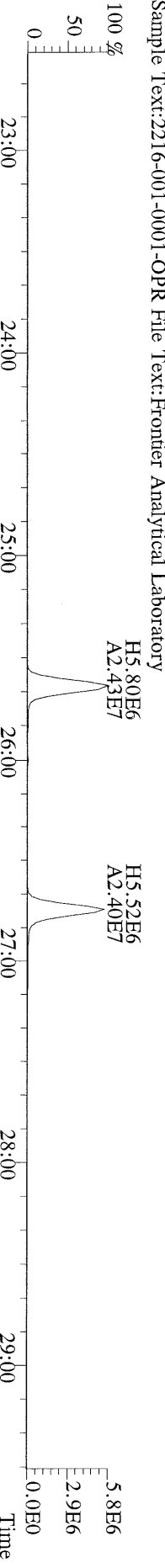
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



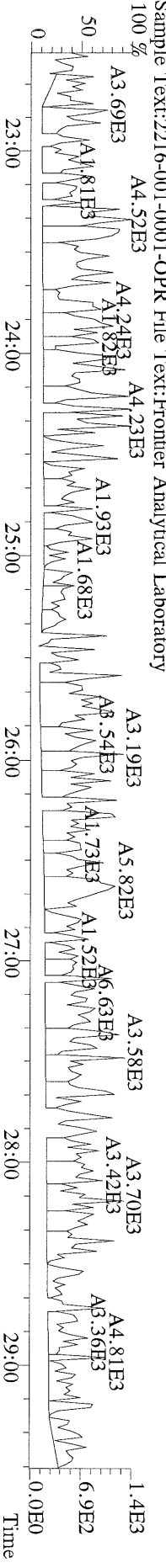
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



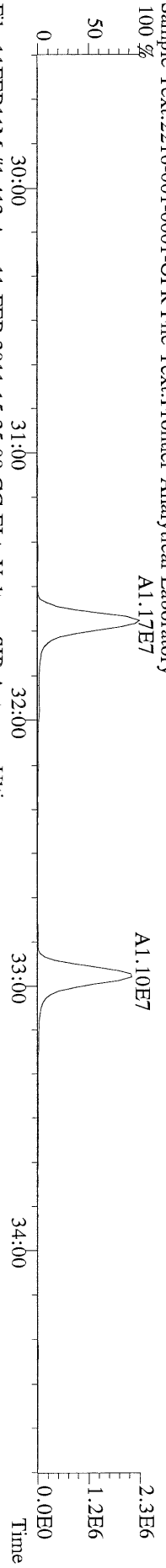
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



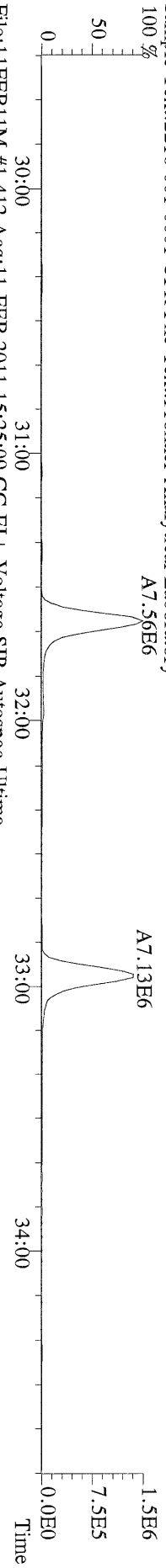
File:11FEB11M #1-426 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



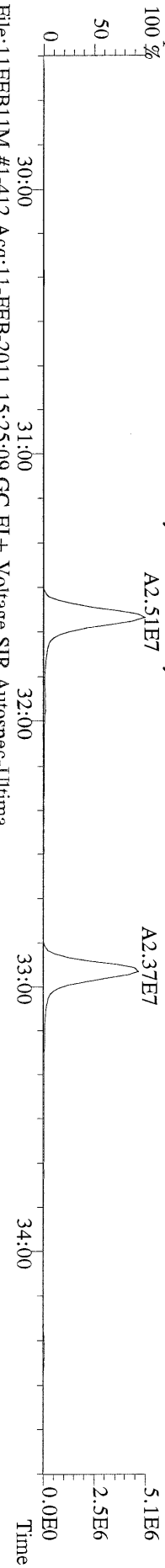
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



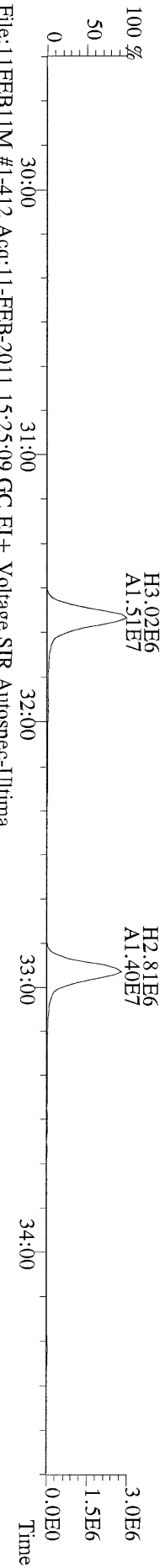
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



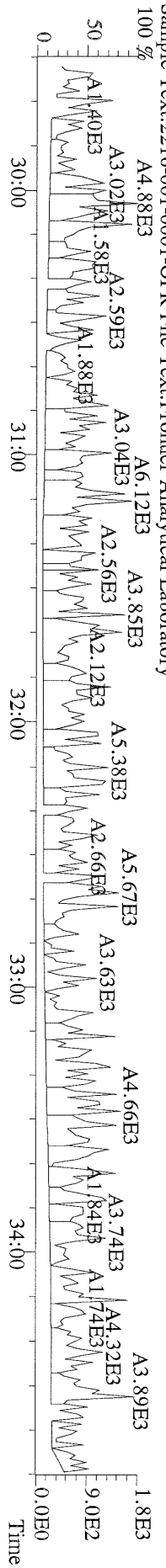
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



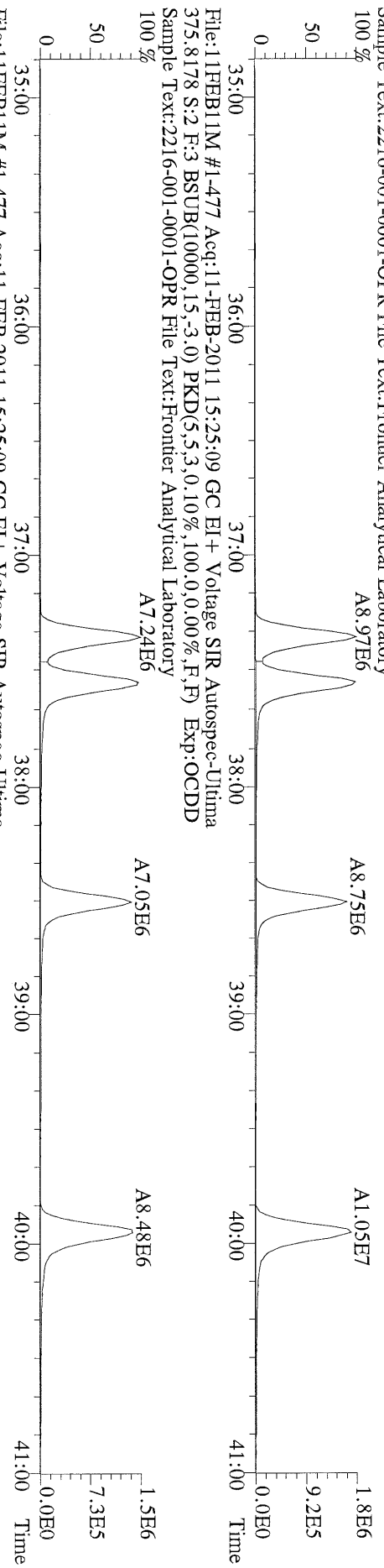
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



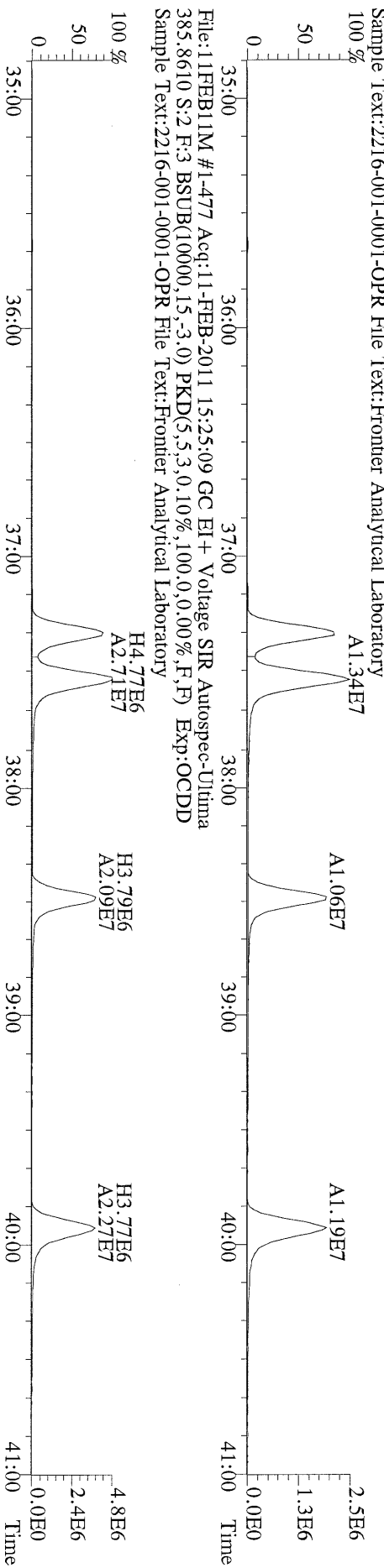
File:11FEB11M #1-412 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



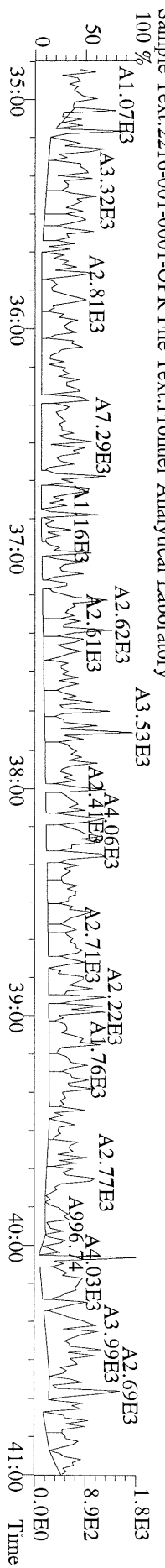
File:11FEB11M #1-477 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



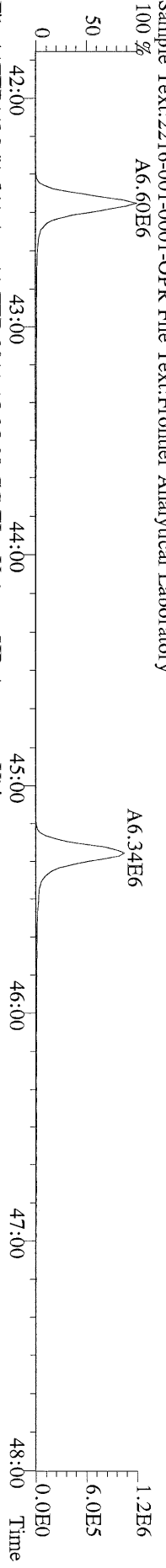
File:11FEB11M #1-477 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



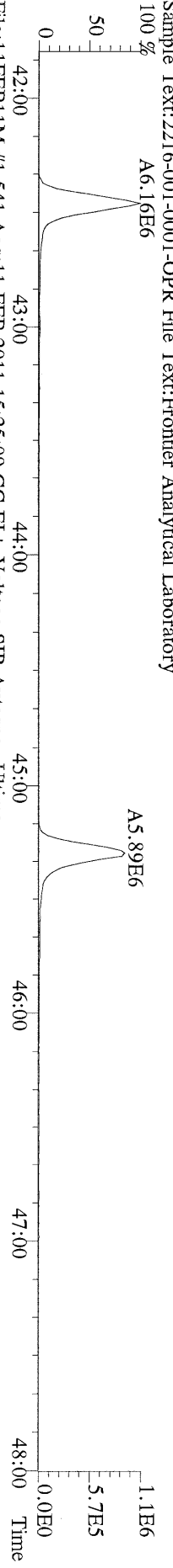
File:11FEB11M #1-477 Acq:11-FEB-2011 15:25:09 GC EI+ Voltage SIR Autospec-Ultima
 445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:OCDD
 Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



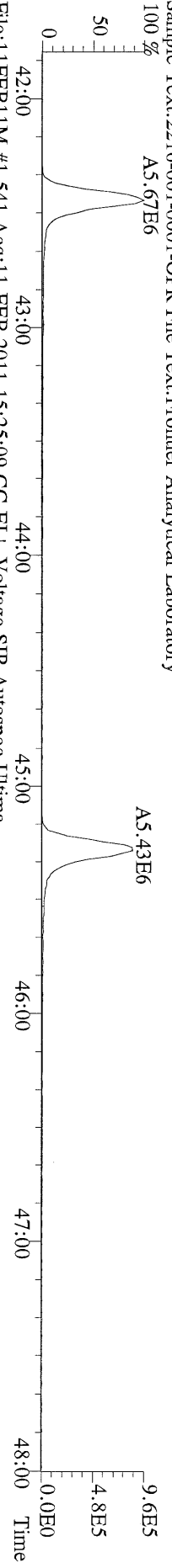
File:11FEB11M #1-541 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



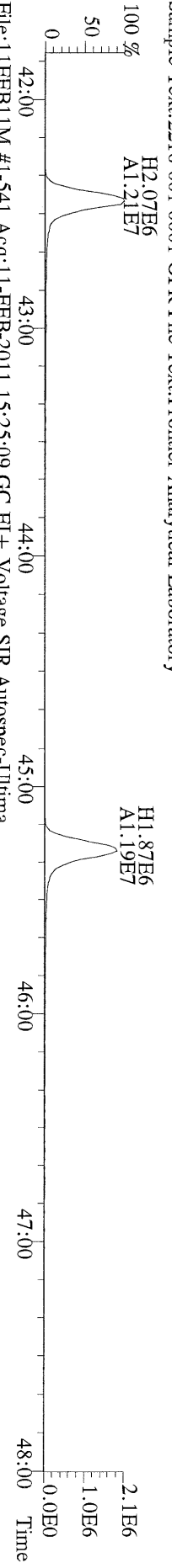
File:11FEB11M #1-541 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



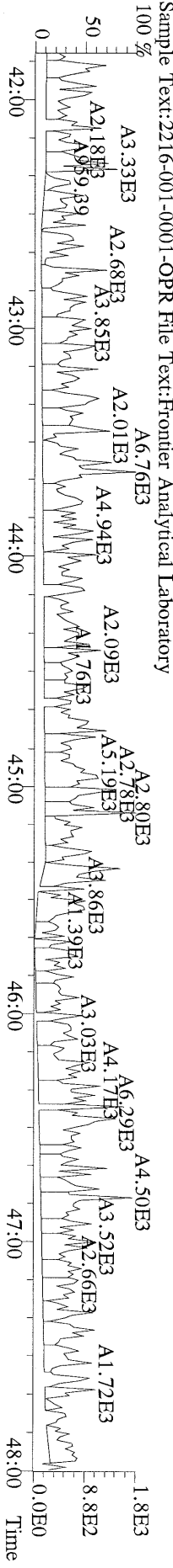
File:11FEB11M #1-541 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



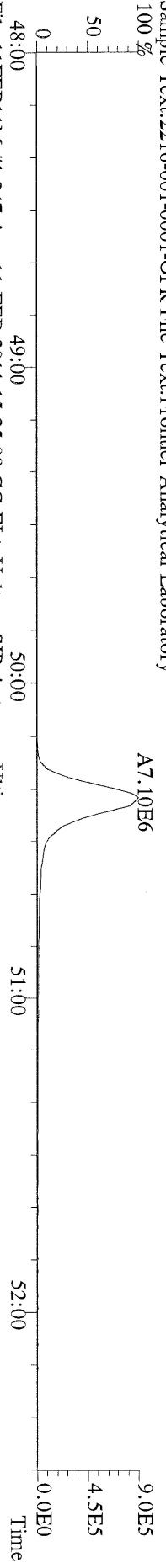
File:11FEB11M #1-541 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



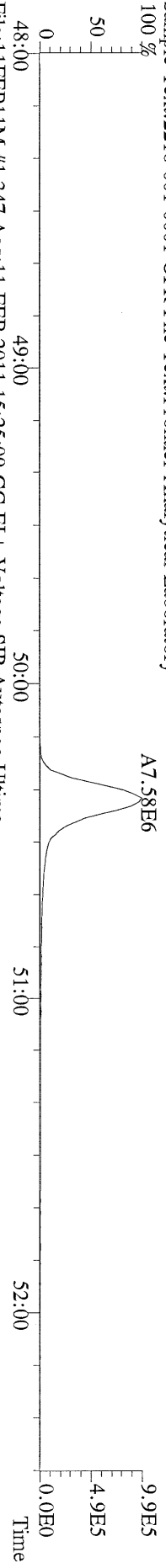
File:11FEB11M #1-541 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0,00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



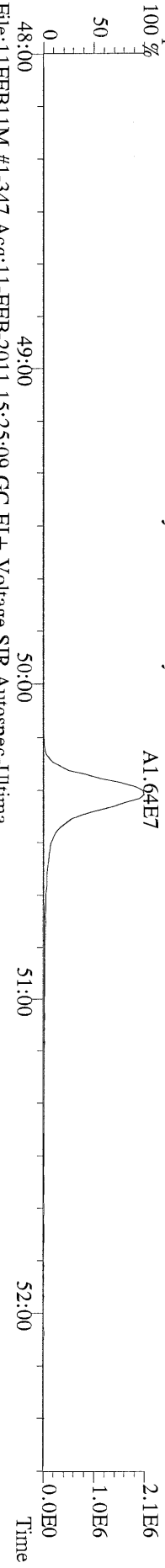
File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



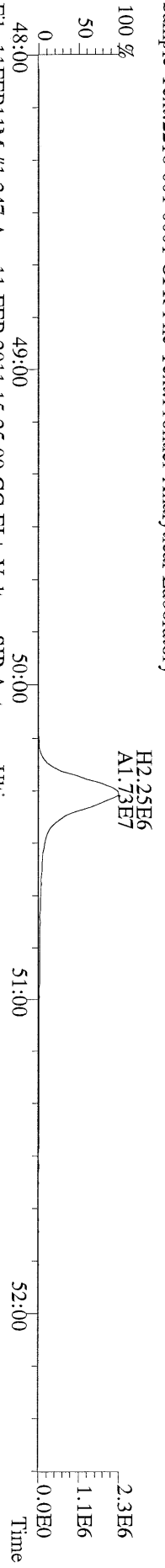
File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



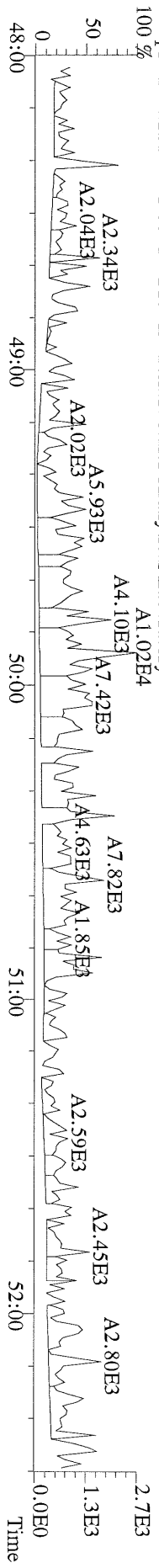
File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



File:11FEB11M #1-347 Acq:11-FEB-2011 15:25:09 GC EI + Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:2216-001-0001-OPR File Text:Frontier Analytical Laboratory



TEQ
= 0.0832

Name	Resp	RA	RT	RRF	Conc	Qual	Fac Noise-1	Noise-2	DL	Rec	#Hom
2,3,7,8-TCDD	*	* n	NotFnd	1.11	*		2.50	864	980	0.291	
1,2,3,7,8-PeCDD	*	* n	NotFnd	1.10	*		2.50	844	740	0.314	
1,2,3,4,7,8-HxCDD	*	* n	NotFnd	1.37	*		2.50	952	900	0.378	
1,2,3,6,7,8-HxCDD	*	* n	NotFnd	1.37	*		2.50	952	900	0.486	
1,2,3,7,8,9-HxCDD	*	* n	NotFnd	1.36	*		2.50	952	900	0.431	
1,2,3,4,6,7,8-HpCDD	2.70e+05	1.01 y	44:22	1.45	5.20		2.50	-	-	*	
OCDD	1.89e+06	0.95 y	49:60	1.43	62.7		2.50	-	-	*	
2,3,7,8-TCDF	*	* n	NotFnd	1.50	*		2.50	1160	1390	0.175	
1,2,3,7,8-PeCDF	*	* n	NotFnd	0.94	*		2.50	836	1040	0.265	
2,3,4,7,8-PeCDF	*	* n	NotFnd	0.94	*		2.50	836	1040	0.278	
1,2,3,4,7,8-HxCDF	*	* n	NotFnd	0.93	*		2.50	640	627	0.228	
1,2,3,6,7,8-HxCDF	*	* n	NotFnd	0.82	*		2.50	640	627	0.234	
2,3,4,6,7,8-HxCDF	*	* n	NotFnd	0.92	*		2.50	640	627	0.257	
1,2,3,7,8,9-HxCDF	*	* n	NotFnd	1.00	*		2.50	640	627	0.241	
1,2,3,4,6,7,8-HpCDF	6.80e+04	1.14 y	42:28	1.39	1.18	J	2.50	-	-	*	
1,2,3,4,7,8,9-HpCDF	*	* n	NotFnd	1.36	*		2.50	725	515	0.342	
OCDF	6.31e+04	0.96 y	50:25	0.79	2.08	J	2.50	-	-	*	
13C-2,3,7,8-TCDD	2.58e+07	0.80 y	27:30	1.02	355					88.8	
13C-1,2,3,7,8-PeCDD	2.36e+07	1.73 y	33:21	0.84	396					98.9	
13C-1,2,3,4,7,8-HxCDD	1.84e+07	1.26 y	38:44	1.07	381					95.3	
13C-1,2,3,6,7,8-HxCDD	1.59e+07	1.26 y	38:54	1.01	350					87.5	
13C-1,2,3,4,6,7,8-HpCDD	1.43e+07	1.09 y	44:21	0.86	372					93.1	
13C-OCDD	1.68e+07	0.98 y	49:59	0.55	684					85.5	
13C-2,3,7,8-TCDF	4.21e+07	0.88 y	26:45	0.99	340					85.0	
13C-1,2,3,7,8-PeCDF	3.82e+07	1.67 y	31:37	0.84	366					91.5	
13C-2,3,4,7,8-PeCDF	3.58e+07	1.64 y	32:57	0.81	354					88.5	
13C-1,2,3,4,7,8-HxCDF	3.01e+07	0.52 y	37:21	1.85	362					90.5	
13C-1,2,3,6,7,8-HxCDF	3.72e+07	0.51 y	37:32	2.54	327					81.7	
13C-2,3,4,6,7,8-HxCDF	2.84e+07	0.53 y	38:29	2.01	314					78.6	
13C-1,2,3,7,8,9-HxCDF	3.15e+07	0.52 y	39:56	2.03	346					86.4	
13C-1,2,3,4,6,7,8-HpCDF	1.65e+07	0.48 y	42:27	1.11	332					82.9	
13C-1,2,3,4,7,8,9-HpCDF	1.62e+07	0.46 y	45:17	0.80	448					112	
13C-OCDF	3.09e+07	0.94 y	50:21	1.08	637					79.7	
37Cl-2,3,7,8-TCDD	6.77e+06		27:32	0.69	139					86.9	
13C-1,2,3,4-TCDD	2.84e+07	0.79 y	26:55	-	12.6						
13C-1,2,3,4-TCDF	4.98e+07	0.87 y	25:39	-	13.8						
13C-1,2,3,7,8,9-HxCDD	1.79e+07	1.25 y	39:21	-	13.0						
Total Tetra-Dioxins	*		NotFnd	1.11	*		2.50	864	980	0.291	0
Total Penta-Dioxins	*		NotFnd	1.10	*		2.50	844	740	0.314	0
Total Hexa-Dioxins	*		NotFnd	1.37	*		2.50	952	900	0.489	0
Total Hepta-Dioxins	5.49e+05		42:59	1.45	10.6		2.50	-	-	*	2
Total Tetra-Furans	*		NotFnd	1.50	*		2.50	1160	1390	0.175	0
1st Fn. Tot Penta-Furans	*		NotFnd	0.94	*		2.50	836	1040	0.278	PeCDF 0
Total Penta-Furans	*		NotFnd	0.94	*		2.50	836	1040	0.278	* 0
Total Hexa-Furans	1.04e+05		35:40	0.91	1.44	J	2.50	-	-	*	2
Total Hepta-Furans	1.74e+05		42:28	1.38	3.07	J	2.50	-	-	*	2

Analyst: 

Date: 2/14/11

Totals class: Total Hepta-Dioxins

Entry #: 41

Run: 11

File: 11FEB11M

S: 4 I: 1 F: 4

Acquired: 11-FEB-11 17:17:09

Total Concentration: 10.6

Unnamed Concentration: 5.372

RT	mL Resp	m2 Resp	RA	Resp	Concentration	Name
42:59	1.38e+05	1.41e+05	0.98 y	2.79e+05	5.37	
44:22	1.36e+05	1.34e+05	1.01 y	2.70e+05	5.20	1,2,3,4,6,7,8-HpCDD

Totals class: Total Hexa-Furans

Entry #: 45

Run: 11

File: 11FEB11M

S: 4 I: 1 F: 3

Acquired: 11-FEB-11 17:17:09

Total Concentration: 1.44

Unnamed Concentration: 1.438

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
35:40	1.91e+04	1.78e+04	1.07 y	3.70e+04	0.511	
36:36	3.55e+04	3.15e+04	1.13 y	6.70e+04	0.927	

Totals class: Total Hepta-Furans

Entry #: 46

Run: 11

File: 11FEB11M

S: 4 I: 1 F: 4

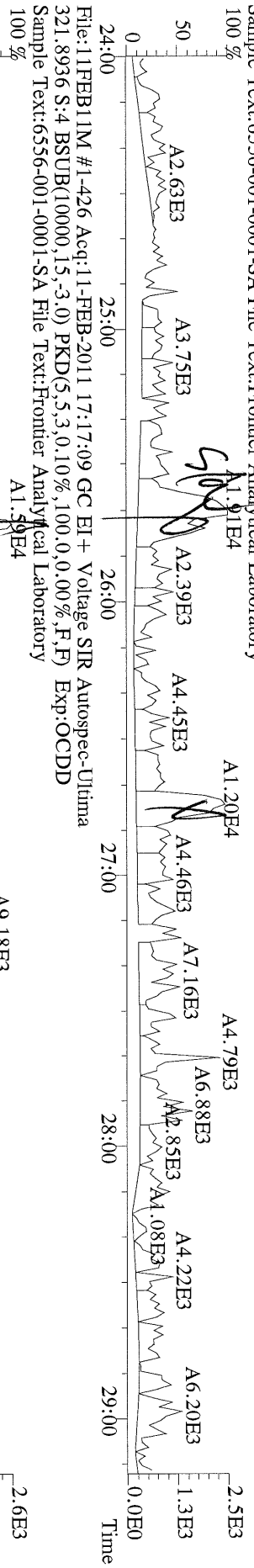
Acquired: 11-FEB-11 17:17:09

Total Concentration: 3.07

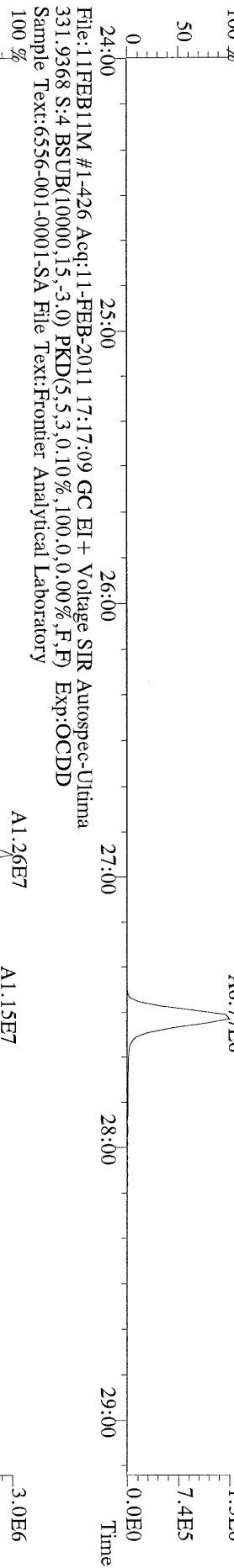
Unnamed Concentration: 1.882

RT	mL Resp	m2 Resp	RA	Resp	Concentration	Name
42:28	3.62e+04	3.17e+04	1.14 y	6.80e+04	1.18	1,2,3,4,6,7,8-HpCDF
43:18	5.53e+04	5.05e+04	1.09 y	1.06e+05	1.88	

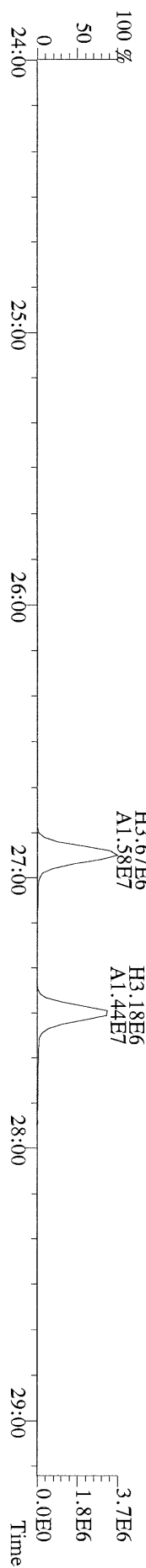
File:11FEB11M #1-426 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



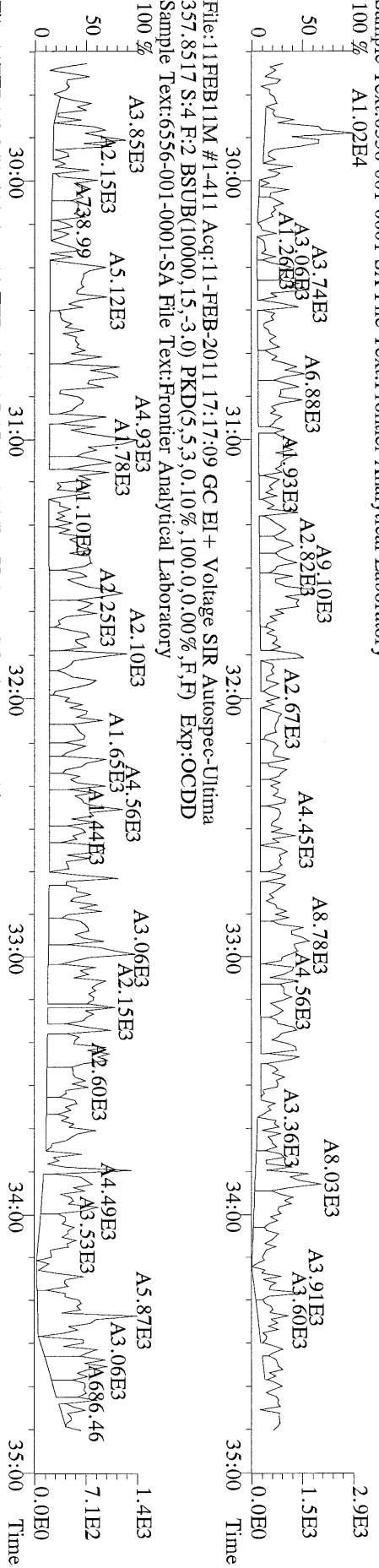
File:11FEB11M #1-426 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



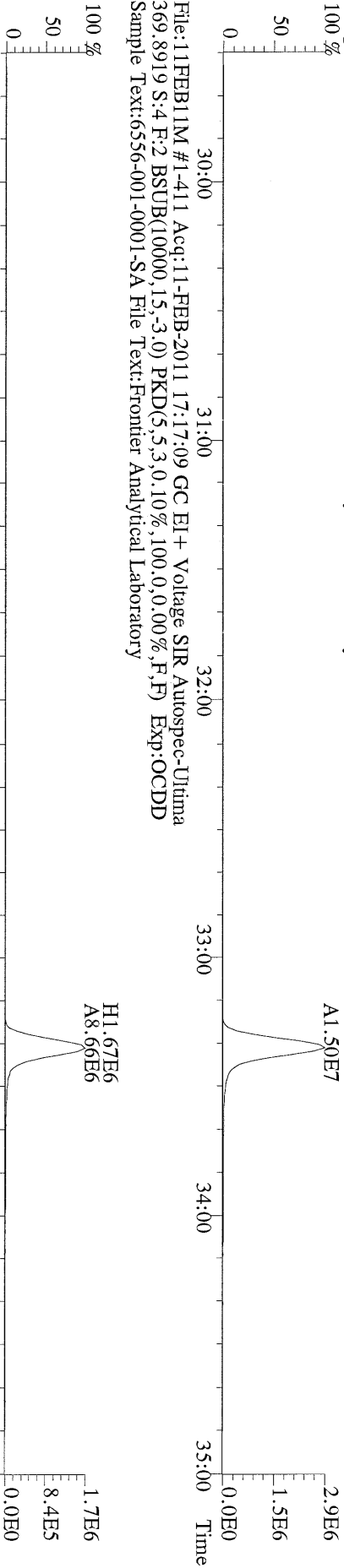
File:11FEB11M #1-426 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
333.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



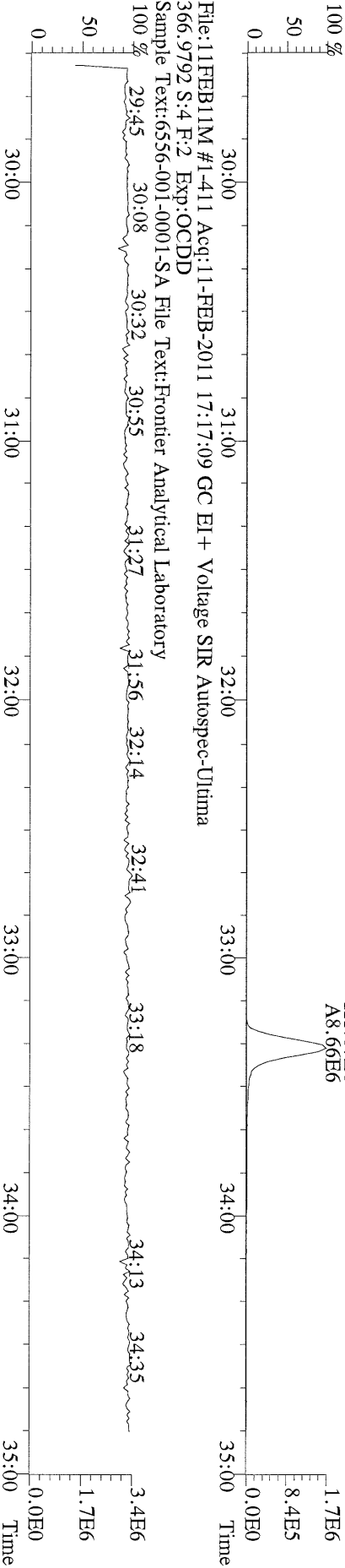
File:11FEB11M #1-411 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory
 100% A1.02E4



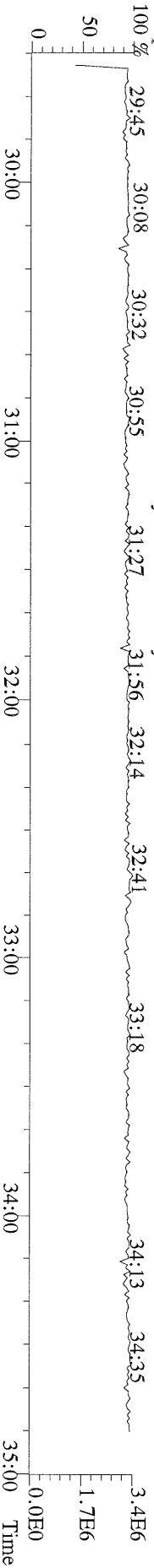
File:11FEB11M #1-411 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



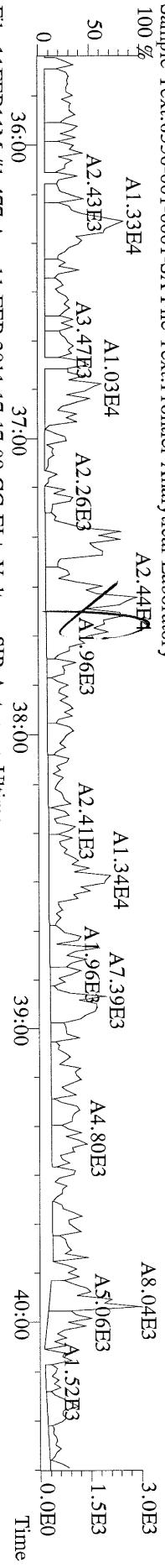
File:11FEB11M #1-411 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



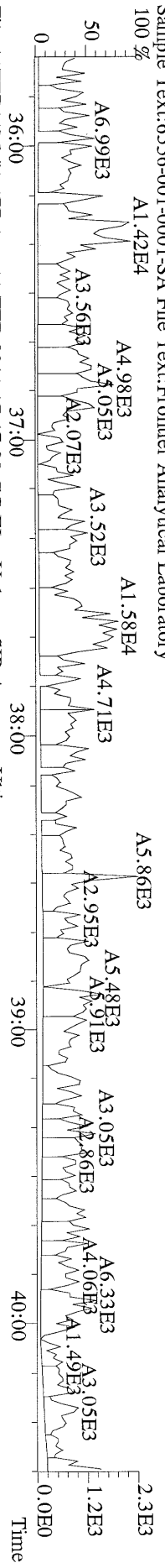
File:11FEB11M #1-411 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 366.9792 S:4 F:2 Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



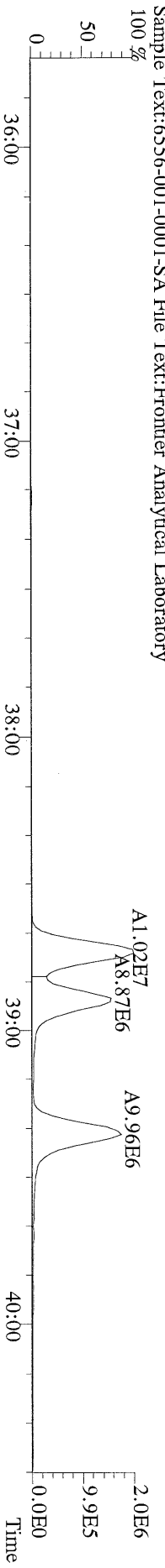
File:11FEB11M #1-477 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
 389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



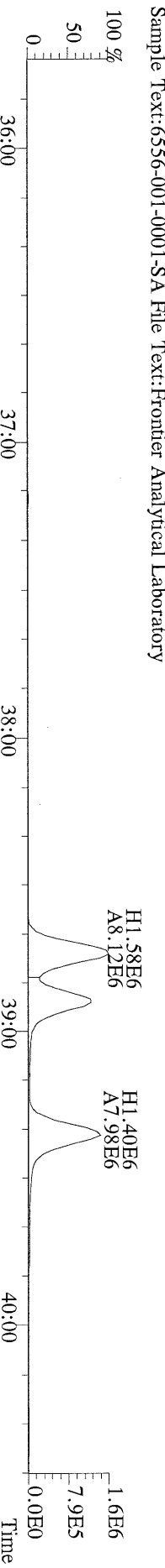
File:11FEB11M #1-477 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
 391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



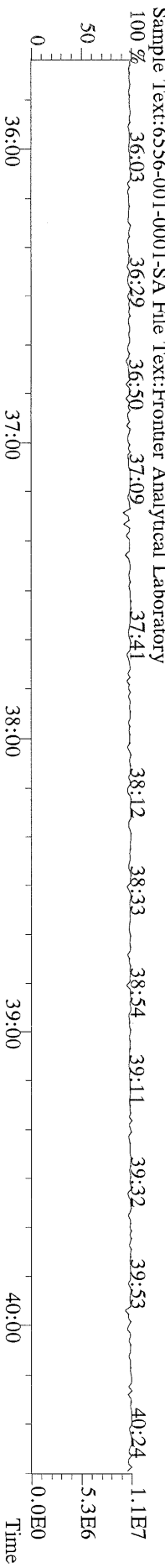
File:11FEB11M #1-477 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
 401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



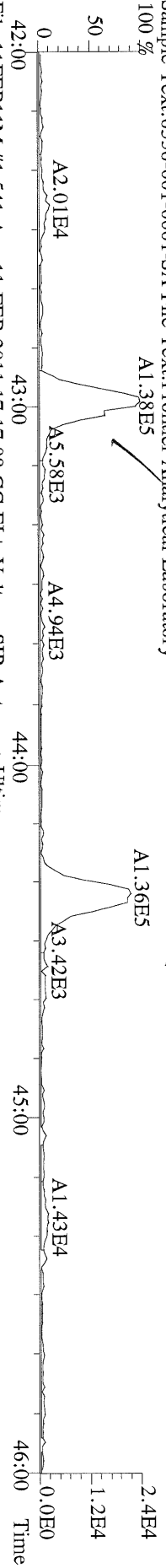
File:11FEB11M #1-477 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
 403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



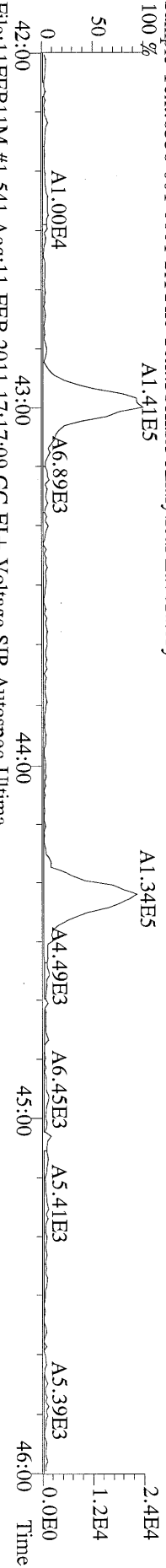
File:11FEB11M #1-477 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
 380.9760 S:4 F:3 Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



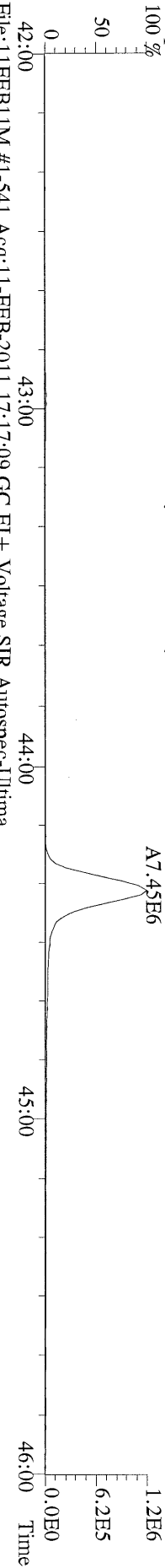
File:11FEB11M #1-541 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



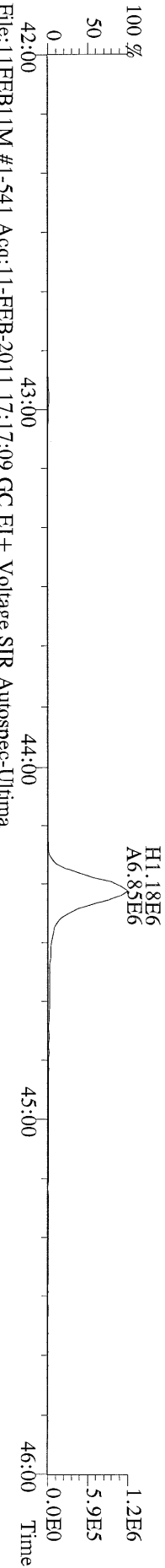
File:11FEB11M #1-541 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



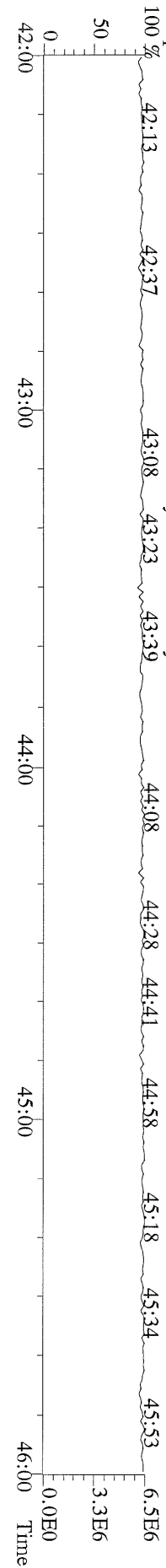
File:11FEB11M #1-541 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



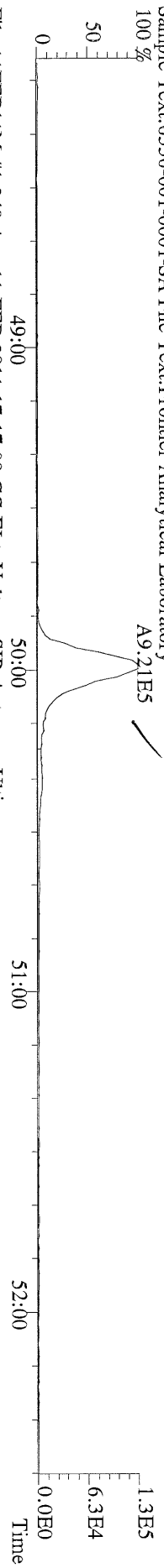
File:11FEB11M #1-541 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



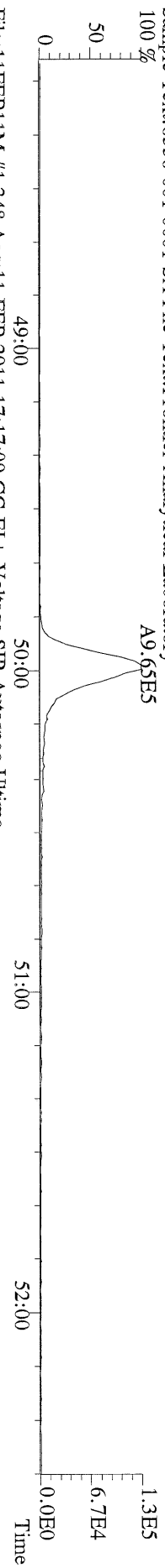
File:11FEB11M #1-541 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



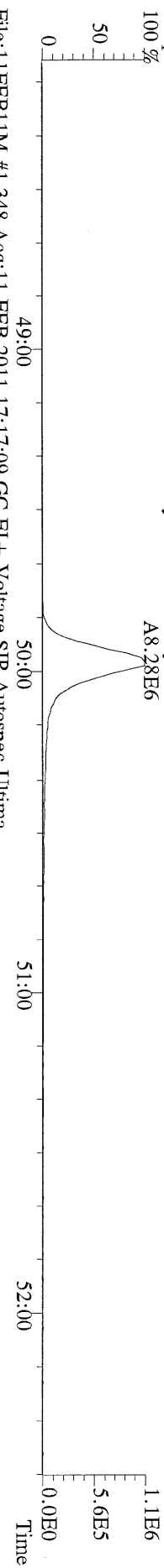
File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



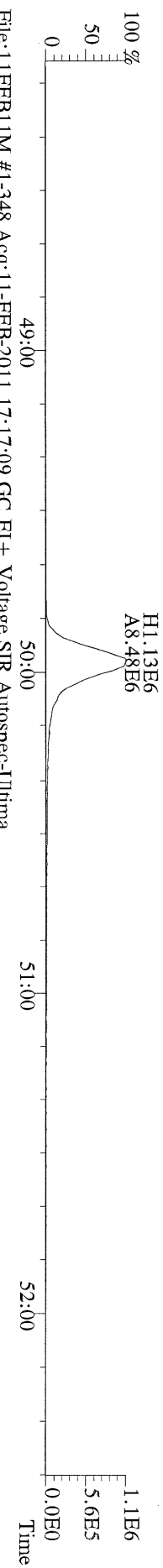
File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



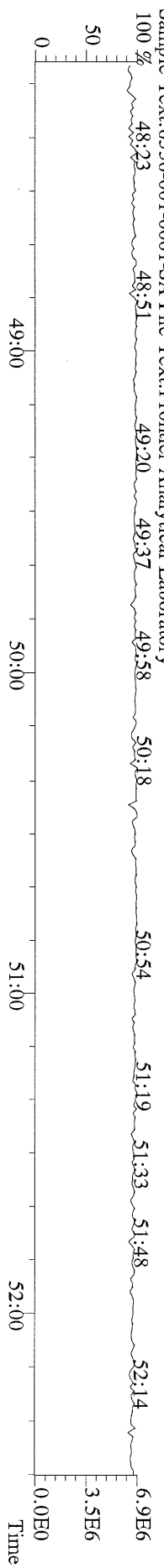
File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



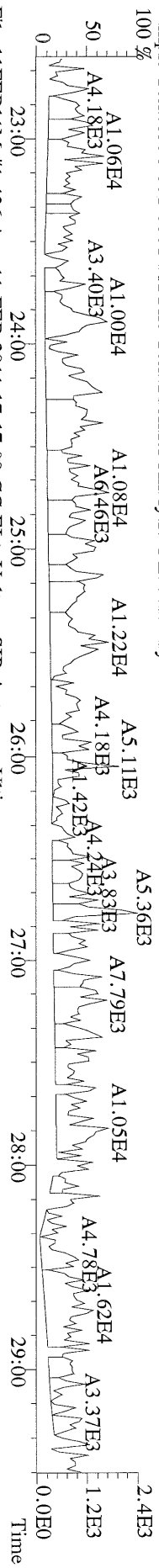
File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



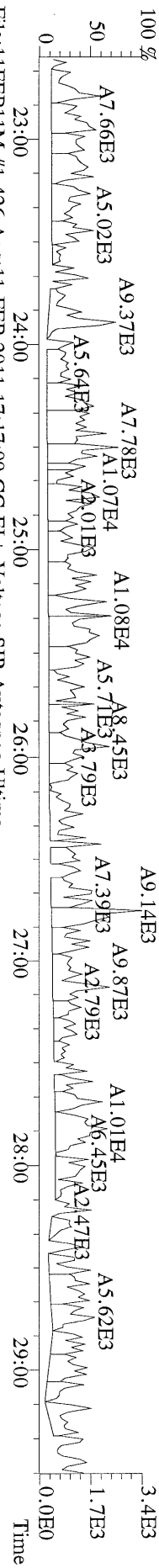
File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



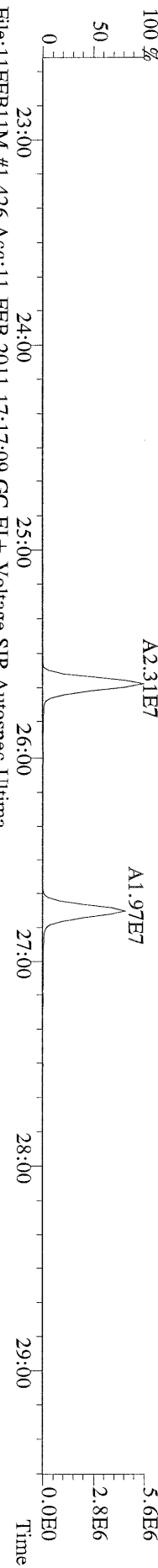
File:11FEB11M #1-426 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%) F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



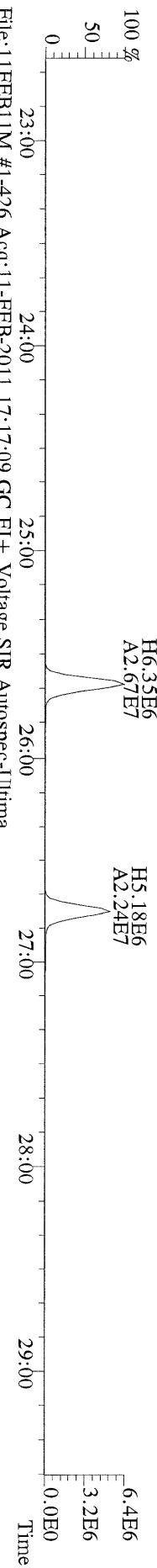
File:11FEB11M #1-426 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 305.8887 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%) F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



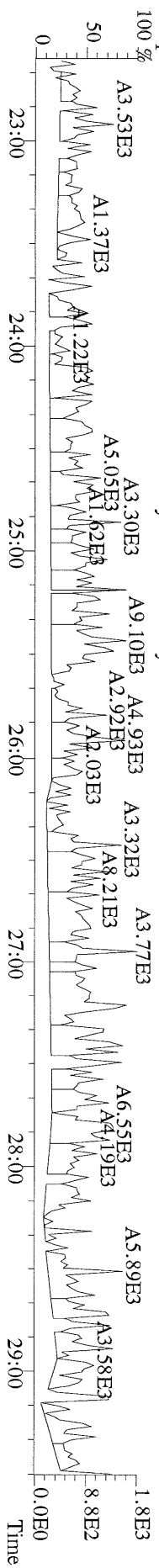
File:11FEB11M #1-426 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%) F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



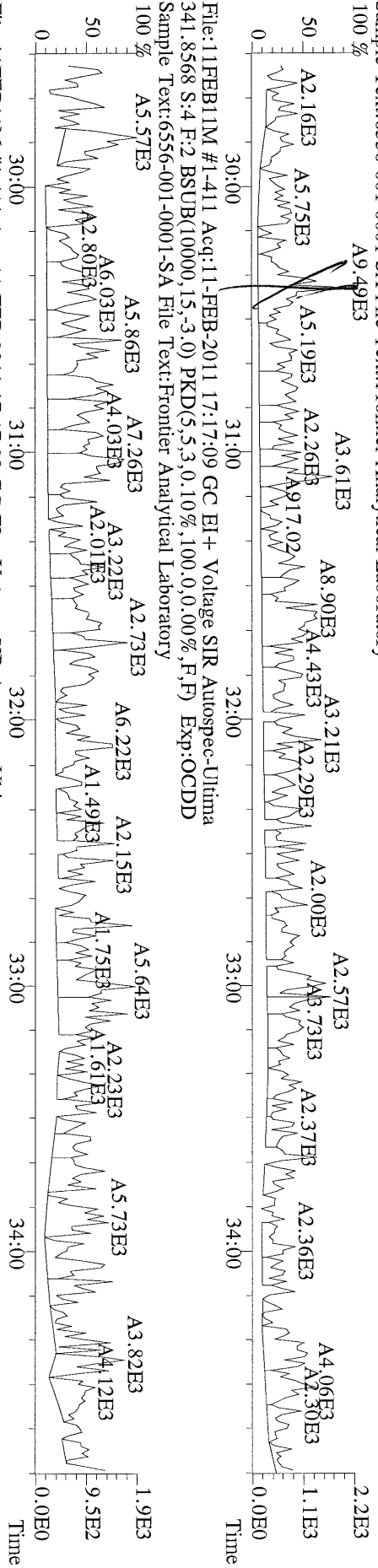
File:11FEB11M #1-426 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%) F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



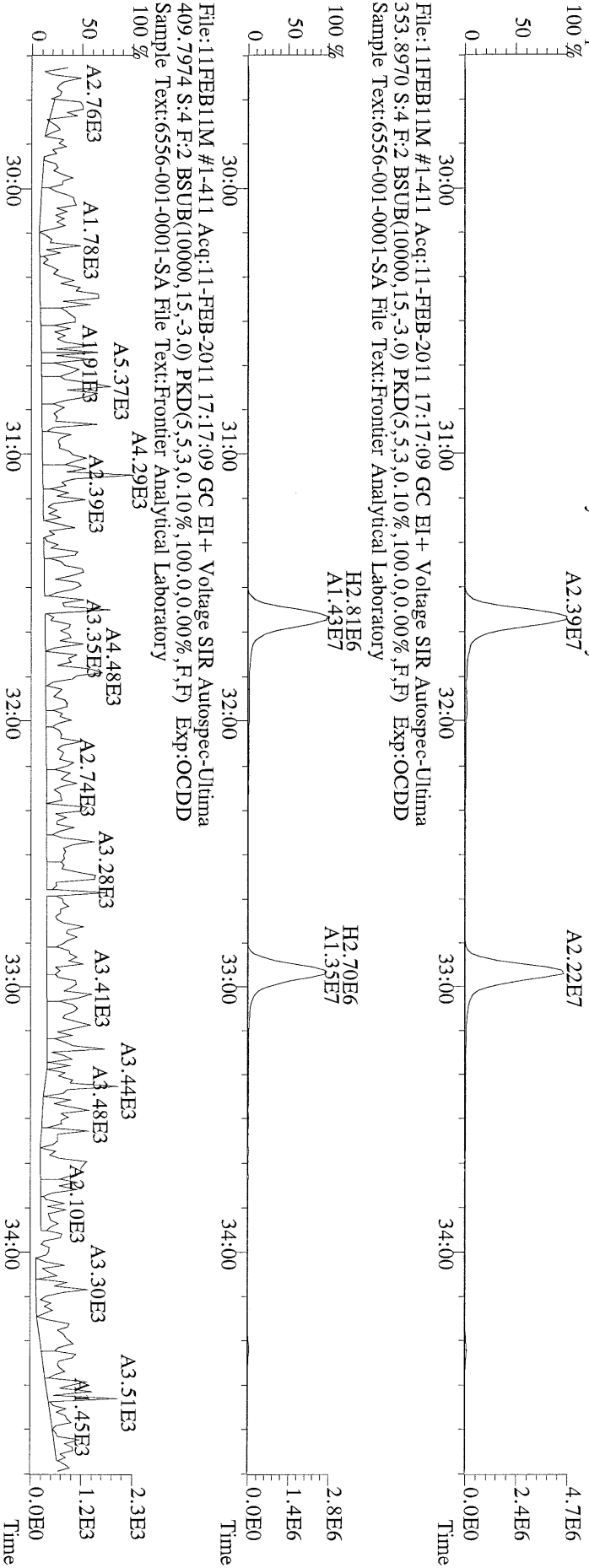
File:11FEB11M #1-426 Acq:11-FEB-2011 17:17:09 GC EI + Voltage SIR Autospec-Ultima
 375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0%) F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



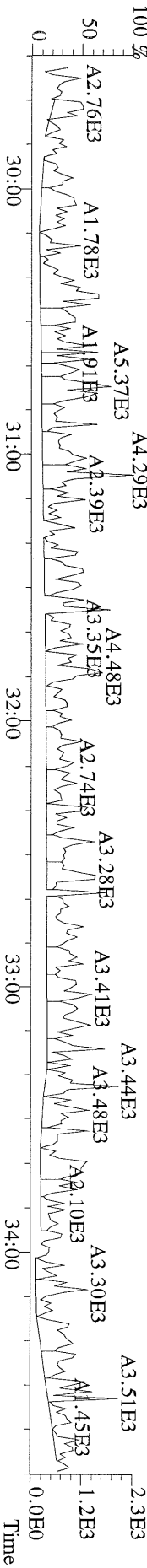
File:11FEB11M #1-411 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



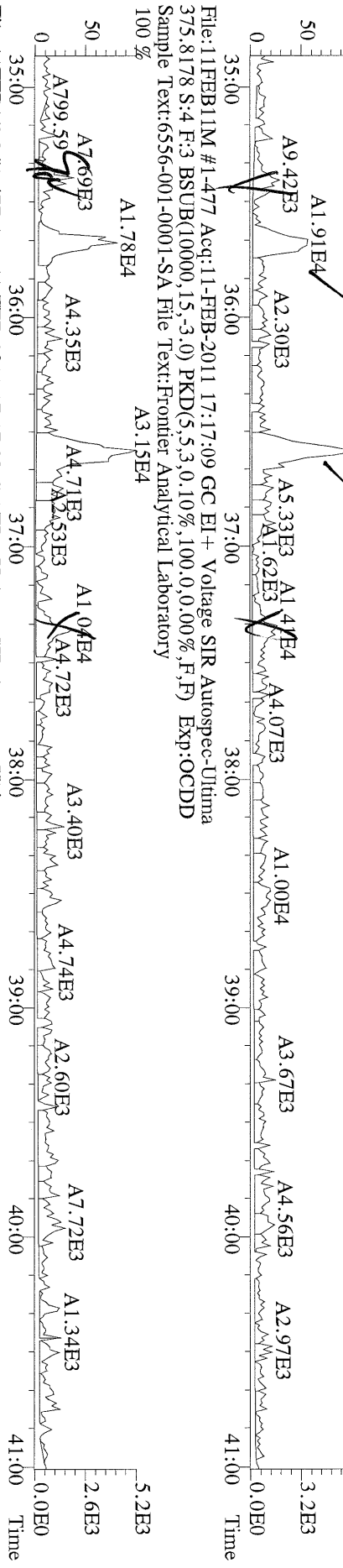
File:11FEB11M #1-411 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



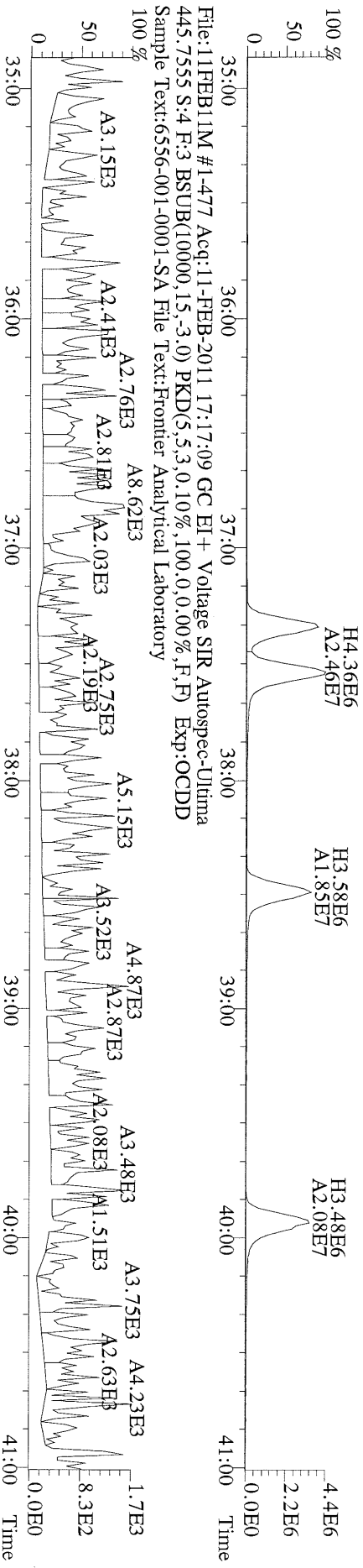
File:11FEB11M #1-411 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



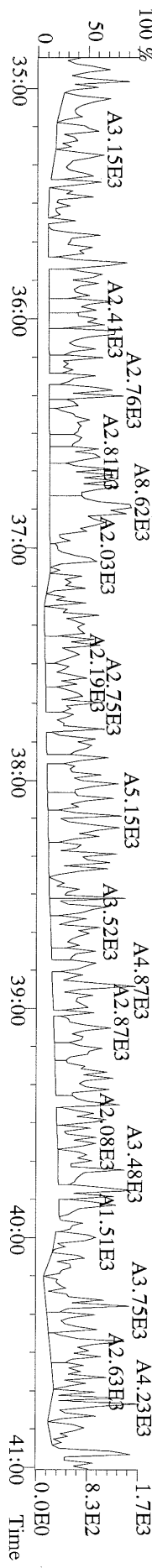
File:11FEB11M #1-477 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



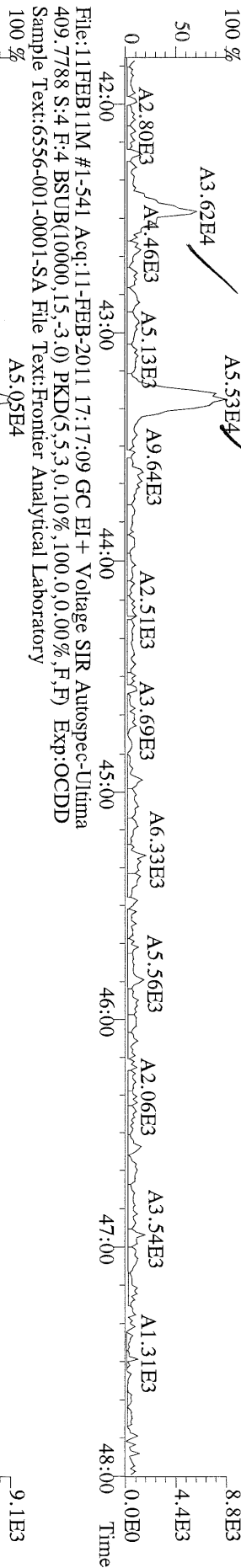
File:11FEB11M #1-477 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



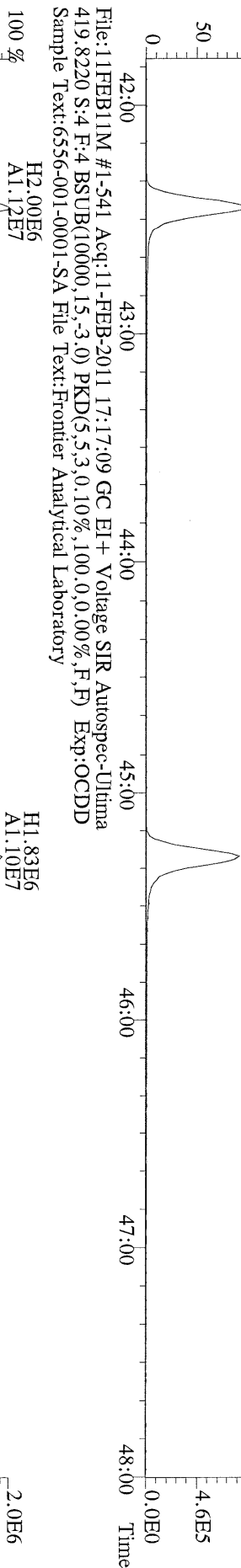
File:11FEB11M #1-477 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



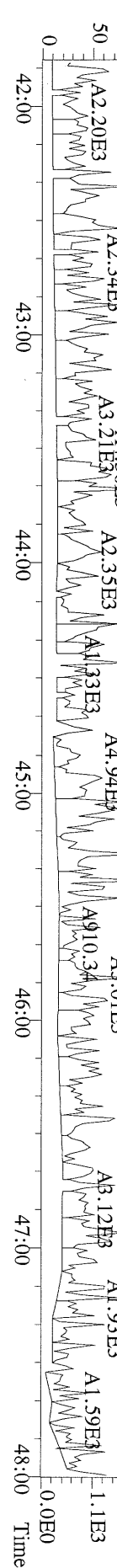
File:11FEB11M #1-541 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
 407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



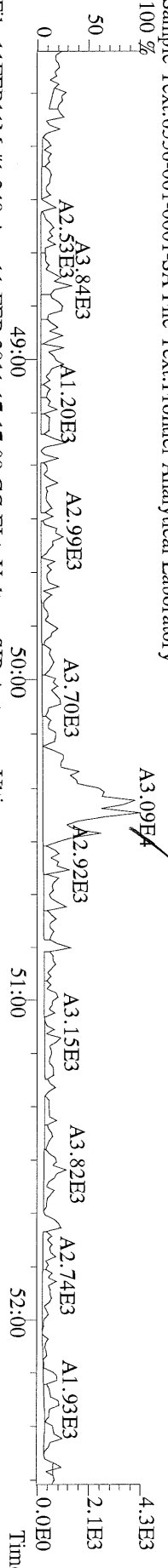
File:11FEB11M #1-541 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
 417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



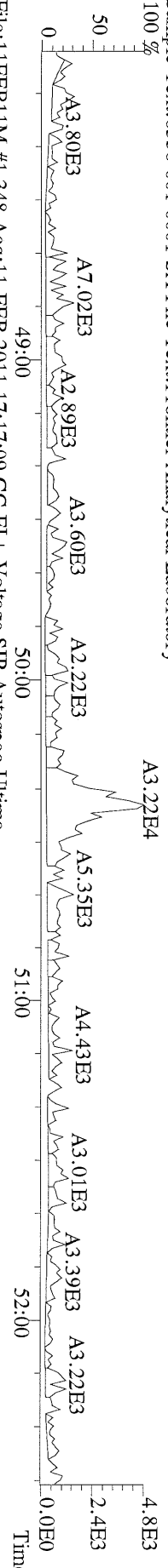
File:11FEB11M #1-541 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Ultima
 419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



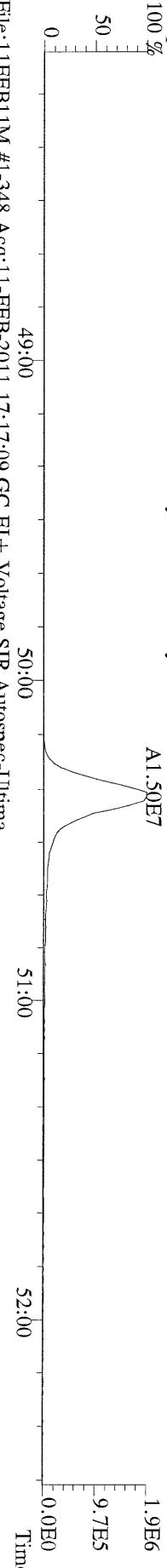
File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Utima
 441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



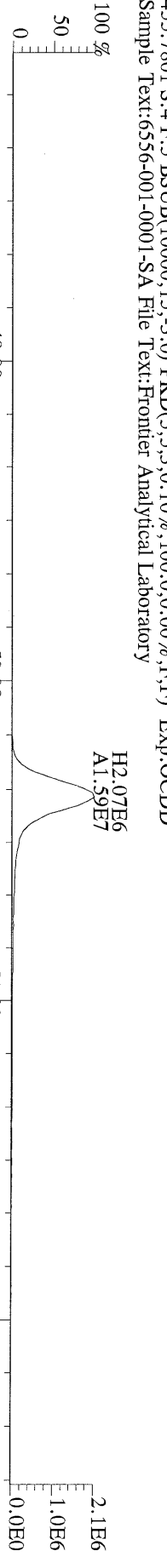
File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Utima
 443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



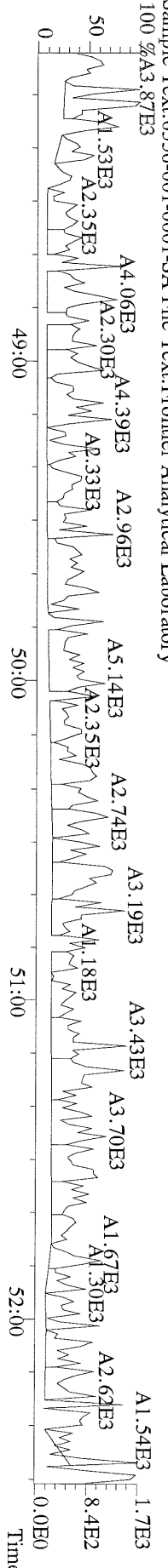
File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Utima
 453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
 Sample Text:6556-001-0001-SA File Text:Frontier Analytical Laboratory



File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Utima
 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:6556-001-0001-SA File Text:Frontier Analytical Laboratory



File:11FEB11M #1-348 Acq:11-FEB-2011 17:17:09 GC EI+ Voltage SIR Autospec-Utima
 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:6556-001-0001-SA File Text:Frontier Analytical Laboratory



Frontier Analytical Laboratory

Data Filename: 23AUG10M

Analyte:

Cal: PCDDFAL3-8-23-10

Name	RRF	S. D.	%RSD	S3 RRF#1	S4 RRF#2	S5 RRF#3	S1 RRF#4	S6 RRF#5	S7 RRF#6
2,3,7,8-TCDD	1.11	0.0404	3.63 %	1.07	1.09	1.06	1.16	1.13	1.14
1,2,3,7,8-PeCDD	1.10	0.0456	4.14 %	1.03	1.08	1.09	1.11	1.15	1.15
1,2,3,4,7,8-HxCDD	1.37	0.0589	4.29 %	1.40	1.30	1.31	1.36	1.44	1.42
1,2,3,6,7,8-HxCDD	1.37	0.0522	3.80 %	1.30	1.38	1.39	1.32	1.43	1.42
1,2,3,7,8,9-HxCDD	1.36	0.0713	5.24 %	1.29	1.31	1.37	1.30	1.45	1.45
1,2,3,4,6,7,8-HpCDD	1.45	0.0199	1.37 %	1.43	1.47	1.45	1.44	1.45	1.48
OCDD	1.43	0.0834	5.81 %	1.37	1.37	1.42	1.44	1.42	1.59
2,3,7,8-TCDF	1.50	0.0738	4.91 %	1.57	1.60	1.50	1.40	1.47	1.48
1,2,3,7,8-PeCDF	0.94	0.0427	4.53 %	0.92	0.88	0.92	0.96	0.99	0.99
2,3,4,7,8-PeCDF	0.94	0.0501	5.35 %	0.88	0.90	0.91	0.93	0.99	1.00
1,2,3,4,7,8-HxCDF	0.93	0.0529	5.70 %	0.90	0.88	0.90	0.91	0.99	1.00
1,2,3,6,7,8-HxCDF	0.82	0.0486	5.91 %	0.75	0.79	0.82	0.83	0.87	0.88
2,3,4,6,7,8-HxCDF	0.92	0.0553	6.02 %	0.87	0.86	0.92	0.89	0.98	0.99
1,2,3,7,8,9-HxCDF	1.00	0.0728	7.30 %	0.90	0.94	0.99	1.00	1.08	1.08
1,2,3,4,6,7,8-HpCDF	1.39	0.0804	5.78 %	1.28	1.33	1.37	1.39	1.49	1.47
1,2,3,4,7,8,9-HpCDF	1.36	0.108	7.94 %	1.30	1.20	1.33	1.35	1.45	1.50
OCDF	0.79	0.0651	8.29 %	0.73	0.72	0.75	0.79	0.86	0.87
13C-2,3,7,8-TCDD	1.02	0.0764	7.46 %	0.98	0.98	0.97	0.98	1.15	1.08
13C-1,2,3,7,8-PeCDD	0.84	0.0798	9.48 %	0.79	0.79	0.79	0.79	0.95	0.93
13C-1,2,3,4,7,8-HxCDD	1.07	0.0580	5.40 %	1.06	1.03	1.06	1.01	1.12	1.16
13C-1,2,3,6,7,8-HxCDD	1.01	0.0164	1.62 %	1.00	1.00	1.00	1.02	1.03	1.03
13C-1,2,3,4,6,7,8-HpCDD	0.86	0.0467	5.45 %	0.82	0.82	0.84	0.83	0.90	0.93
13C-OCDD	0.55	0.0456	8.36 %	0.52	0.51	0.52	0.52	0.58	0.63
13C-2,3,7,8-TCDF	0.99	0.0775	7.79 %	0.97	0.92	0.93	0.96	1.12	1.05
13C-1,2,3,7,8-PeCDF	0.84	0.0816	9.74 %	0.78	0.78	0.79	0.79	0.95	0.93
13C-2,3,4,7,8-PeCDF	0.81	0.0728	8.97 %	0.77	0.75	0.76	0.78	0.91	0.90
13C-1,2,3,4,7,8-HxCDF	1.85	0.0371	2.00 %	1.82	1.85	1.85	1.81	1.91	1.88
13C-1,2,3,6,7,8-HxCDF	2.54	0.0434	1.71 %	2.55	2.51	2.52	2.51	2.62	2.51
13C-2,3,4,6,7,8-HxCDF	2.01	0.0361	1.79 %	2.00	2.00	1.98	2.00	2.08	2.03
13C-1,2,3,7,8,9-HxCDF	2.03	0.110	5.42 %	1.97	1.94	1.96	1.98	2.14	2.20
13C-1,2,3,4,6,7,8,9-HpCDF	1.11	0.0532	4.80 %	1.08	1.05	1.12	1.07	1.16	1.18
13C-1,2,3,4,7,8,9-HpCDF	0.80	0.0576	7.16 %	0.78	0.76	0.78	0.77	0.83	0.91
13C-OCDF	1.08	0.0934	8.63 %	1.00	1.00	1.05	1.05	1.16	1.23
37Cl-2,3,7,8-TCDD	0.69	0.0526	7.67 %	0.67	0.70	0.63	0.63	0.76	0.73
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-
13C-1,2,3,4-TCDF	-	-	- %	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-
Total Tetra-Dioxins	1.11	0.0404	3.63 %	1.07	1.09	1.06	1.16	1.13	1.14
Total Penta-Dioxins	1.10	0.0456	4.14 %	1.03	1.08	1.09	1.11	1.15	1.15
Total Hexa-Dioxins	1.37	0.0513	3.75 %	1.33	1.33	1.36	1.33	1.44	1.43
Total Hepta-Dioxins	1.45	0.0199	1.37 %	1.43	1.47	1.45	1.44	1.45	1.48
Total Tetra-Furans	1.50	0.0738	4.91 %	1.57	1.60	1.50	1.40	1.47	1.48
1st Fn. Tot Penta-Furans	0.94	0.0454	4.83 %	0.90	0.89	0.91	0.95	0.99	0.99
Total Penta-Furans	0.94	0.0454	4.83 %	0.90	0.89	0.91	0.95	0.99	0.99
Total Hexa-Furans	0.91	0.0562	6.18 %	0.84	0.86	0.90	0.90	0.97	0.98
Total Hepta-Furans	1.38	0.0885	6.43 %	1.29	1.28	1.36	1.37	1.47	1.48

Analyst: 

Date: 8/24/10

Run #1 Filename 23AUG10M
Client ID: ST082310M0

S: 3 Acquired: 23-AUG-10 16:16:35 Cal: PCDDFAL3-8-23-10
Analyte: FAL ID: 1613 CS0 100511G

Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk 2,3,7,8-TCDD	0.25	1.20e+05	0.73 y	27:27	-	1.07 y
2	Unk 1,2,3,7,8-PeCDD	1.25	4.64e+05	1.70 y	33:15	-	1.03 y
3	Unk 1,2,3,4,7,8-HxCDD	1.25	4.89e+05	1.42 y	38:38	-	1.40 y
4	Unk 1,2,3,6,7,8-HxCDD	1.25	4.28e+05	1.40 y	38:48	-	1.30 y
5	Unk 1,2,3,7,8,9-HxCDD	1.25	4.38e+05	1.41 y	39:14	-	1.29 y
6	Unk 1,2,3,4,6,7,8-HpCDD	1.25	3.88e+05	1.02 y	44:13	-	1.43 y
7	Unk OCDD	2.50	4.72e+05	1.00 y	49:47	-	1.37 y
8	Unk 2,3,7,8-TCDF	0.25	2.81e+05	0.67 y	26:41	-	1.57 y
9	Unk 1,2,3,7,8-PeCDF	1.25	6.57e+05	1.49 y	31:31	-	0.916 y
10	Unk 2,3,4,7,8-PeCDF	1.25	6.24e+05	1.48 y	32:50	-	0.883 y
11	Unk 1,2,3,4,7,8-HxCDF	1.25	5.37e+05	1.22 y	37:14	-	0.897 y
12	Unk 1,2,3,6,7,8-HxCDF	1.25	6.28e+05	1.31 y	37:25	-	0.747 y
13	Unk 2,3,4,6,7,8-HxCDF	1.25	5.72e+05	1.25 y	38:22	-	0.870 y
14	Unk 1,2,3,7,8,9-HxCDF	1.25	5.81e+05	1.15 y	39:48	-	0.897 y
15	Unk 1,2,3,4,6,7,8-HpCDF	1.25	4.57e+05	1.04 y	42:19	-	1.28 y
16	Unk 1,2,3,4,7,8,9-HpCDF	1.25	3.34e+05	0.99 y	45:09	-	1.30 y
17	Unk OCDF	2.50	4.80e+05	0.93 y	50:10	-	0.727 y
18	IS/RT 13C-2,3,7,8-TCDD	100.00	4.47e+07	0.85 y	27:24	-	0.976 y
19	IS 13C-1,2,3,7,8-PeCDD	100.00	3.60e+07	1.77 y	33:14	-	0.786 y
20	IS 13C-1,2,3,4,7,8-HxCDD	100.00	2.78e+07	1.26 y	38:36	-	1.06 y
21	IS 13C-1,2,3,6,7,8-HxCDD	100.00	2.63e+07	1.26 y	38:46	-	0.998 y
22	IS 13C-1,2,3,4,6,7,8-HpCDD	100.00	2.17e+07	1.00 y	44:13	-	0.825 y
23	IS 13C-OCDD	200.00	2.76e+07	1.00 y	49:46	-	0.523 y
24	IS 13C-2,3,7,8-TCDF	100.00	7.17e+07	0.88 y	26:40	-	0.975 y
25	IS 13C-1,2,3,7,8-PeCDF	100.00	5.74e+07	1.74 y	31:30	-	0.780 y
26	IS 13C-2,3,4,7,8-PeCDF	100.00	5.65e+07	1.74 y	32:49	-	0.769 y
27	IS 13C-1,2,3,4,7,8-HxCDF	100.00	4.79e+07	0.55 y	37:12	-	1.82 y
28	IS 13C-1,2,3,6,7,8-HxCDF	100.00	6.72e+07	0.56 y	37:24	-	2.55 y
29	IS 13C-2,3,4,6,7,8-HxCDF	100.00	5.26e+07	0.58 y	38:20	-	2.00 y
30	IS 13C-1,2,3,7,8,9-HxCDF	100.00	5.18e+07	0.54 y	39:47	-	1.97 y
31	IS 13C-1,2,3,4,6,7,8-HpCDF	100.00	2.84e+07	0.42 y	42:18	-	1.08 y
32	IS 13C-1,2,3,4,7,8,9-HpCDF	100.00	2.05e+07	0.43 y	45:08	-	0.778 y
33	IS 13C-OCDF	200.00	5.28e+07	0.95 y	50:09	-	1.00 y
34	C/Up 37Cl-2,3,7,8-TCDD	0.25	7.69e+04		27:26	-	0.671 y
35	RS 13C-1,2,3,4-TCDD	100.00	4.58e+07	0.85 y	26:50	4.58e+05	- n
36	RS 13C-1,2,3,4-TCDF	100.00	7.35e+07	0.87 y	25:35	7.35e+05	- n
37	RS/RT 13C-1,2,3,7,8,9-HxCDD	100.00	2.64e+07	1.27 y	39:12	2.64e+05	- n
38	Tot Total Tetra-Dioxins	0.00	-	- n	-	-	1.07 y
39	Tot Total Penta-Dioxins	0.00	-	- n	-	-	1.03 y
40	Tot Total Hexa-Dioxins	0.00	-	- n	-	-	1.33 y
41	Tot Total Hepta-Dioxins	0.00	-	- n	-	-	1.43 y
42	Tot Total Tetra-Furans	0.00	-	- n	-	-	1.57 y
43	Tot 1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.899 y
44	Tot Total Penta-Furans	0.00	-	- n	-	-	0.899 y
45	Tot Total Hexa-Furans	0.00	-	- n	-	-	0.845 y
46	Tot Total Hepta-Furans	0.00	-	- n	-	-	1.29 y

Analyst: 

Date: 8/24/10

Run #2 Filename 23AUG10M
Client ID: ST082310M1

S: 4 Acquired: 23-AUG-10 17:12:02 Cal: PCDDFAL3-8-23-10
Analyte: FAL ID: 1613 CS1 100511H

Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk 2,3,7,8-TCDD	0.50	2.50e+05	0.74 y	27:27	-	1.09 y
2	Unk 1,2,3,7,8-PeCDD	2.50	9.93e+05	1.61 y	33:16	-	1.08 y
3	Unk 1,2,3,4,7,8-HxCDD	2.50	8.89e+05	1.42 y	38:37	-	1.30 y
4	Unk 1,2,3,6,7,8-HxCDD	2.50	9.16e+05	1.42 y	38:48	-	1.38 y
5	Unk 1,2,3,7,8,9-HxCDD	2.50	8.82e+05	1.39 y	39:14	-	1.31 y
6	Unk 1,2,3,4,6,7,8-HpCDD	2.50	8.00e+05	1.07 y	44:14	-	1.47 y
7	Unk OCDD	5.00	9.24e+05	0.99 y	49:48	-	1.37 y
8	Unk 2,3,7,8-TCDF	0.50	5.65e+05	0.69 y	26:41	-	1.60 y
9	Unk 1,2,3,7,8-PeCDF	2.50	1.31e+06	1.45 y	31:32	-	0.885 y
10	Unk 2,3,4,7,8-PeCDF	2.50	1.29e+06	1.43 y	32:51	-	0.896 y
11	Unk 1,2,3,4,7,8-HxCDF	2.50	1.08e+06	1.27 y	37:14	-	0.877 y
12	Unk 1,2,3,6,7,8-HxCDF	2.50	1.32e+06	1.22 y	37:26	-	0.790 y
13	Unk 2,3,4,6,7,8-HxCDF	2.50	1.14e+06	1.31 y	38:23	-	0.858 y
14	Unk 1,2,3,7,8,9-HxCDF	2.50	1.21e+06	1.23 y	39:48	-	0.938 y
15	Unk 1,2,3,4,6,7,8-HpCDF	2.50	9.30e+05	1.05 y	42:20	-	1.33 y
16	Unk 1,2,3,4,7,8,9-HpCDF	2.50	6.04e+05	1.06 y	45:09	-	1.20 y
17	Unk OCDF	5.00	9.66e+05	0.89 y	50:10	-	0.721 y
18	IS/RT 13C-2,3,7,8-TCDD	100.00	4.56e+07	0.84 y	27:25	-	0.980 y
19	IS 13C-1,2,3,7,8-PeCDD	100.00	3.68e+07	1.77 y	33:14	-	0.790 y
20	IS 13C-1,2,3,4,7,8-HxCDD	100.00	2.74e+07	1.32 y	38:36	-	1.03 y
21	IS 13C-1,2,3,6,7,8-HxCDD	100.00	2.66e+07	1.22 y	38:46	-	0.996 y
22	IS 13C-1,2,3,4,6,7,8-HpCDD	100.00	2.18e+07	1.02 y	44:13	-	0.818 y
23	IS 13C-OCDD	200.00	2.71e+07	0.99 y	49:47	-	0.507 y
24	IS 13C-2,3,7,8-TCDF	100.00	7.06e+07	0.86 y	26:40	-	0.923 y
25	IS 13C-1,2,3,7,8-PeCDF	100.00	5.94e+07	1.73 y	31:30	-	0.777 y
26	IS 13C-2,3,4,7,8-PeCDF	100.00	5.75e+07	1.68 y	32:49	-	0.752 y
27	IS 13C-1,2,3,4,7,8-HxCDF	100.00	4.93e+07	0.55 y	37:13	-	1.85 y
28	IS 13C-1,2,3,6,7,8-HxCDF	100.00	6.70e+07	0.55 y	37:24	-	2.51 y
29	IS 13C-2,3,4,6,7,8-HxCDF	100.00	5.33e+07	0.57 y	38:21	-	2.00 y
30	IS 13C-1,2,3,7,8,9-HxCDF	100.00	5.18e+07	0.55 y	39:48	-	1.94 y
31	IS 13C-1,2,3,4,6,7,8-HpCDF	100.00	2.79e+07	0.44 y	42:18	-	1.05 y
32	IS 13C-1,2,3,4,7,8,9-HpCDF	100.00	2.02e+07	0.42 y	45:09	-	0.756 y
33	IS 13C-OCDF	200.00	5.36e+07	0.96 y	50:09	-	1.00 y
34	C/Up 37Cl-2,3,7,8-TCDD	0.50	1.62e+05		27:26	-	0.696 y
35	RS 13C-1,2,3,4-TCDD	100.00	4.66e+07	0.83 y	26:51	4.66e+05	- n
36	RS 13C-1,2,3,4-TCDF	100.00	7.65e+07	0.88 y	25:34	7.65e+05	- n
37	RS/RT 13C-1,2,3,7,8,9-HxCDD	100.00	2.67e+07	1.27 y	39:13	2.67e+05	- n
38	Tot Total Tetra-Dioxins	0.00	-	- n	-	-	1.09 y
39	Tot Total Penta-Dioxins	0.00	-	- n	-	-	1.08 y
40	Tot Total Hexa-Dioxins	0.00	-	- n	-	-	1.33 y
41	Tot Total Hepta-Dioxins	0.00	-	- n	-	-	1.47 y
42	Tot Total Tetra-Furans	0.00	-	- n	-	-	1.60 y
43	Tot 1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.890 y
44	Tot Total Penta-Furans	0.00	-	- n	-	-	0.890 y
45	Tot Total Hexa-Furans	0.00	-	- n	-	-	0.860 y
46	Tot Total Hepta-Furans	0.00	-	- n	-	-	1.28 y


Analyst: 

Date: 8/24/10

Run #3 Filename 23AUG10M
Client ID: ST082310M2

S: 5 Acquired: 23-AUG-10 18:07:23 Cal: PCDDFAL3-8-23-10
Analyte: FAL ID: 1613 CS2 100511I

Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk 2,3,7,8-TCDD	2.00	9.56e+05	0.76 y	27:26	-	1.06 y
2	Unk 1,2,3,7,8-PeCDD	10.00	3.99e+06	1.62 y	33:15	-	1.09 y
3	Unk 1,2,3,4,7,8-HxCDD	10.00	3.69e+06	1.40 y	38:38	-	1.31 y
4	Unk 1,2,3,6,7,8-HxCDD	10.00	3.71e+06	1.40 y	38:47	-	1.39 y
5	Unk 1,2,3,7,8,9-HxCDD	10.00	3.75e+06	1.40 y	39:14	-	1.37 y
6	Unk 1,2,3,4,6,7,8-HpCDD	10.00	3.22e+06	1.04 y	44:14	-	1.45 y
7	Unk OCDD	20.00	3.97e+06	0.89 y	49:47	-	1.42 y
8	Unk 2,3,7,8-TCDF	2.00	2.12e+06	0.69 y	26:41	-	1.50 y
9	Unk 1,2,3,7,8-PeCDF	10.00	5.47e+06	1.50 y	31:32	-	0.916 y
10	Unk 2,3,4,7,8-PeCDF	10.00	5.23e+06	1.51 y	32:51	-	0.913 y
11	Unk 1,2,3,4,7,8-HxCDF	10.00	4.43e+06	1.30 y	37:14	-	0.900 y
12	Unk 1,2,3,6,7,8-HxCDF	10.00	5.48e+06	1.24 y	37:26	-	0.819 y
13	Unk 2,3,4,6,7,8-HxCDF	10.00	4.88e+06	1.33 y	38:22	-	0.924 y
14	Unk 1,2,3,7,8,9-HxCDF	10.00	5.17e+06	1.28 y	39:49	-	0.990 y
15	Unk 1,2,3,4,6,7,8-HpCDF	10.00	4.10e+06	1.03 y	42:19	-	1.37 y
16	Unk 1,2,3,4,7,8,9-HpCDF	10.00	2.76e+06	1.01 y	45:09	-	1.33 y
17	Unk OCDF	20.00	4.20e+06	0.92 y	50:11	-	0.753 y
18	IS/RT 13C-2,3,7,8-TCDD	100.00	4.51e+07	0.83 y	27:25	-	0.970 y
19	IS 13C-1,2,3,7,8-PeCDD	100.00	3.68e+07	1.77 y	33:14	-	0.792 y
20	IS 13C-1,2,3,4,7,8-HxCDD	100.00	2.81e+07	1.27 y	38:36	-	1.06 y
21	IS 13C-1,2,3,6,7,8-HxCDD	100.00	2.66e+07	1.28 y	38:46	-	1.00 y
22	IS 13C-1,2,3,4,6,7,8-HpCDD	100.00	2.22e+07	1.02 y	44:13	-	0.835 y
23	IS 13C-OCDD	200.00	2.79e+07	0.95 y	49:47	-	0.524 y
24	IS 13C-2,3,7,8-TCDF	100.00	7.06e+07	0.88 y	26:40	-	0.935 y
25	IS 13C-1,2,3,7,8-PeCDF	100.00	5.98e+07	1.74 y	31:30	-	0.791 y
26	IS 13C-2,3,4,7,8-PeCDF	100.00	5.73e+07	1.71 y	32:50	-	0.759 y
27	IS 13C-1,2,3,4,7,8-HxCDF	100.00	4.92e+07	0.55 y	37:13	-	1.85 y
28	IS 13C-1,2,3,6,7,8-HxCDF	100.00	6.70e+07	0.55 y	37:25	-	2.52 y
29	IS 13C-2,3,4,6,7,8-HxCDF	100.00	5.28e+07	0.56 y	38:21	-	1.98 y
30	IS 13C-1,2,3,7,8,9-HxCDF	100.00	5.23e+07	0.56 y	39:47	-	1.96 y
31	IS 13C-1,2,3,4,6,7,8-HpCDF	100.00	2.98e+07	0.43 y	42:18	-	1.12 y
32	IS 13C-1,2,3,4,7,8,9-HpCDF	100.00	2.07e+07	0.41 y	45:08	-	0.777 y
33	IS 13C-OCDF	200.00	5.58e+07	1.00 y	50:09	-	1.05 y
34	C/Up 37Cl-2,3,7,8-TCDD	2.00	5.87e+05		27:27	-	0.632 y
35	RS 13C-1,2,3,4-TCDD	100.00	4.65e+07	0.85 y	26:50	4.65e+05	- n
36	RS 13C-1,2,3,4-TCDF	100.00	7.56e+07	0.87 y	25:35	7.56e+05	- n
37	RS/RT 13C-1,2,3,7,8,9-HxCDD	100.00	2.66e+07	1.26 y	39:13	2.66e+05	- n
38	Tot Total Tetra-Dioxins	0.00	-	- n	-	-	1.06 y
39	Tot Total Penta-Dioxins	0.00	-	- n	-	-	1.09 y
40	Tot Total Hexa-Dioxins	0.00	-	- n	-	-	1.36 y
41	Tot Total Hepta-Dioxins	0.00	-	- n	-	-	1.45 y
42	Tot Total Tetra-Furans	0.00	-	- n	-	-	1.50 y
43	Tot 1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.914 y
44	Tot Total Penta-Furans	0.00	-	- n	-	-	0.914 y
45	Tot Total Hexa-Furans	0.00	-	- n	-	-	0.902 y
46	Tot Total Hepta-Furans	0.00	-	- n	-	-	1.36 y

Analyst: 

Date: 8/24/10

Run #5 Filename 23AUG10M
Client ID: ST082310M4

S: 6 Acquired: 23-AUG-10 19:02:46 Cal: PCDDFAL3-8-23-10
Analyte: FAL ID: 1613 CS4 100511K

Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk 2,3,7,8-TCDD	40.00	2.29e+07	0.76 y	27:27	-	1.13 y
2	Unk 1,2,3,7,8-PeCDD	200.00	9.61e+07	1.62 y	33:16	-	1.15 y
3	Unk 1,2,3,4,7,8-HxCDD	200.00	9.66e+07	1.40 y	38:37	-	1.44 y
4	Unk 1,2,3,6,7,8-HxCDD	200.00	8.79e+07	1.41 y	38:47	-	1.43 y
5	Unk 1,2,3,7,8,9-HxCDD	200.00	9.29e+07	1.41 y	39:15	-	1.45 y
6	Unk 1,2,3,4,6,7,8-HpCDD	200.00	7.75e+07	1.03 y	44:14	-	1.45 y
7	Unk OCDD	400.00	9.77e+07	1.00 y	49:48	-	1.42 y
8	Unk 2,3,7,8-TCDF	40.00	4.55e+07	0.67 y	26:42	-	1.47 y
9	Unk 1,2,3,7,8-PeCDF	200.00	1.31e+08	1.55 y	31:31	-	0.991 y
10	Unk 2,3,4,7,8-PeCDF	200.00	1.25e+08	1.52 y	32:50	-	0.991 y
11	Unk 1,2,3,4,7,8-HxCDF	200.00	1.13e+08	1.27 y	37:14	-	0.995 y
12	Unk 1,2,3,6,7,8-HxCDF	200.00	1.35e+08	1.28 y	37:26	-	0.869 y
13	Unk 2,3,4,6,7,8-HxCDF	200.00	1.21e+08	1.26 y	38:23	-	0.979 y
14	Unk 1,2,3,7,8,9-HxCDF	200.00	1.38e+08	1.30 y	39:49	-	1.08 y
15	Unk 1,2,3,4,6,7,8-HpCDF	200.00	1.03e+08	1.03 y	42:19	-	1.49 y
16	Unk 1,2,3,4,7,8,9-HpCDF	200.00	7.19e+07	1.05 y	45:09	-	1.45 y
17	Unk OCDF	400.00	1.19e+08	0.92 y	50:11	-	0.860 y
18	IS/RT 13C-2,3,7,8-TCDD	100.00	5.05e+07	0.85 y	27:25	-	1.15 y
19	IS 13C-1,2,3,7,8-PeCDD	100.00	4.17e+07	1.76 y	33:14	-	0.955 y
20	IS 13C-1,2,3,4,7,8-HxCDD	100.00	3.35e+07	1.27 y	38:37	-	1.12 y
21	IS 13C-1,2,3,6,7,8-HxCDD	100.00	3.08e+07	1.28 y	38:46	-	1.03 y
22	IS 13C-1,2,3,4,6,7,8-HpCDD	100.00	2.67e+07	1.01 y	44:13	-	0.896 y
23	IS 13C-OCDD	200.00	3.44e+07	0.94 y	49:47	-	0.578 y
24	IS 13C-2,3,7,8-TCDF	100.00	7.76e+07	0.88 y	26:41	-	1.12 y
25	IS 13C-1,2,3,7,8-PeCDF	100.00	6.59e+07	1.75 y	31:30	-	0.954 y
26	IS 13C-2,3,4,7,8-PeCDF	100.00	6.31e+07	1.73 y	32:49	-	0.913 y
27	IS 13C-1,2,3,4,7,8-HxCDF	100.00	5.67e+07	0.55 y	37:13	-	1.91 y
28	IS 13C-1,2,3,6,7,8-HxCDF	100.00	7.79e+07	0.55 y	37:25	-	2.62 y
29	IS 13C-2,3,4,6,7,8-HxCDF	100.00	6.19e+07	0.54 y	38:21	-	2.08 y
30	IS 13C-1,2,3,7,8,9-HxCDF	100.00	6.38e+07	0.54 y	39:48	-	2.14 y
31	IS 13C-1,2,3,4,6,7,8-HpCDF	100.00	3.44e+07	0.43 y	42:18	-	1.16 y
32	IS 13C-1,2,3,4,7,8,9-HpCDF	100.00	2.48e+07	0.43 y	45:08	-	0.832 y
33	IS 13C-OCDF	200.00	6.90e+07	0.99 y	50:09	-	1.16 y
34	C/Up 37Cl-2,3,7,8-TCDD	40.00	1.32e+07		27:27	-	0.757 y
35	RS 13C-1,2,3,4-TCDD	100.00	4.37e+07	0.85 y	26:50	4.37e+05	- n
36	RS 13C-1,2,3,4-TCDF	100.00	6.91e+07	0.87 y	25:35	6.91e+05	- n
37	RS/RT 13C-1,2,3,7,8,9-HxCDD	100.00	2.98e+07	1.25 y	39:13	2.98e+05	- n
38	Tot Total Tetra-Dioxins	0.00	-	- n	-	-	1.13 y
39	Tot Total Penta-Dioxins	0.00	-	- n	-	-	1.15 y
40	Tot Total Hexa-Dioxins	0.00	-	- n	-	-	1.44 y
41	Tot Total Hepta-Dioxins	0.00	-	- n	-	-	1.45 y
42	Tot Total Tetra-Furans	0.00	-	- n	-	-	1.47 y
43	Tot 1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.991 y
44	Tot Total Penta-Furans	0.00	-	- n	-	-	0.991 y
45	Tot Total Hexa-Furans	0.00	-	- n	-	-	0.974 y
46	Tot Total Hepta-Furans	0.00	-	- n	-	-	1.47 y


Analyst: 

Date: 8/24/10

Run #6 Filename 23AUG10M
Client ID: ST082310M5

S: 7 Acquired: 23-AUG-10 19:58:08 Cal: PCDDFAL3-8-23-10
Analyte: PCDDFAL3-8-23-10 FAL ID: 1613 CS5 100511L

Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk 2,3,7,8-TCDD	200.00	1.06e+08	0.76 y	27:26	-	1.14 y
2	Unk 1,2,3,7,8-PeCDD	1000.00	4.58e+08	1.63 y	33:15	-	1.15 y
3	Unk 1,2,3,4,7,8-HxCDD	1000.00	4.92e+08	1.39 y	38:38	-	1.42 y
4	Unk 1,2,3,6,7,8-HxCDD	1000.00	4.34e+08	1.40 y	38:48	-	1.42 y
5	Unk 1,2,3,7,8,9-HxCDD	1000.00	4.72e+08	1.38 y	39:14	-	1.45 y
6	Unk 1,2,3,4,6,7,8-HpCDD	1000.00	4.12e+08	1.03 y	44:14	-	1.48 y
7	Unk OCDD	2000.00	5.93e+08	0.92 y	49:50	-	1.59 y
8	Unk 2,3,7,8-TCDF	200.00	2.14e+08	0.66 y	26:41	-	1.48 y
9	Unk 1,2,3,7,8-PeCDF	1000.00	6.33e+08	1.52 y	31:32	-	0.985 y
10	Unk 2,3,4,7,8-PeCDF	1000.00	6.21e+08	1.52 y	32:51	-	1.00 y
11	Unk 1,2,3,4,7,8-HxCDF	1000.00	5.58e+08	1.28 y	37:14	-	0.996 y
12	Unk 1,2,3,6,7,8-HxCDF	1000.00	6.54e+08	1.27 y	37:26	-	0.876 y
13	Unk 2,3,4,6,7,8-HxCDF	1000.00	5.98e+08	1.27 y	38:22	-	0.989 y
14	Unk 1,2,3,7,8,9-HxCDF	1000.00	7.04e+08	1.28 y	39:49	-	1.08 y
15	Unk 1,2,3,4,6,7,8-HpCDF	1000.00	5.19e+08	1.05 y	42:20	-	1.47 y
16	Unk 1,2,3,4,7,8,9-HpCDF	1000.00	4.06e+08	1.08 y	45:09	-	1.50 y
17	Unk OCDF	2000.00	6.38e+08	0.93 y	50:12	-	0.869 y
18	IS/RT 13C-2,3,7,8-TCDD	100.00	4.62e+07	0.84 y	27:25	-	1.08 y
19	IS 13C-1,2,3,7,8-PeCDD	100.00	4.00e+07	1.76 y	33:15	-	0.933 y
20	IS 13C-1,2,3,4,7,8-HxCDD	100.00	3.46e+07	1.27 y	38:37	-	1.16 y
21	IS 13C-1,2,3,6,7,8-HxCDD	100.00	3.07e+07	1.25 y	38:46	-	1.03 y
22	IS 13C-1,2,3,4,6,7,8-HpCDD	100.00	2.78e+07	1.04 y	44:13	-	0.932 y
23	IS 13C-OCDD	200.00	3.72e+07	0.93 y	49:49	-	0.625 y
24	IS 13C-2,3,7,8-TCDF	100.00	7.26e+07	0.87 y	26:40	-	1.05 y
25	IS 13C-1,2,3,7,8-PeCDF	100.00	6.43e+07	1.73 y	31:30	-	0.931 y
26	IS 13C-2,3,4,7,8-PeCDF	100.00	6.19e+07	1.73 y	32:49	-	0.896 y
27	IS 13C-1,2,3,4,7,8-HxCDF	100.00	5.60e+07	0.55 y	37:13	-	1.88 y
28	IS 13C-1,2,3,6,7,8-HxCDF	100.00	7.47e+07	0.56 y	37:25	-	2.51 y
29	IS 13C-2,3,4,6,7,8-HxCDF	100.00	6.05e+07	0.56 y	38:21	-	2.03 y
30	IS 13C-1,2,3,7,8,9-HxCDF	100.00	6.55e+07	0.54 y	39:47	-	2.20 y
31	IS 13C-1,2,3,4,6,7,8-HpCDF	100.00	3.52e+07	0.44 y	42:18	-	1.18 y
32	IS 13C-1,2,3,4,7,8,9-HpCDF	100.00	2.71e+07	0.42 y	45:08	-	0.909 y
33	IS 13C-OCDF	200.00	7.35e+07	0.99 y	50:11	-	1.23 y
34	C/Up 37Cl-2,3,7,8-TCDD	200.00	6.26e+07		27:26	-	0.731 y
35	RS 13C-1,2,3,4-TCDD	100.00	4.28e+07	0.84 y	26:50	4.28e+05	- n
36	RS 13C-1,2,3,4-TCDF	100.00	6.91e+07	0.87 y	25:34	6.91e+05	- n
37	RS/RT 13C-1,2,3,7,8,9-HxCDD	100.00	2.98e+07	1.25 y	39:13	2.98e+05	- n
38	Tot Total Tetra-Dioxins	0.00	-	- n	-	-	1.14 y
39	Tot Total Penta-Dioxins	0.00	-	- n	-	-	1.15 y
40	Tot Total Hexa-Dioxins	0.00	-	- n	-	-	1.43 y
41	Tot Total Hepta-Dioxins	0.00	-	- n	-	-	1.48 y
42	Tot Total Tetra-Furans	0.00	-	- n	-	-	1.48 y
43	Tot 1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.994 y
44	Tot Total Penta-Furans	0.00	-	- n	-	-	0.994 y
45	Tot Total Hexa-Furans	0.00	-	- n	-	-	0.980 y
46	Tot Total Hepta-Furans	0.00	-	- n	-	-	1.48 y

Analyst: 

Date: 8/24/10

USEPA - ITD

FORM 3A

PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3 GC Column ID: db5

CS0 Data Filename: 23AUG10M S3 CS3 Data Filename: 23AUG10M S1

CS1 Data Filename: 23AUG10M S4 CS4 Data Filename: 23AUG10M S6

CS2 Data Filename: 23AUG10M S5 CS5 Data Filename: 23AUG10M S7

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
NATIVE ANALYTES								
2,3,7,8-TCDD	1.07	1.09	1.06	1.16	1.13	1.14	1.11	3.63
1,2,3,7,8-PeCDD	1.03	1.08	1.09	1.11	1.15	1.15	1.10	4.14
1,2,3,4,7,8-HxCDD	1.40	1.30	1.31	1.36	1.44	1.42	1.37	4.29
1,2,3,6,7,8-HxCDD	1.30	1.38	1.39	1.32	1.43	1.42	1.37	3.80
1,2,3,7,8,9-HxCDD	1.29	1.31	1.37	1.30	1.45	1.45	1.36	5.24
1,2,3,4,6,7,8-HpCDD	1.43	1.47	1.45	1.44	1.45	1.48	1.45	1.37
OCDD	1.37	1.37	1.42	1.44	1.42	1.59	1.43	5.81
2,3,7,8-TCDF	1.57	1.60	1.50	1.40	1.47	1.48	1.50	4.91
1,2,3,7,8-PeCDF	0.92	0.88	0.92	0.96	0.99	0.99	0.94	4.53
2,3,4,7,8-PeCDF	0.88	0.90	0.91	0.93	0.99	1.00	0.94	5.35
1,2,3,4,7,8-HxCDF	0.90	0.88	0.90	0.91	0.99	1.00	0.93	5.70
1,2,3,6,7,8-HxCDF	0.75	0.79	0.82	0.83	0.87	0.88	0.82	5.91
2,3,4,6,7,8-HxCDF	0.87	0.86	0.92	0.89	0.98	0.99	0.92	6.02
1,2,3,7,8,9-HxCDF	0.90	0.94	0.99	1.00	1.08	1.08	1.00	7.30
1,2,3,4,6,7,8-HpCDF	1.28	1.33	1.37	1.39	1.49	1.47	1.39	5.78
1,2,3,4,7,8,9-HpCDF	1.30	1.20	1.33	1.35	1.45	1.50	1.36	7.94
OCDF	0.73	0.72	0.75	0.79	0.86	0.87	0.79	8.29

Analyst: Date: 8/24/10

USEPA - ITD

FORM 3B

PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3

GC Column ID: db5

CS0 Data Filename: 23AUG10M S3 CS4 Data Filename: 23AUG10M S1

CS1 Data Filename: 23AUG10M S4 CS4 Data Filename: 23AUG10M S6

CS2 Data Filename: 23AUG10M S5 CS5 Data Filename: 23AUG10M S7

RELATIVE RESPONSE (RR)

MEAN
RR Cv
(%RSD)

LABELED COMPOUNDS	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
13C-2,3,7,8-TCDD	0.98	0.98	0.97	0.98	1.15	1.08	1.02	7.46
13C-1,2,3,7,8-PeCDD	0.79	0.79	0.79	0.79	0.95	0.93	0.84	9.48
13C-1,2,3,4,7,8-HxCDD	1.06	1.03	1.06	1.01	1.12	1.16	1.07	5.40
13C-1,2,3,6,7,8-HxCDD	1.00	1.00	1.00	1.02	1.03	1.03	1.01	1.62
13C-1,2,3,4,6,7,8-HpCDD	0.82	0.82	0.84	0.83	0.90	0.93	0.86	5.45
13C-OCDD	0.52	0.51	0.52	0.52	0.58	0.63	0.55	8.36
13C-2,3,7,8-TCDF	0.97	0.92	0.93	0.96	1.12	1.05	0.99	7.79
13C-1,2,3,7,8-PeCDF	0.78	0.78	0.79	0.79	0.95	0.93	0.84	9.74
13C-2,3,4,7,8-PeCDF	0.77	0.75	0.76	0.78	0.91	0.90	0.81	8.97
13C-1,2,3,4,7,8-HxCDF	1.82	1.85	1.85	1.81	1.91	1.88	1.85	2.00
13C-1,2,3,6,7,8-HxCDF	2.55	2.51	2.52	2.51	2.62	2.51	2.54	1.71
13C-2,3,4,6,7,8-HxCDF	2.00	2.00	1.98	2.00	2.08	2.03	2.01	1.79
13C-1,2,3,7,8,9-HxCDF	1.97	1.94	1.96	1.98	2.14	2.20	2.03	5.42
13C-1,2,3,4,6,7,8-HpCDF	1.08	1.05	1.12	1.07	1.16	1.18	1.11	4.80
13C-1,2,3,4,7,8,9-HpCDF	0.78	0.76	0.78	0.77	0.83	0.91	0.80	7.16
13C-OCDF	1.00	1.00	1.05	1.05	1.16	1.23	1.08	8.63
CLEANUP STANDARD								
37Cl-2,3,7,8-TCDD	0.67	0.70	0.63	0.63	0.76	0.73	0.69	7.67

Analyst: Date: 8/24/10

USEPA - ITD

FORM 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Frontier Analytical Laboratory

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3

GC Column ID: db5

CS0 Data Filename: 23AUG10M S3 CS3 Data Filename: 23AUG10M S1

CS1 Data Filename: 23AUG10M S4 CS4 Data Filename: 23AUG10M S6

CS2 Data Filename: 23AUG10M S5 CS5 Data Filename: 23AUG10M S7

NATIVE ANALYTES	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS						QC LIMITS
		CS1	CS2	CS3	CS4	CS5	CS6	
2,3,7,8-TCDD	M/M+2	0.73	0.74	0.76	0.73	0.76	0.76	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.70	1.61	1.62	1.64	1.62	1.63	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.42	1.42	1.40	1.41	1.40	1.39	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.40	1.42	1.40	1.39	1.41	1.40	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.41	1.39	1.40	1.41	1.41	1.38	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	1.07	1.04	1.04	1.03	1.03	0.88-1.20
OCDD	M+2/M+4	1.00	0.99	0.89	0.95	1.00	0.92	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.67	0.69	0.69	0.67	0.67	0.66	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.49	1.45	1.50	1.53	1.55	1.52	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.48	1.43	1.51	1.52	1.52	1.52	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.27	1.30	1.29	1.27	1.28	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.31	1.22	1.24	1.26	1.28	1.27	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.31	1.33	1.24	1.26	1.27	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.15	1.23	1.28	1.28	1.30	1.28	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	1.05	1.03	1.04	1.03	1.05	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.99	1.06	1.01	1.04	1.05	1.08	0.88-1.20
OCDF	M+2/M+4	0.93	0.89	0.92	0.93	0.92	0.93	0.76-1.02

Analyst: Date: 8/24/10

USEPA - ITD

FORM 3D

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Frontier Analytical Laboratory

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3

GC Column ID: db5

CS0 Data Filename: 23AUG10M S3 CS3 Data Filename: 23AUG10M S1

CS1 Data Filename: 23AUG10M S4 CS4 Data Filename: 23AUG10M S6

CS2 Data Filename: 23AUG10M S5 CS5 Data Filename: 23AUG10M S7

Labeled Compounds	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS						QC LIMITS
		CS1	CS2	CS3	CS4	CS5	CS6	
13C-2,3,7,8-TCDD	M/M+2	0.85	0.84	0.83	0.86	0.85	0.84	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.77	1.77	1.77	1.77	1.76	1.76	1.32-1.78
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.32	1.27	1.26	1.27	1.27	1.05-1.43
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.22	1.28	1.27	1.28	1.25	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.00	1.02	1.02	1.04	1.01	1.04	0.88-1.20
13C-OCDD	M+2/M+4	1.00	0.99	0.95	0.93	0.94	0.93	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.88	0.86	0.88	0.86	0.88	0.87	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.74	1.73	1.74	1.78	1.75	1.73	1.32-1.78
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.74	1.68	1.71	1.74	1.73	1.73	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.55	0.55	0.55	0.56	0.55	0.55	0.43-0.59
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.56	0.55	0.55	0.55	0.55	0.56	0.43-0.59
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.58	0.57	0.56	0.54	0.54	0.56	0.43-0.59
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.55	0.56	0.55	0.54	0.54	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.42	0.44	0.43	0.42	0.43	0.44	0.37-0.51
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.43	0.42	0.41	0.42	0.43	0.42	0.37-0.51
13C-OCDF	M+2/M+4	0.95	0.96	1.00	0.98	0.99	0.99	0.76-1.02

Analyst: Date: 8/24/10

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: 23AUG10M Sam:1

Analysis Date: 23-AUG-10 14:25:46

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	0.73	0.65-0.89	y	10.4	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32-1.78	y	50.6	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.41	1.05-1.43	y	49.6	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.39	1.05-1.43	y	48.0	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.41	1.05-1.43	y	47.9	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	49.5	43.0 - 58.0
OCDD	M+2/M+4	0.95	0.76-1.02	y	100	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.67	0.65-0.89	y	9.30	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	y	50.9	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.52	1.32-1.78	y	49.8	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	48.8	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	50.3	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	48.5	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.05-1.43	y	50.3	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	49.9	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	49.8	43.0 - 58.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	99.9	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: 8/24/10

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: 23AUG10M Sam:1

Analysis Date: 23-AUG-10 14:25:46

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
13C-2,3,7,8-TCDD	M/M+2	0.86	0.65-0.89	y	95.9	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.77	1.32-1.78	y	94.2	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	94.5	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	100	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	97.0	72.0 - 138
13C-OCDD	M+2/M+4	0.93	0.76-1.02	y	191	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.86	0.65-0.89	y	96.5	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.78	1.32-1.78	y	94.8	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.74	1.32-1.78	y	96.5	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.56	0.43-0.59	y	97.7	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.55	0.43-0.59	y	99.0	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	99.4	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.55	0.43-0.59	y	97.2	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.42	0.37-0.51	y	96.4	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	96.0	77.0 - 129
13C-OCDF	M+2/M+4	0.98	0.76-1.02	y	194	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.14	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: 

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

Name	Resp	RA	RT	RRF	WHO 1998 Tox:		WHO 2005 Tox:		DL	114	
					Conc	Qual	Fac Noise-1	Noise-2			
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						
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

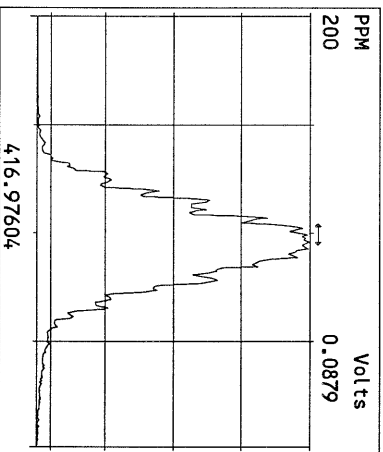
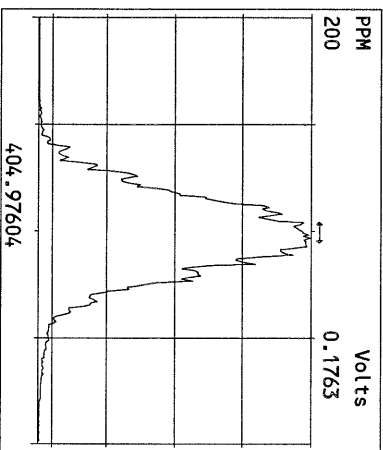
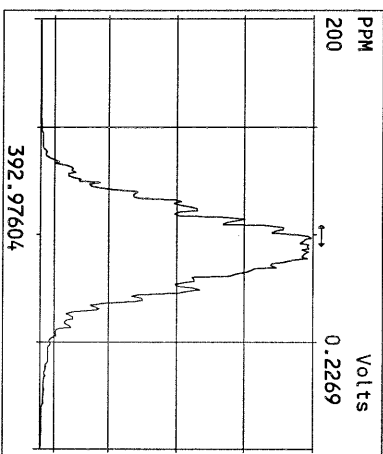
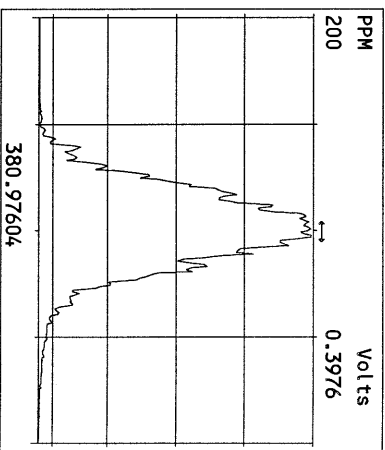
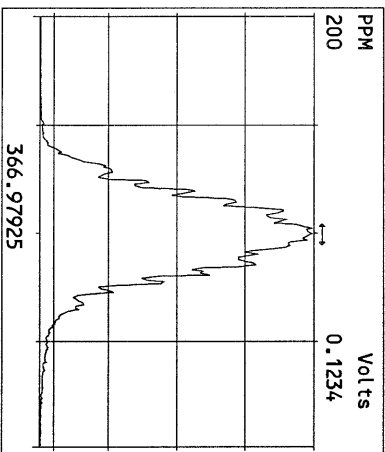
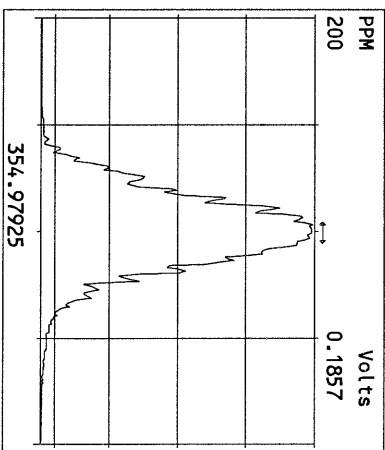
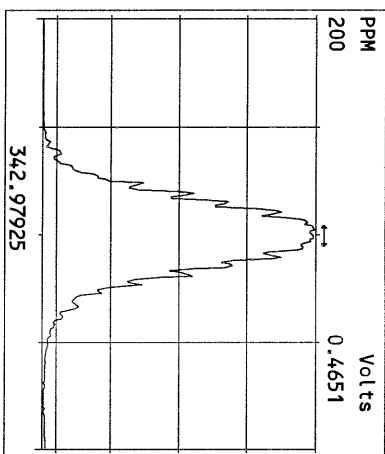
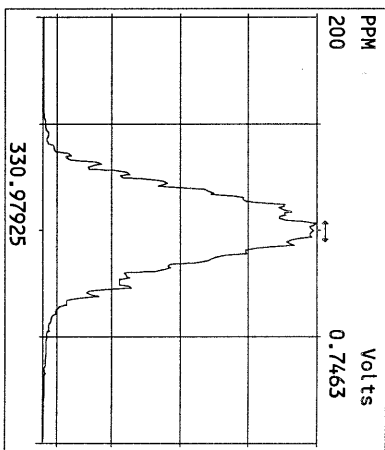
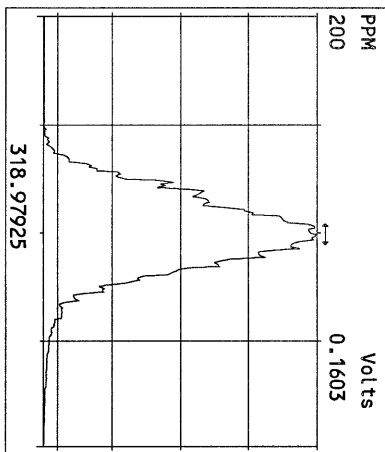
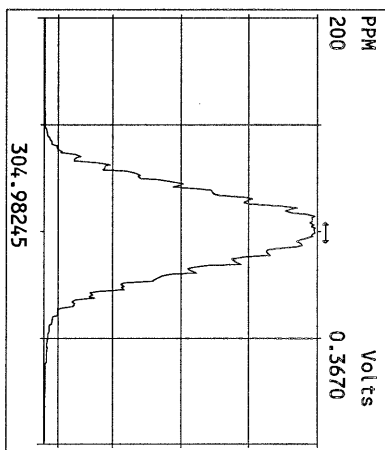
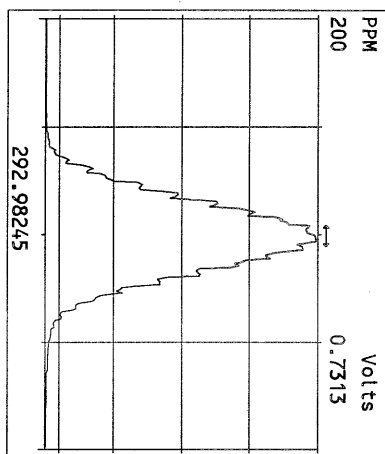
Experiment:PCDD

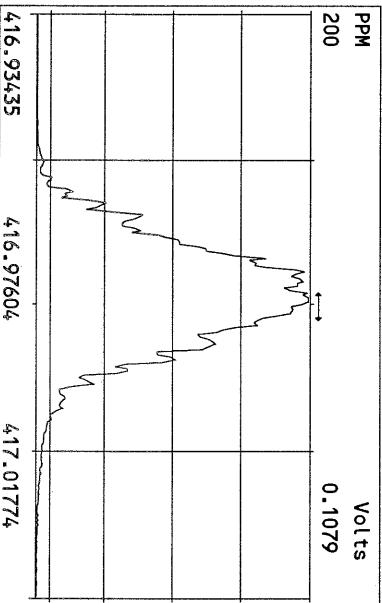
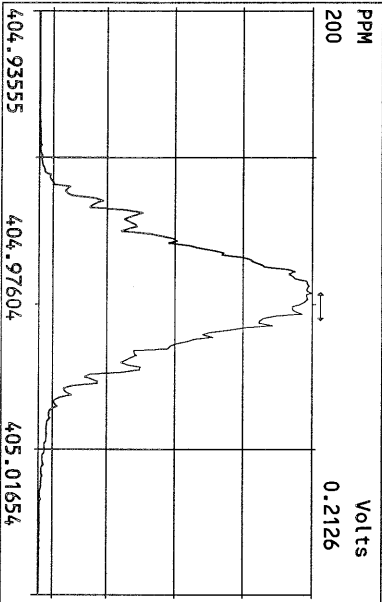
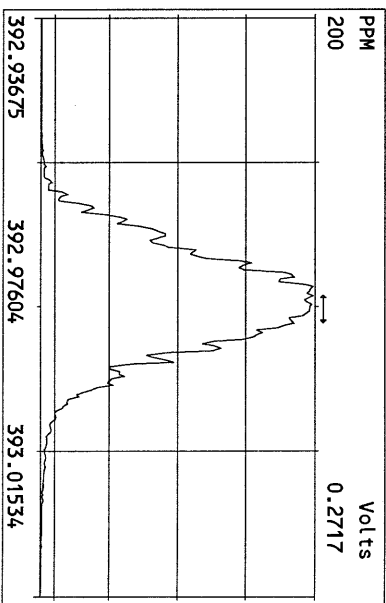
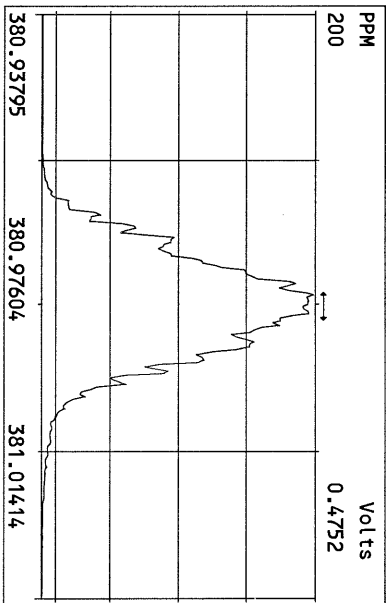
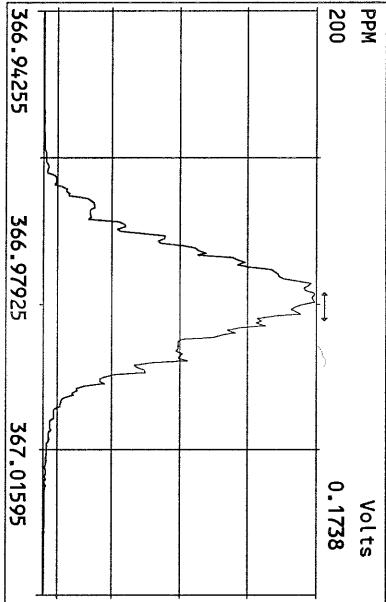
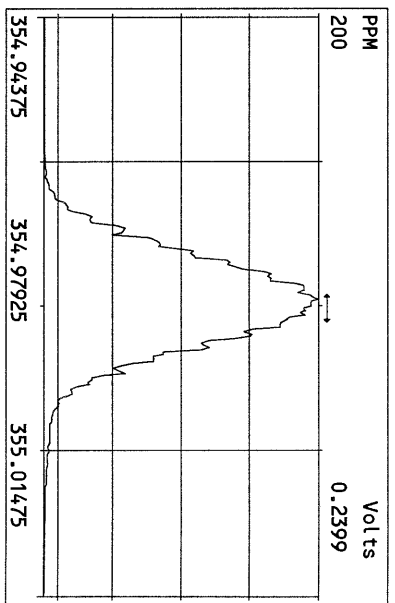
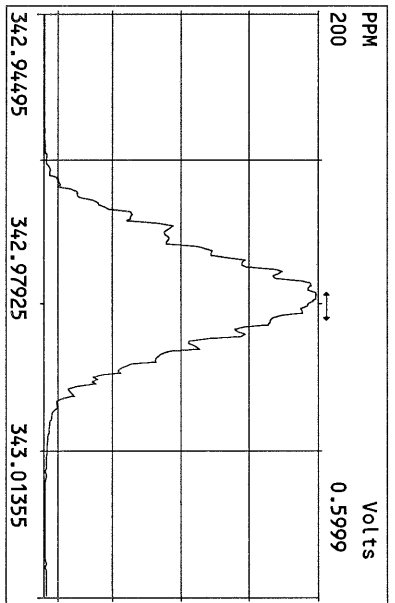
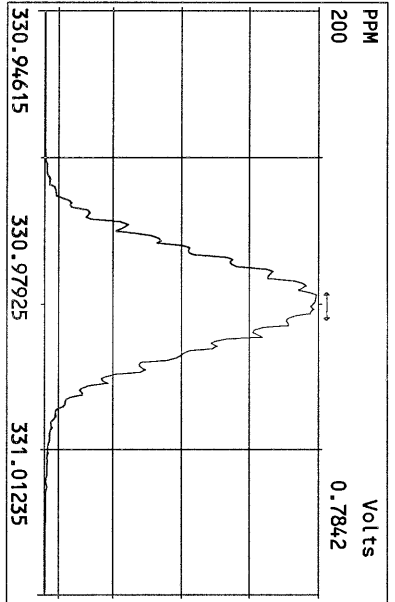
Data File S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
23AUG10M 1	ST082310M3	1613 CS3 100511J	23-AUG-10 14:25:46	ST082310M3	ST082310M6	BS
23AUG10M 2	ST082310M-1	1613 CS-1	23-AUG-10 15:21:08	NA	NA	BS
23AUG10M 3	ST082310M0	1613 CS0 100511G	23-AUG-10 16:16:35	NA	NA	BS
23AUG10M 4	ST082310M1	1613 CS1 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

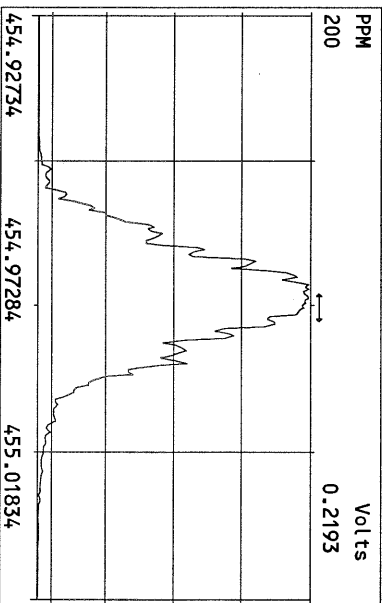
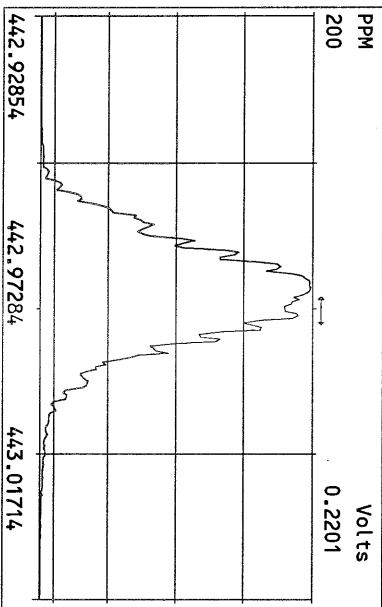
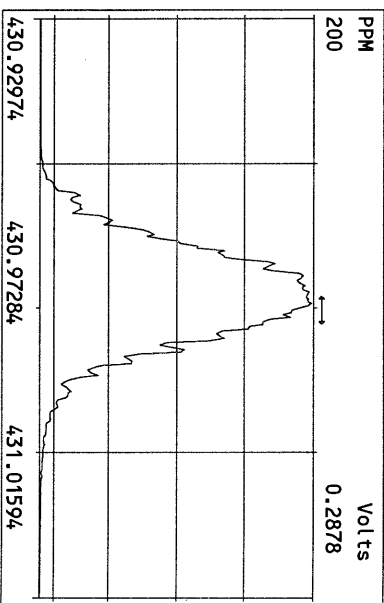
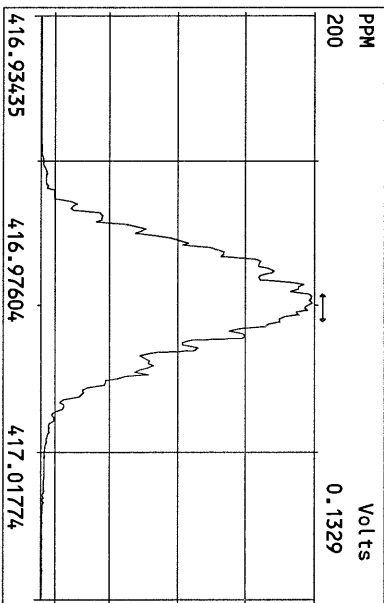
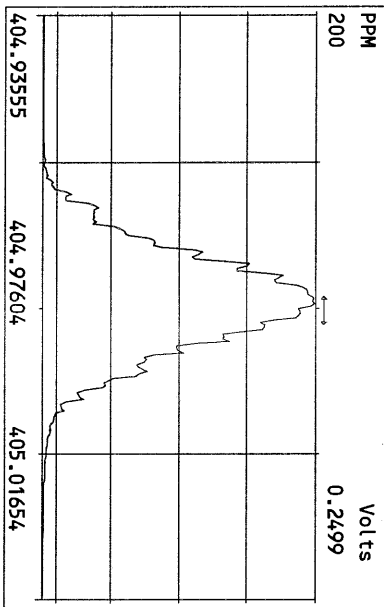
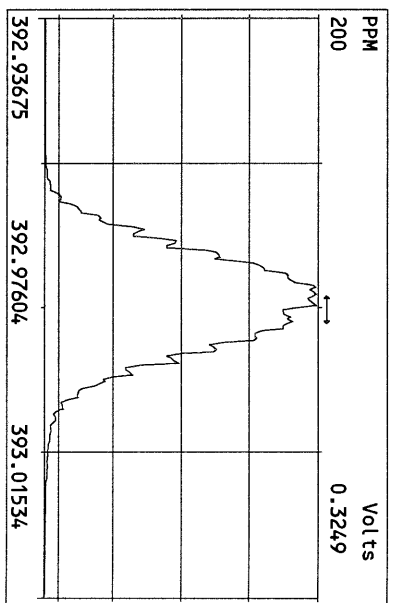
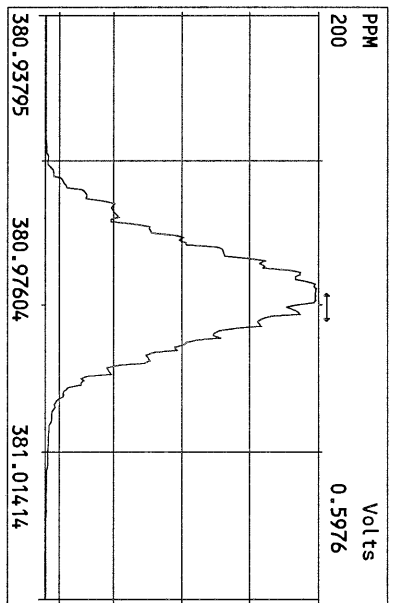
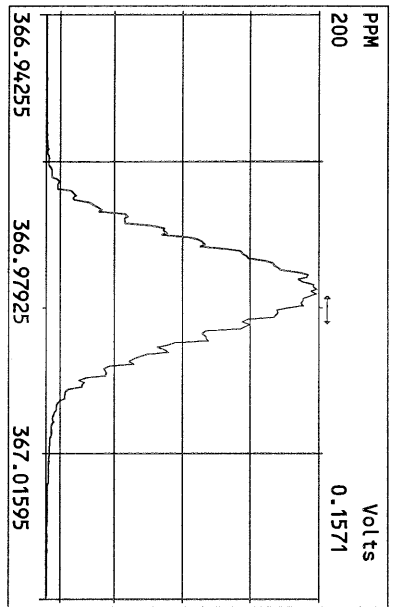
 8/24/10

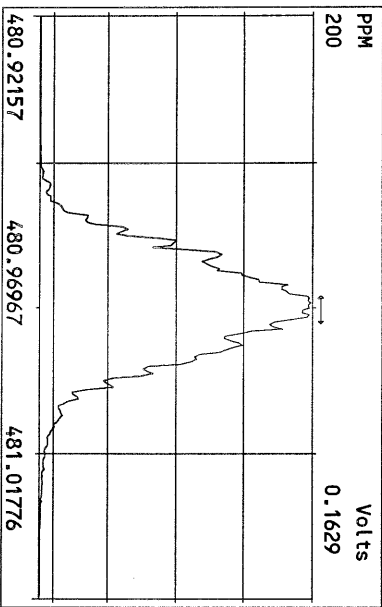
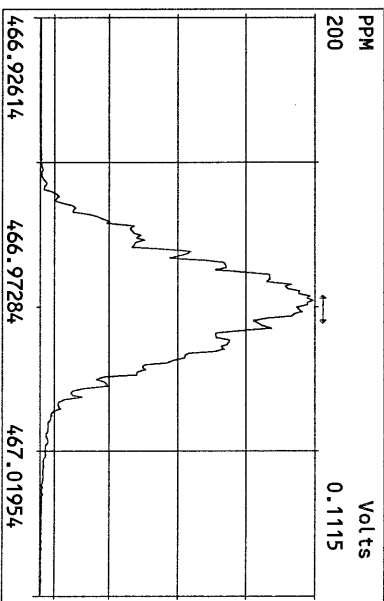
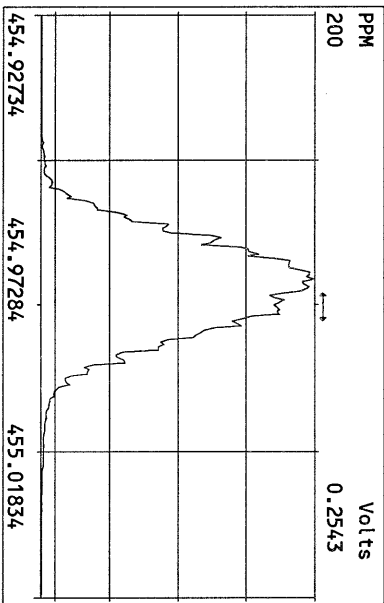
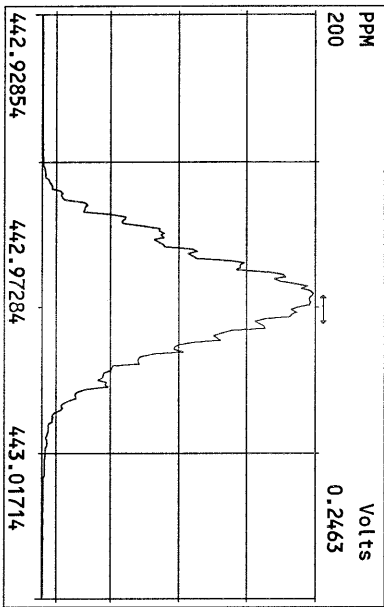
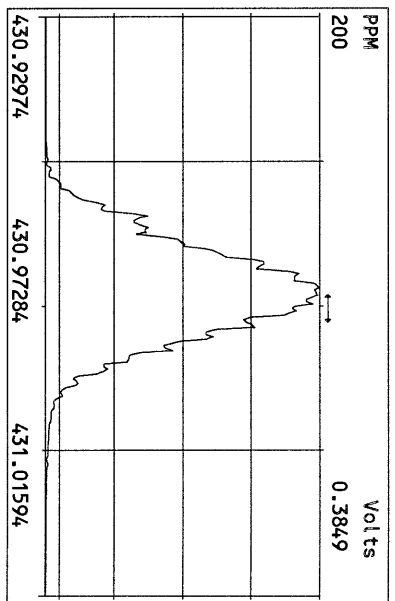
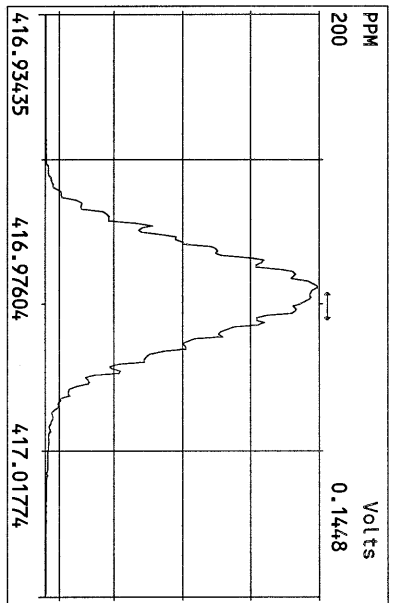
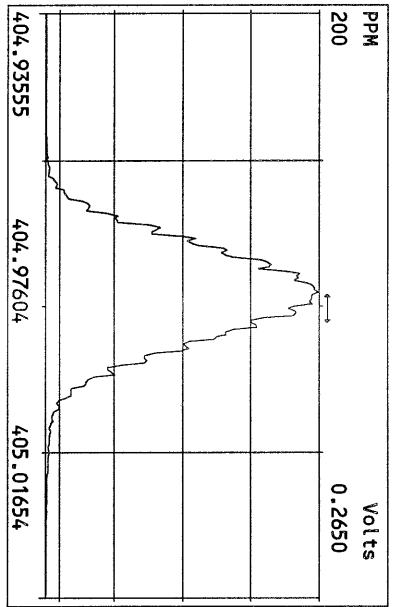
Data Backed Up: _____

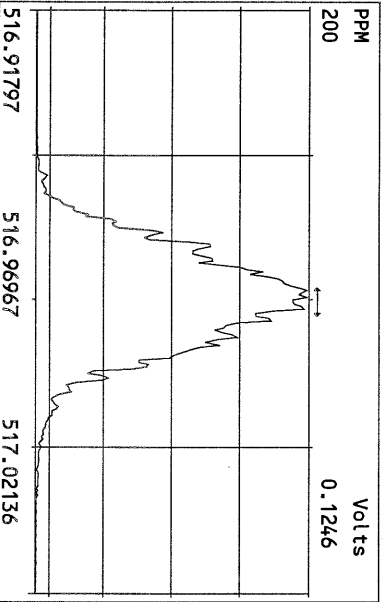
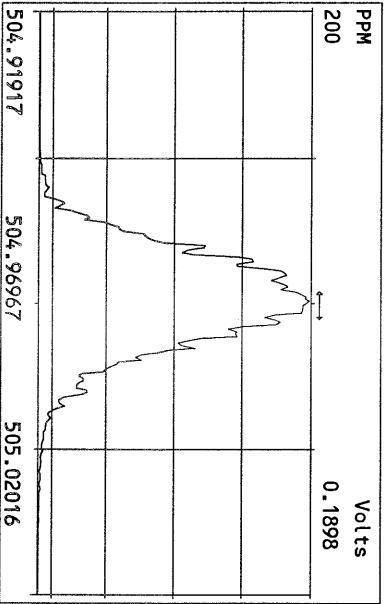
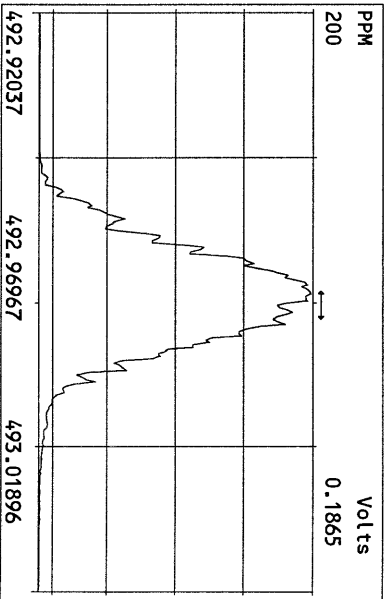
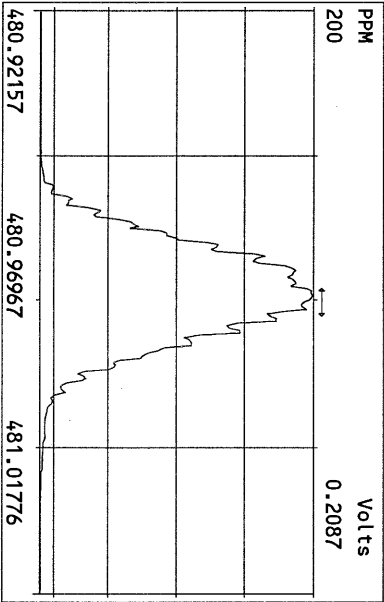
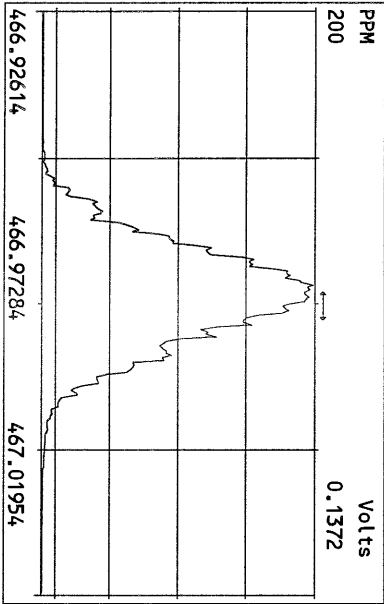
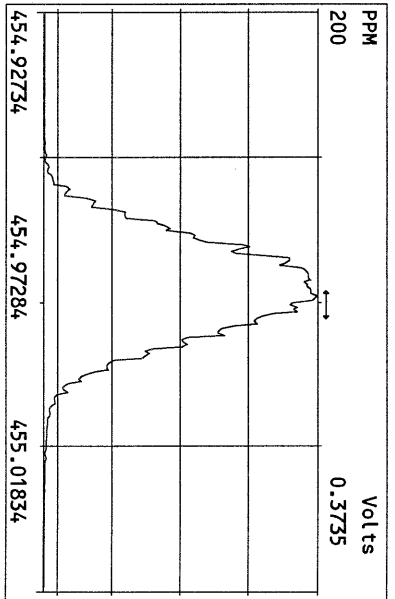
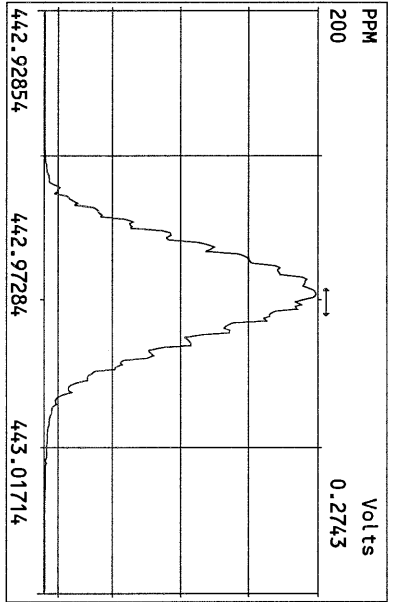
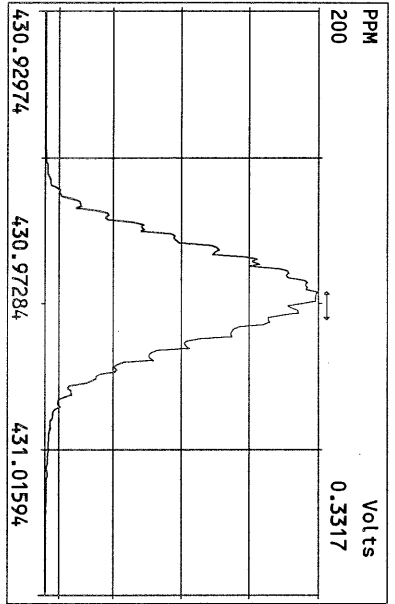
Date: _____



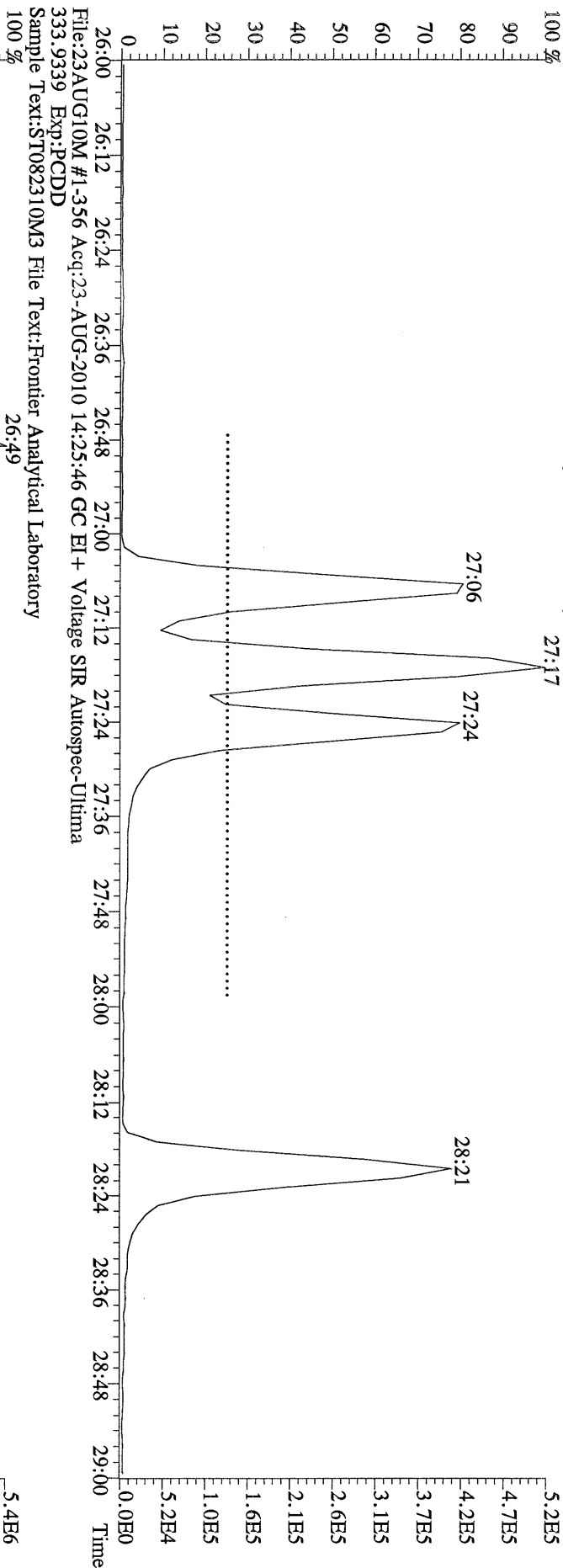




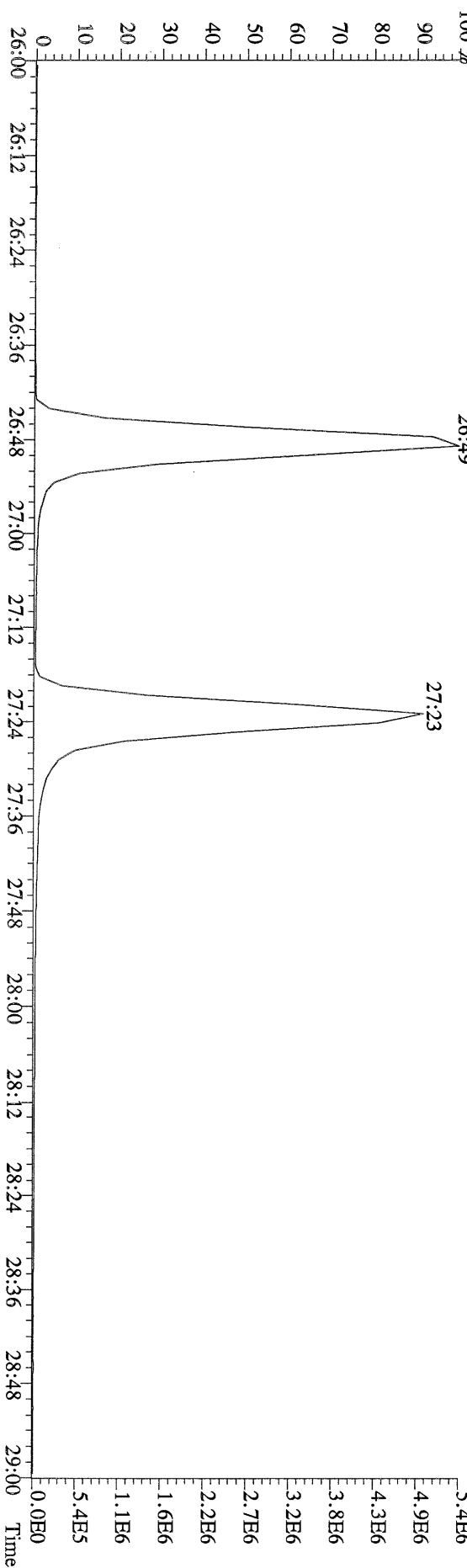




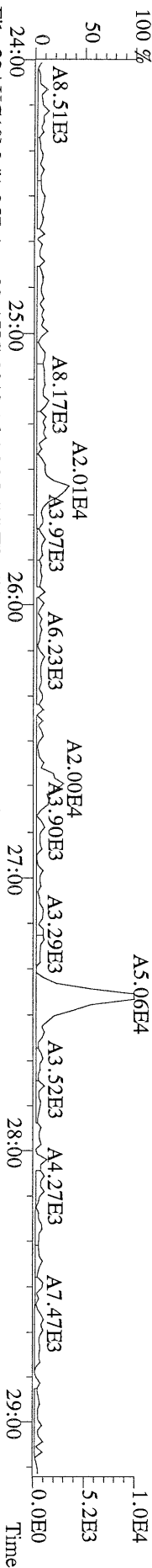
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
319,8965 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



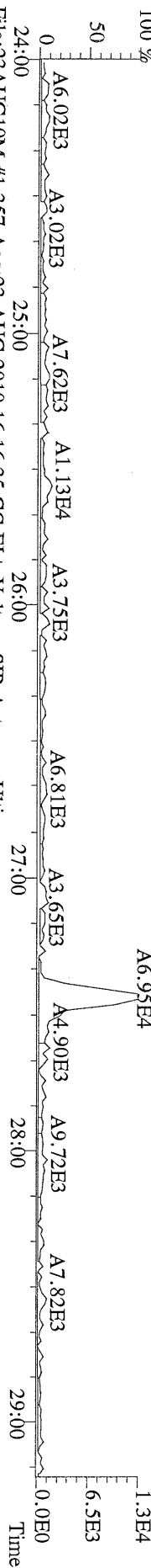
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
333,9339 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



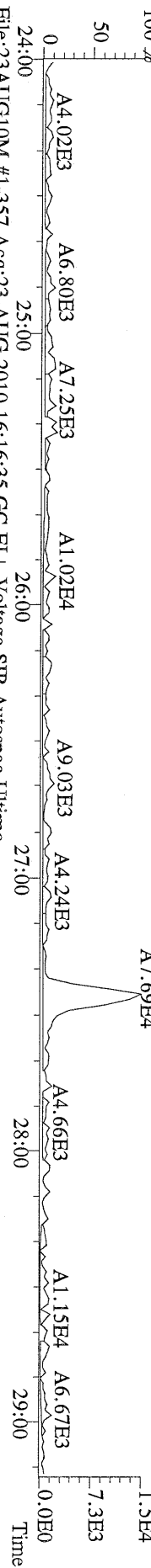
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



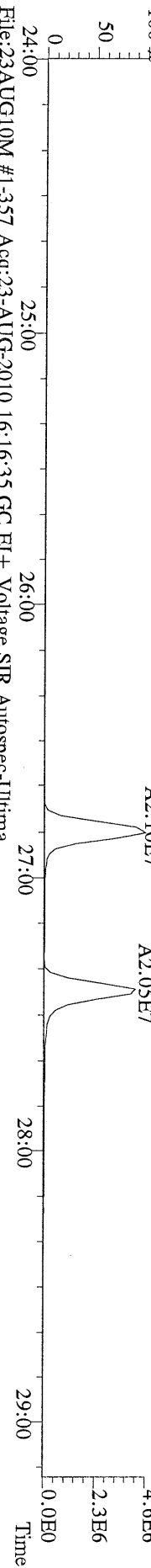
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



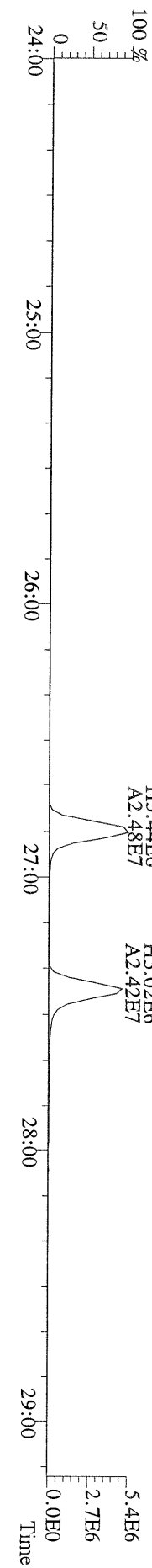
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



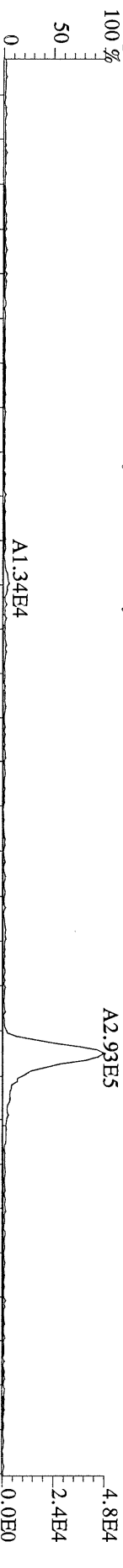
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



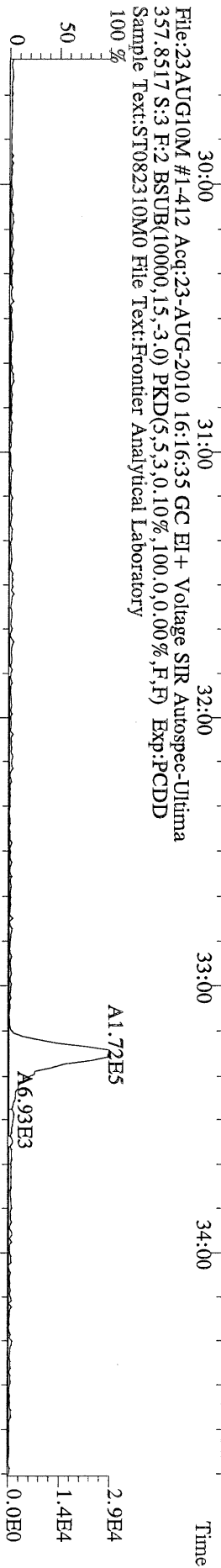
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



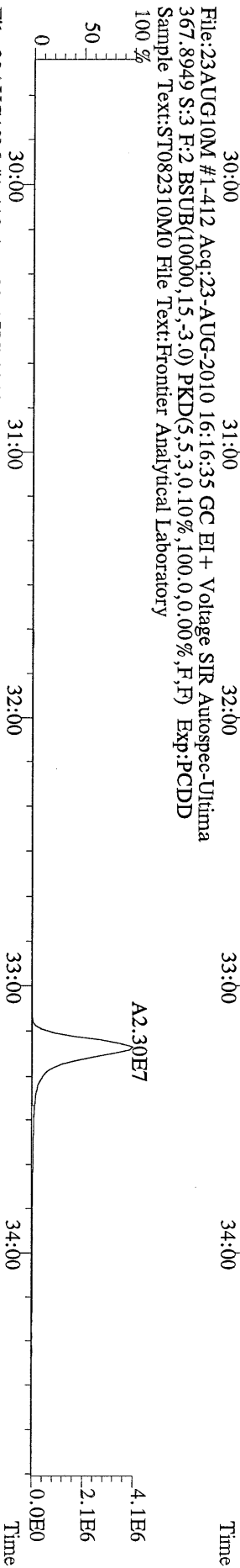
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
355,8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory
100 %



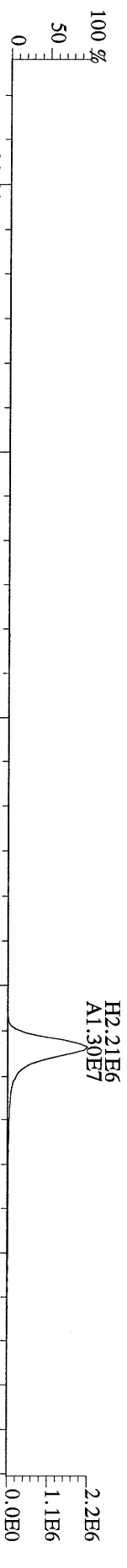
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
357,8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory
100 %



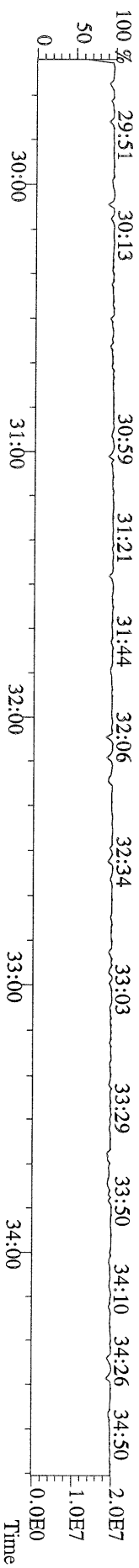
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
367,8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory
100 %



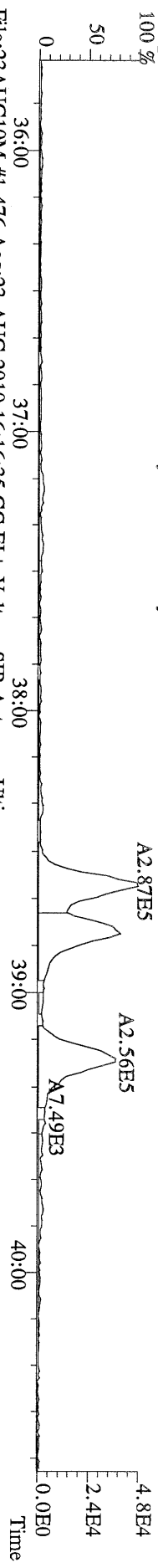
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
369,8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



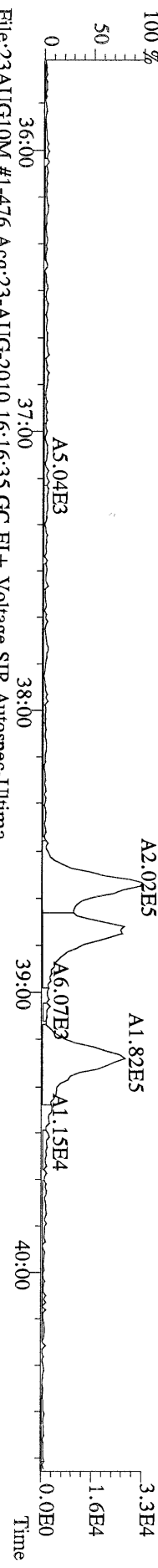
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
366,9792 S:3 F:2 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



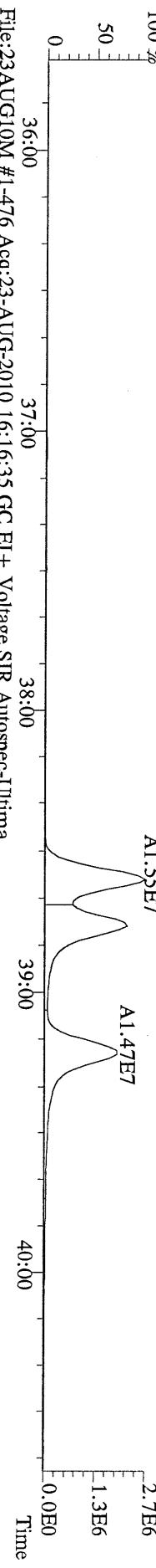
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



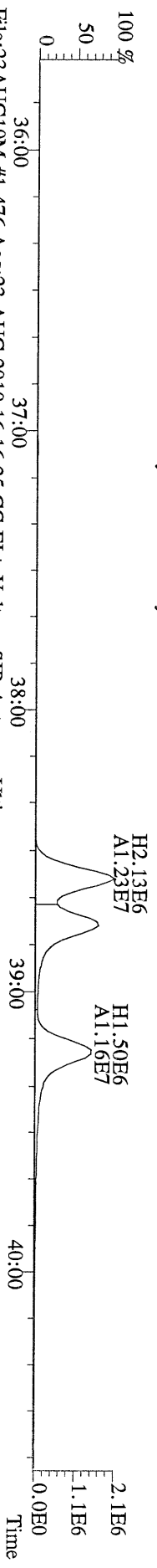
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



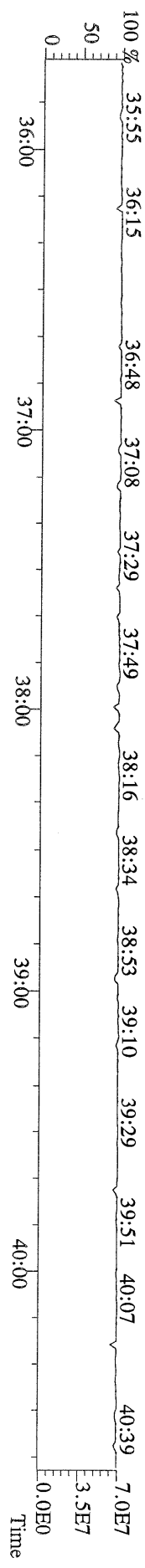
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



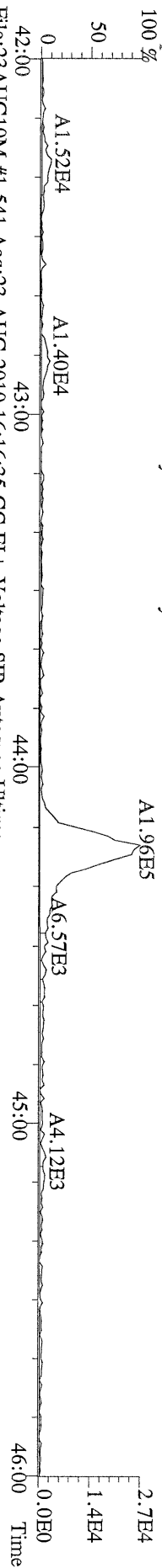
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



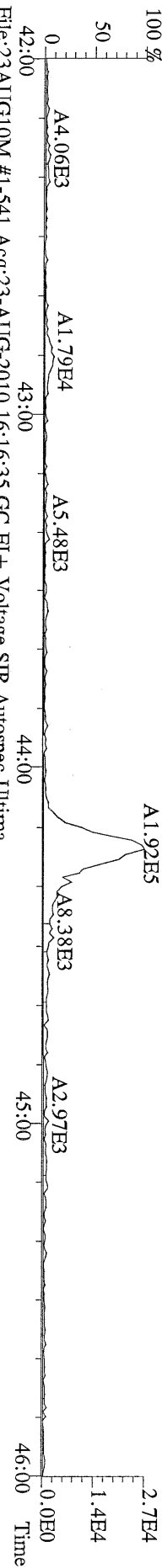
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



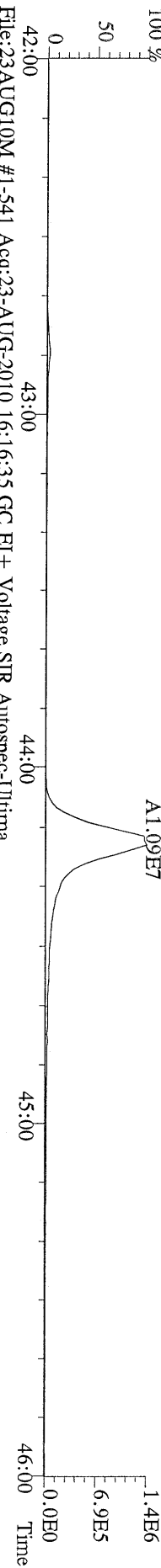
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



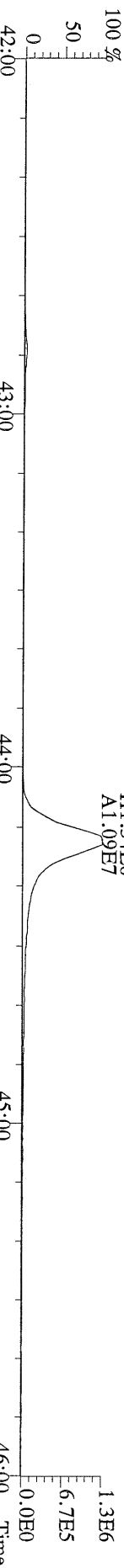
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



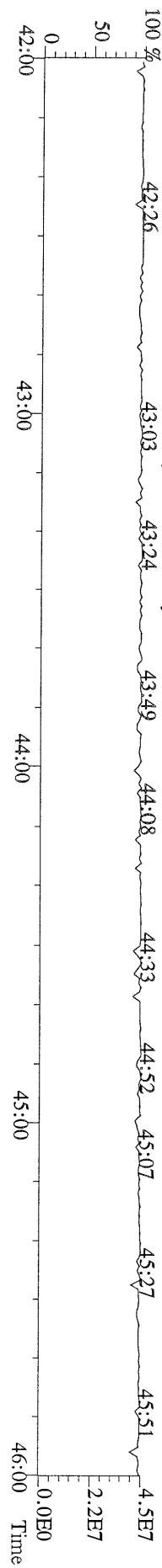
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



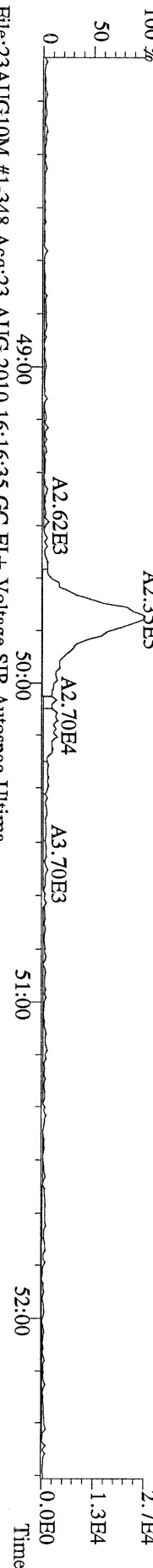
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



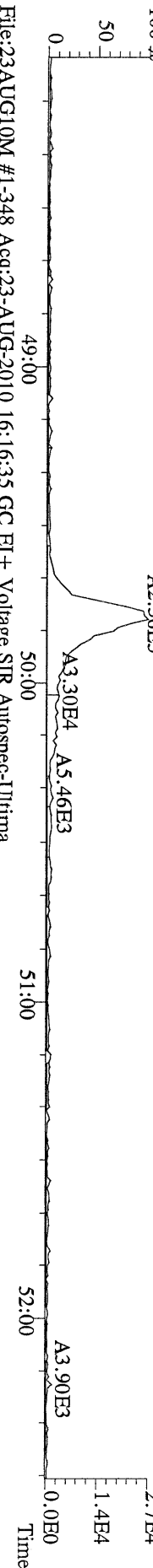
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



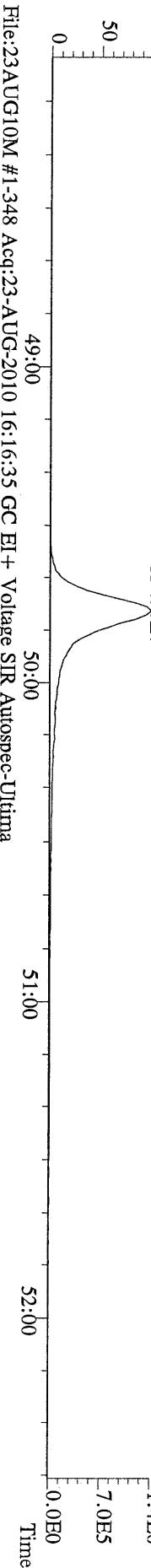
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Fronier Analytical Laboratory



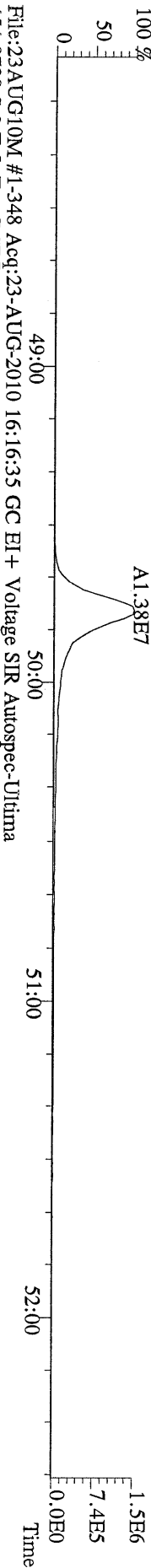
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Fronier Analytical Laboratory



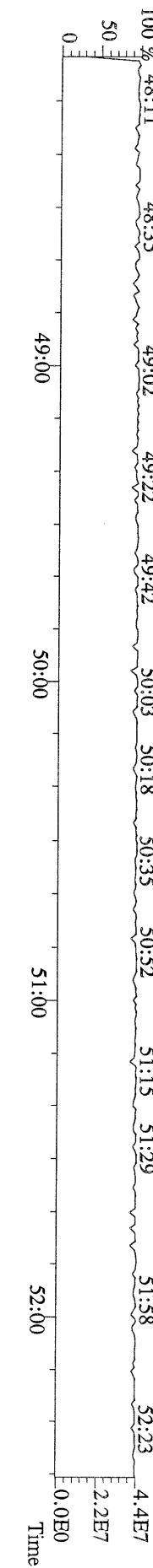
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Fronier Analytical Laboratory



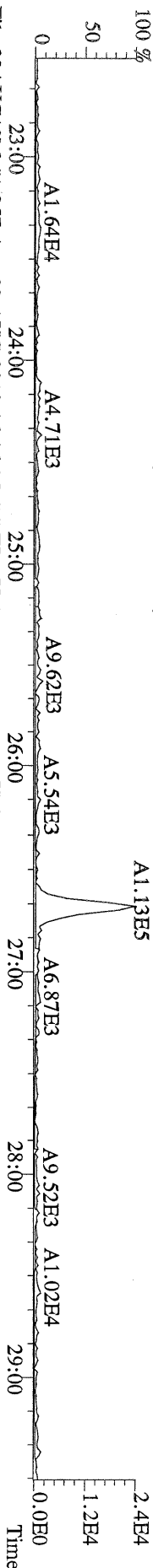
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Fronier Analytical Laboratory



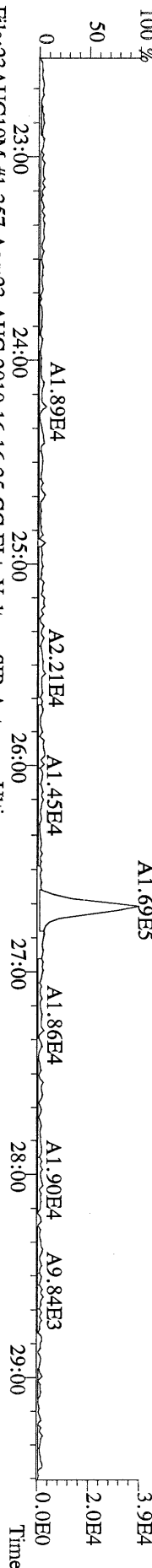
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST082310M0 File Text:Fronier Analytical Laboratory



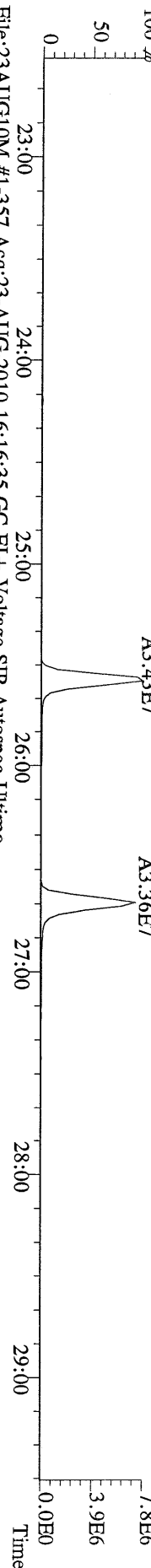
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



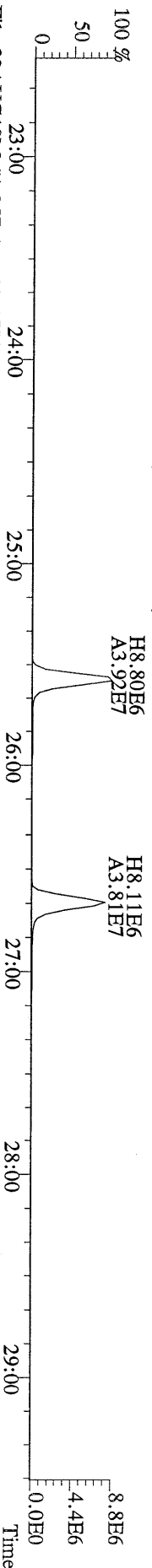
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



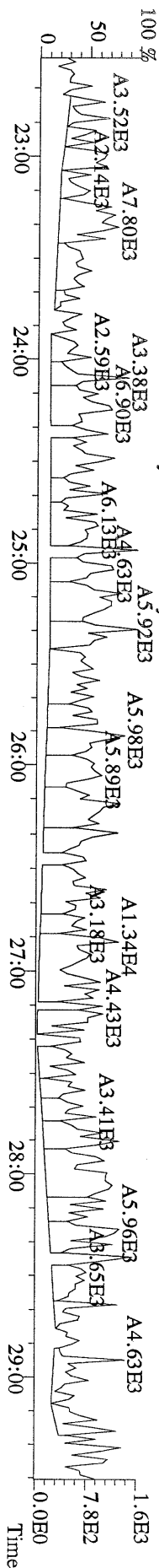
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



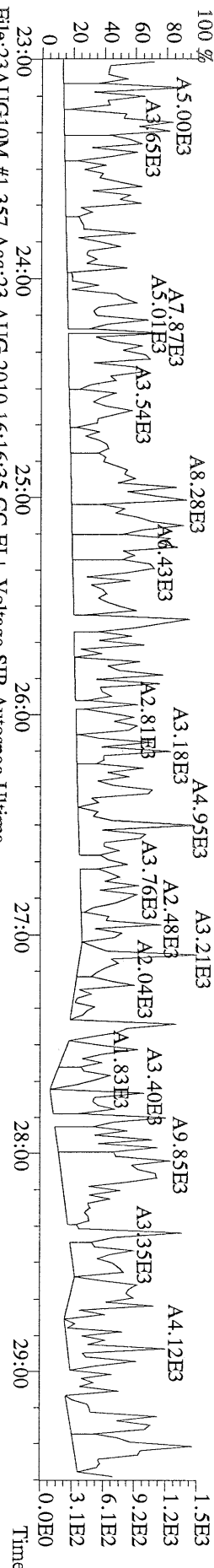
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



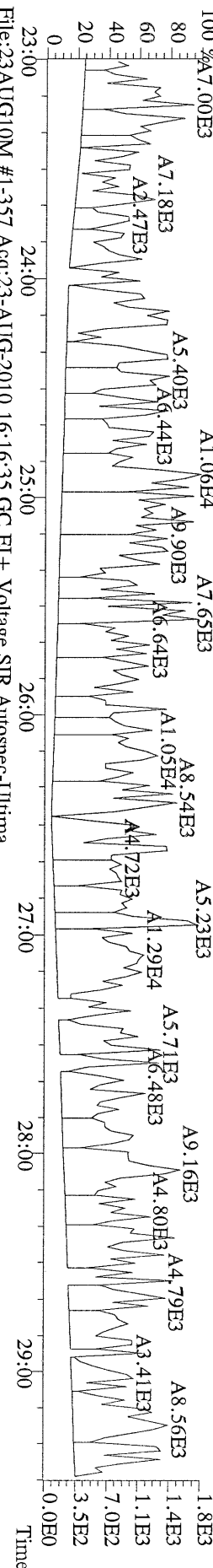
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



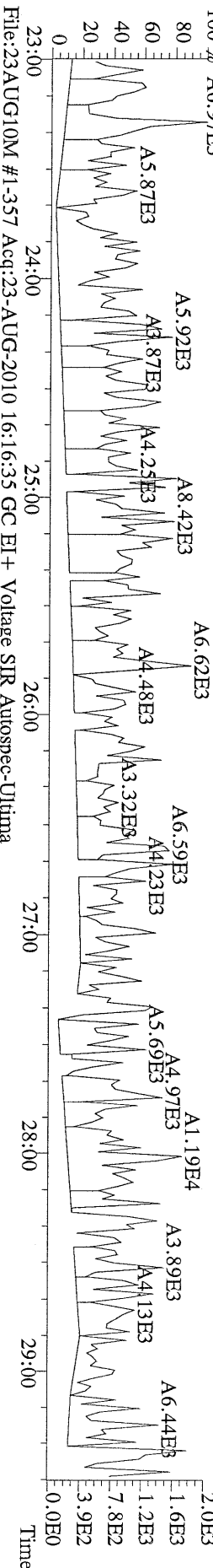
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



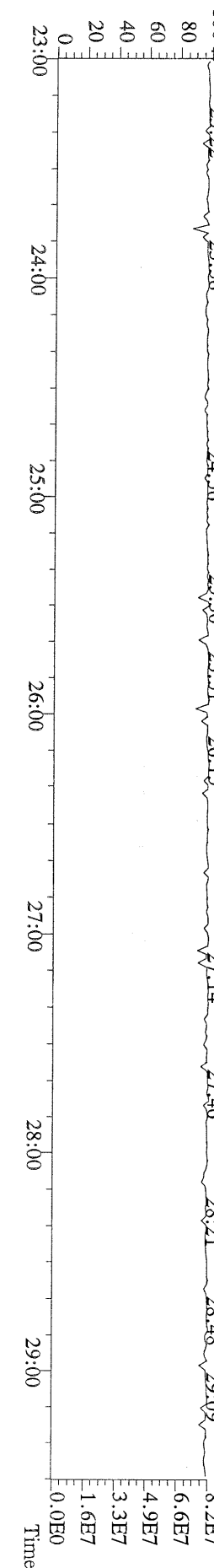
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



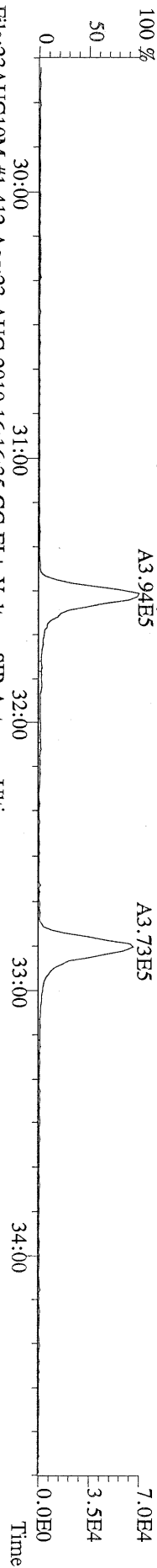
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



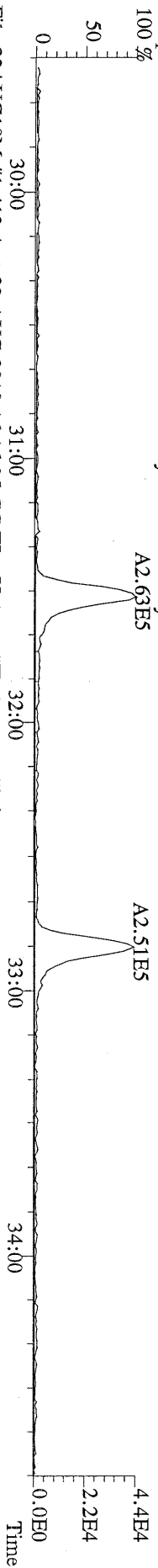
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 330.9792 S:3 Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



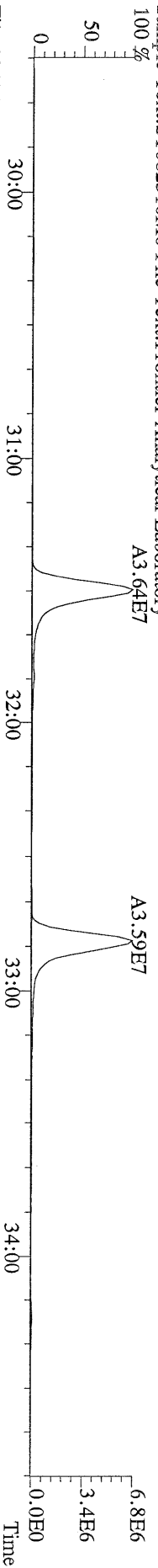
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
339,8597 S:3 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



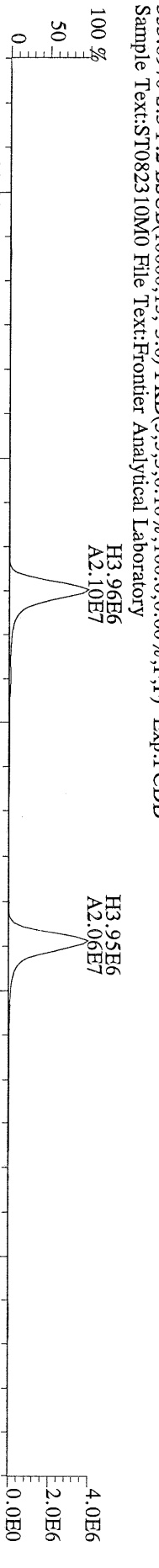
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
341,8568 S:3 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



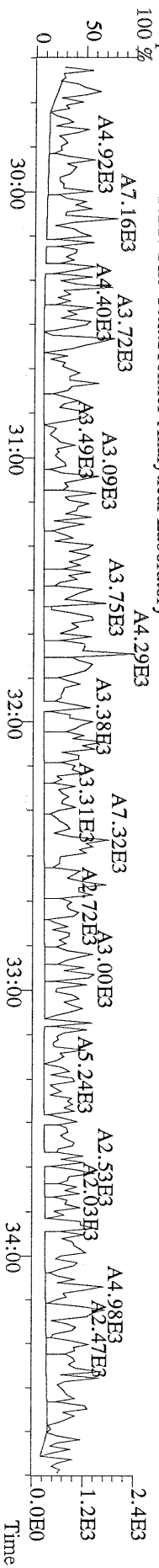
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
351,9000 S:3 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



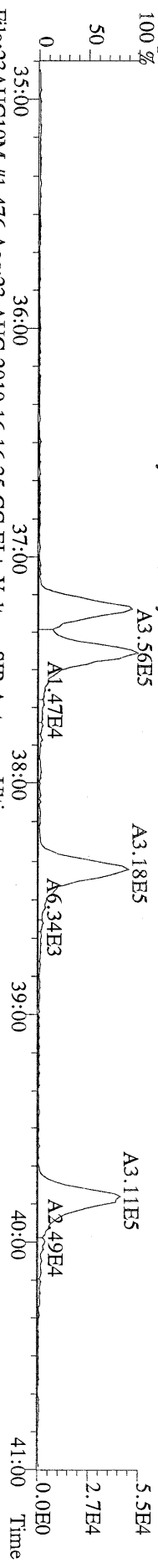
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
353,8970 S:3 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



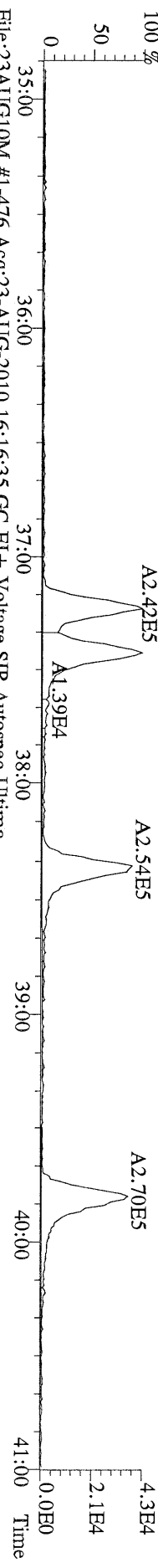
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
409,7974 S:3 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



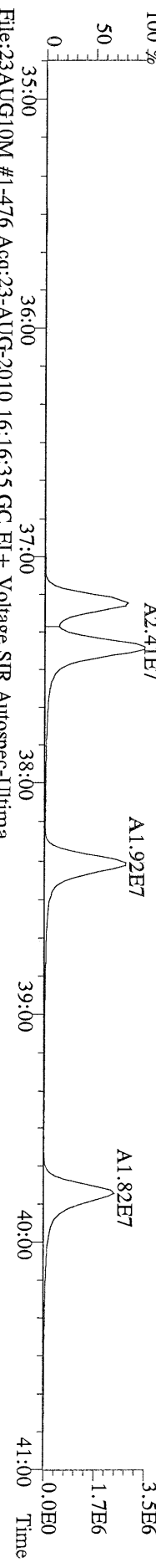
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



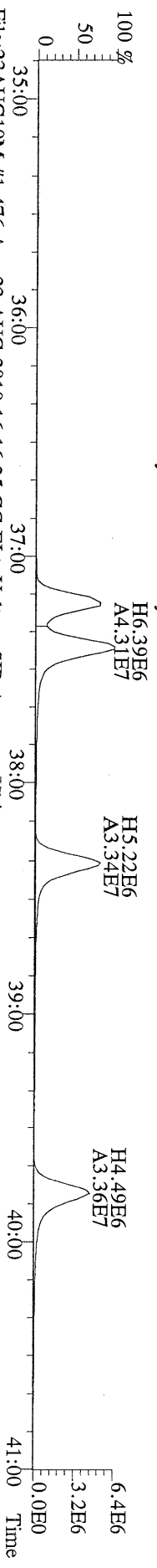
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



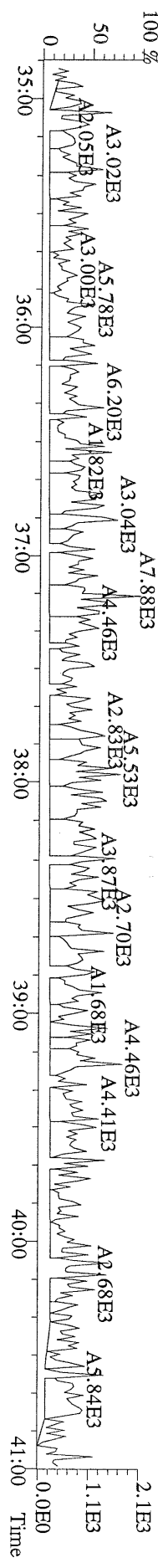
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



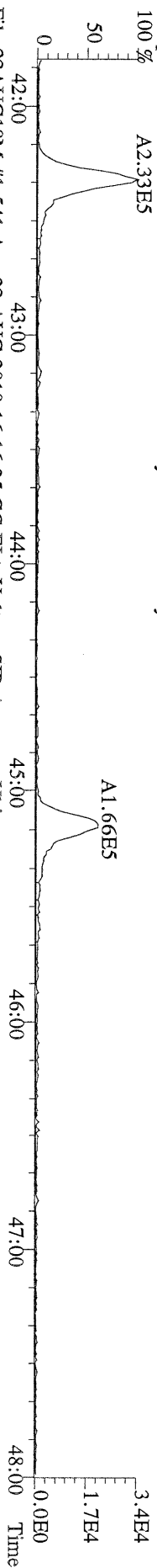
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



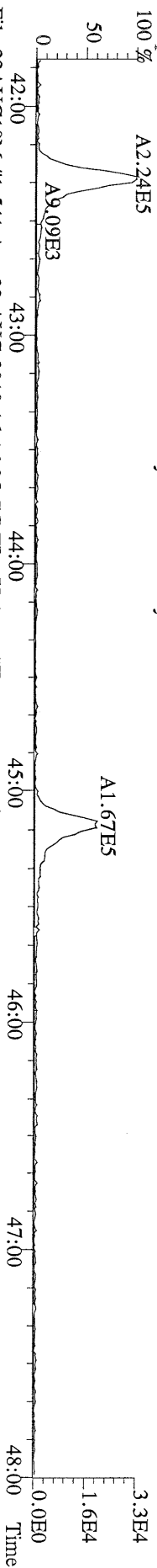
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
 445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



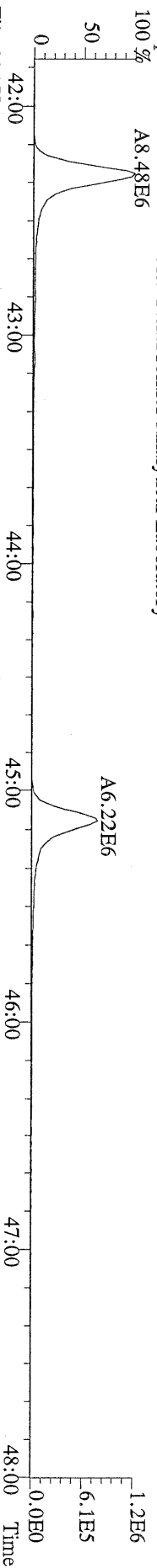
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
407.7818 S:3 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



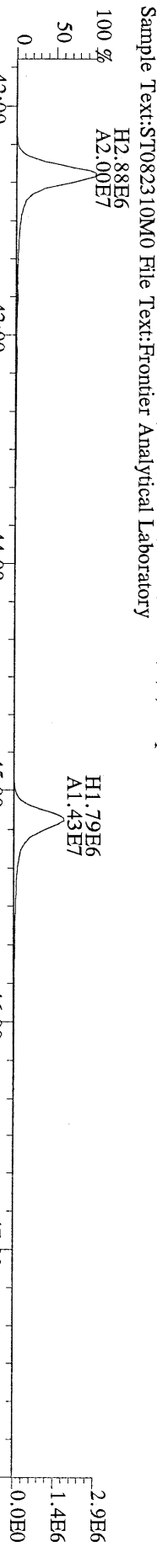
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
409.7788 S:3 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



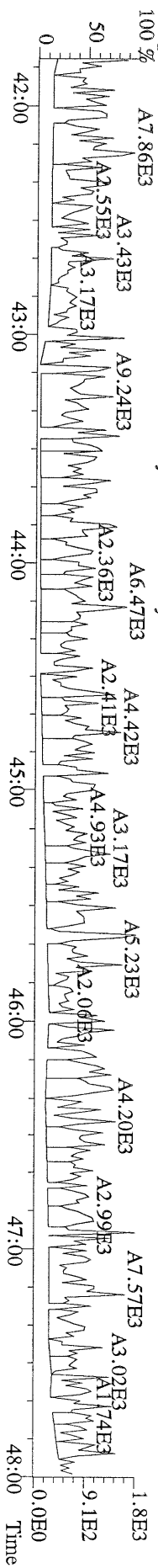
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
417.8253 S:3 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



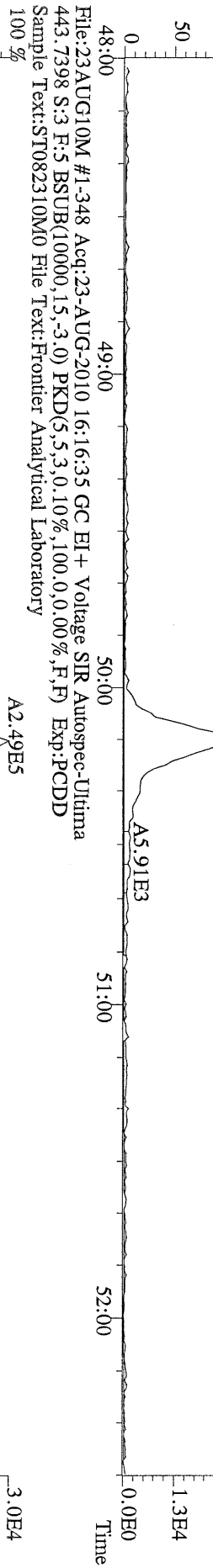
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
419.8220 S:3 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



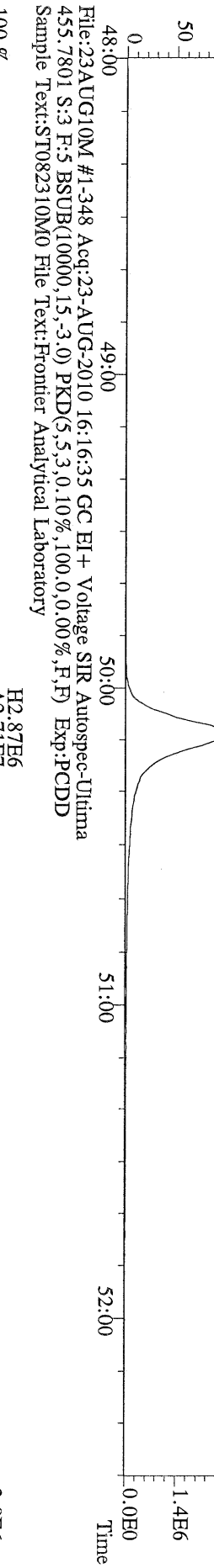
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Utima
479.7165 S:3 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



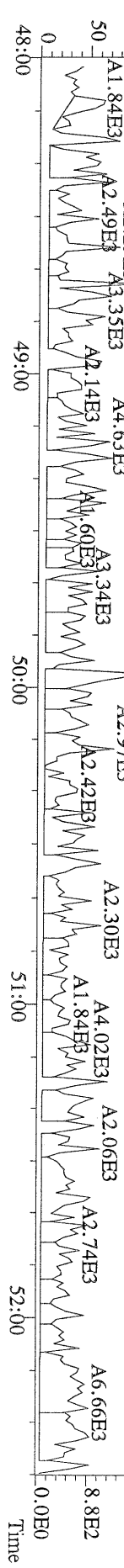
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



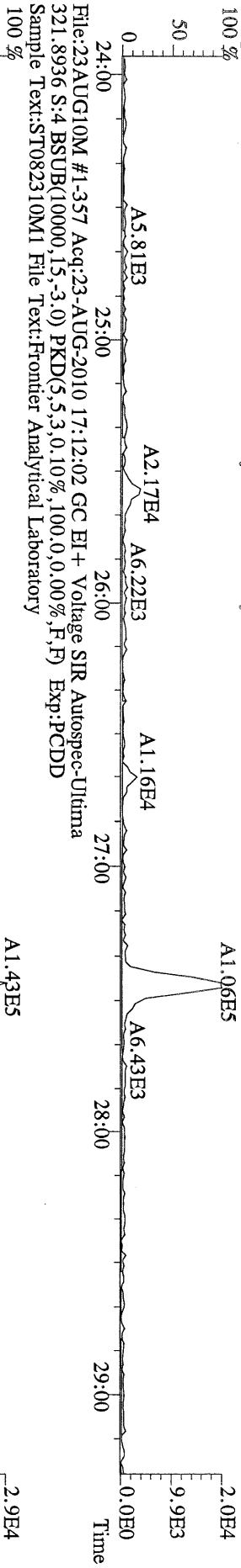
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



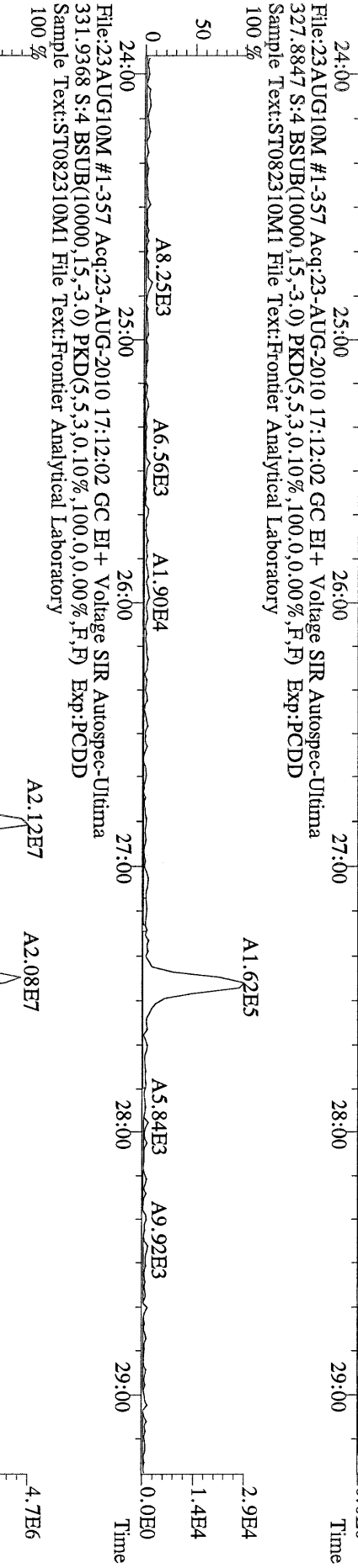
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



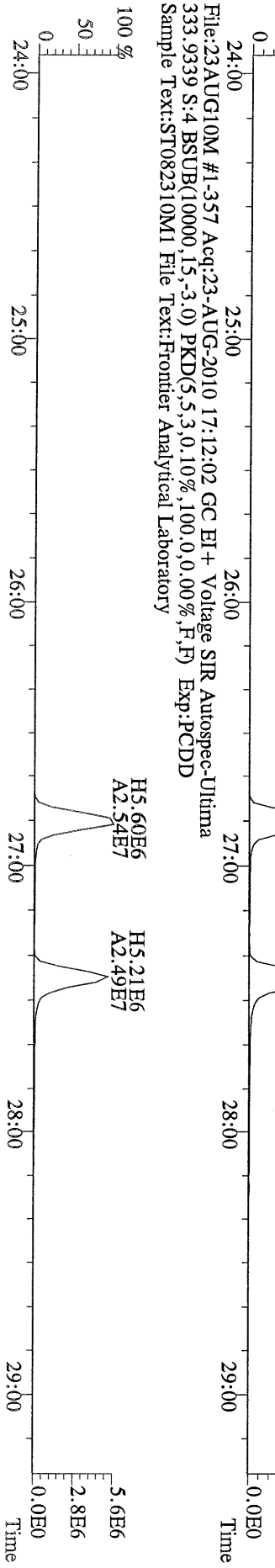
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC BI + Voltage SIR Autospec-Utlima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



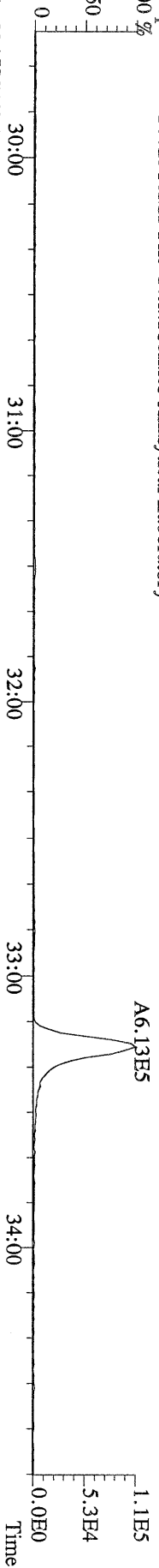
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC BI + Voltage SIR Autospec-Utlima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



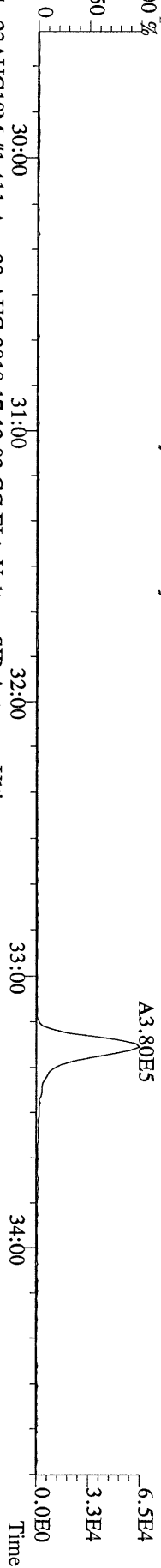
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC BI + Voltage SIR Autospec-Utlima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



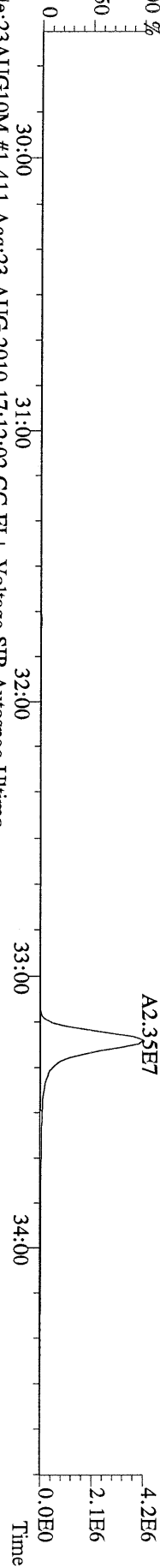
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory
100 %



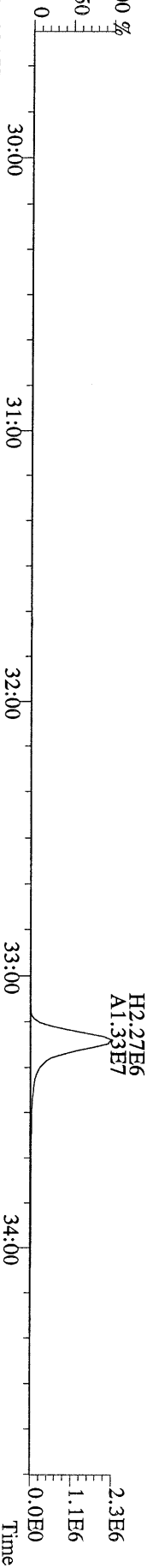
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory
100 %



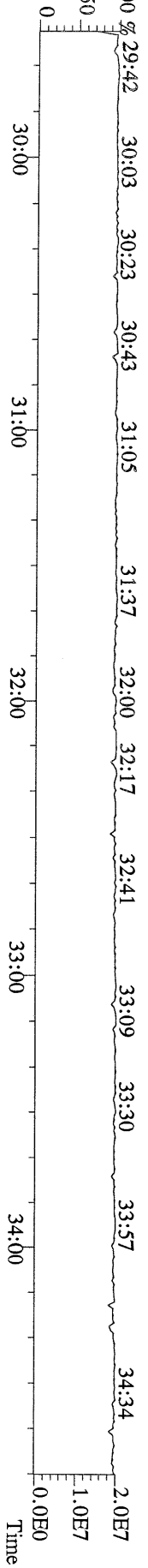
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory
100 %



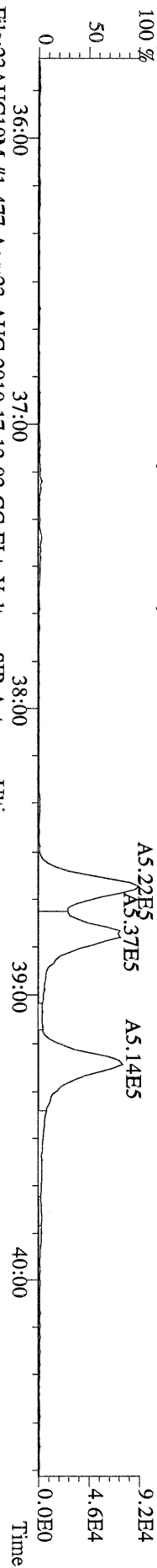
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



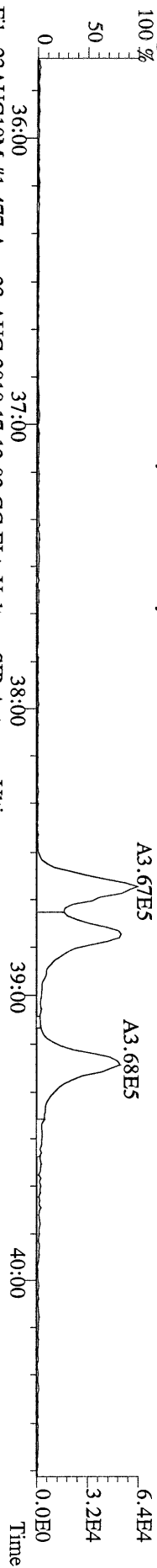
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



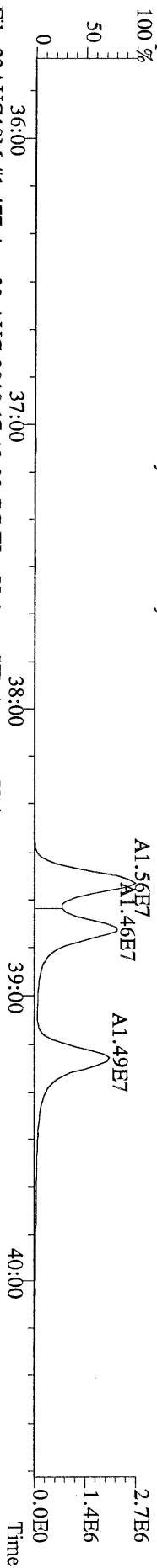
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



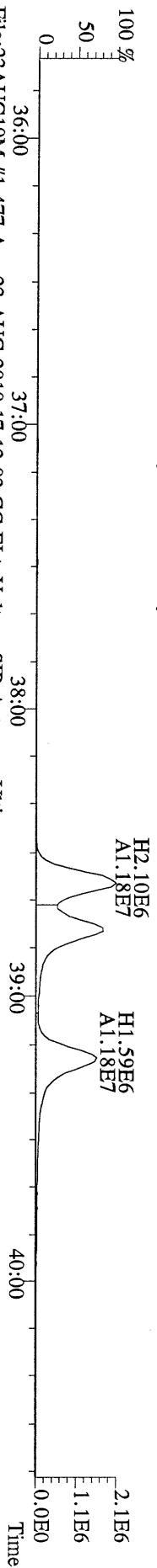
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



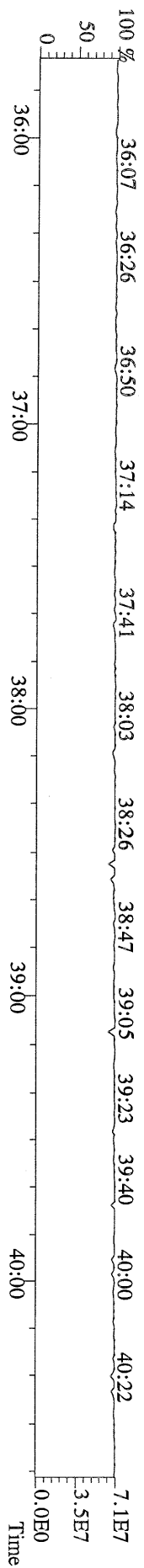
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



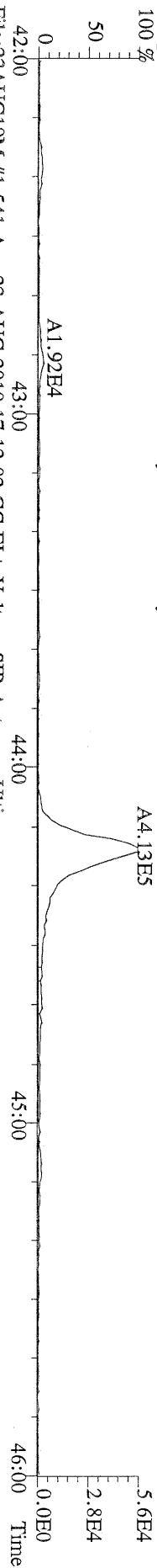
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



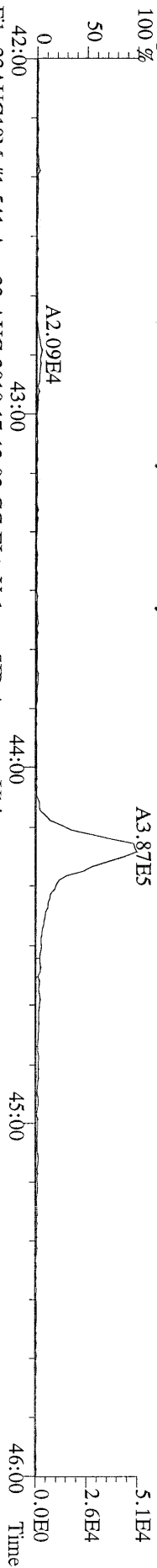
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



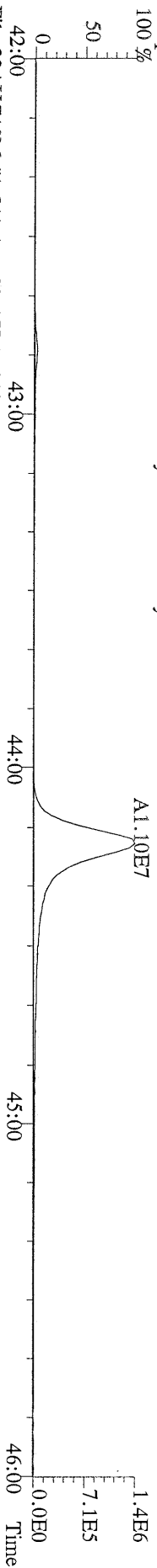
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory
100 %



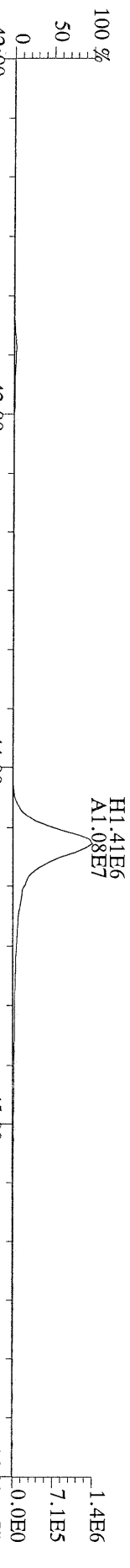
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory
100 %



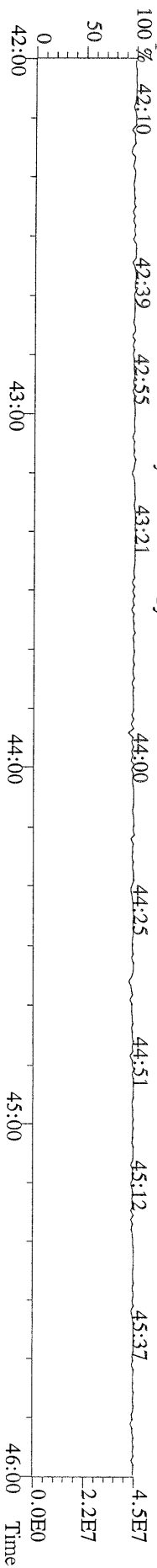
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory
100 %



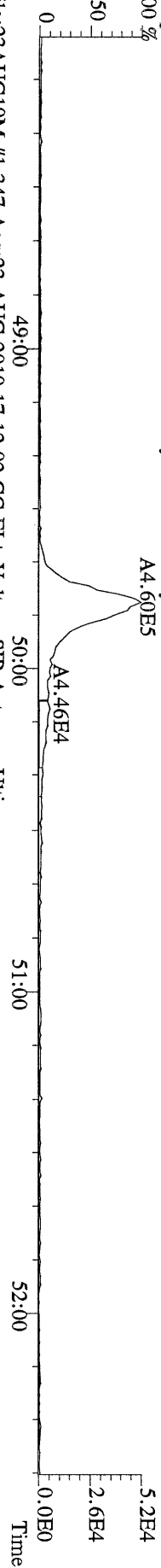
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



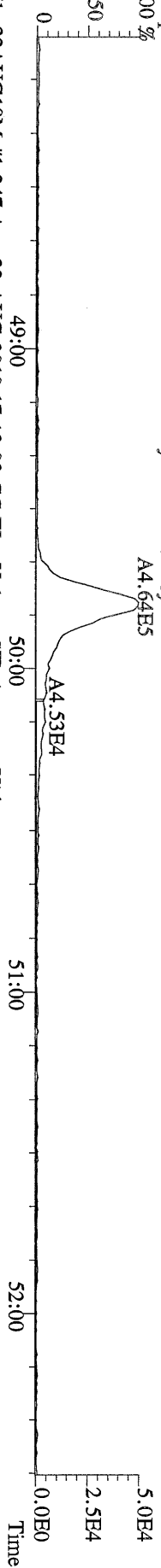
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory
100 %



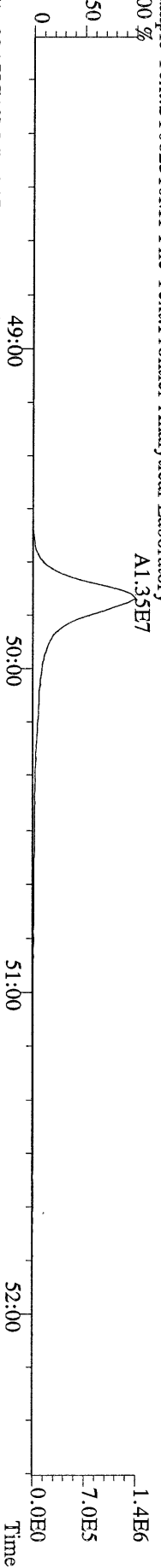
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



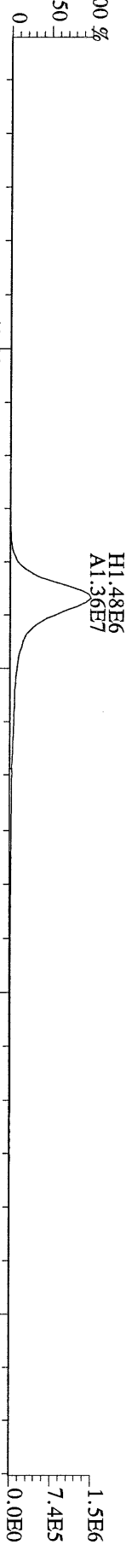
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



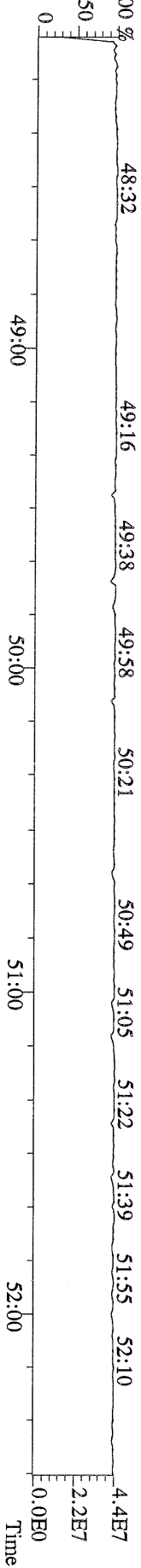
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
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



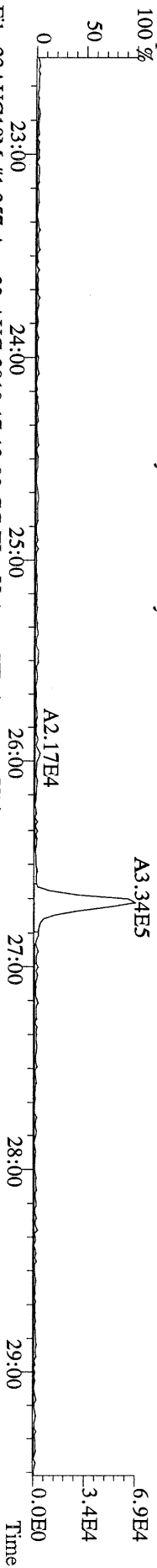
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



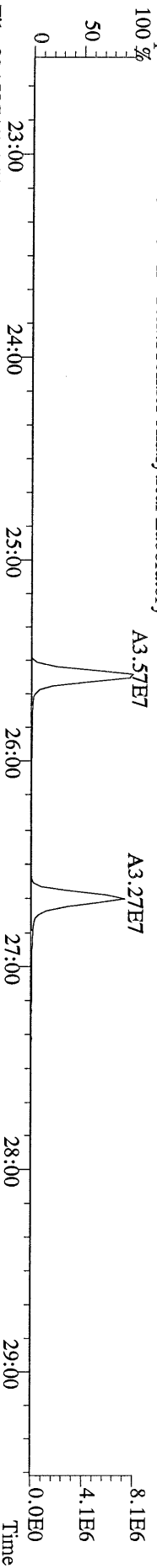
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



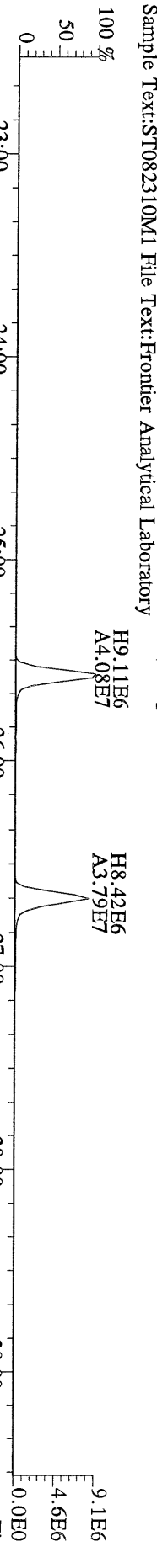
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



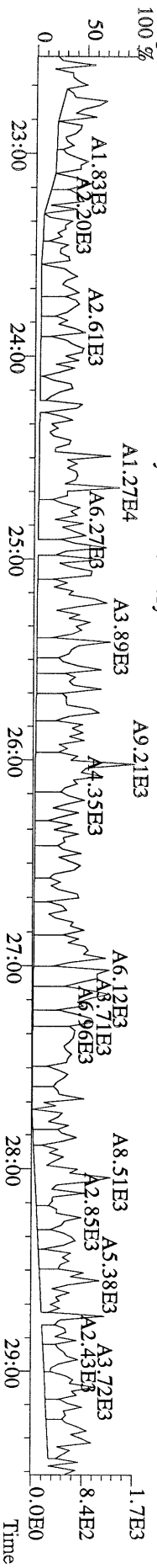
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



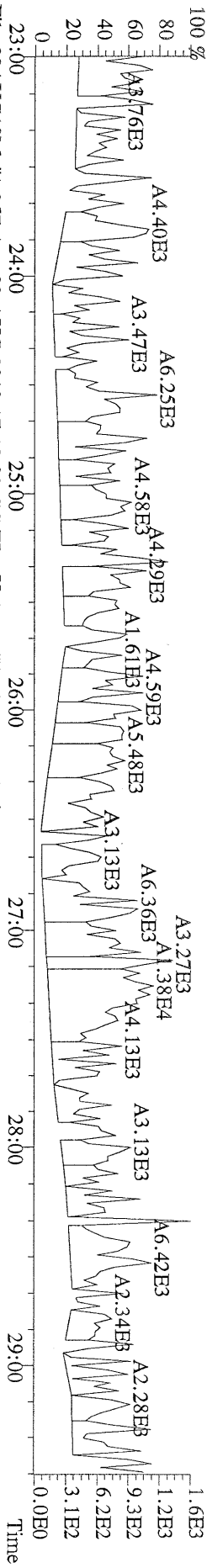
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



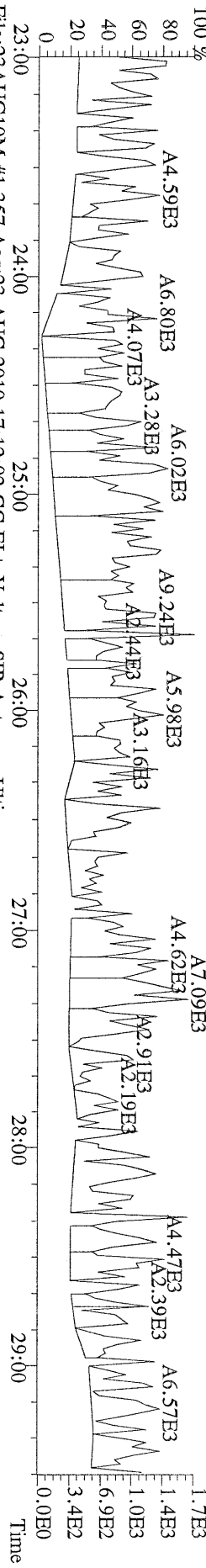
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



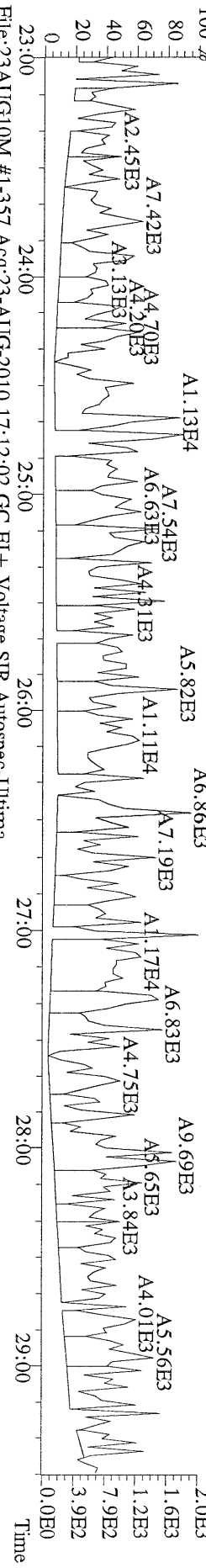
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



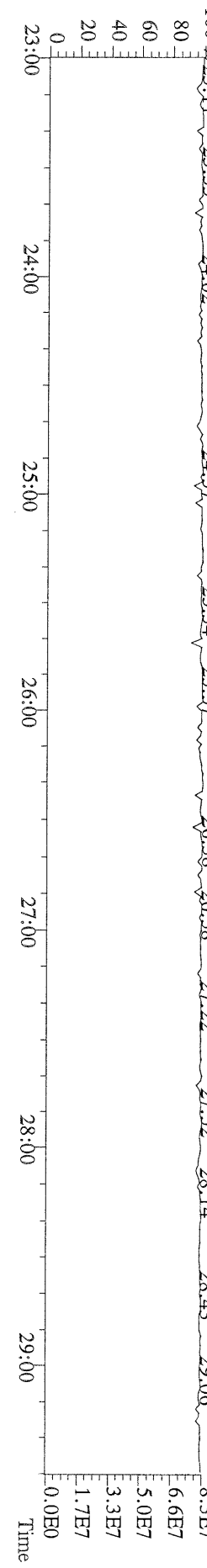
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



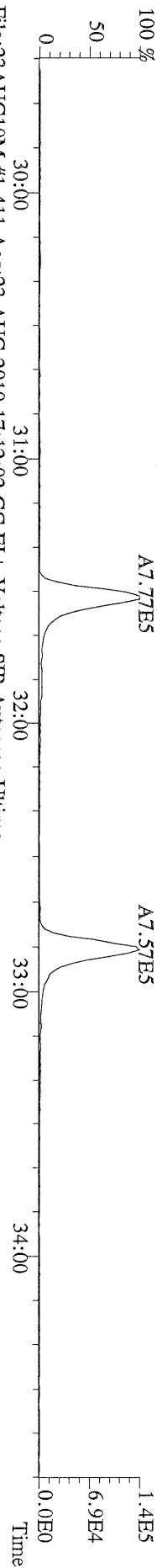
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



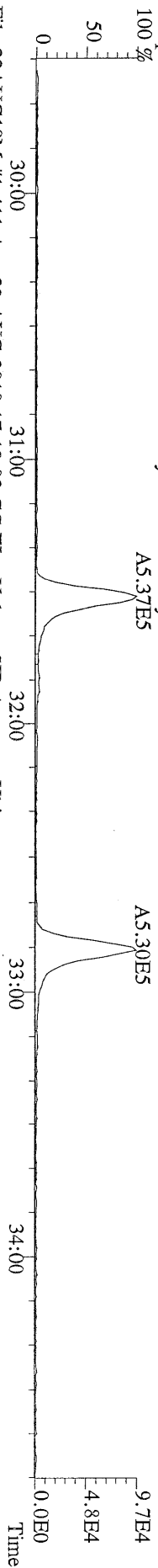
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 330.9792 S:4 Exp:PCDD
 Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



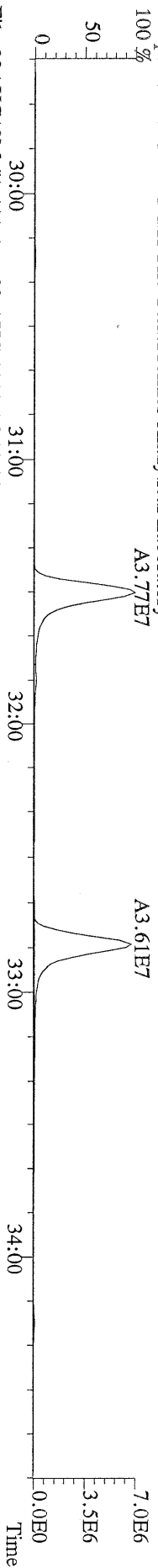
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
339,8597 S:4 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



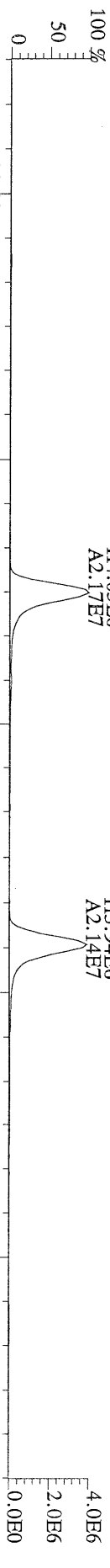
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
341,8568 S:4 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



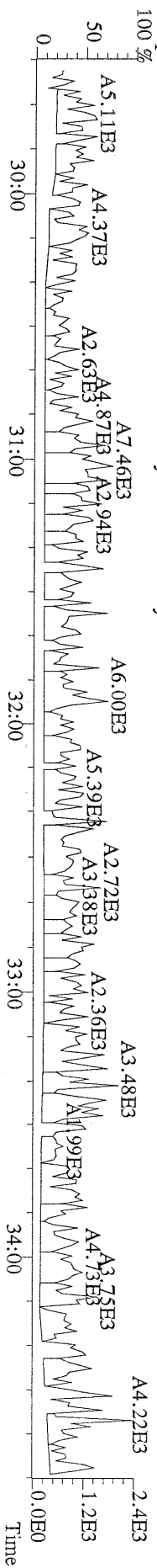
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
351,9000 S:4 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



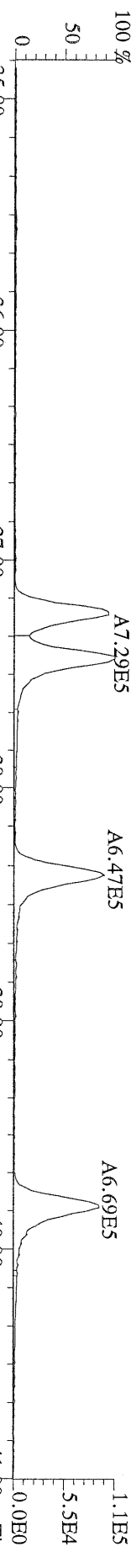
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
353,8970 S:4 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



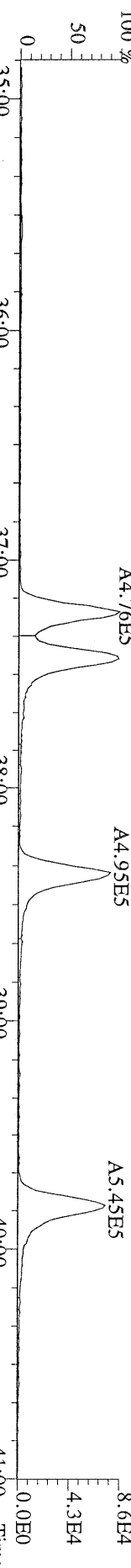
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
409,7974 S:4 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



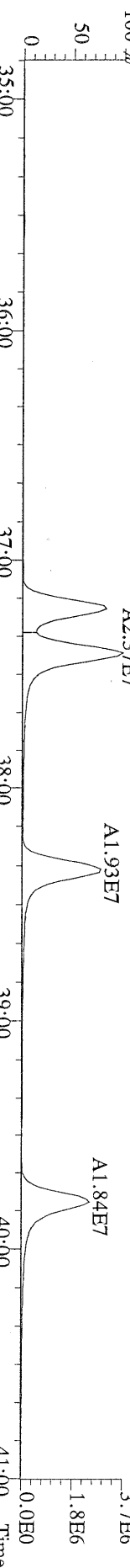
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M1 File Text:Fronier Analytical Laboratory



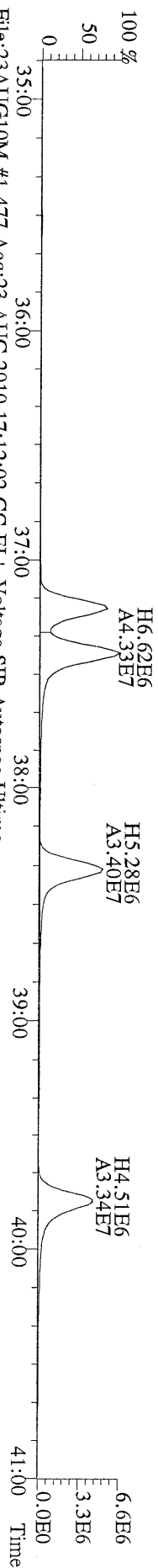
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M1 File Text:Fronier Analytical Laboratory



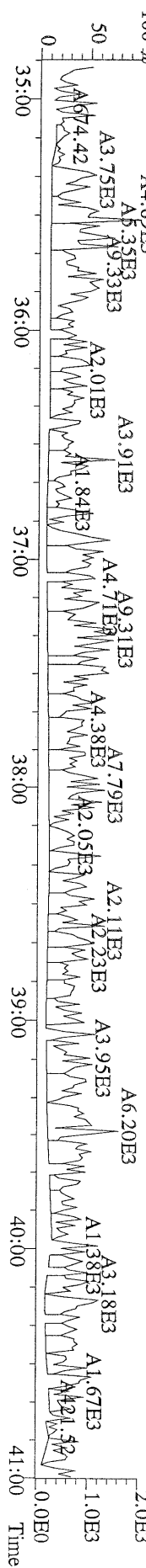
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M1 File Text:Fronier Analytical Laboratory



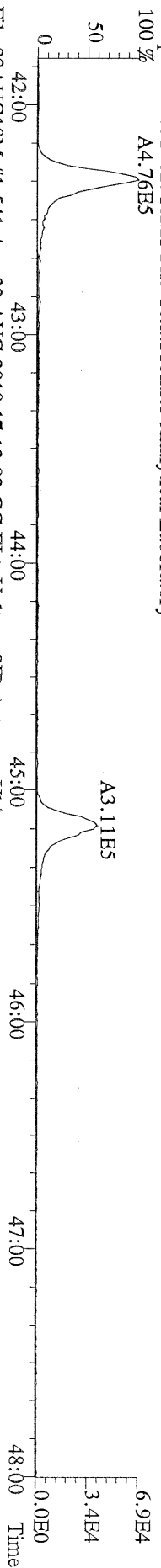
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M1 File Text:Fronier Analytical Laboratory



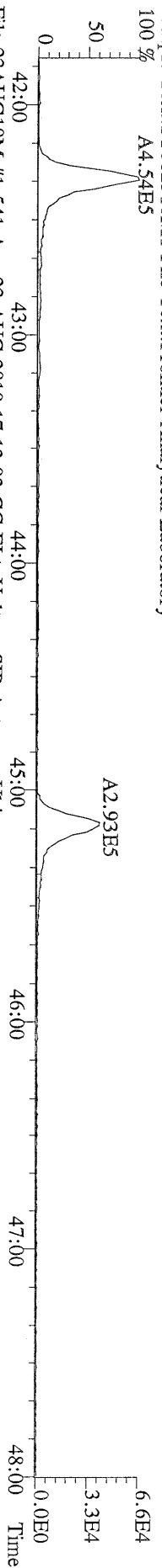
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
 445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M1 File Text:Fronier Analytical Laboratory



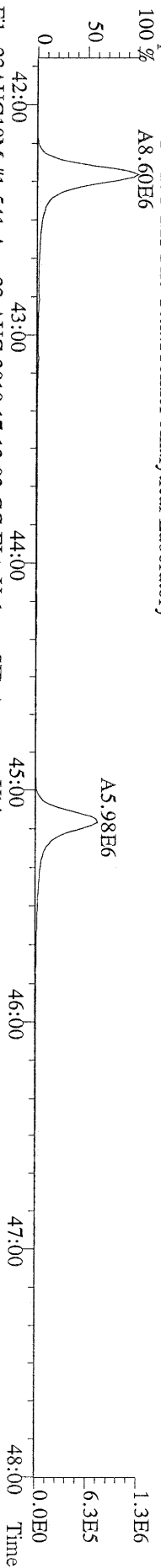
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



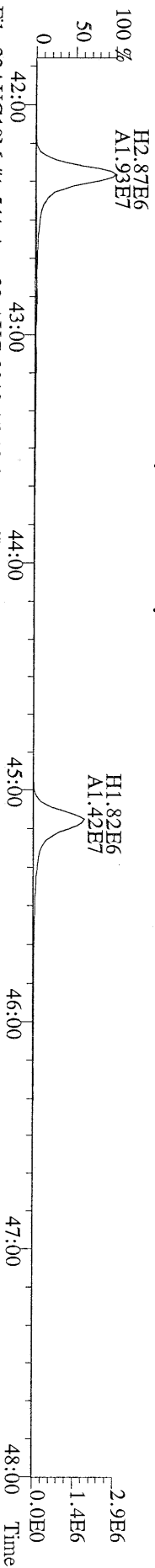
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



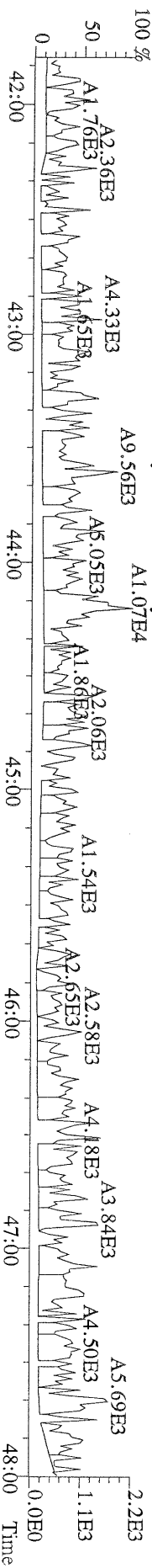
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



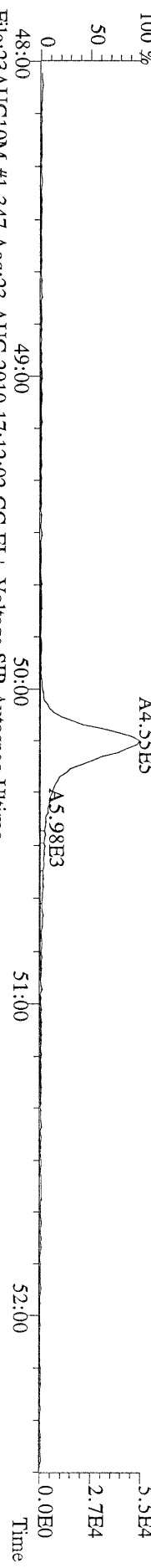
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



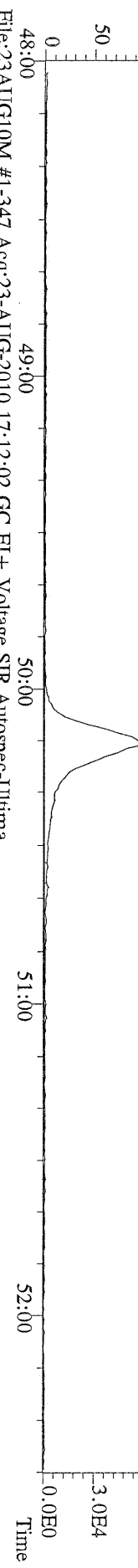
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Utima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



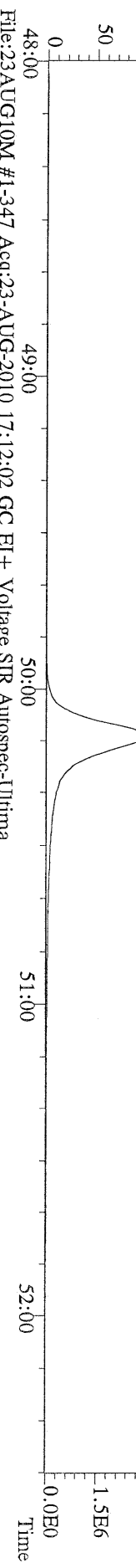
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



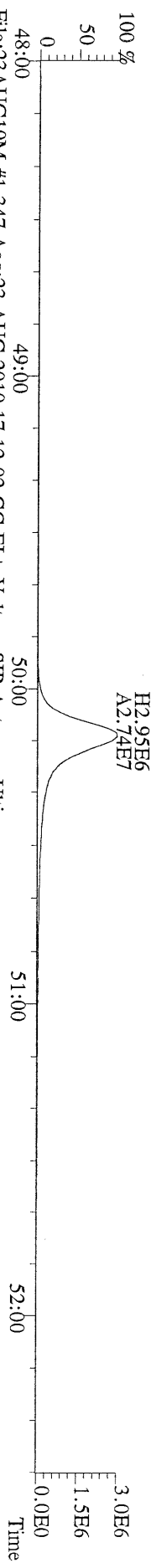
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



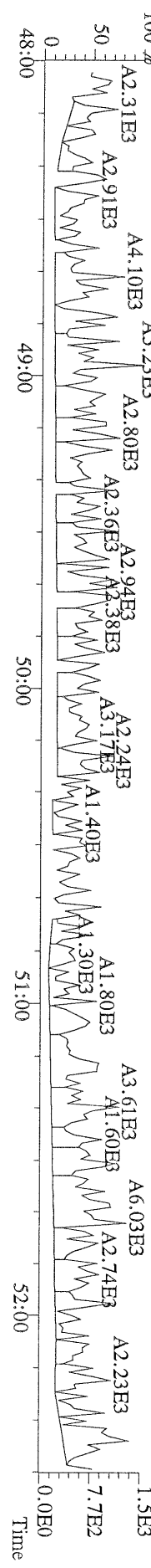
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



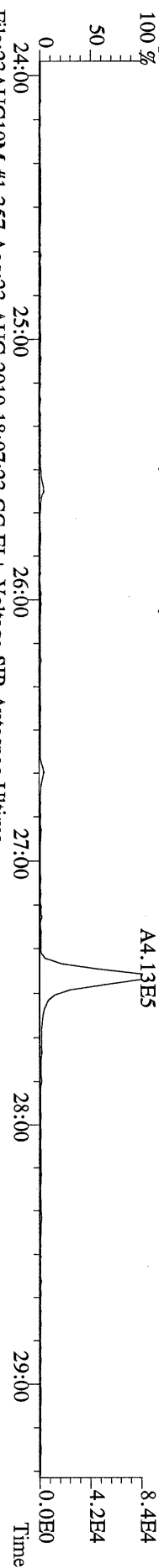
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



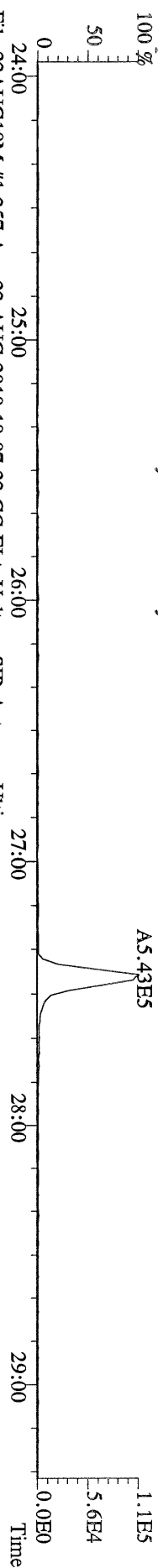
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



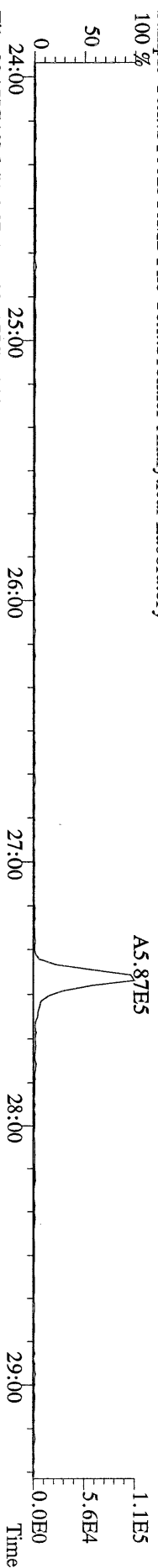
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI + Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



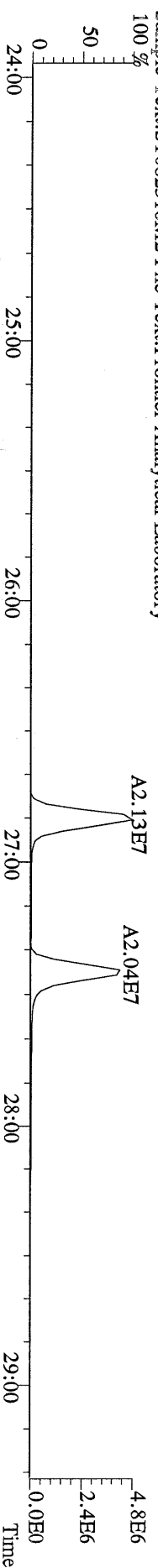
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI + Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



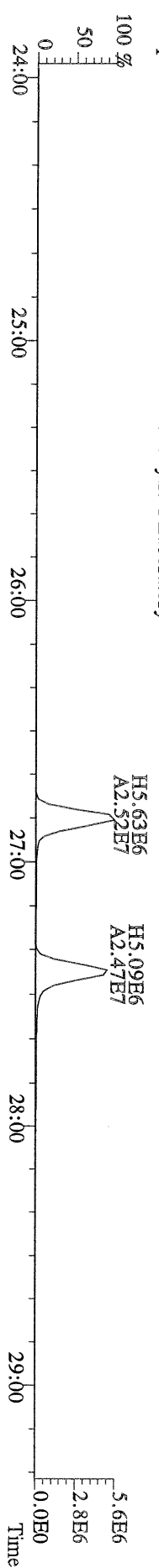
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI + Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



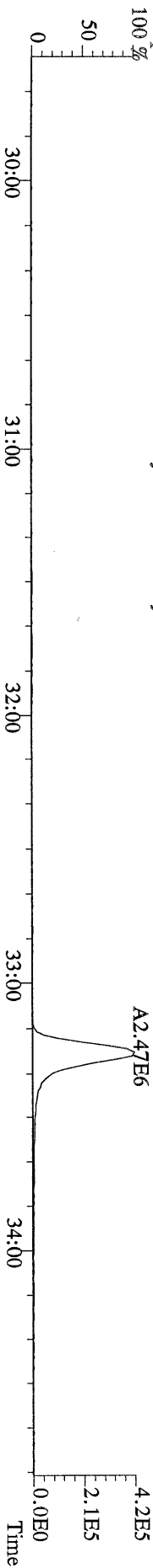
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI + Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



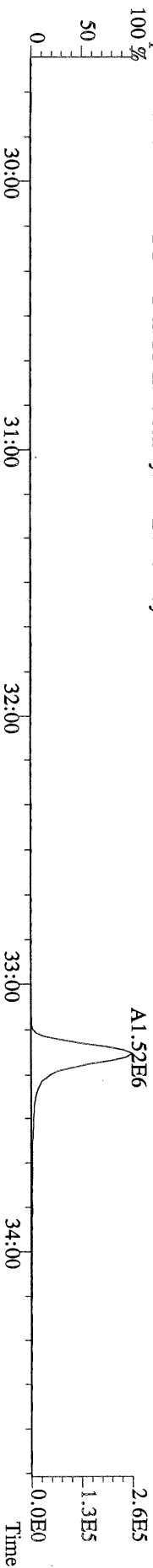
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI + Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



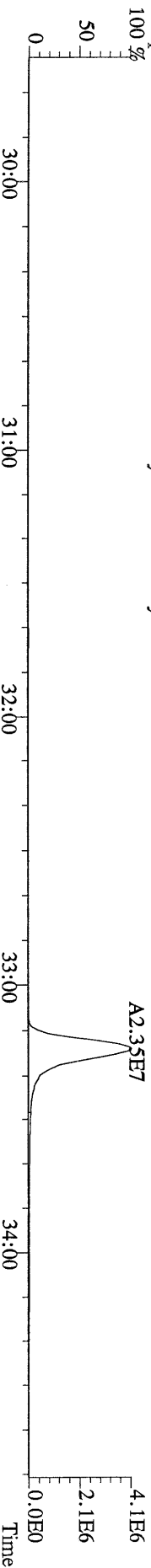
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
355,8546 S:5 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 %



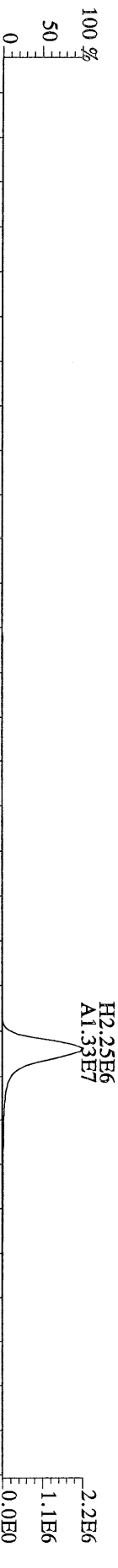
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
357,8517 S:5 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 %



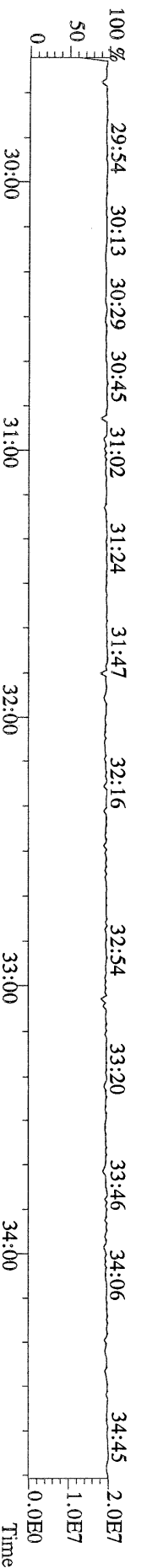
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
367,8949 S:5 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 %



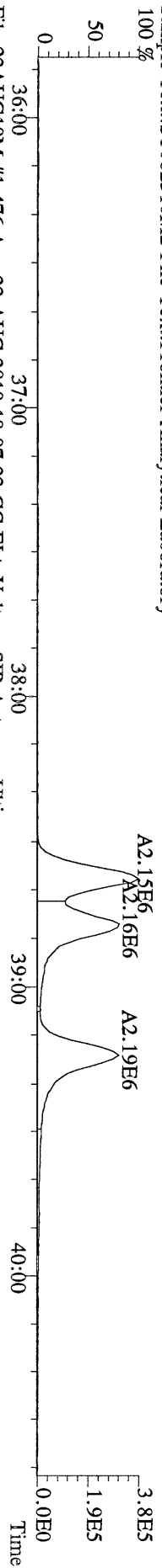
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
369,8919 S:5 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



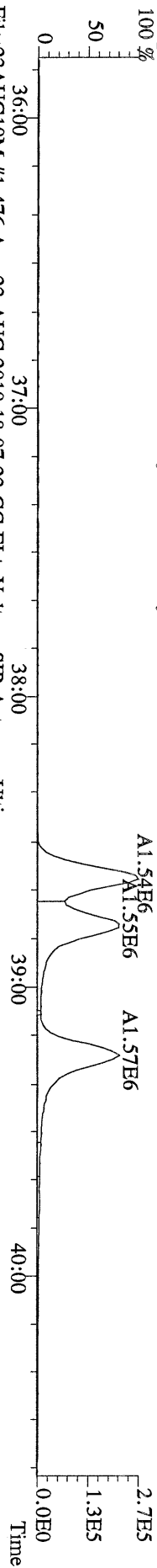
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
366,9792 S:5 F:2 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



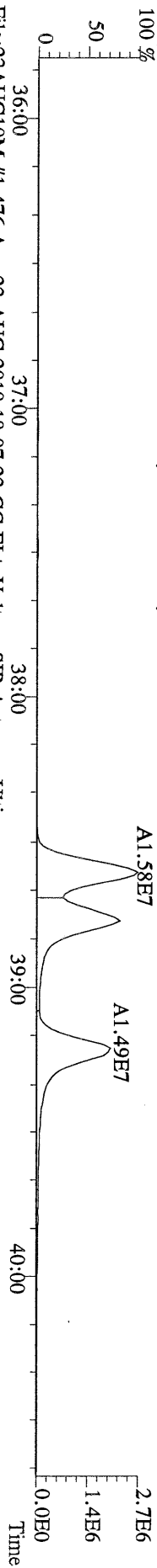
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



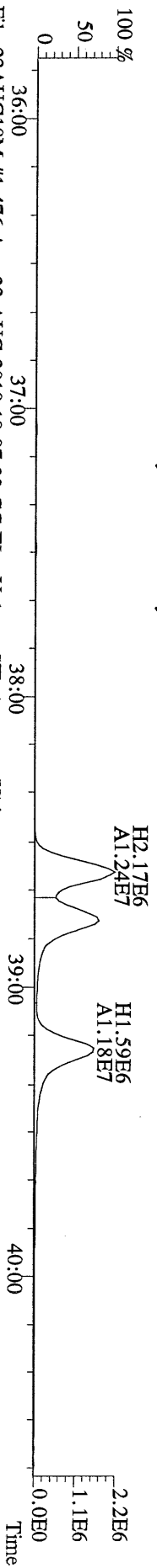
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



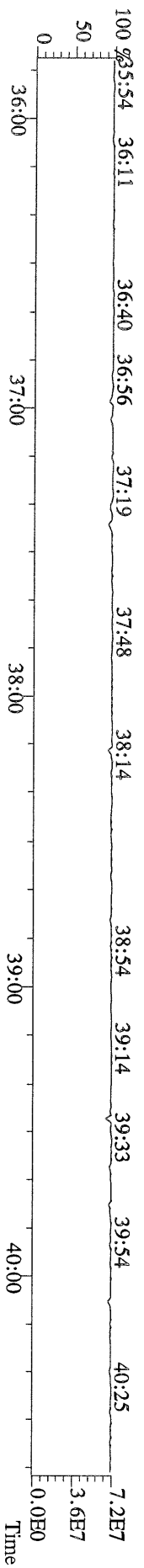
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



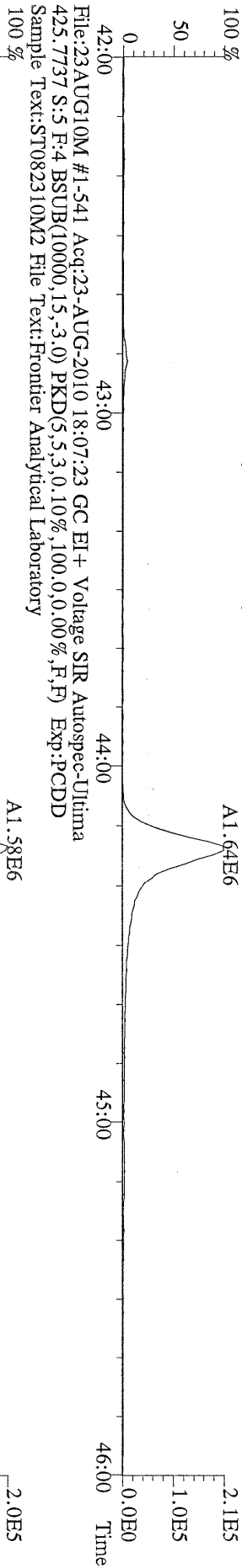
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



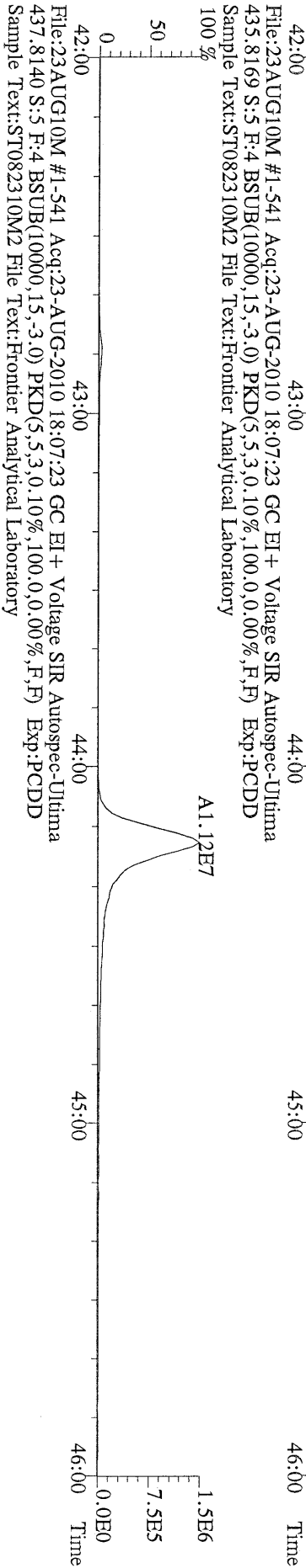
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



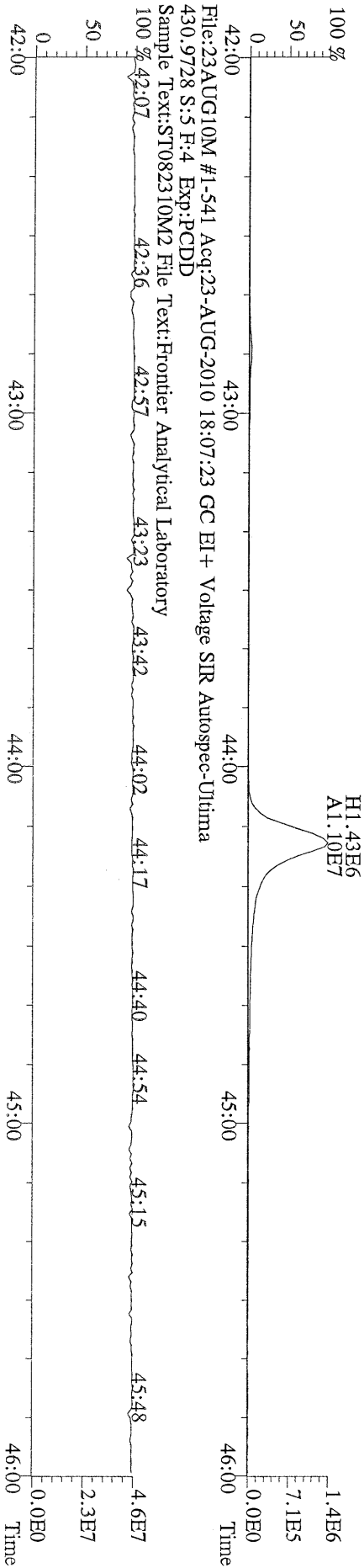
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utlima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 %



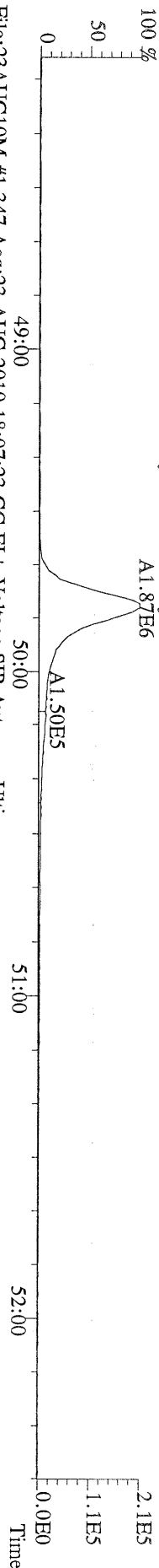
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utlima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 %



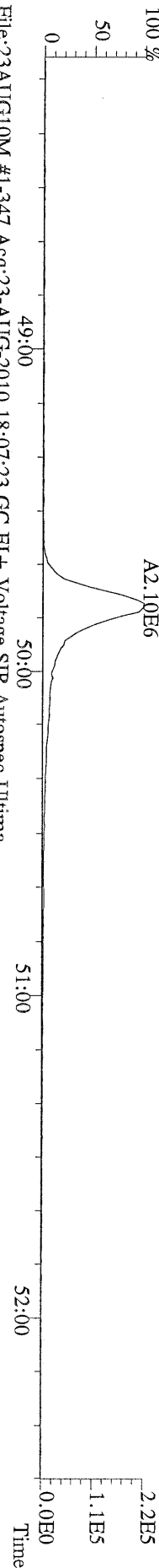
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utlima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 %



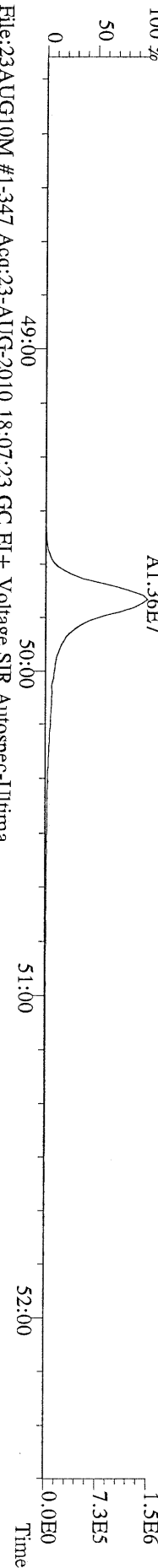
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



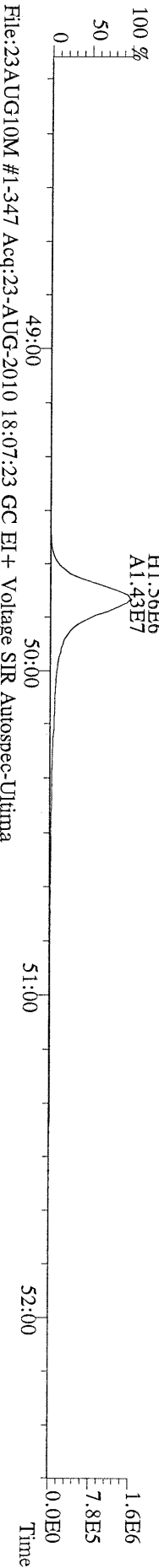
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



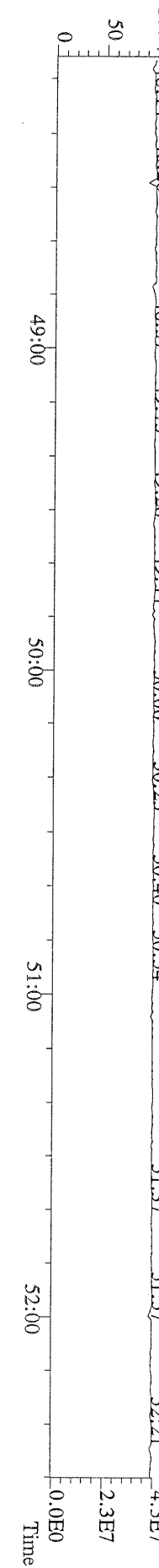
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



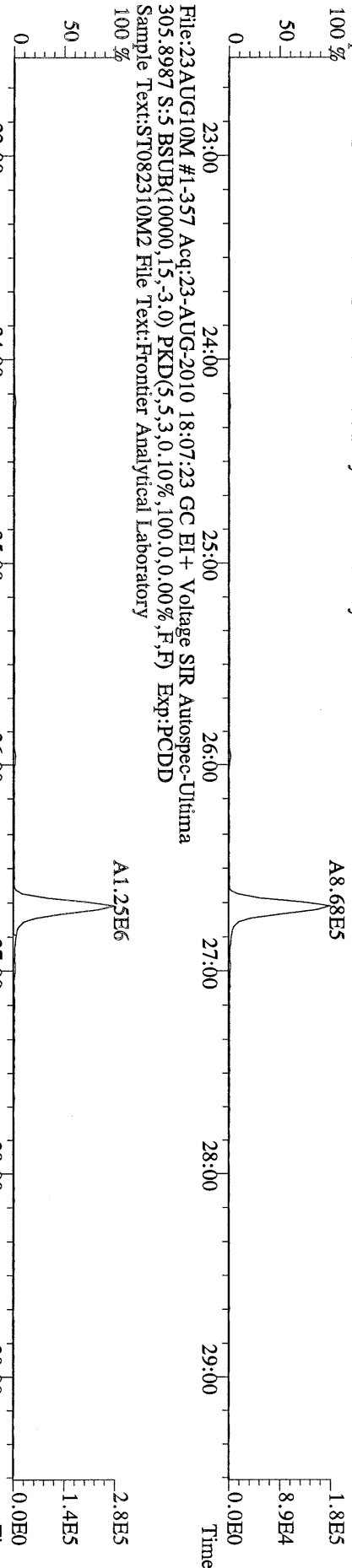
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



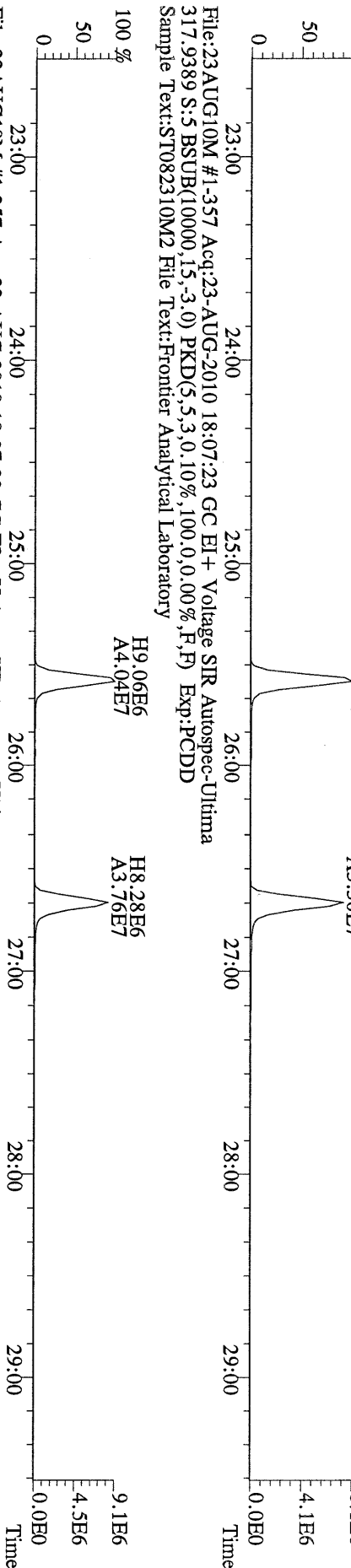
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



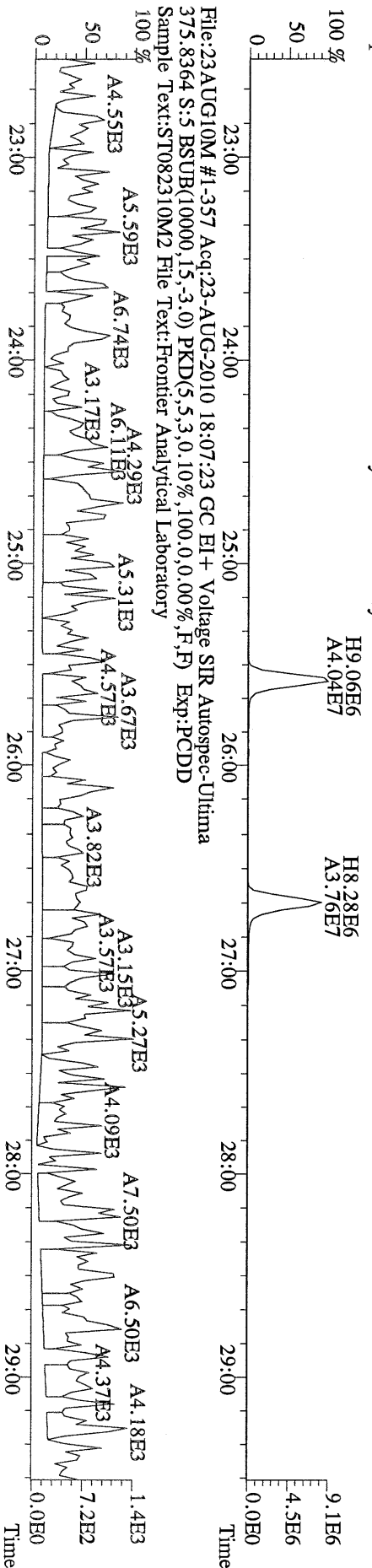
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
303.9016 S:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



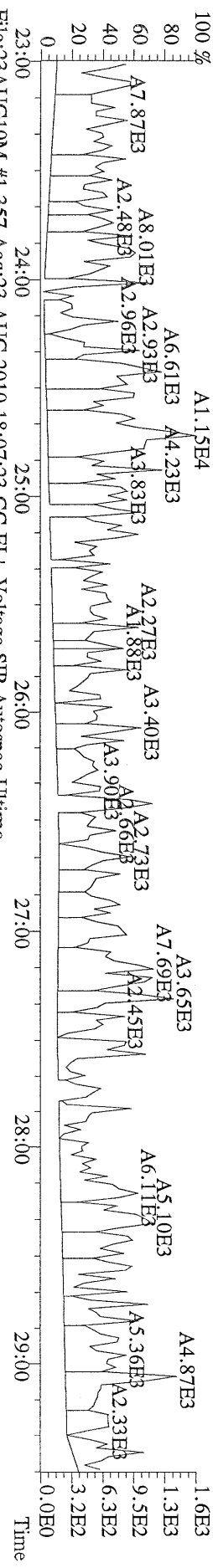
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
315.9419 S:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



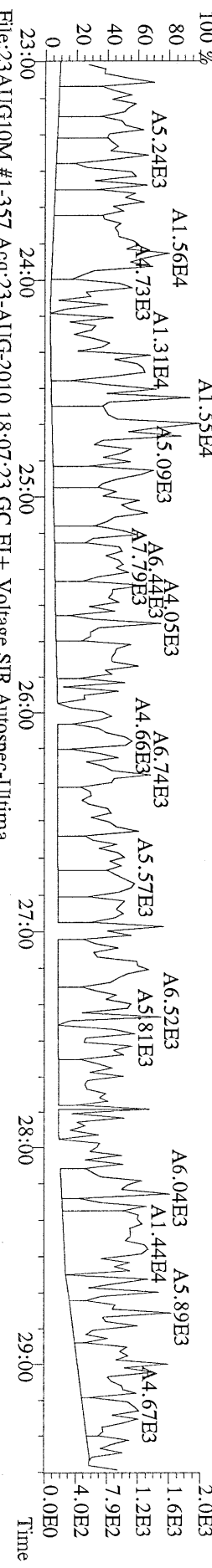
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
317.9389 S:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



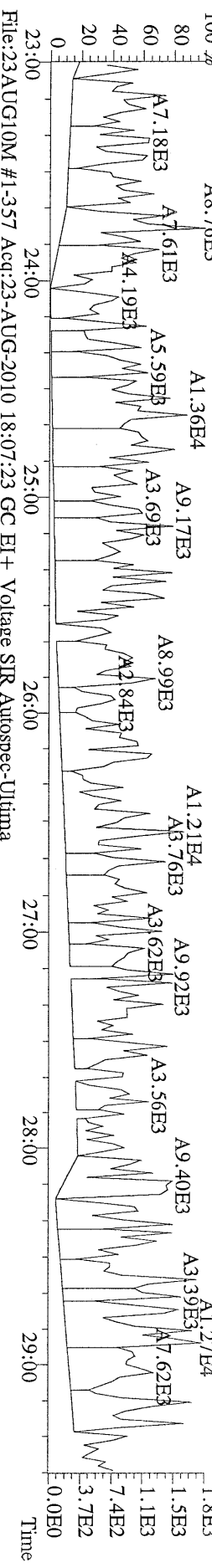
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
 339.8597 S:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



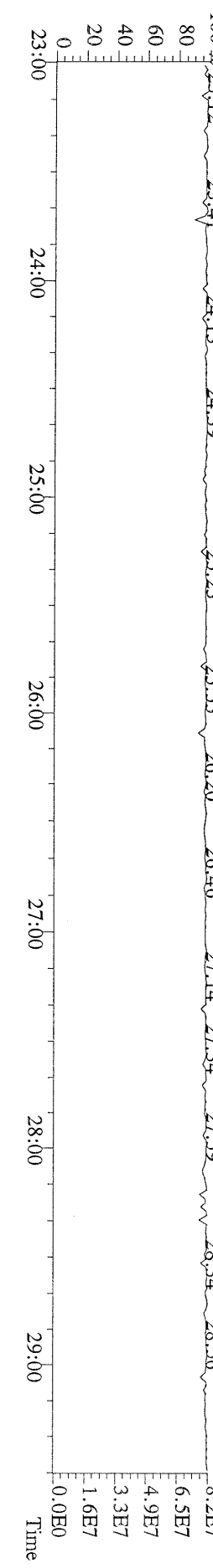
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
 341.8568 S:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



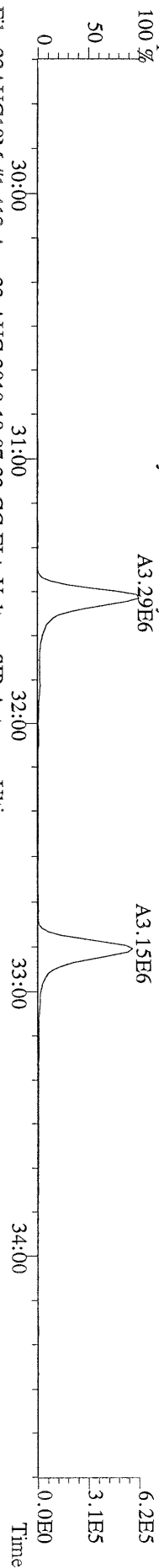
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
 409.7974 S:5 BSUB(10000,15,-3.0) PKD(5.5,3.0,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



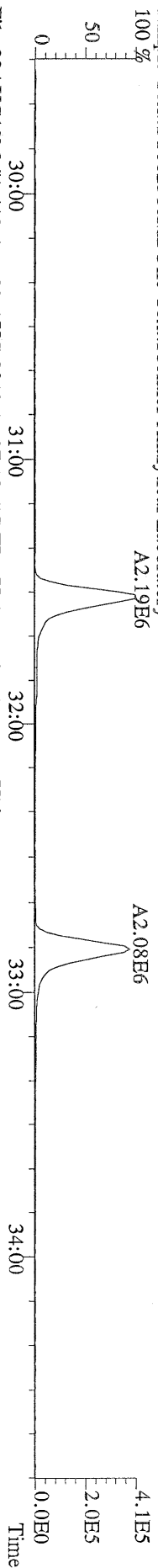
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
 330.9792 S:5 Exp:PCDD
 Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



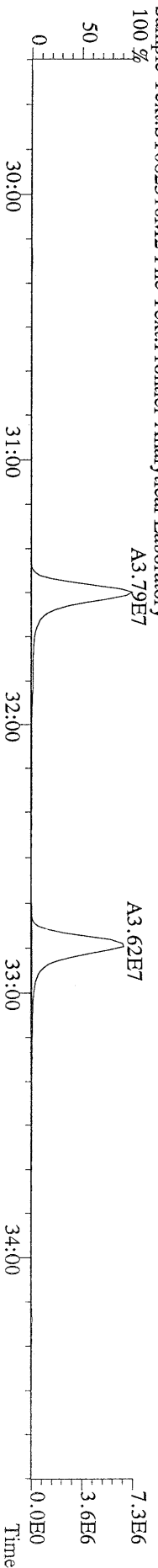
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
339,8597 S:5 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



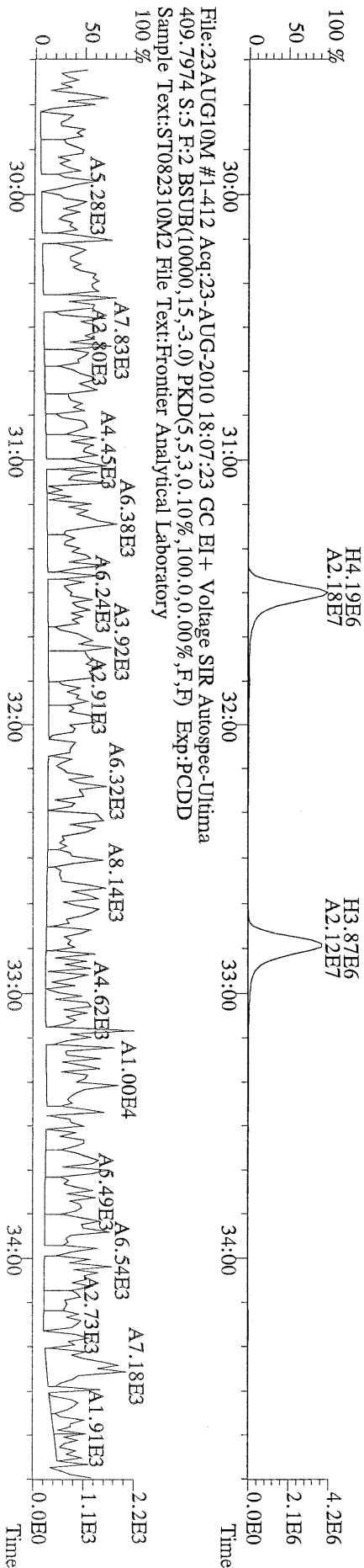
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
341,8568 S:5 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



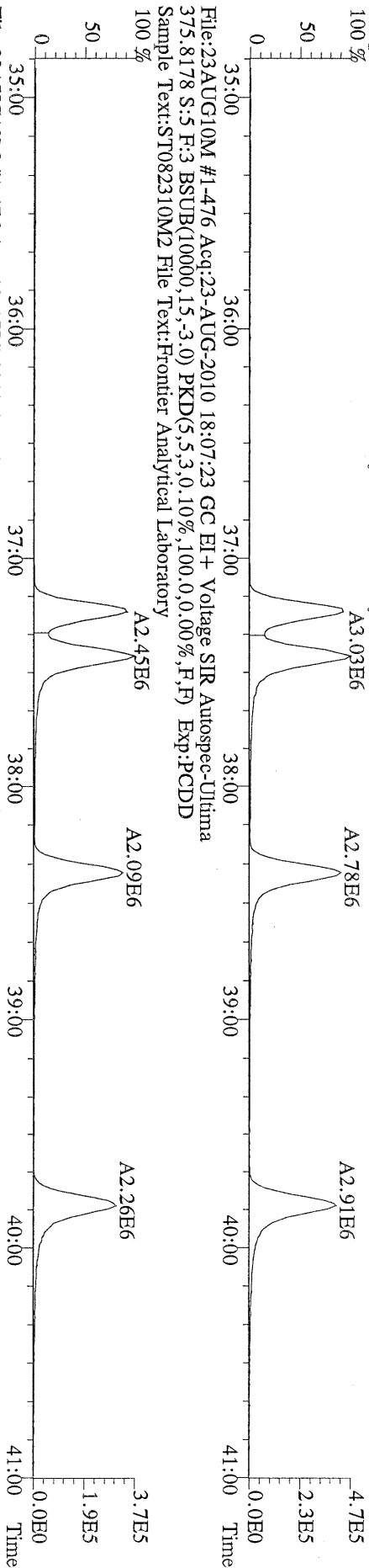
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
351,9000 S:5 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



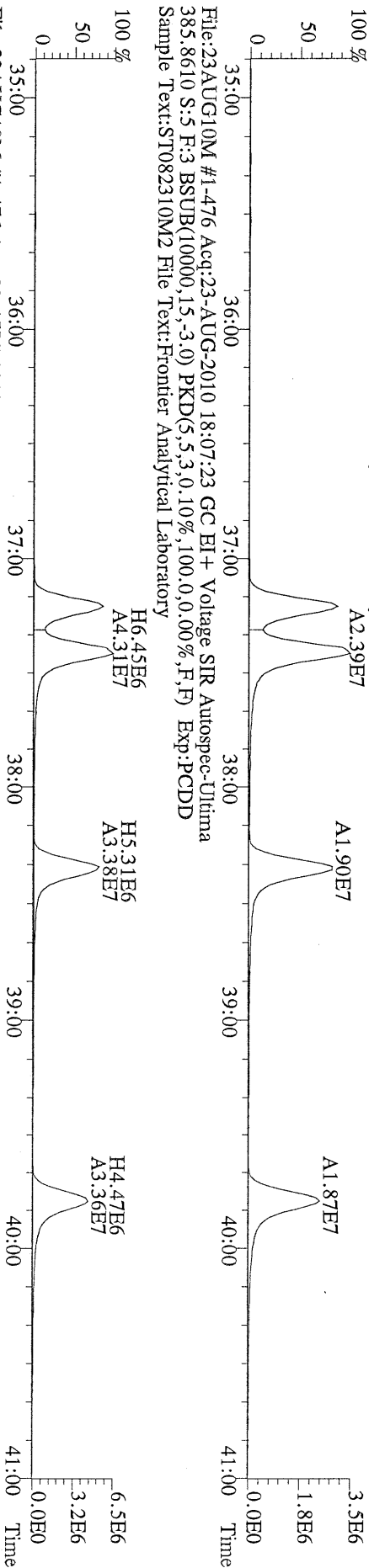
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
409,7974 S:5 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



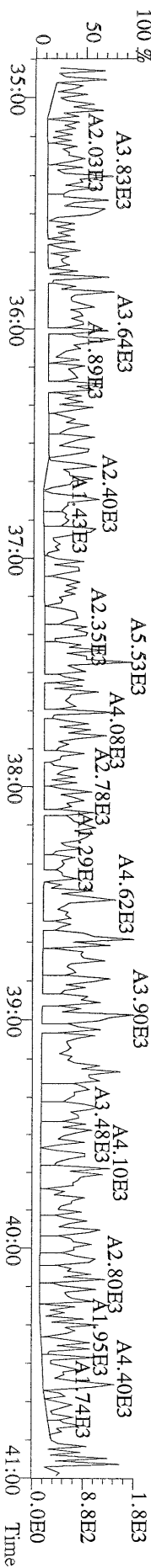
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
373.8207 S:5 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



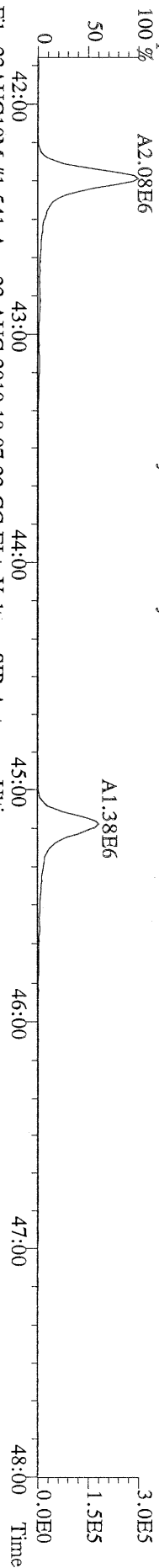
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
383.8639 S:5 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



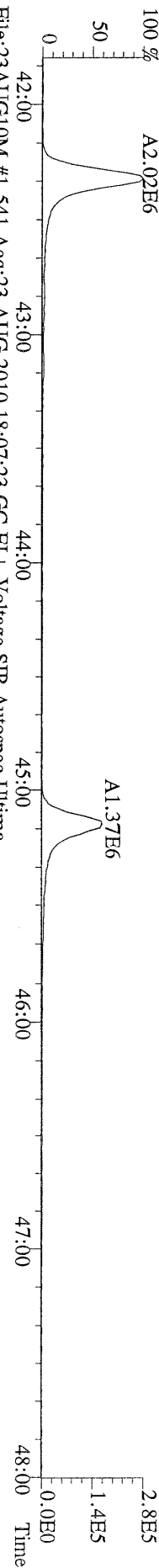
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
445.7555 S:5 F:3 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



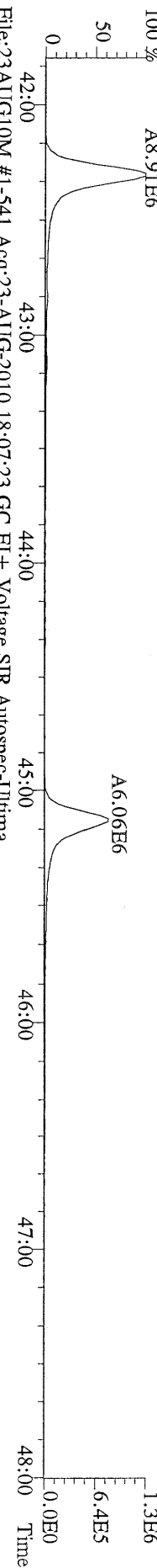
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 % A2.08E6



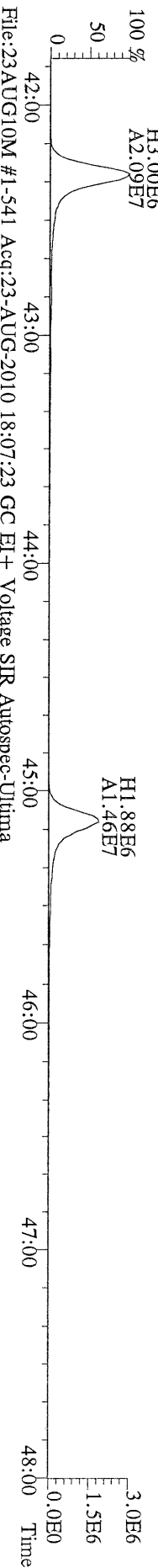
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 % A2.02E6



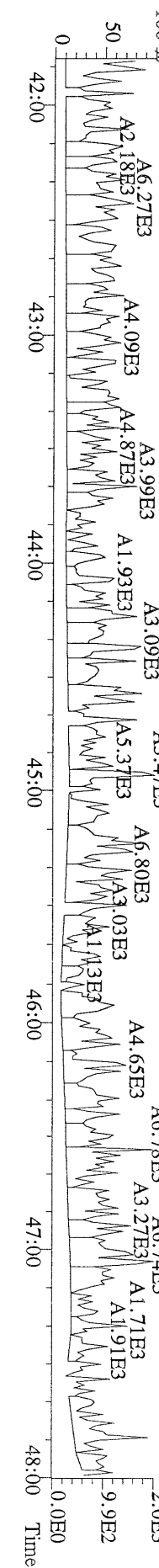
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 % A8.91E6



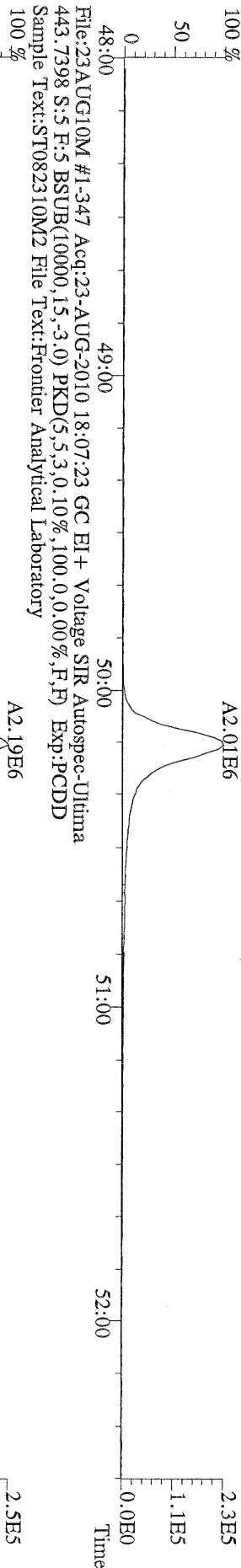
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 % H3.00E6
A2.09E6



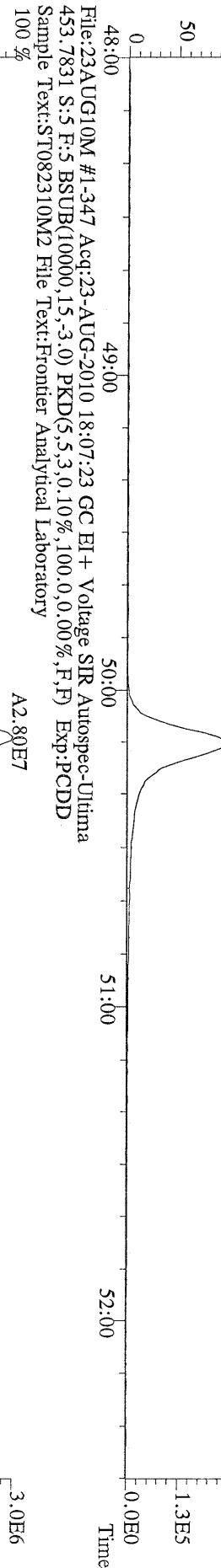
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Utima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory
100 %



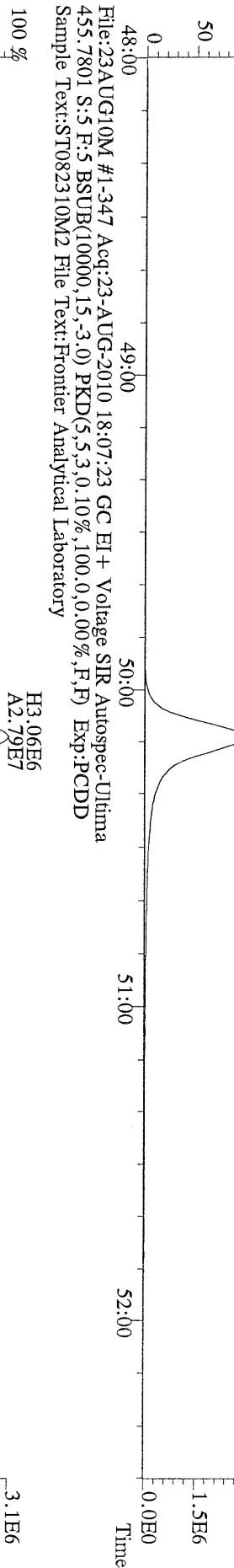
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC BI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



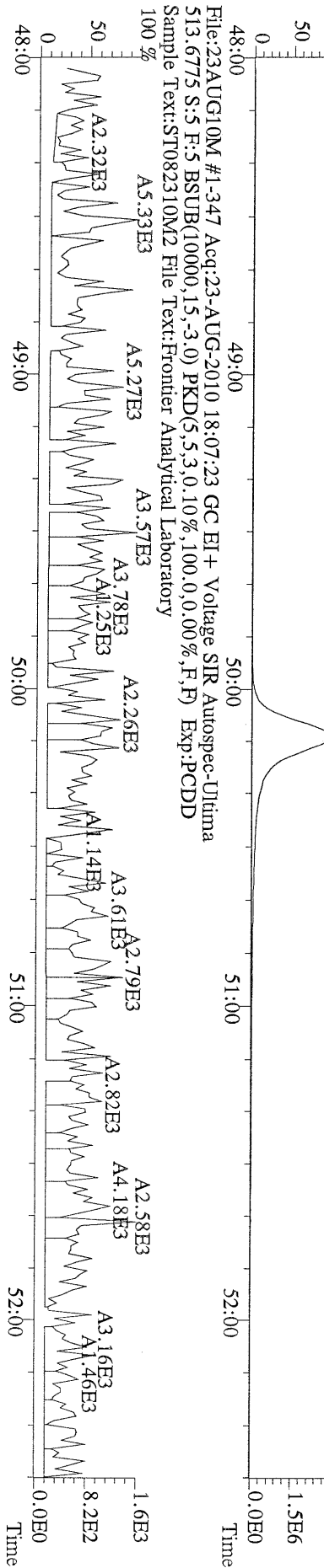
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC BI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC BI+ 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

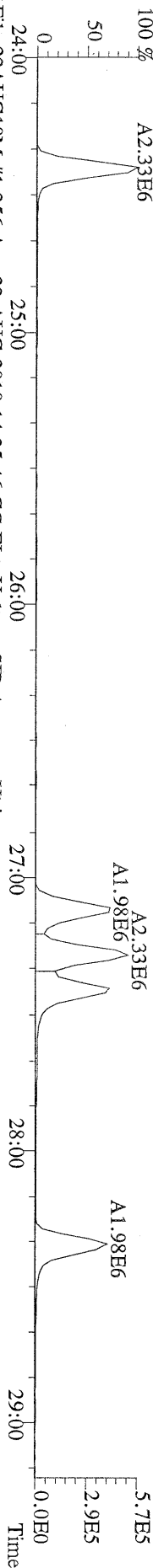


File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC BI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory

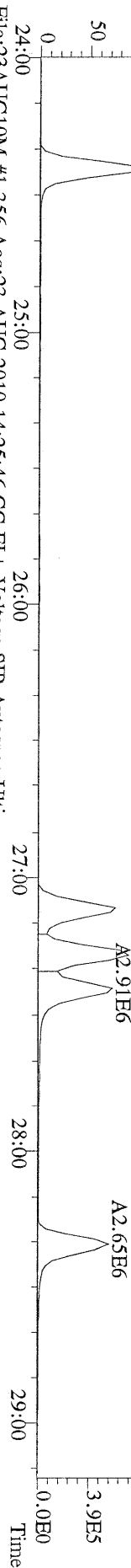


File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC BI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory

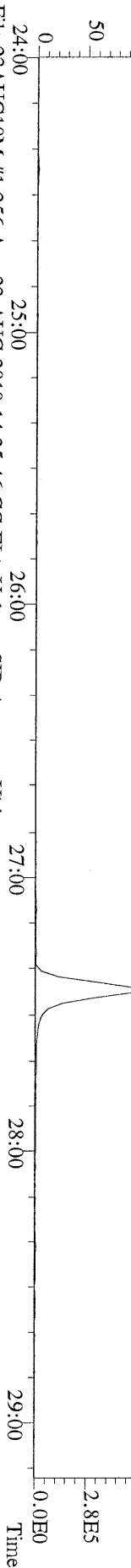
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



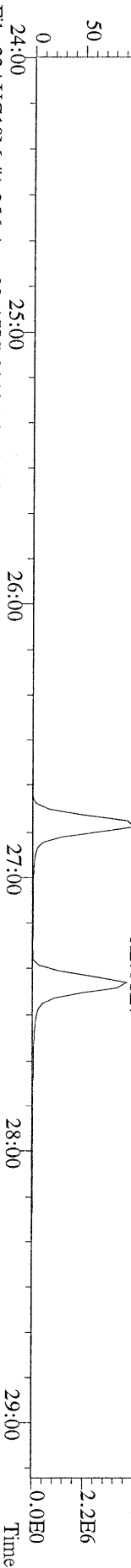
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



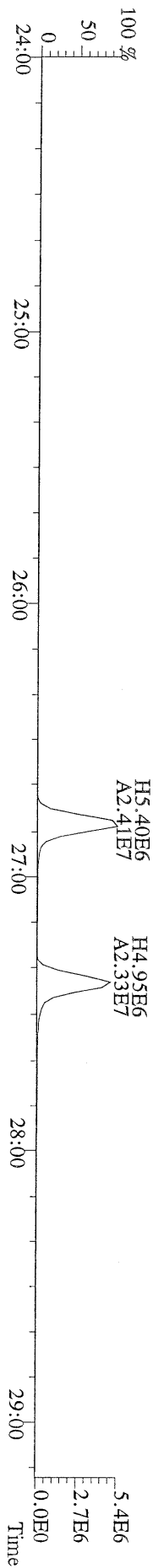
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



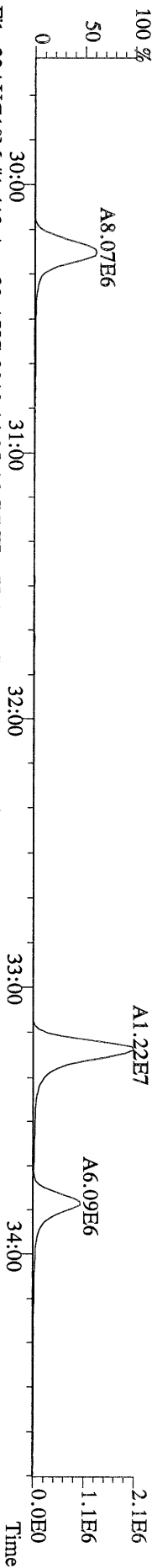
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



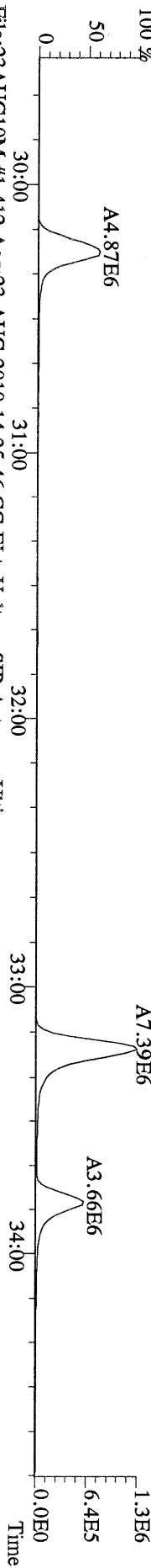
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



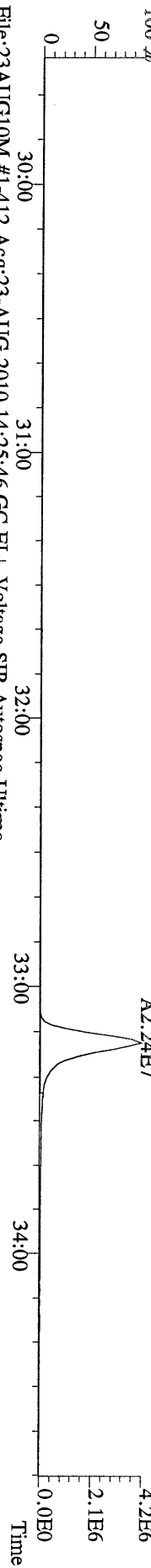
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



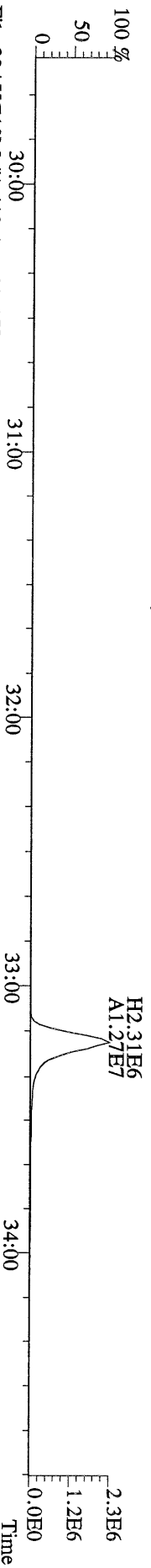
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



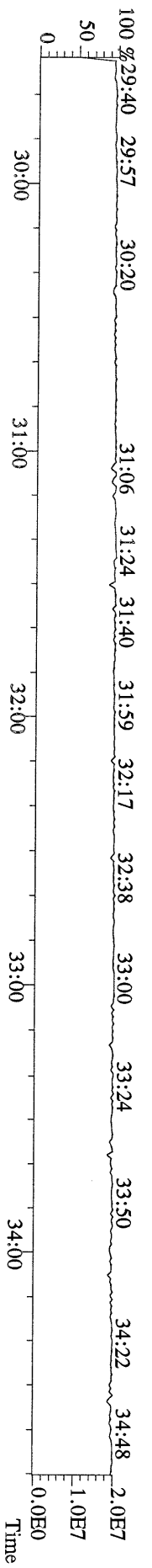
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



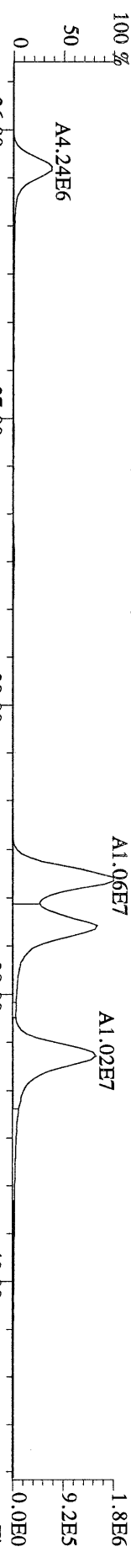
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



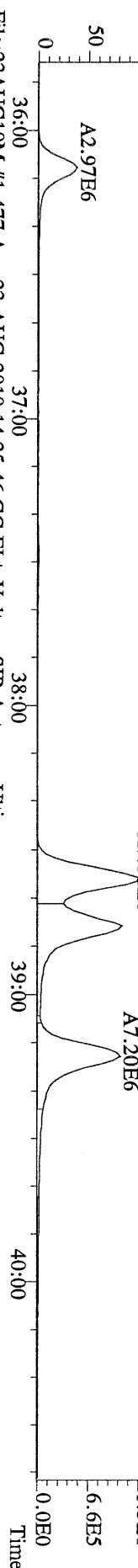
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



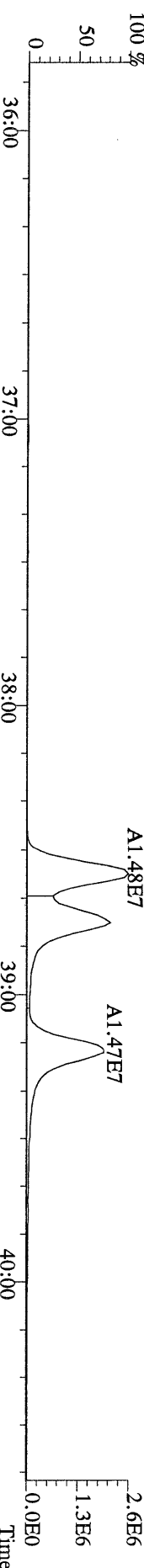
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



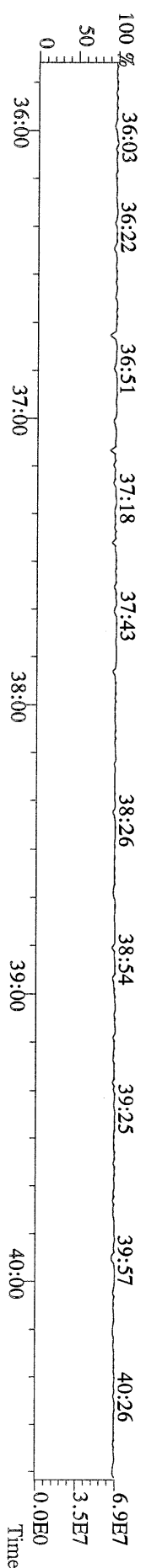
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



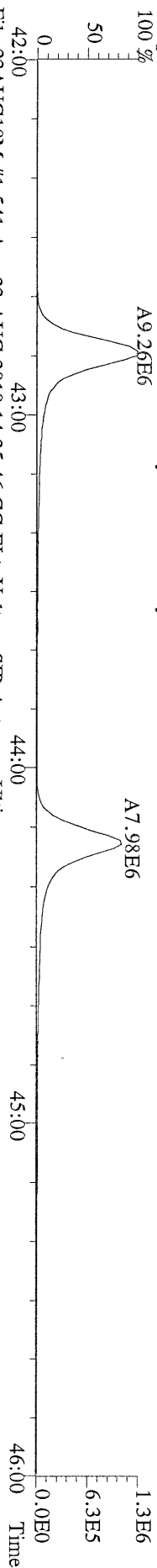
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



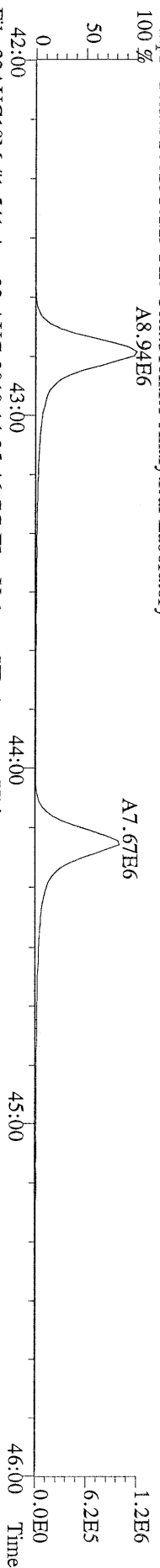
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



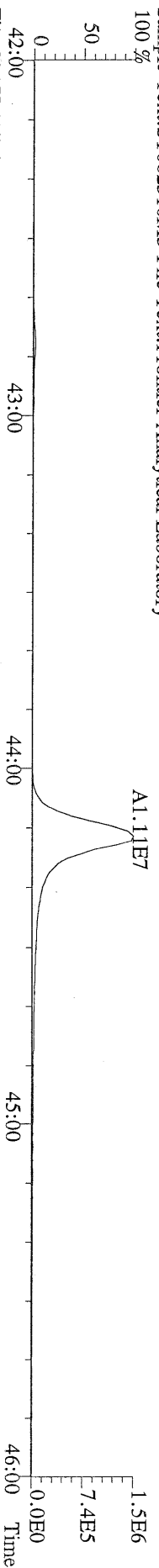
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Utlima
423.7767 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



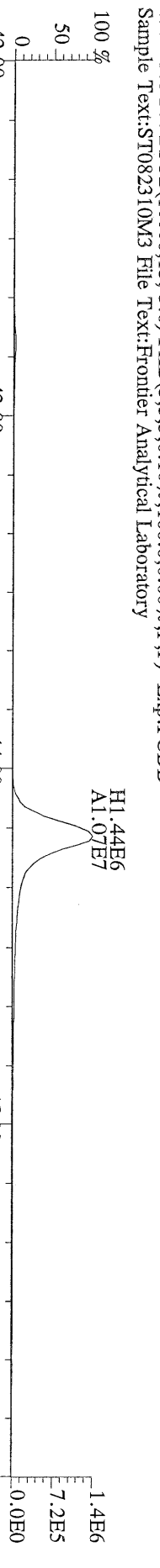
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Utlima
425.7737 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



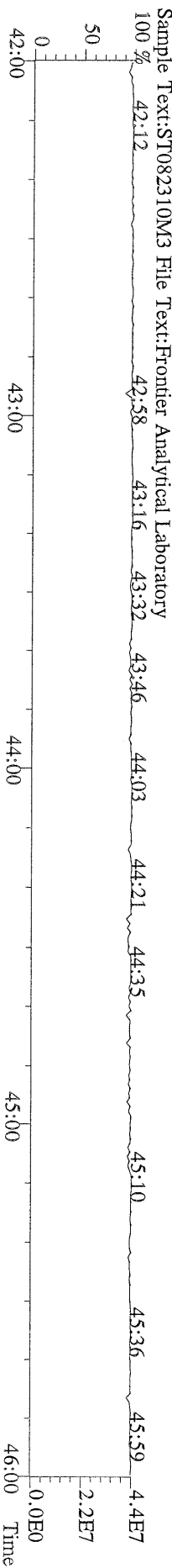
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Utlima
435.8169 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



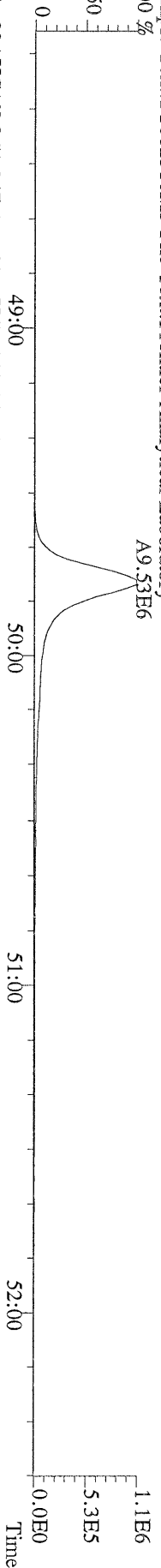
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Utlima
437.8140 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



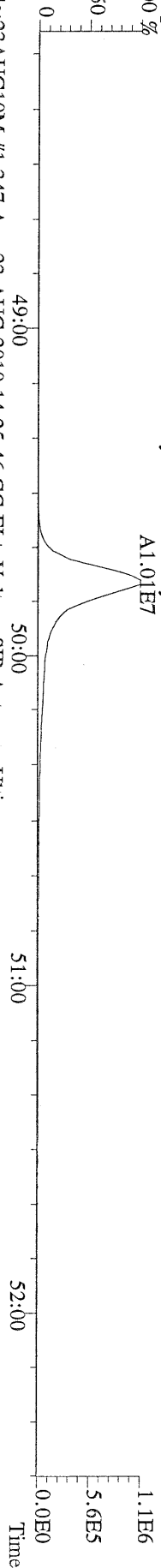
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Utlima
430.9728 F:4 Exp:PCDD



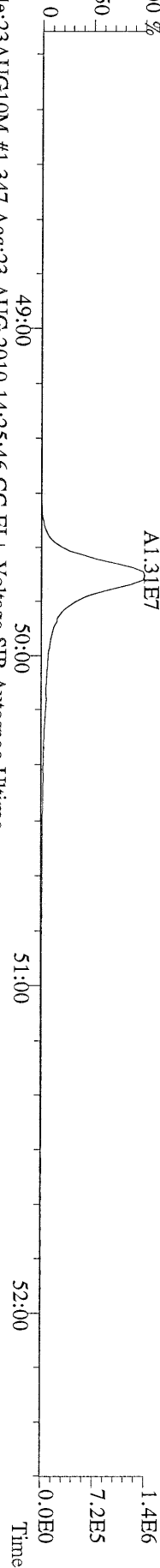
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



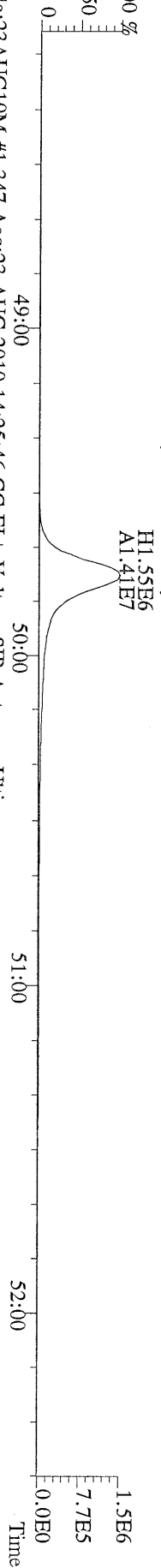
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



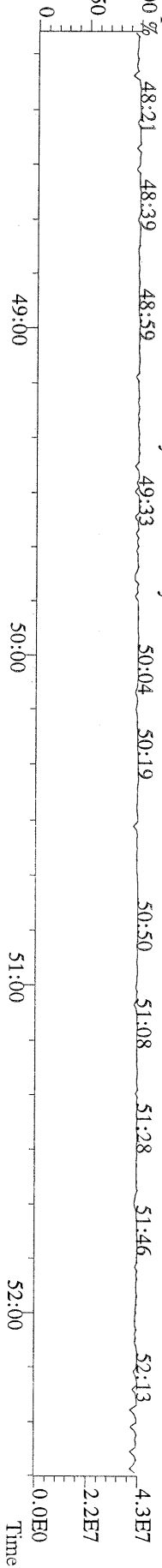
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



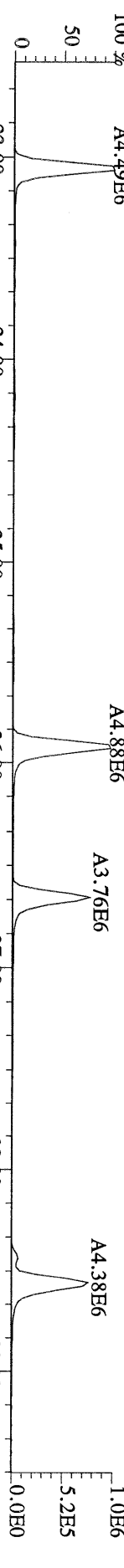
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



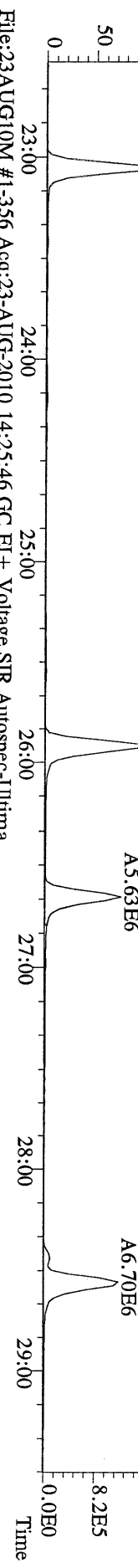
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



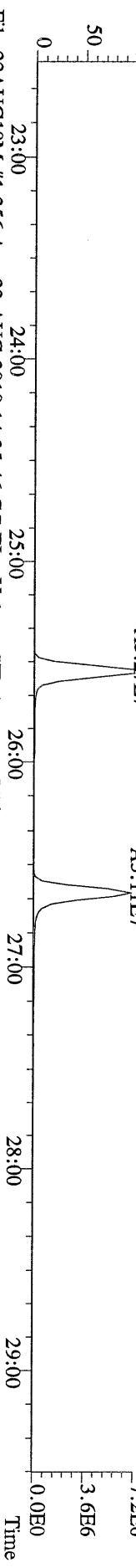
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUBR(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:P:PCDD
Sample Text::ST082310M3 File Text:Frontier Analytical Laboratory



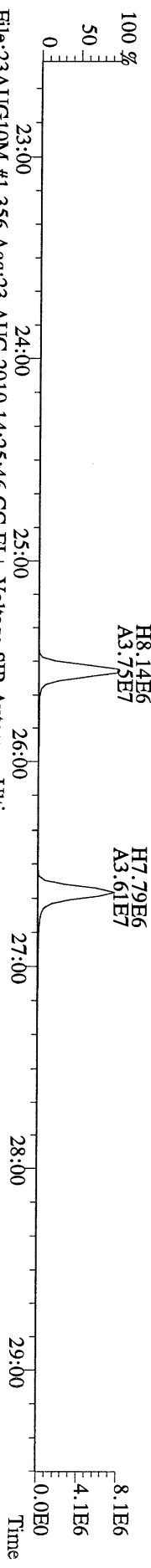
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUBR(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:P:PCDD
Sample Text::ST082310M3 File Text:Frontier Analytical Laboratory



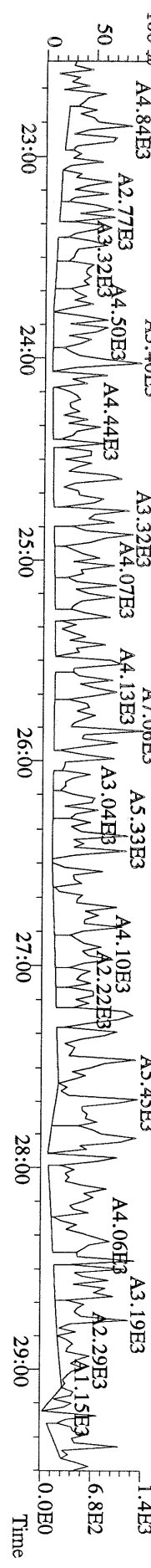
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUBR(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:P:PCDD
Sample Text::ST082310M3 File Text:Frontier Analytical Laboratory



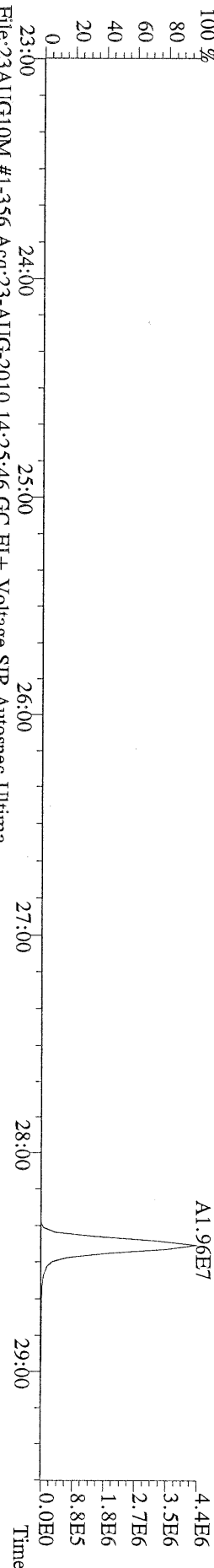
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUBR(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:P:PCDD
Sample Text::ST082310M3 File Text:Frontier Analytical Laboratory



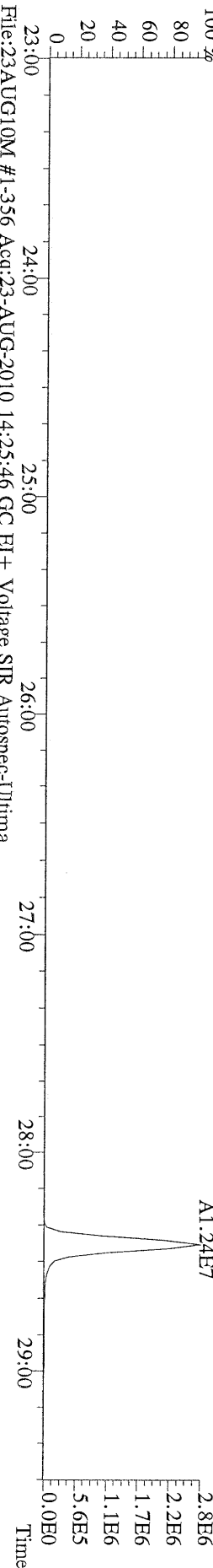
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUBR(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:P:PCDD
Sample Text::ST082310M3 File Text:Frontier Analytical Laboratory



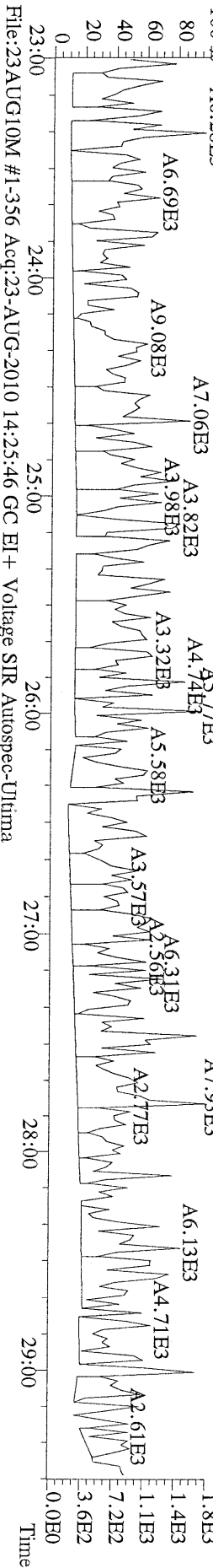
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



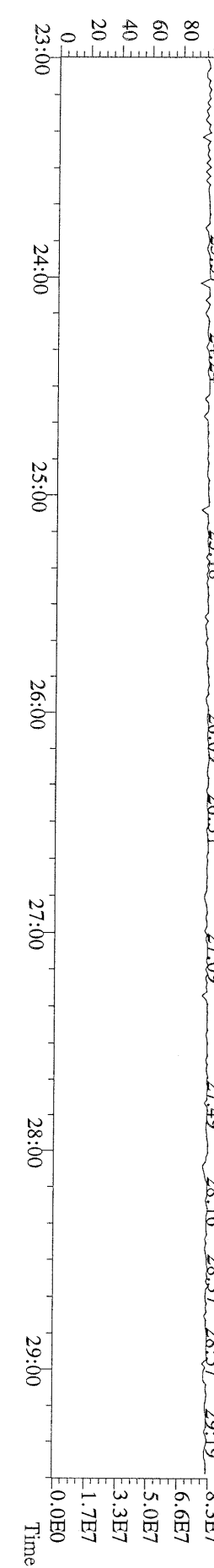
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



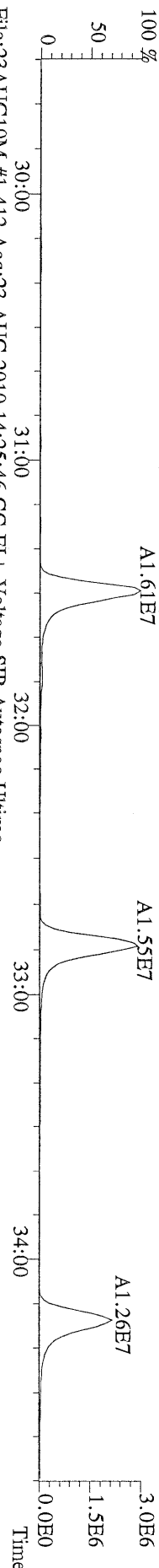
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



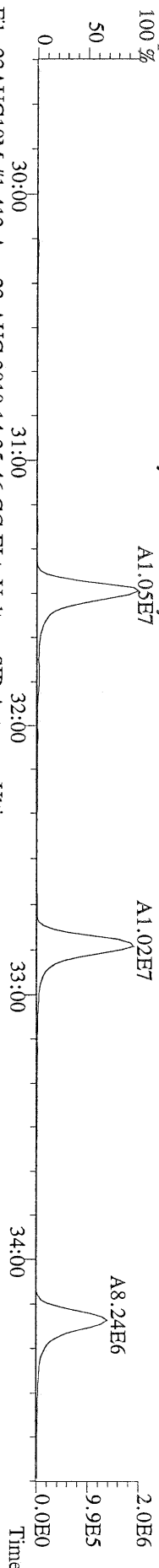
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
 330.9792 Exp:PCDD
 Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



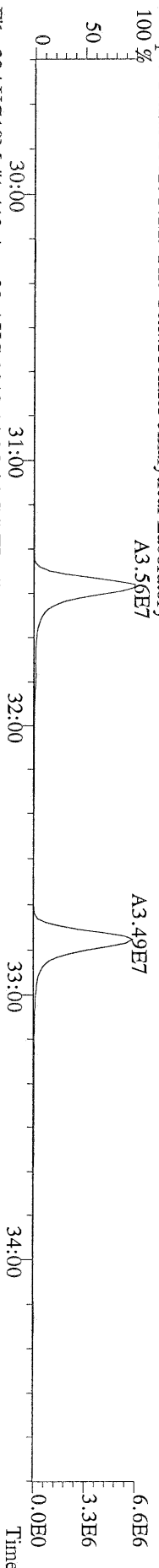
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC BI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00% ,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



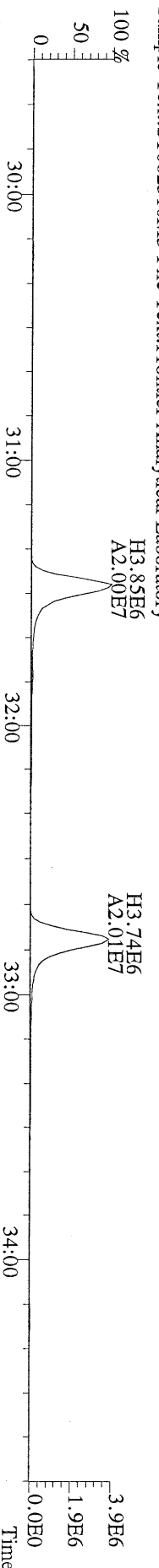
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC BI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00% ,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



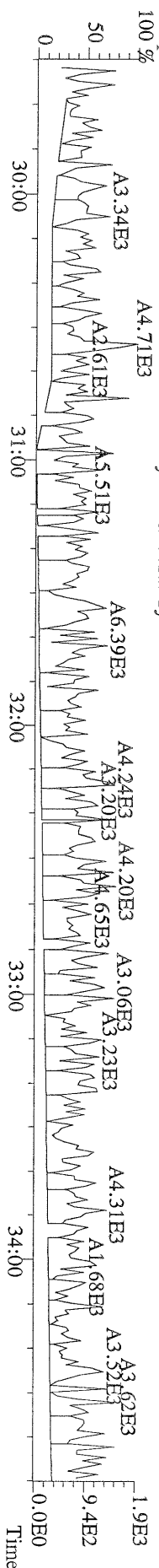
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC BI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00% ,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



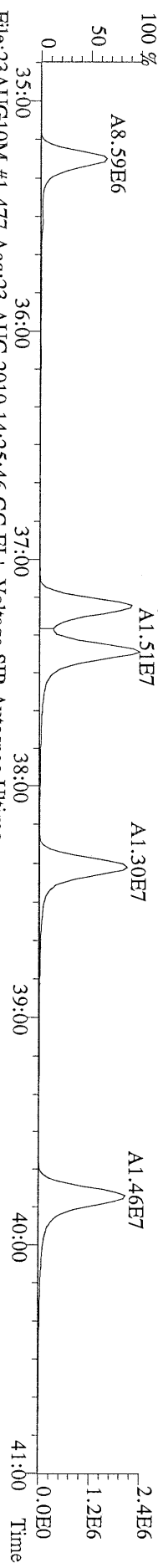
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC BI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00% ,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



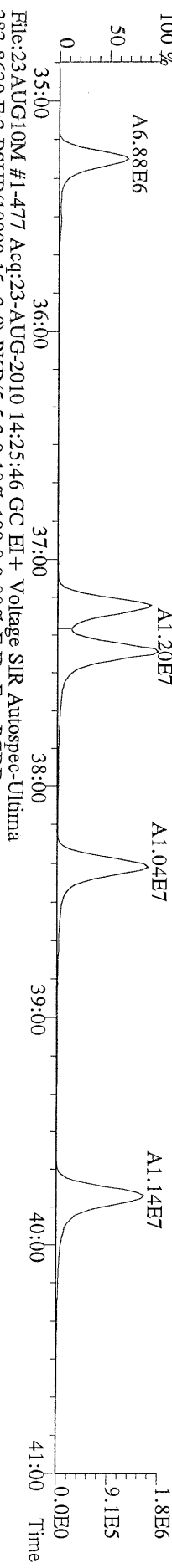
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC BI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5.5,3.0,10%,100.0,0.00% ,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



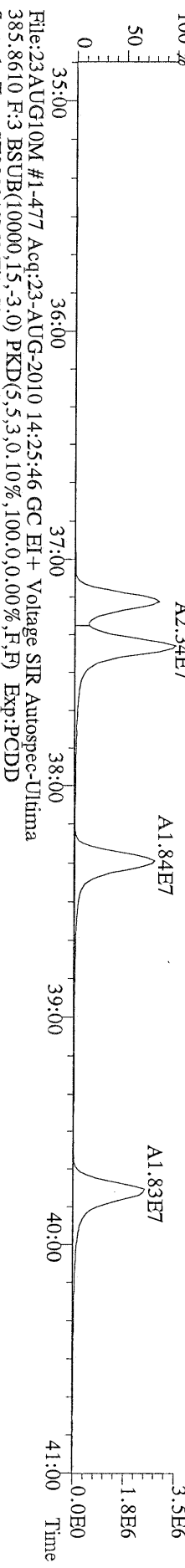
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI + Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,100,0.0,0.00% F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



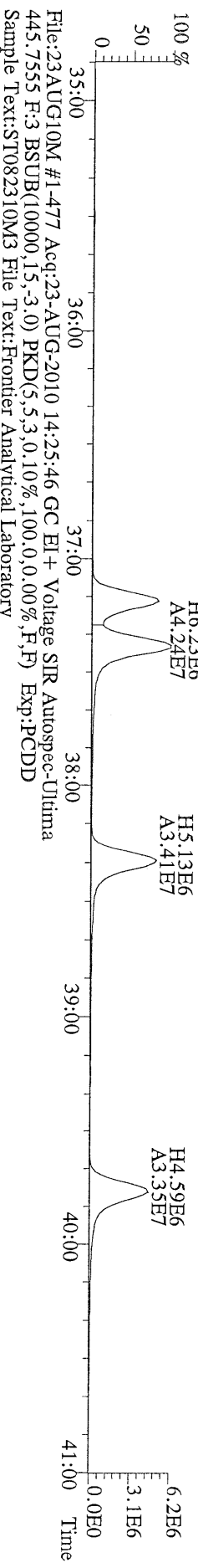
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI + Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,100,0.0,0.00% F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



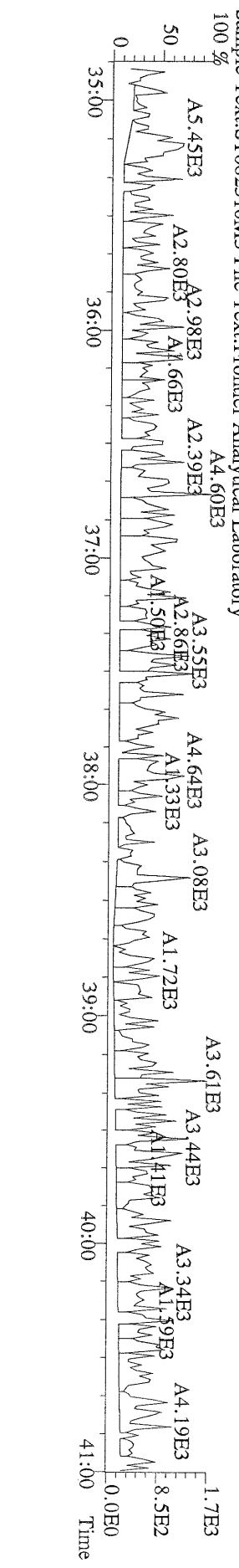
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI + Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,100,0.0,0.00% F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



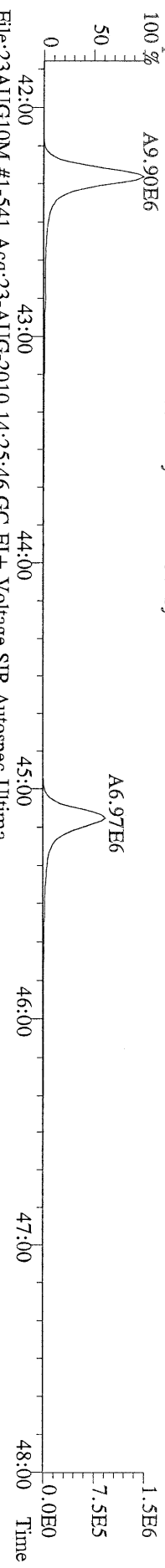
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI + Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,100,0.0,0.00% F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



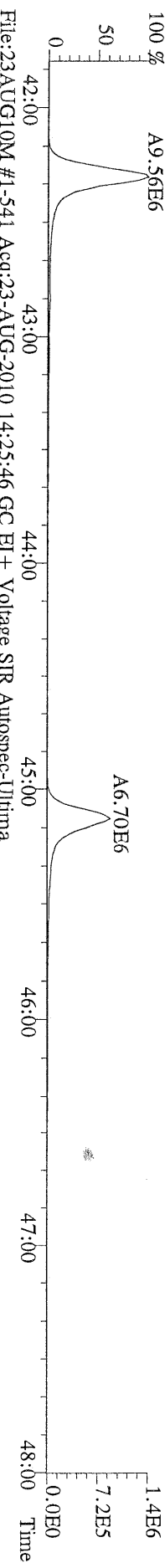
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI + Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5.5,3.0,100,0.0,0.00% F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Fronier Analytical Laboratory



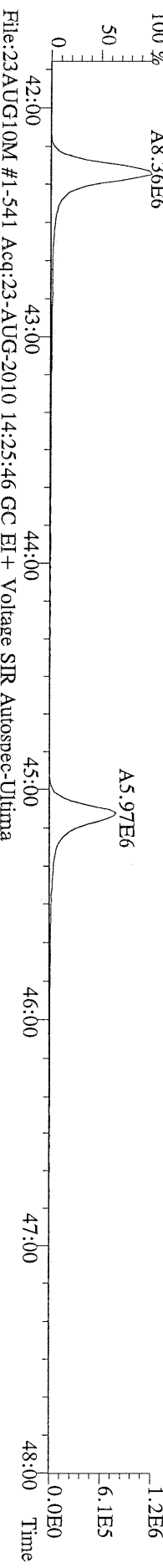
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) Exp:P/CDD
Sample Text:ST082310M3 File Text:Pronier Analytical Laboratory



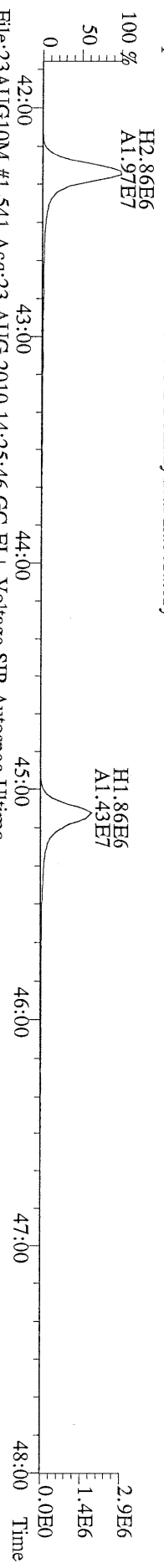
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) Exp:P/CDD
Sample Text:ST082310M3 File Text:Pronier Analytical Laboratory



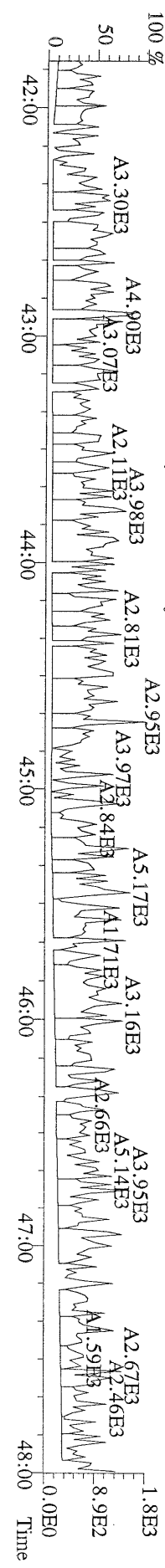
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) Exp:P/CDD
Sample Text:ST082310M3 File Text:Pronier Analytical Laboratory



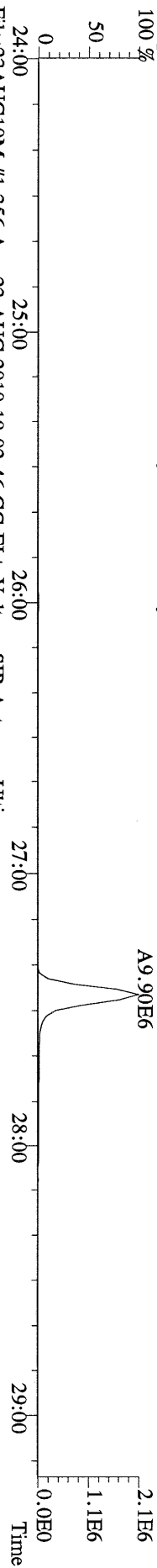
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) Exp:P/CDD
Sample Text:ST082310M3 File Text:Pronier Analytical Laboratory



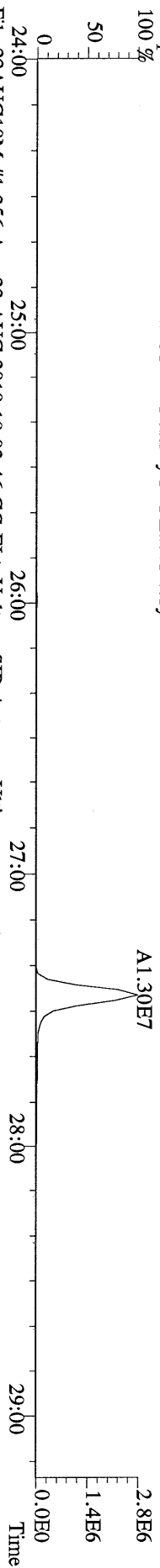
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC BI + Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0,0) Exp:P/CDD
Sample Text:ST082310M3 File Text:Pronier Analytical Laboratory



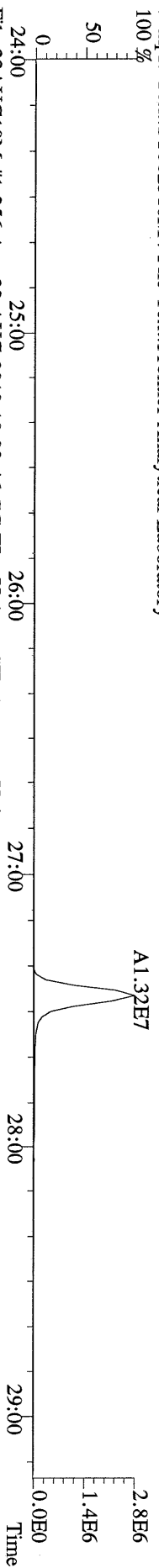
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
319,8965 S:6 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



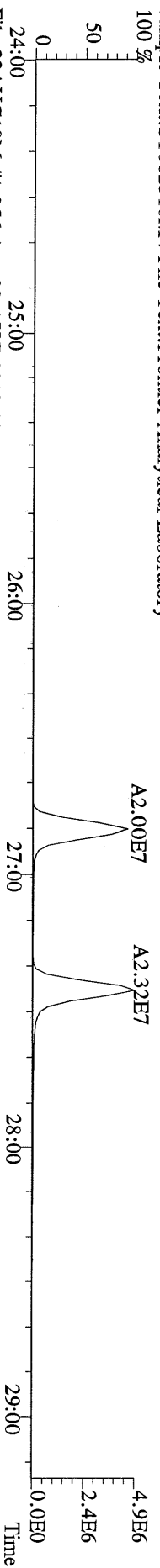
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
321,8936 S:6 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



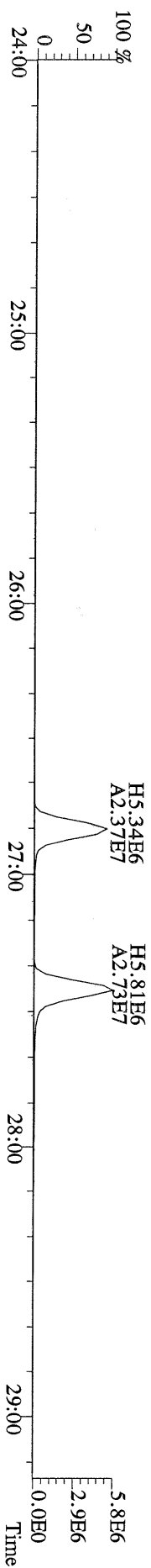
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
327,8847 S:6 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



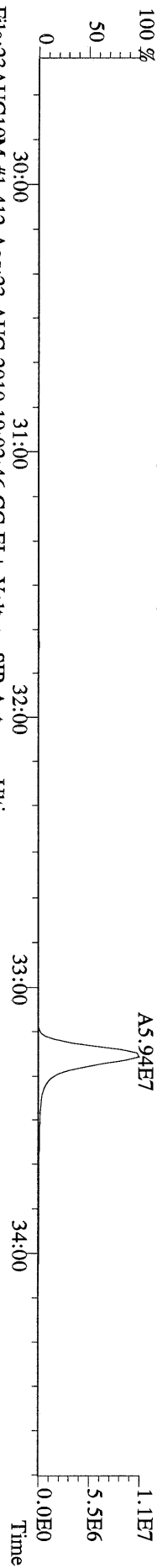
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
331,9368 S:6 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



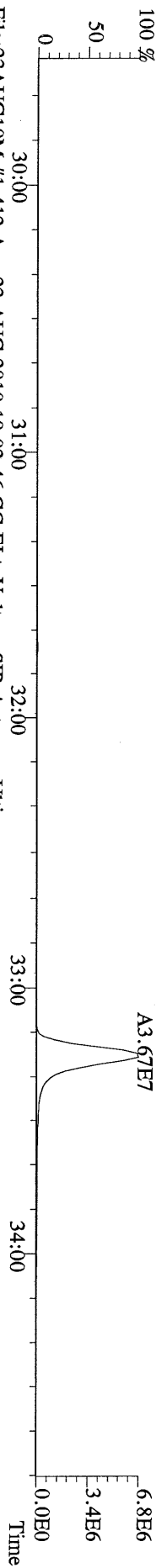
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
333,9339 S:6 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



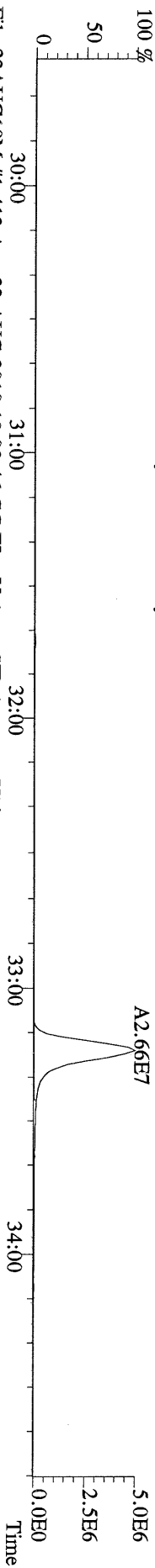
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



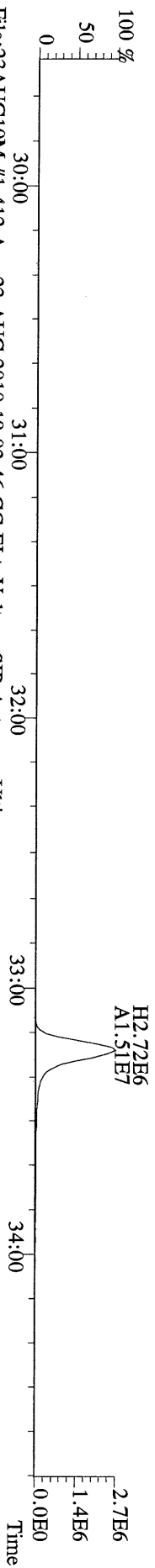
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



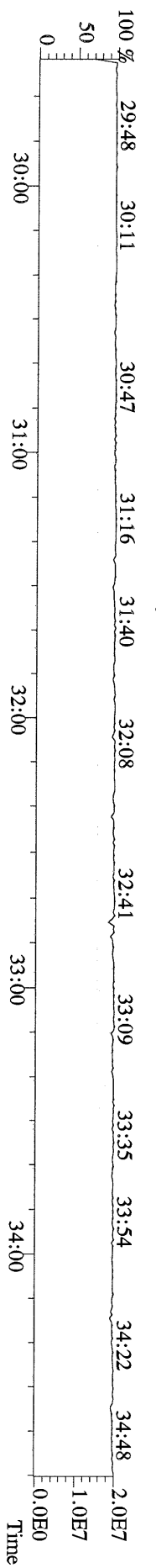
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



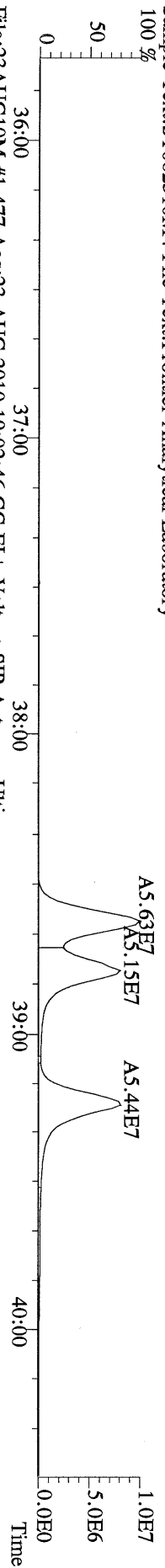
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



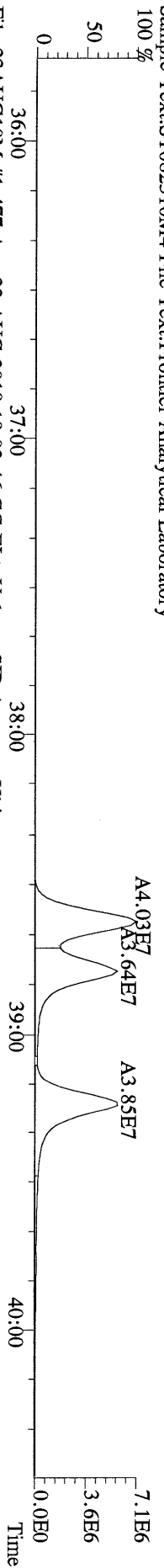
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



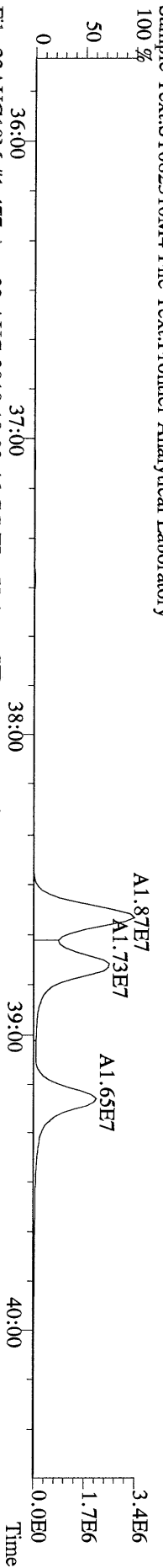
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



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



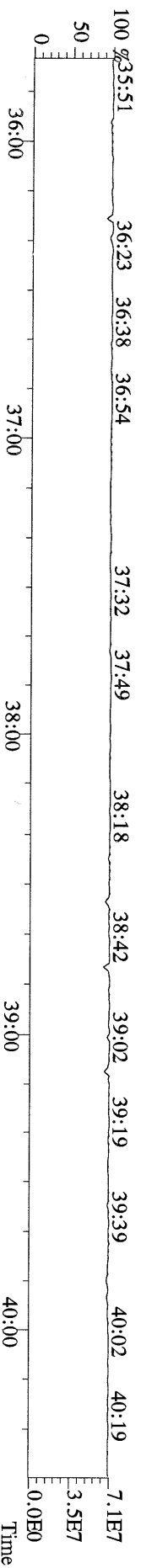
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



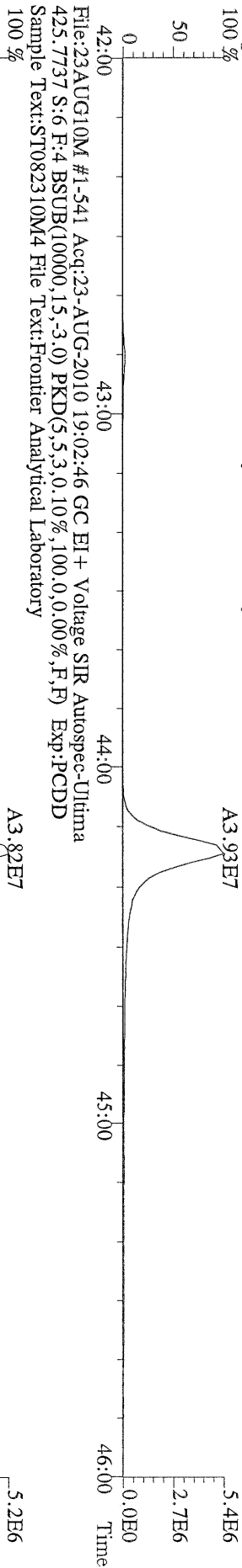
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



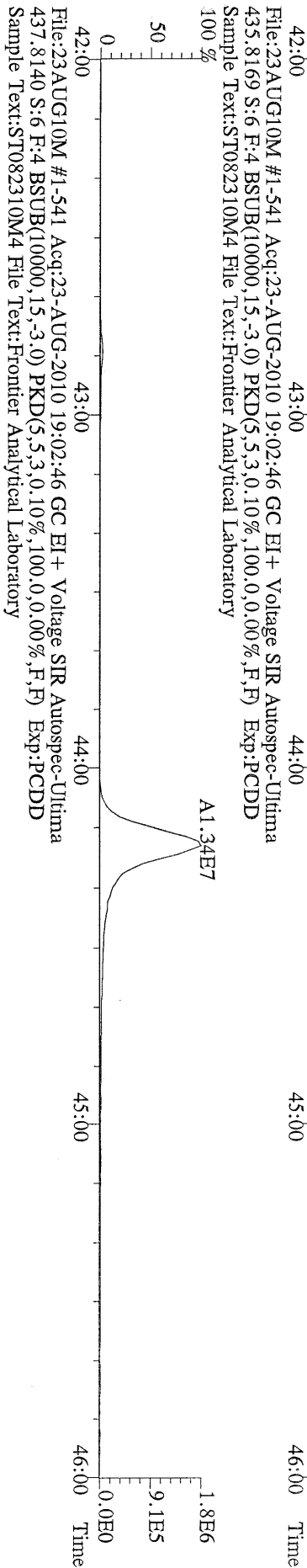
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



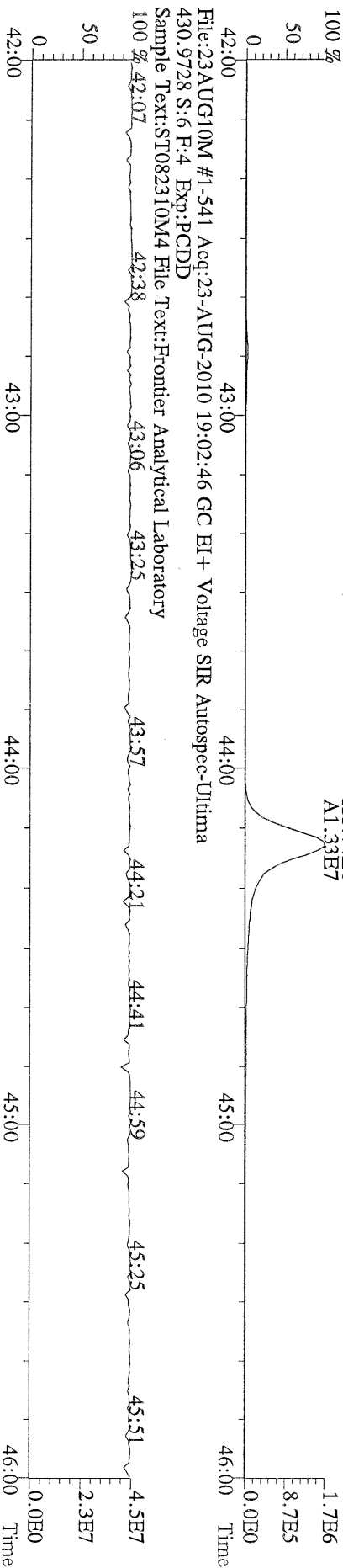
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



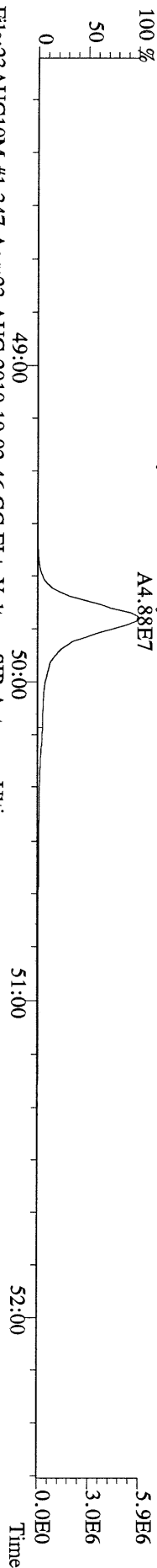
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



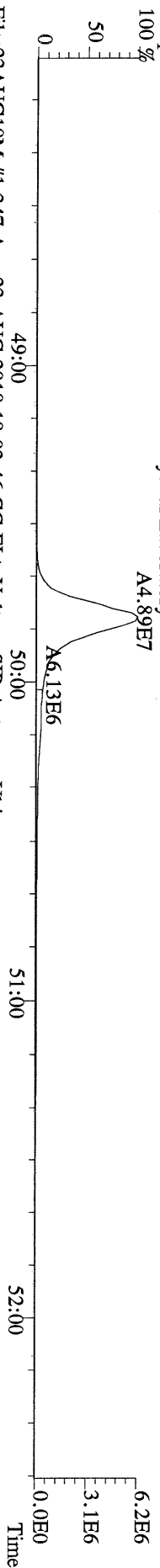
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



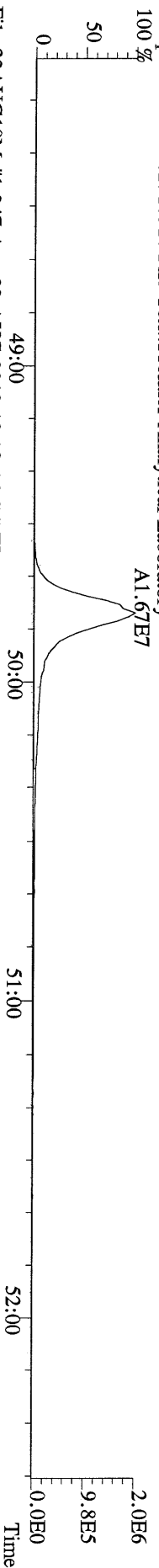
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utlima
457.7377 S:6 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



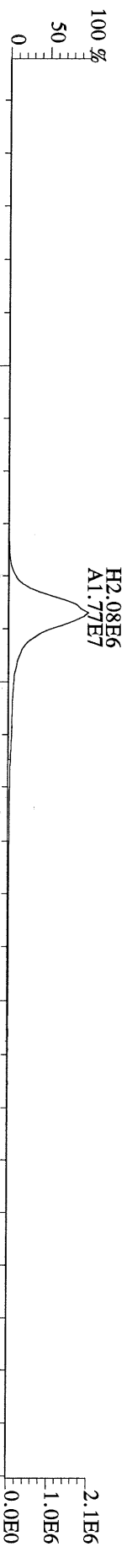
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utlima
459.7348 S:6 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



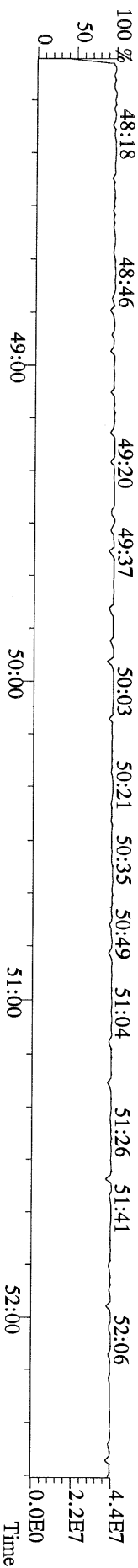
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utlima
469.7780 S:6 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



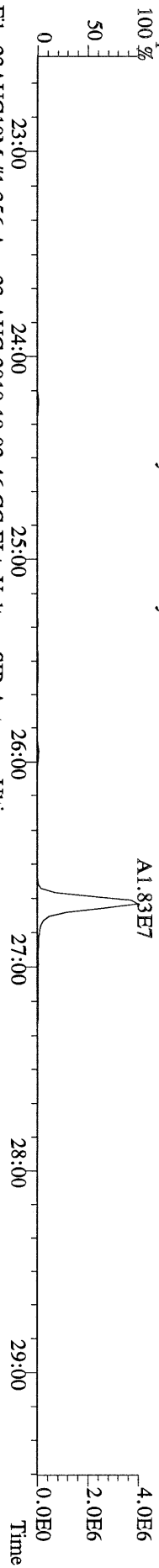
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utlima
471.7750 S:6 F:5 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



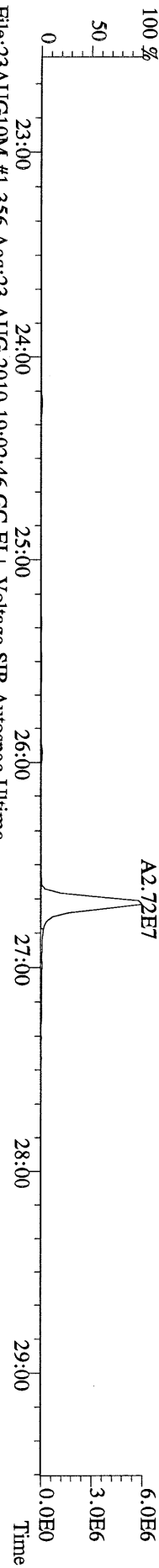
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utlima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



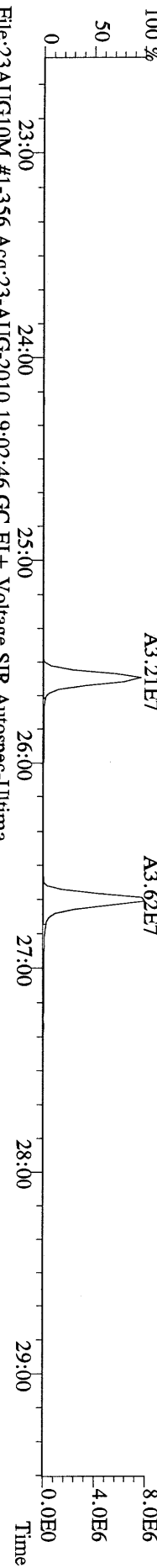
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



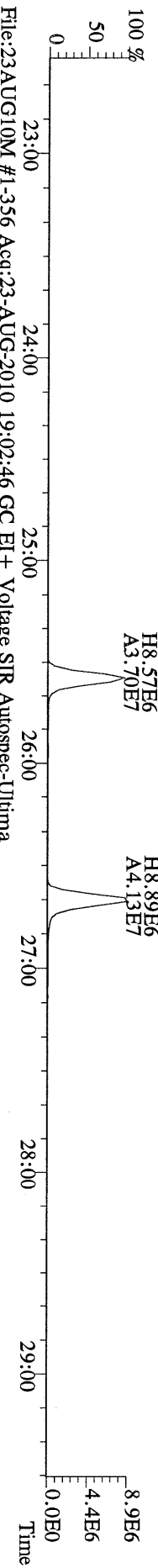
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



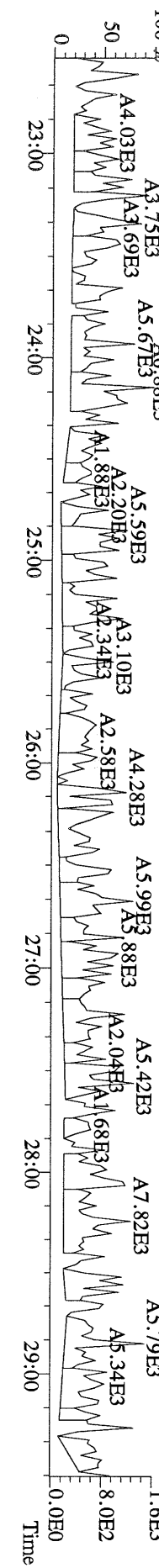
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



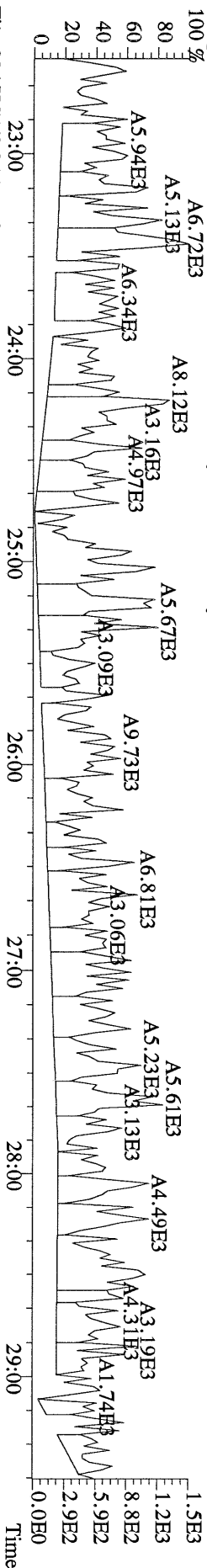
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



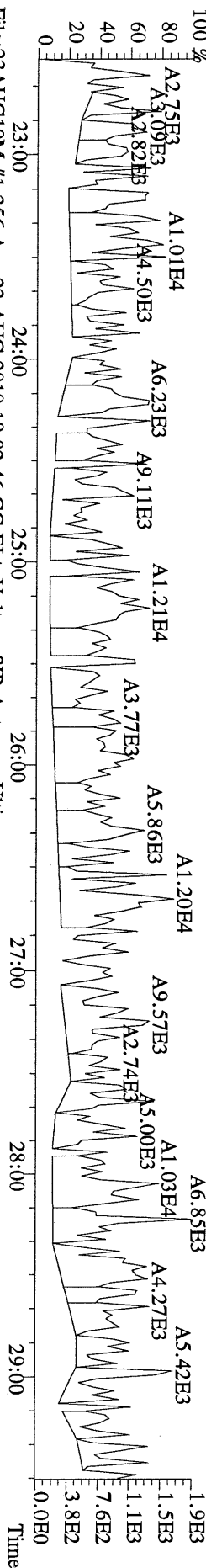
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory
100 %



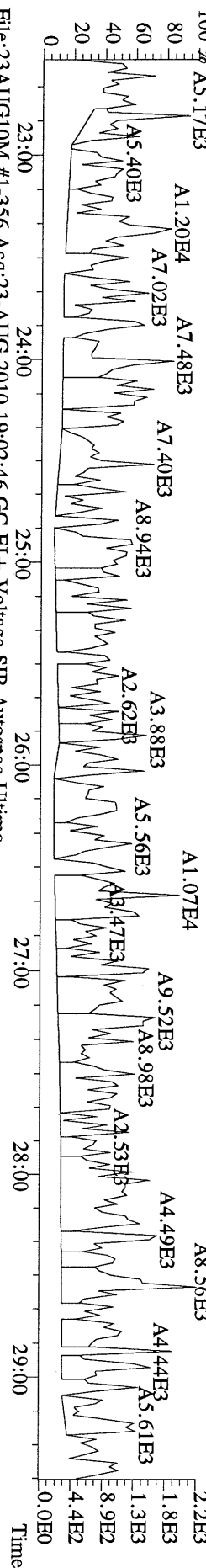
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



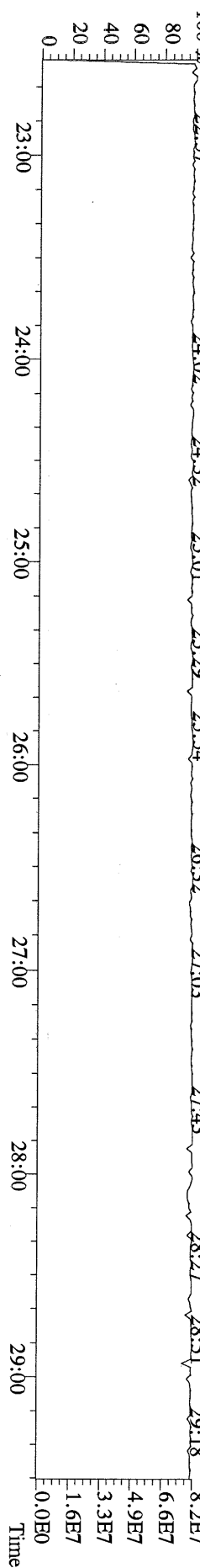
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



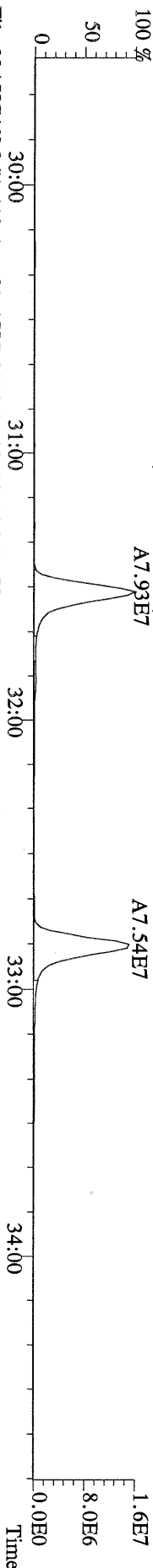
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
 409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



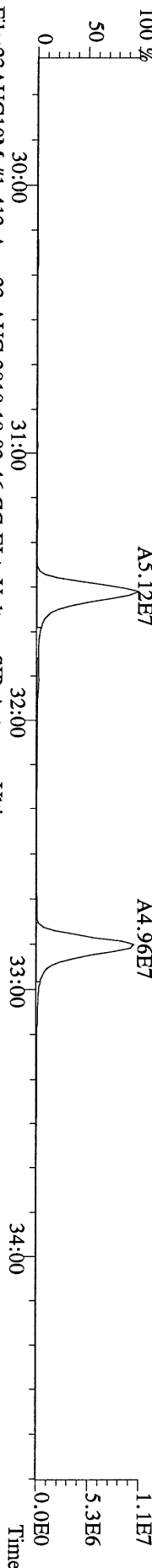
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
 LOCK MASS CHECK S:6 Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



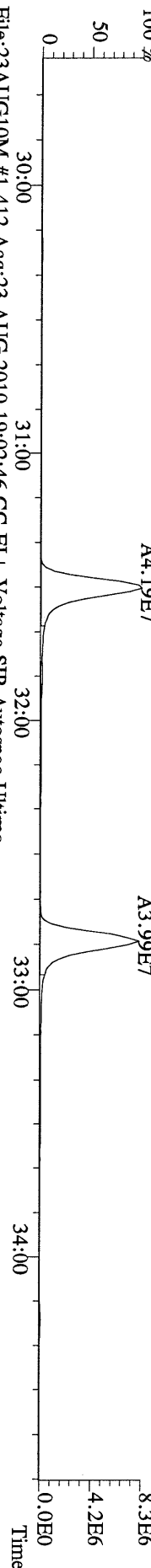
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
 339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



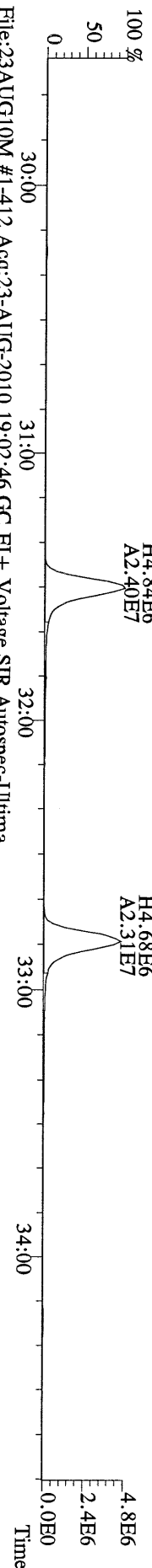
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
 341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



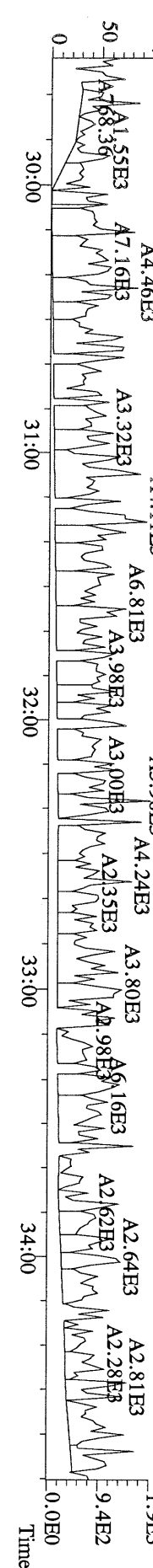
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
 351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



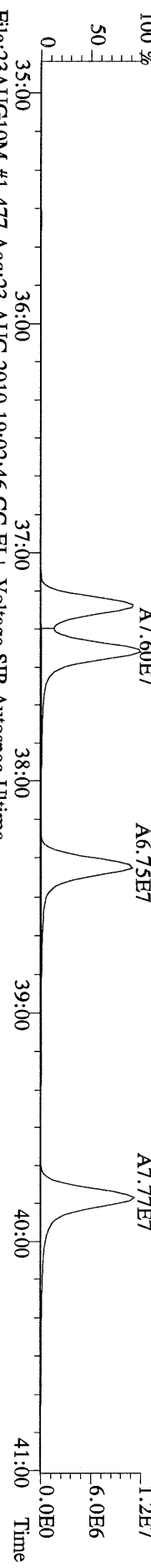
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
 353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



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



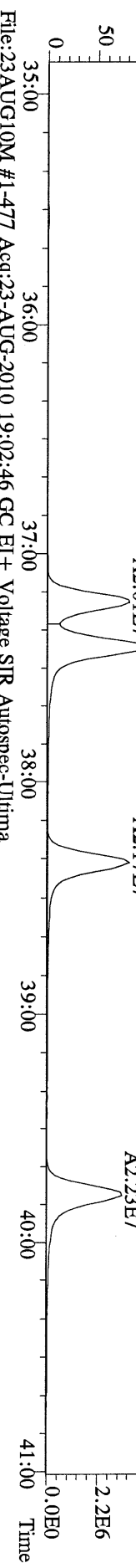
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC BI + Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Fronier Analytical Laboratory



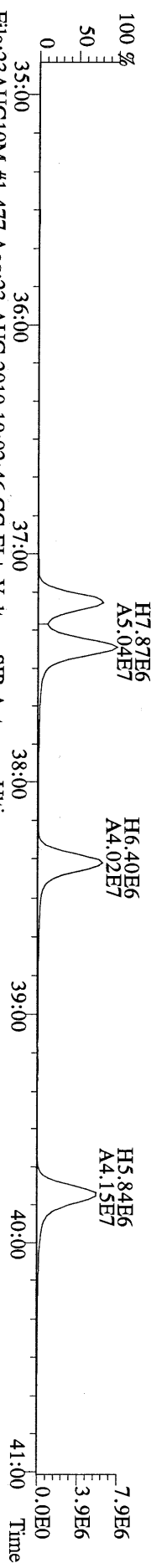
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC BI + Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Fronier Analytical Laboratory



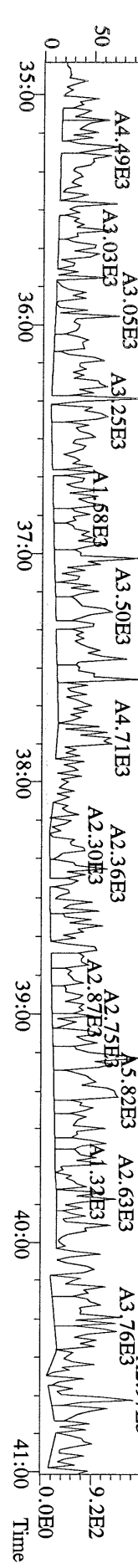
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC BI + Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Fronier Analytical Laboratory



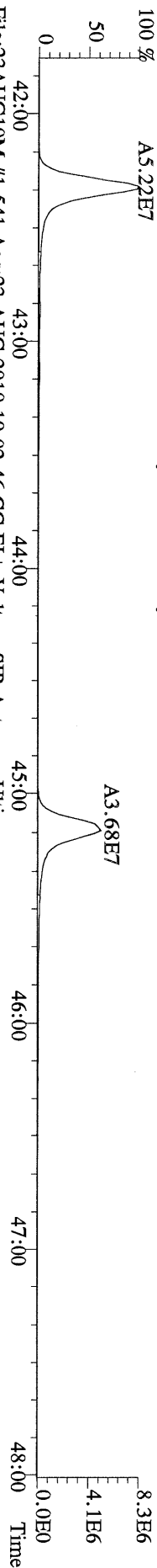
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC BI + Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Fronier Analytical Laboratory



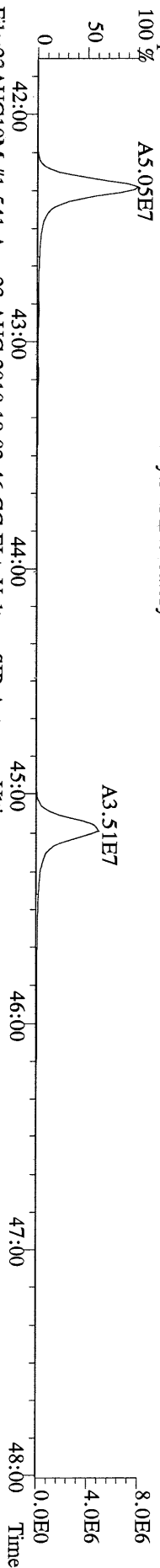
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC BI + Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Fronier Analytical Laboratory



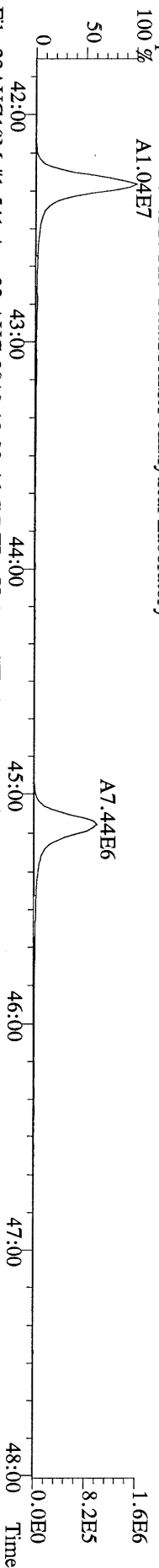
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
 407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



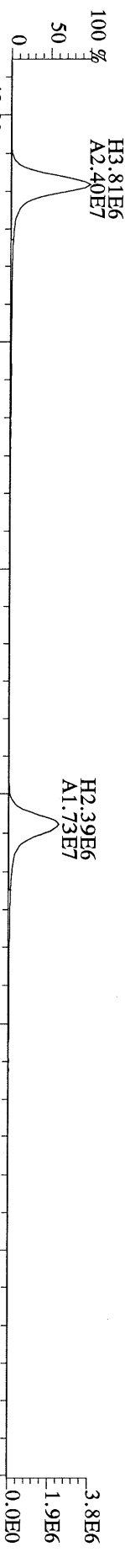
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
 409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



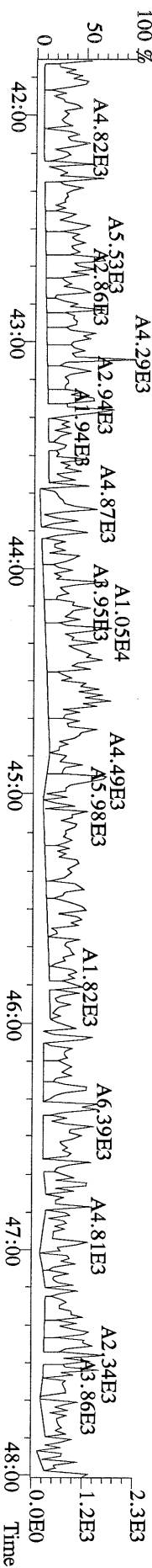
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
 417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



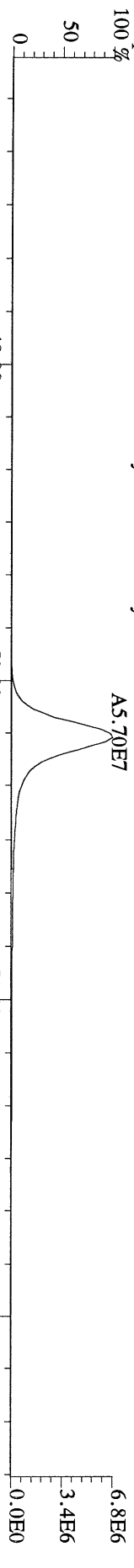
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
 419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



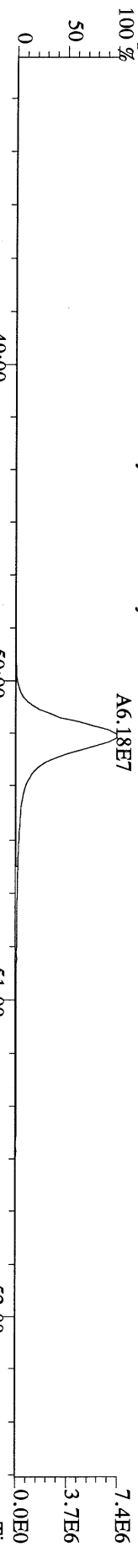
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Utima
 479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
 Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



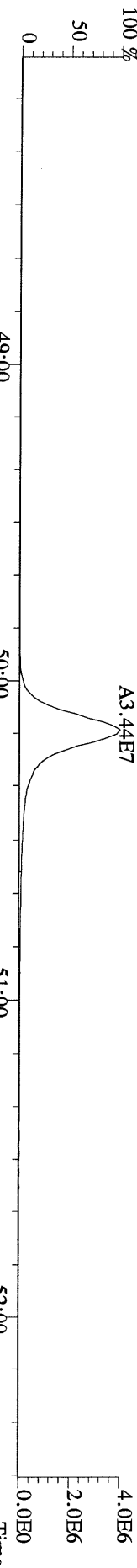
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SHR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



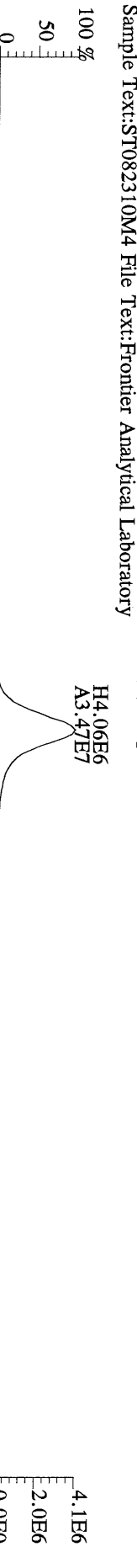
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SHR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



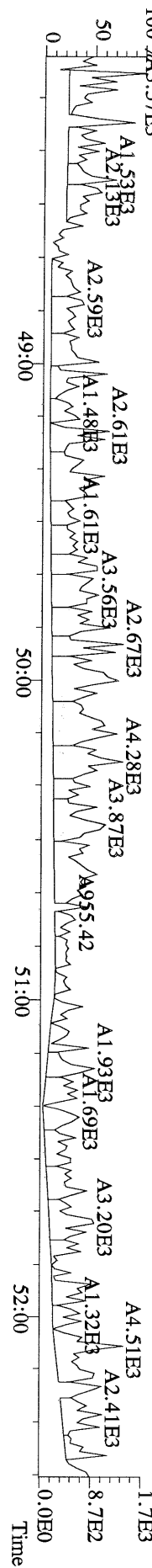
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SHR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



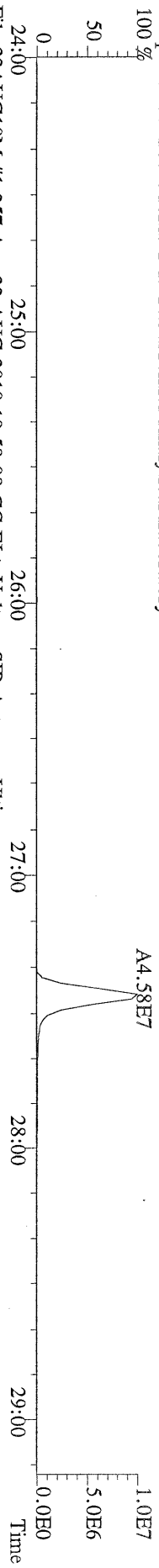
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SHR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



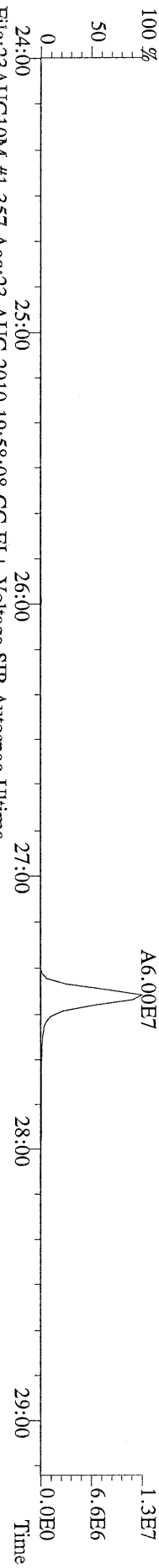
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SHR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



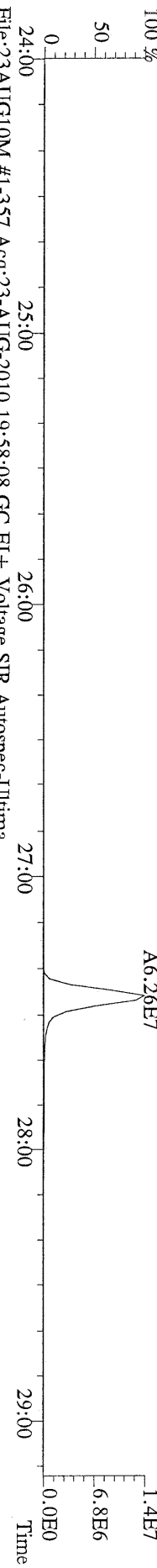
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:7 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



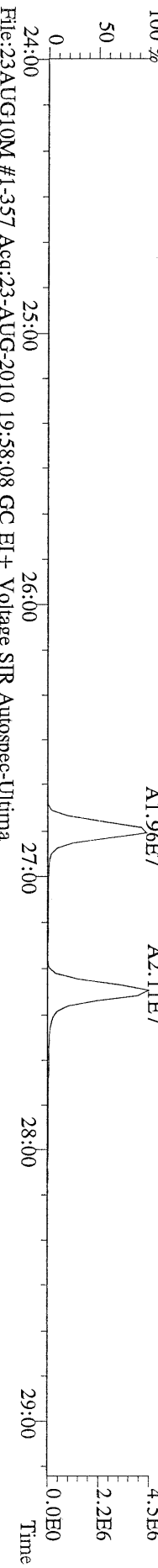
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:7 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



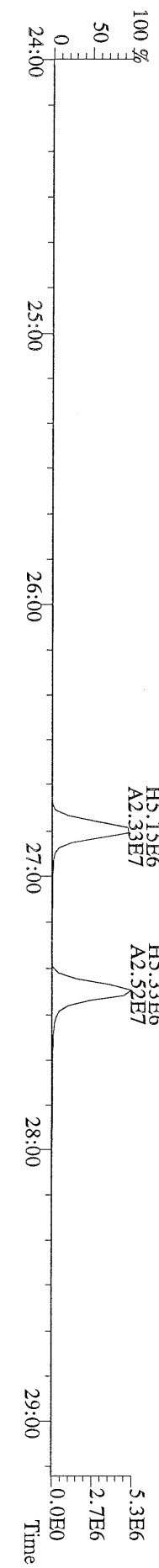
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:7 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



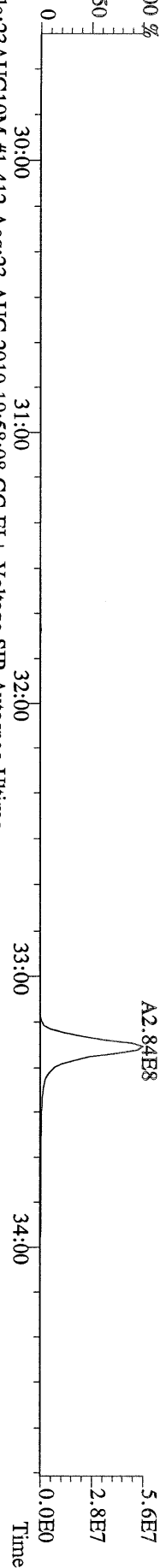
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:7 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



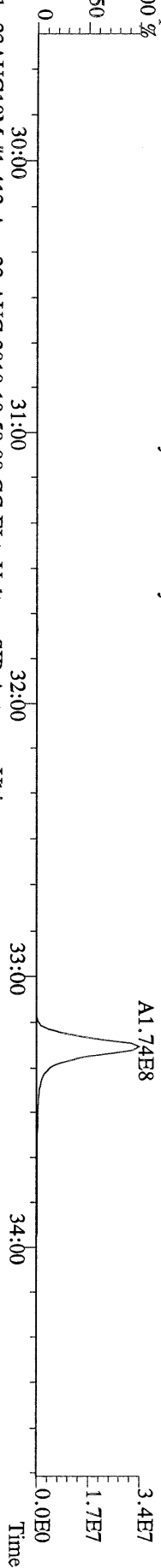
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:7 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



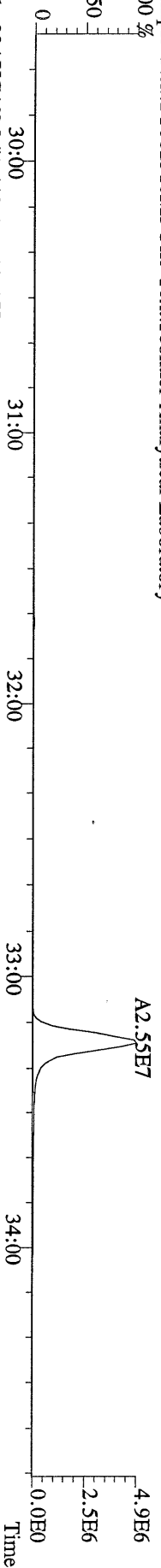
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



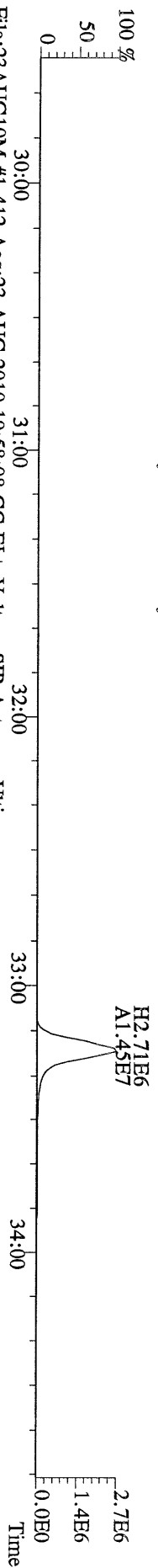
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



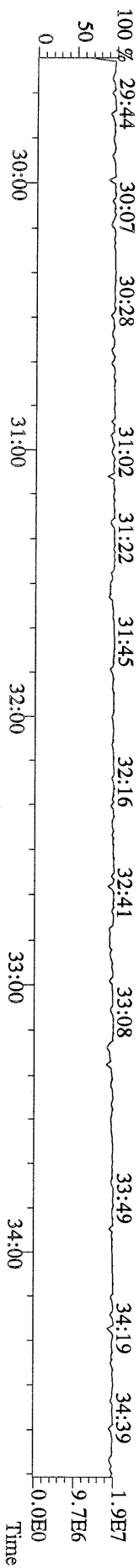
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



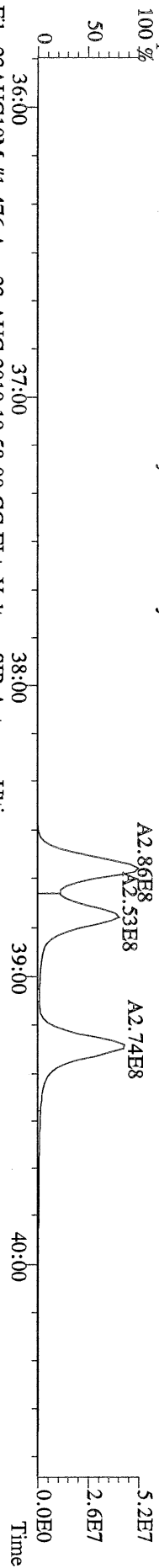
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



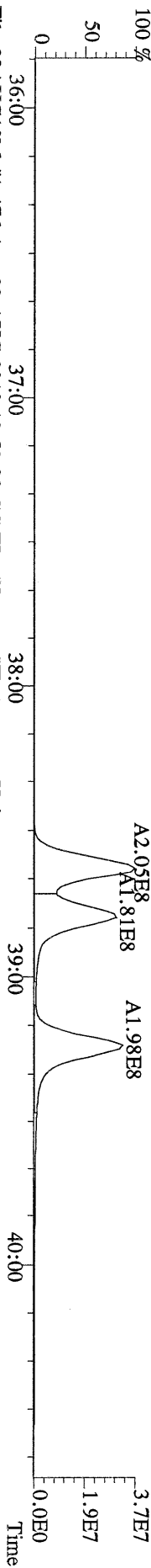
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:7 F:2 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



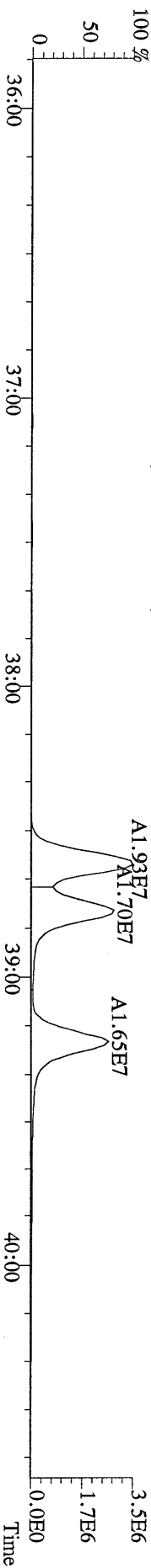
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
 389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



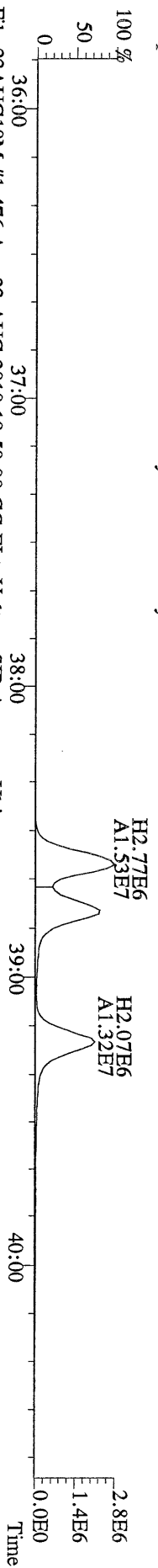
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
 391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



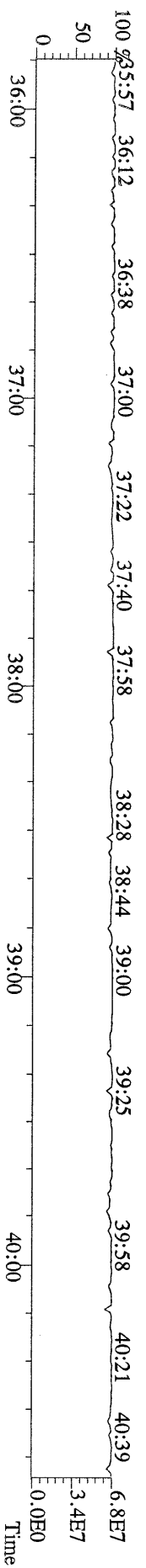
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
 401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



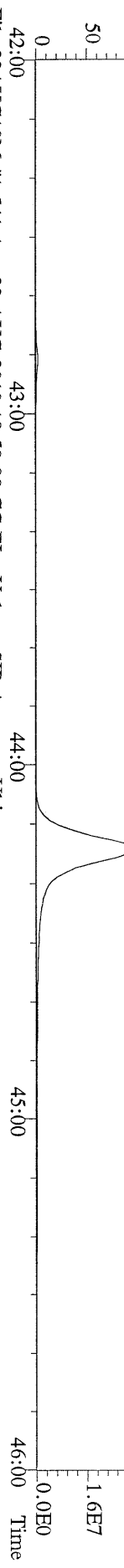
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
 403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



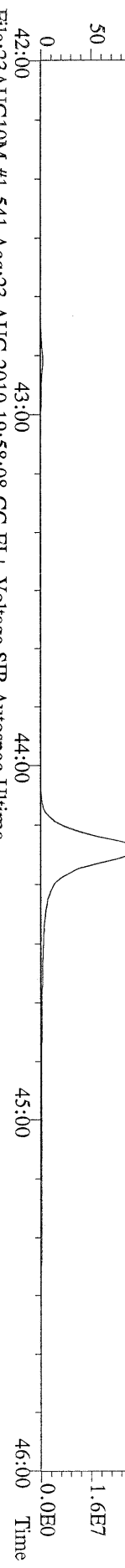
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
 380.9760 S:7 F:3 Exp:PCDD
 Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



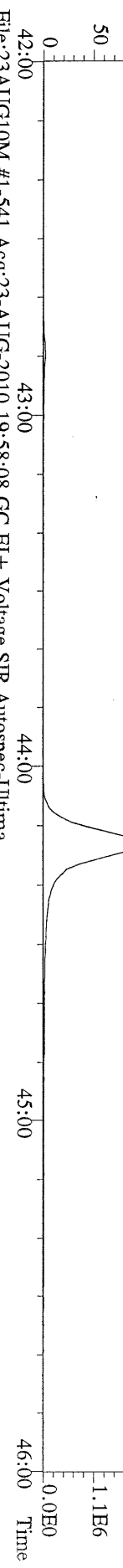
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
423.7767 S:7 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



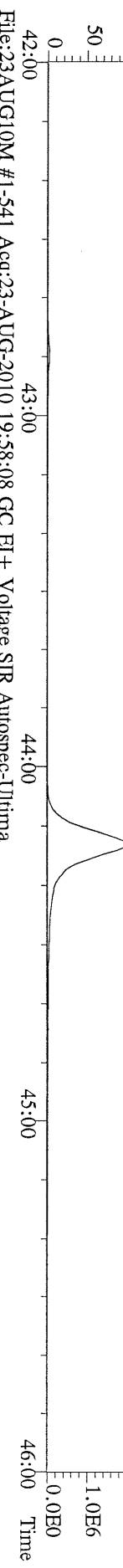
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
425.7737 S:7 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



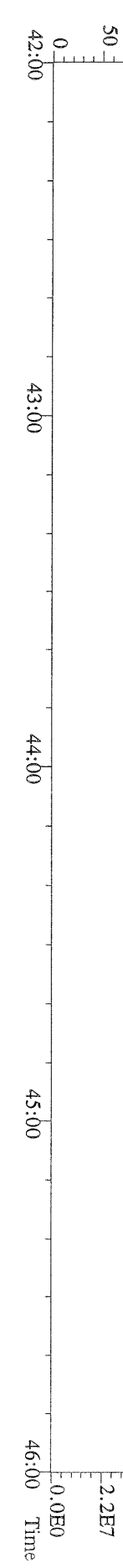
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
435.8169 S:7 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



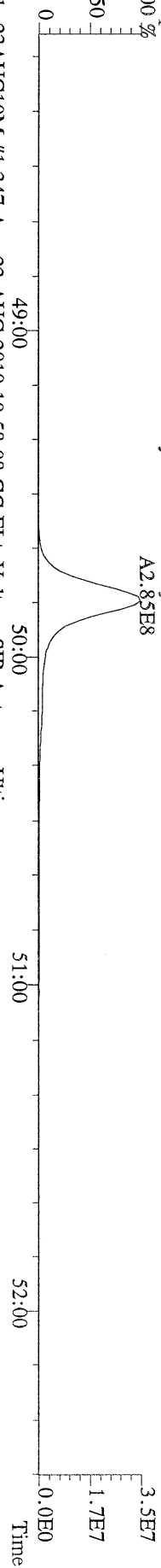
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
437.8140 S:7 F:4 BSUB(10000,15,-3,0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



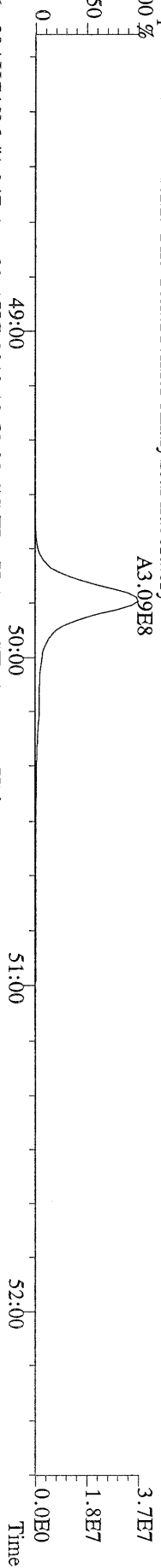
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
430.9728 S:7 F:4 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



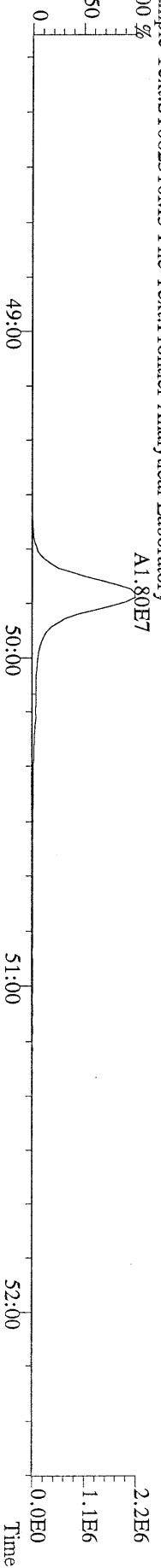
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



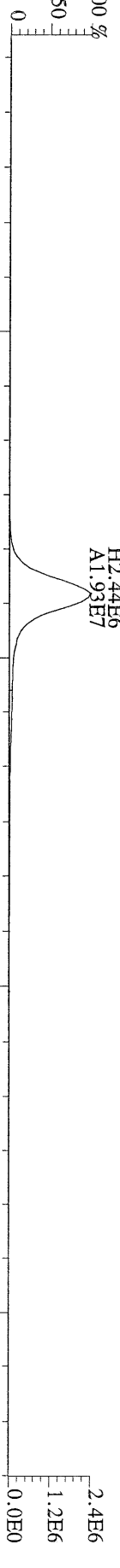
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



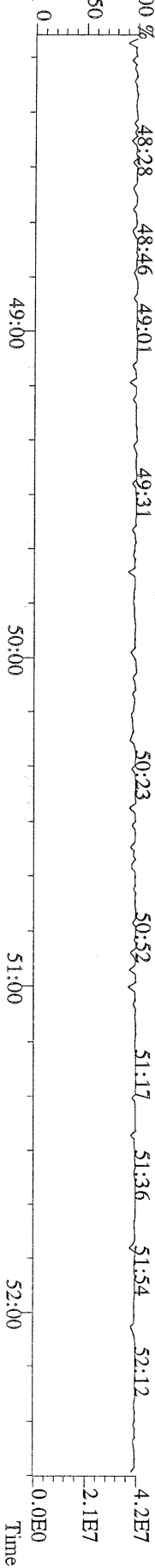
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



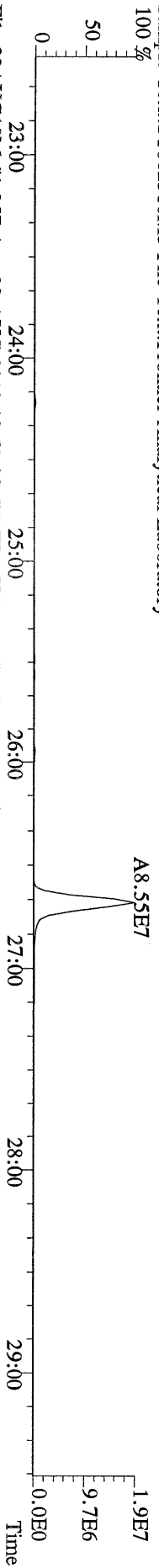
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



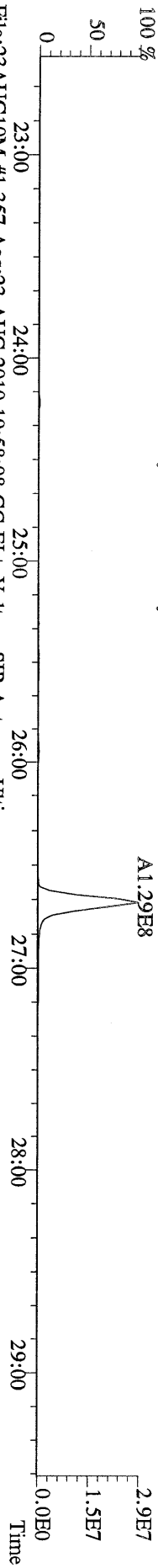
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:7 F:5 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



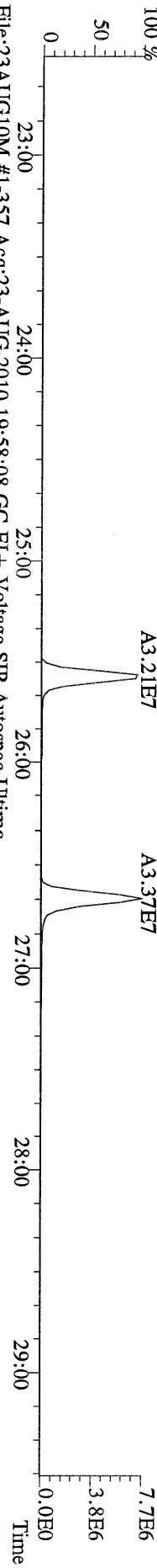
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



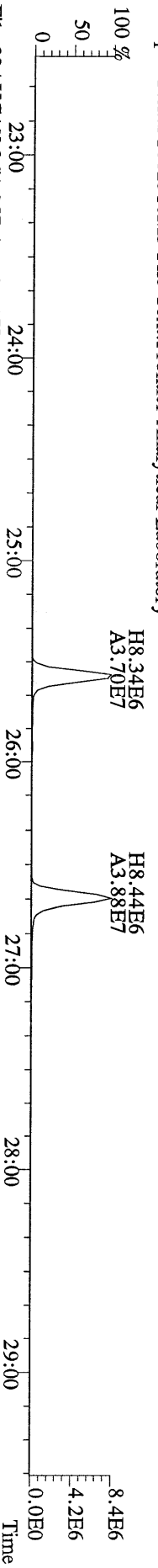
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



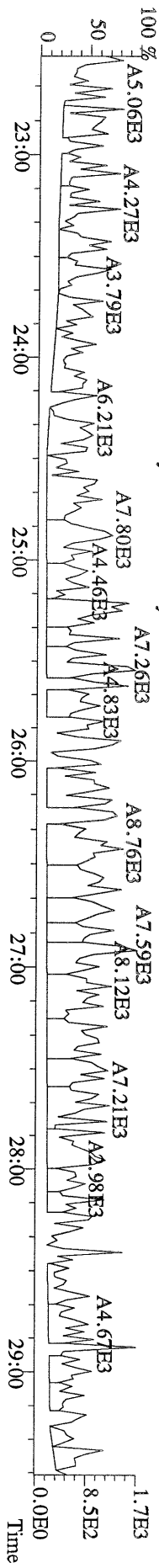
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



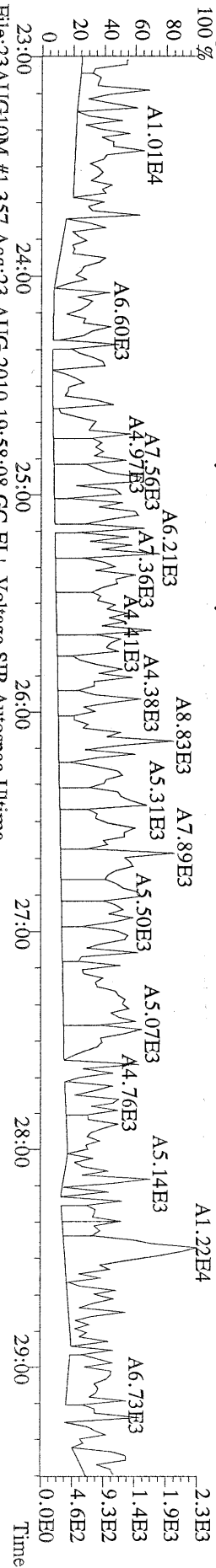
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:7 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



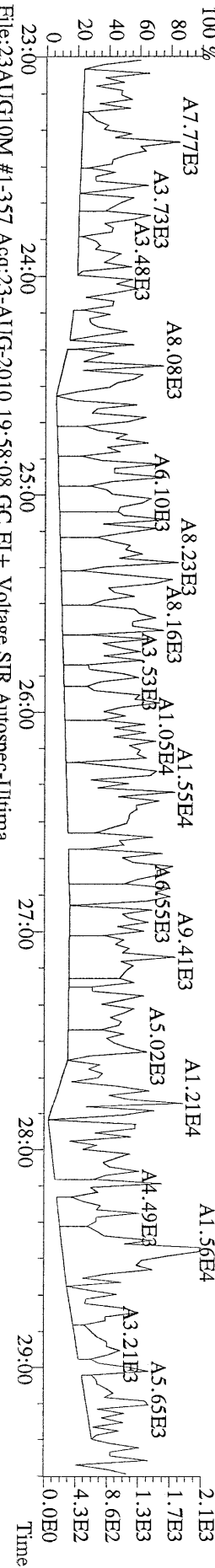
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



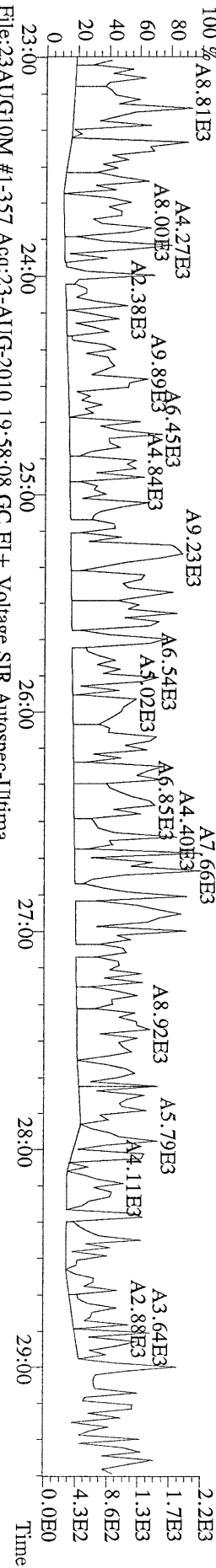
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



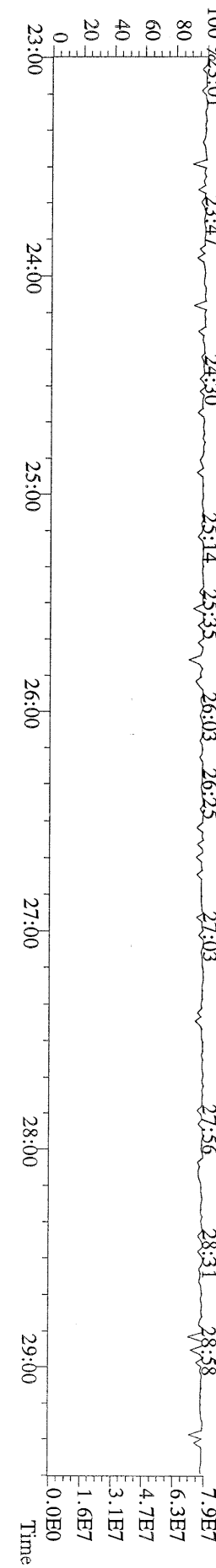
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



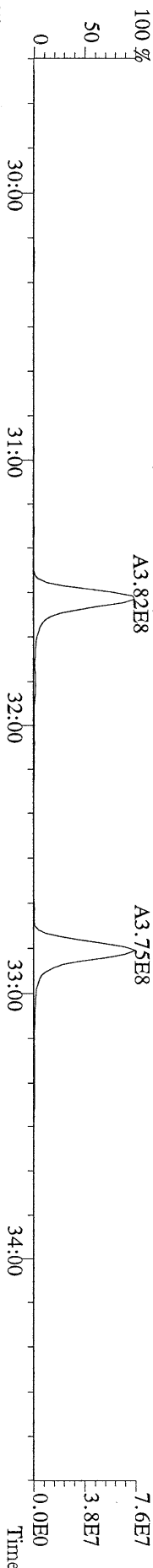
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:7 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



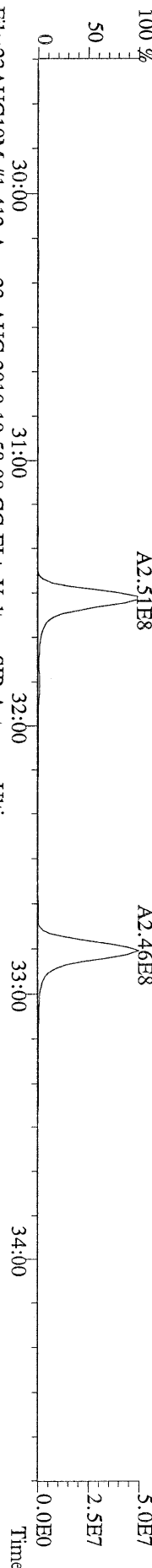
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:7 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



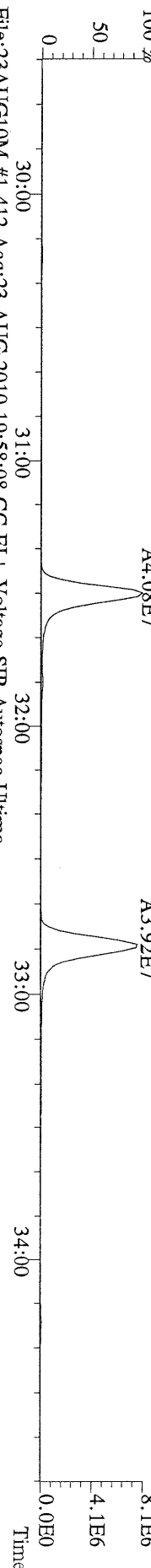
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC HI+ Voltage SIR Autospec-Ultima
 339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Fronier Analytical Laboratory



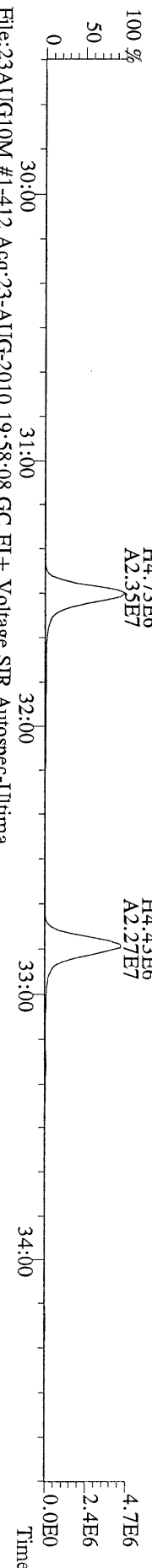
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC HI+ Voltage SIR Autospec-Ultima
 341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Fronier Analytical Laboratory



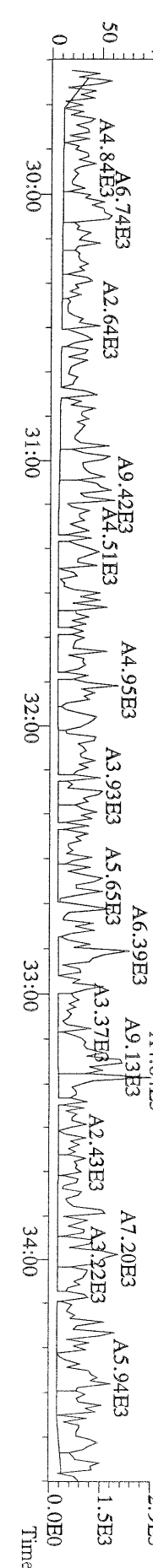
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC HI+ Voltage SIR Autospec-Ultima
 351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Fronier Analytical Laboratory



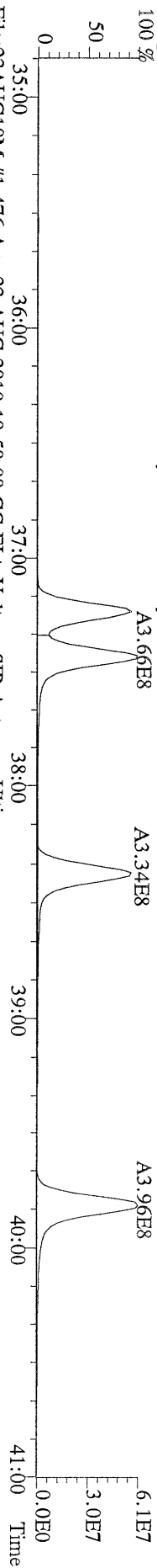
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC HI+ Voltage SIR Autospec-Ultima
 353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Fronier Analytical Laboratory



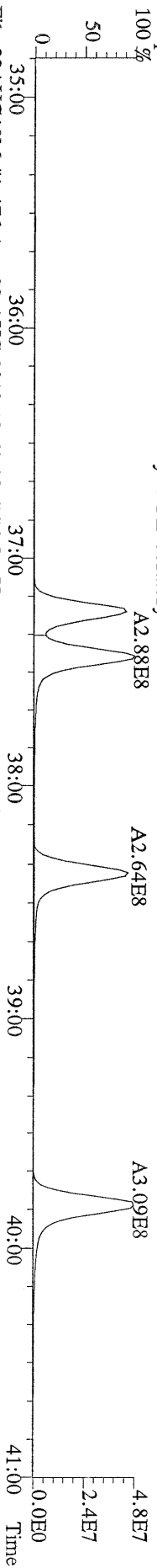
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC HI+ Voltage SIR Autospec-Ultima
 409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5.5,3,0,10%,100.0,0.00%,F,F) Exp:PCDD
 Sample Text:ST082310M5 File Text:Fronier Analytical Laboratory



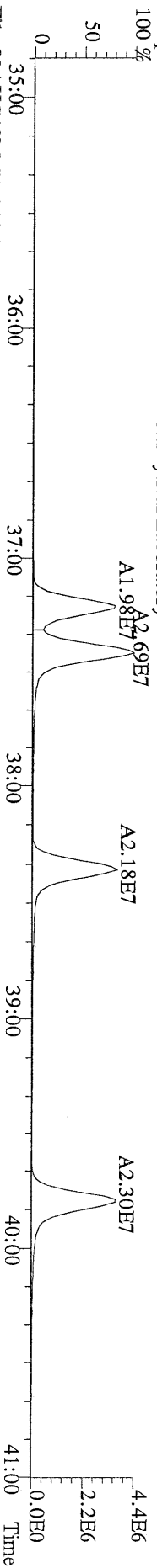
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



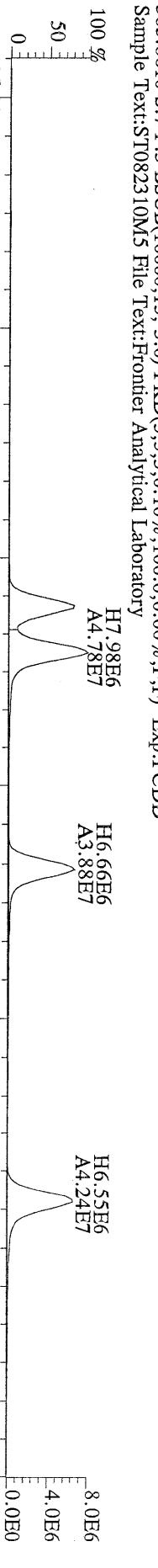
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



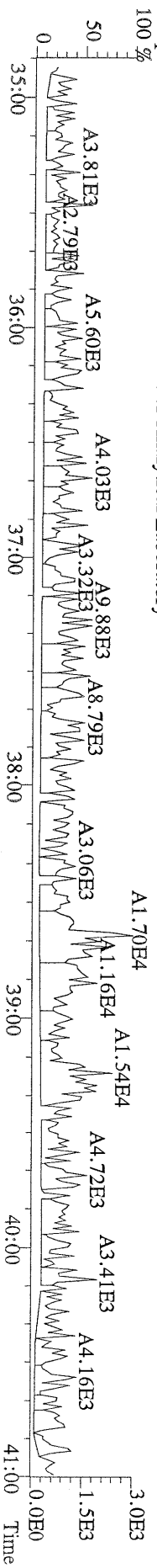
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



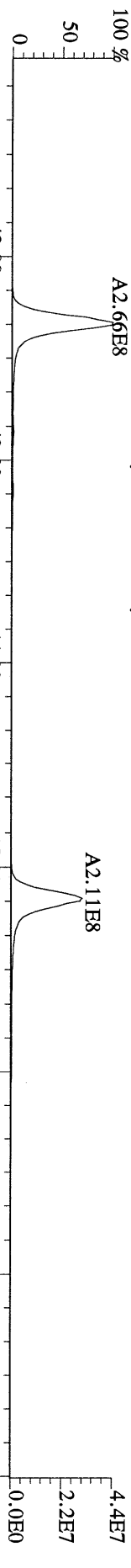
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



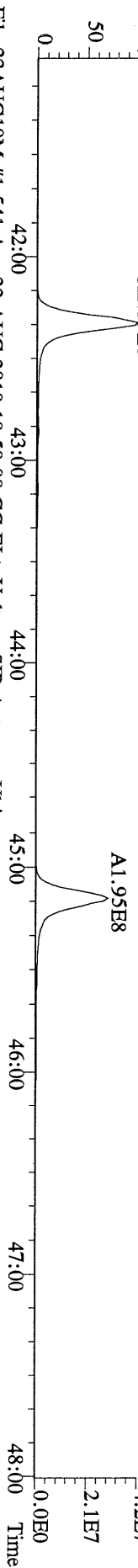
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100,0,0,0,0) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



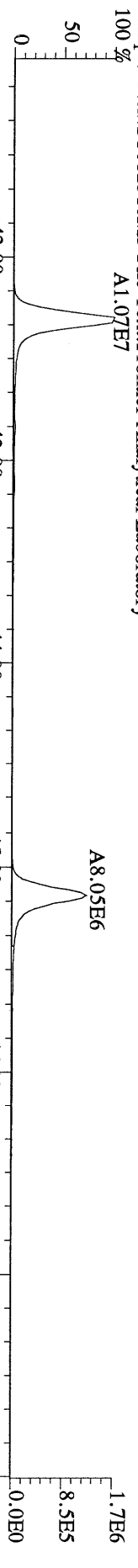
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



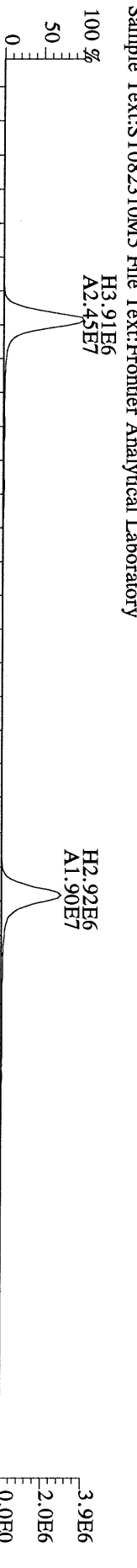
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



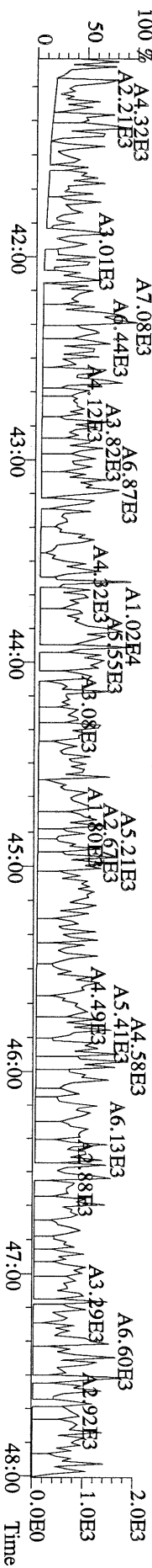
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
417.8253 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



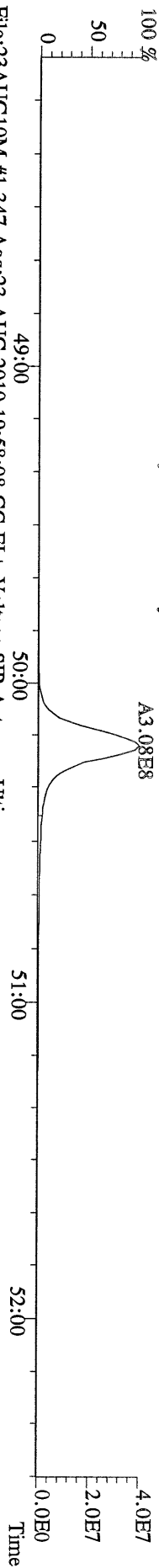
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
419.8220 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



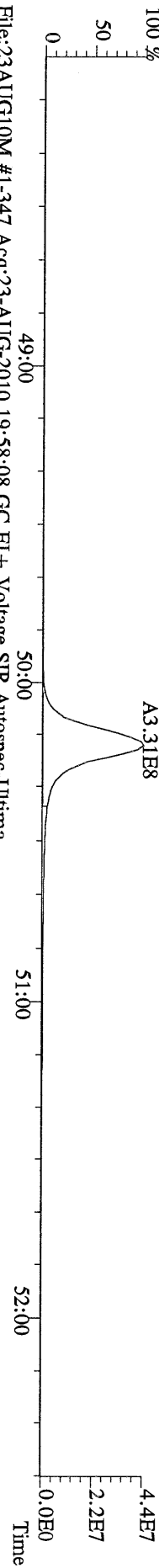
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Utima
479.7165 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



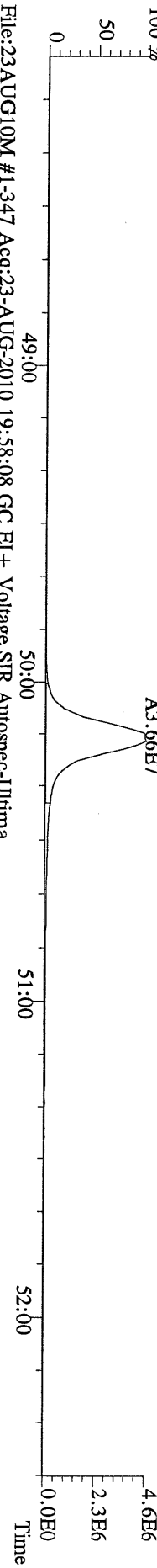
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



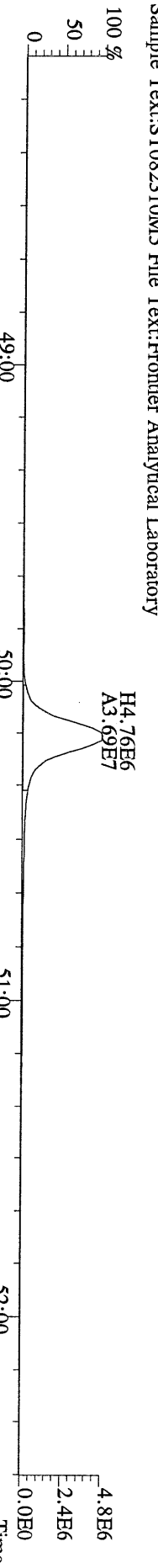
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %



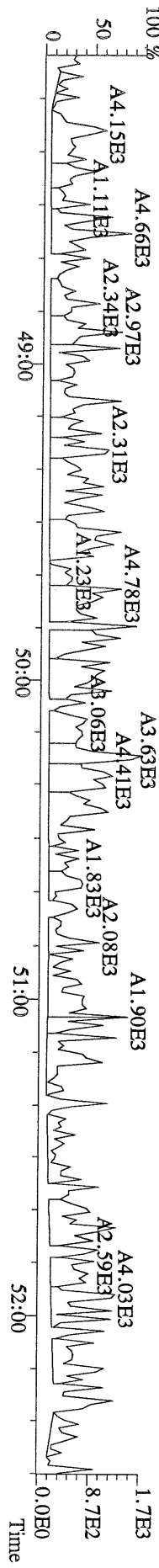
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory
100 %

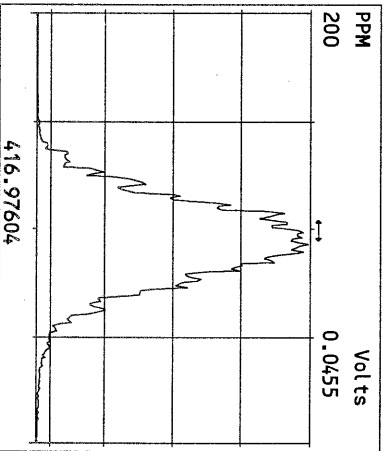
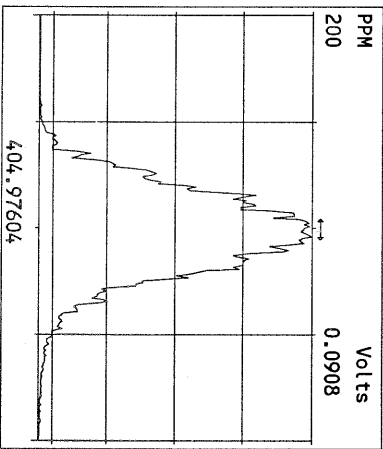
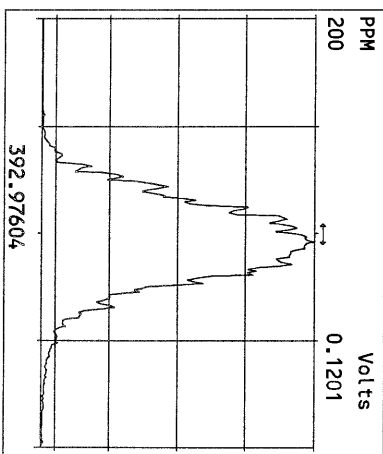
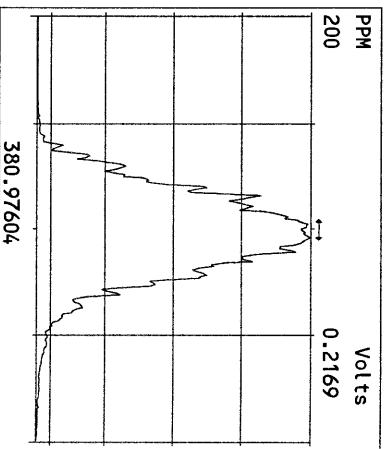
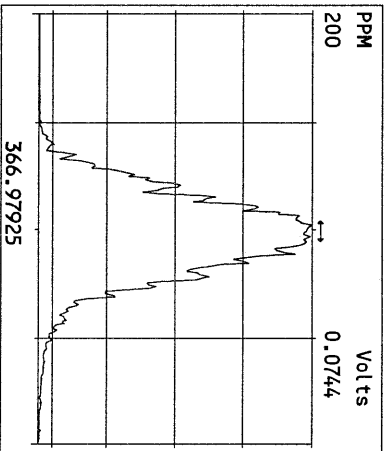
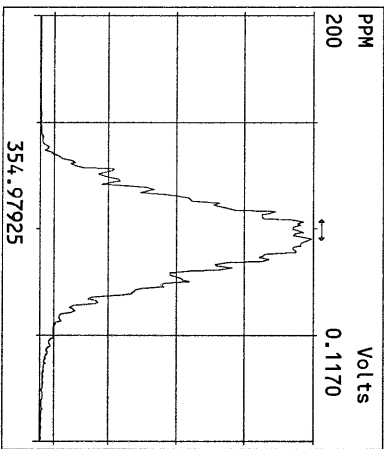
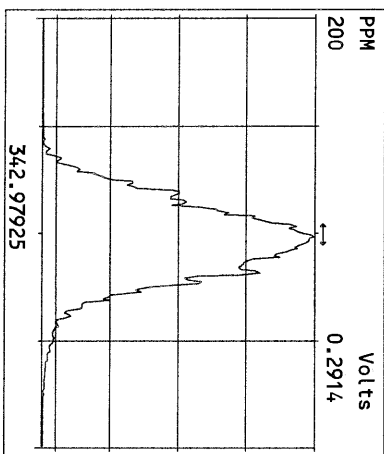
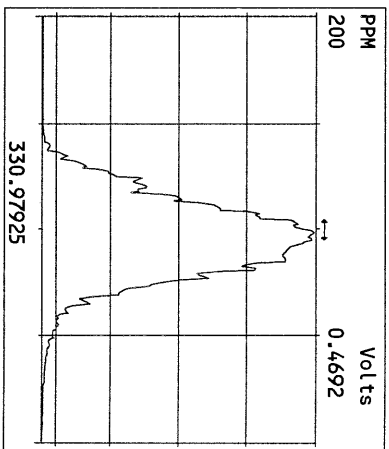
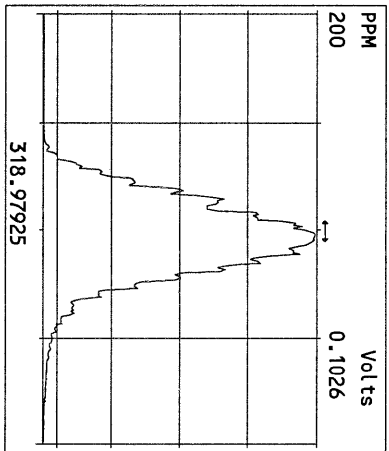
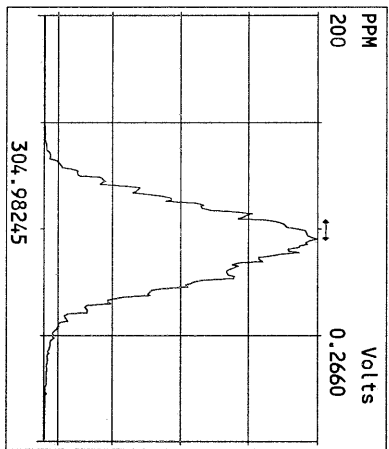
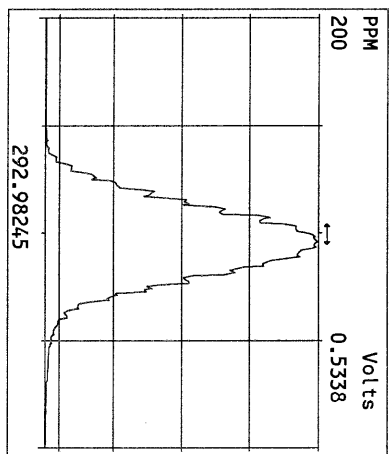


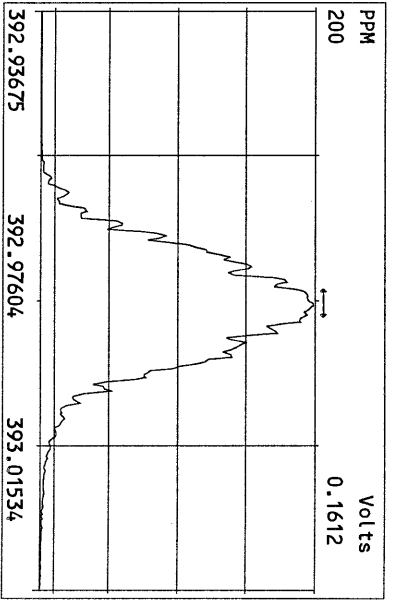
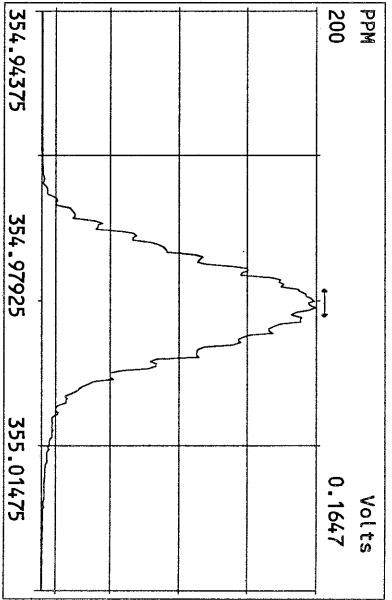
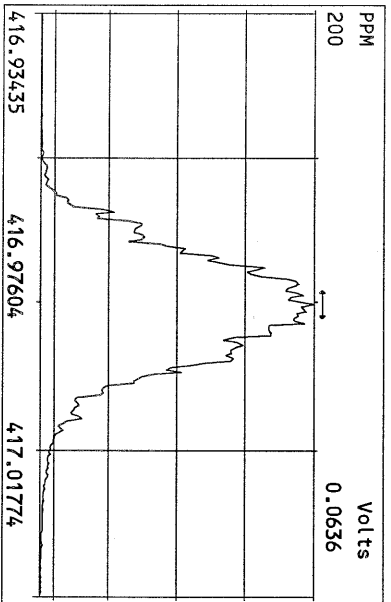
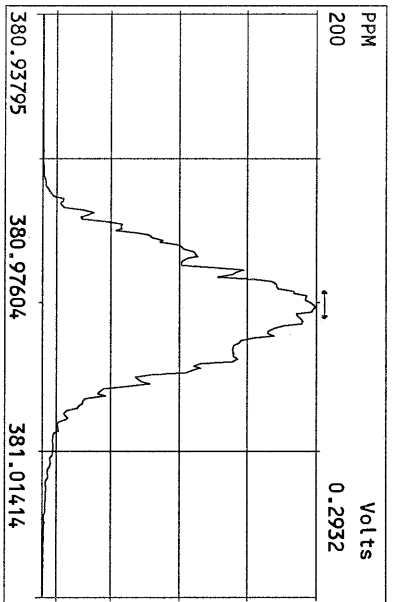
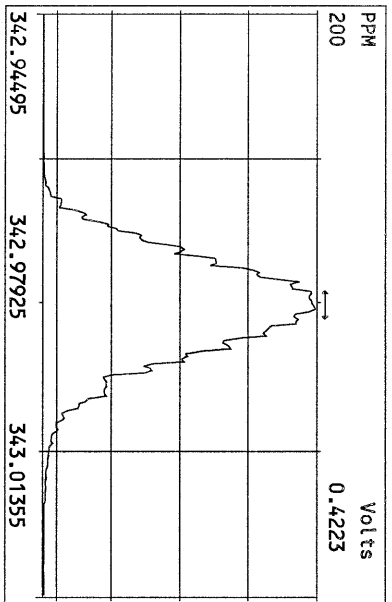
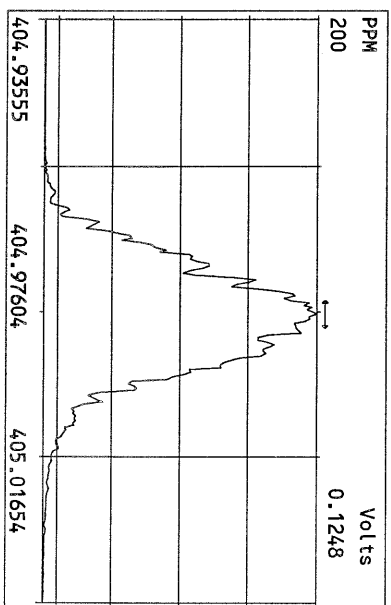
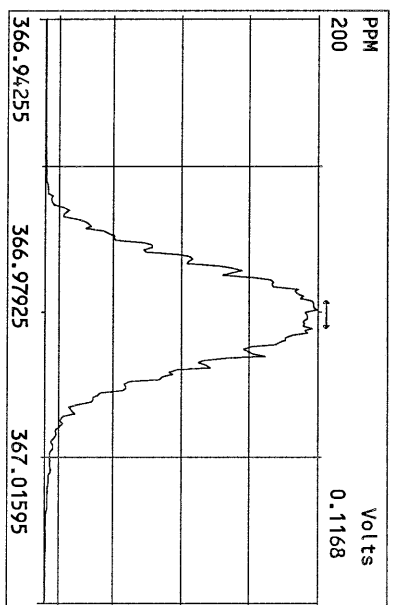
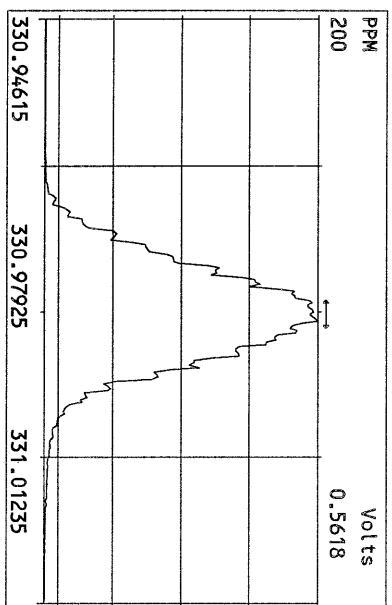
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

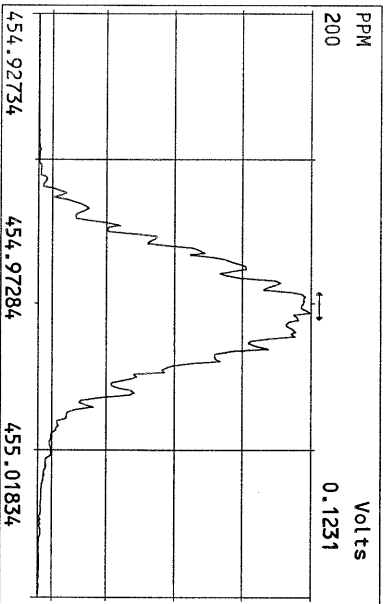
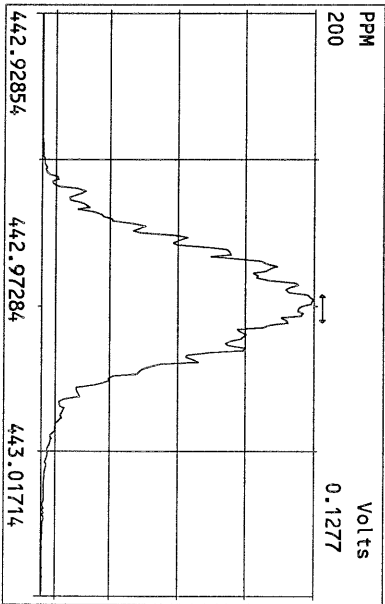
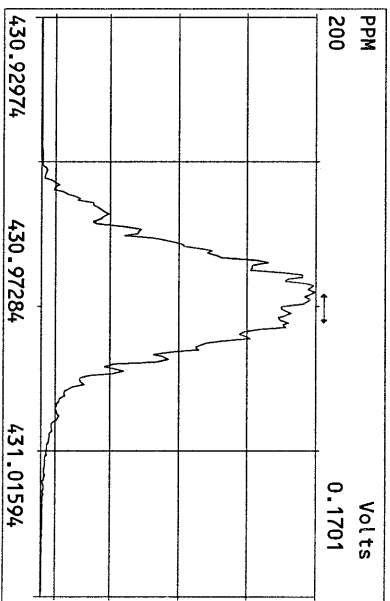
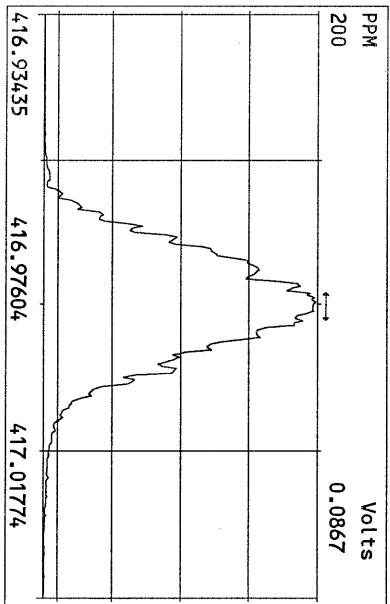
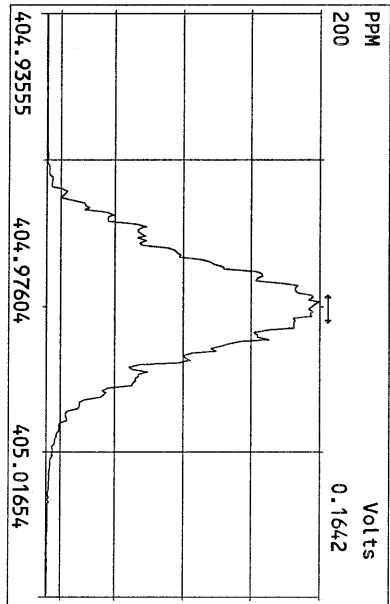
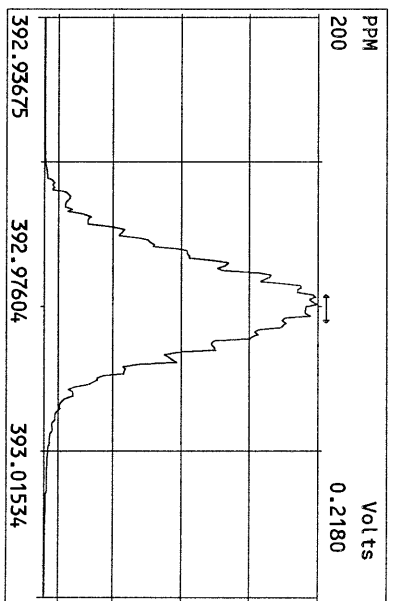
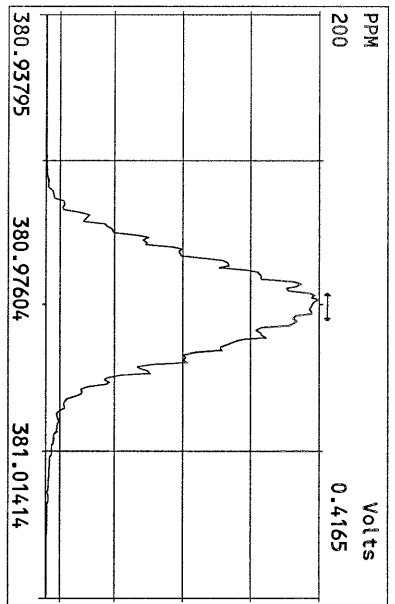
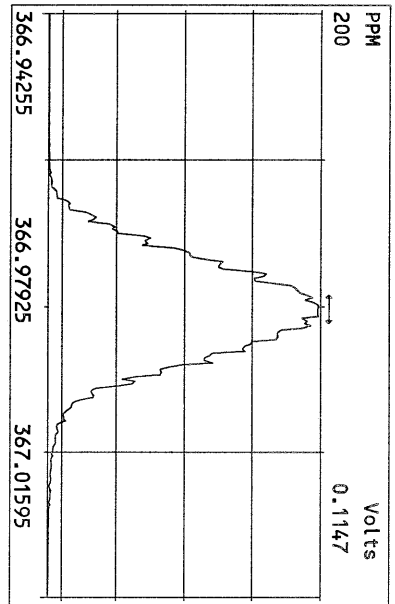


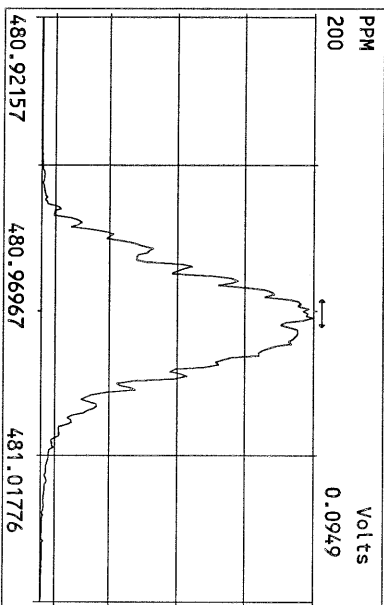
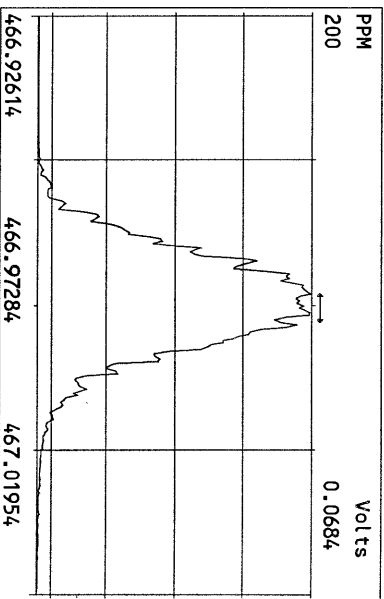
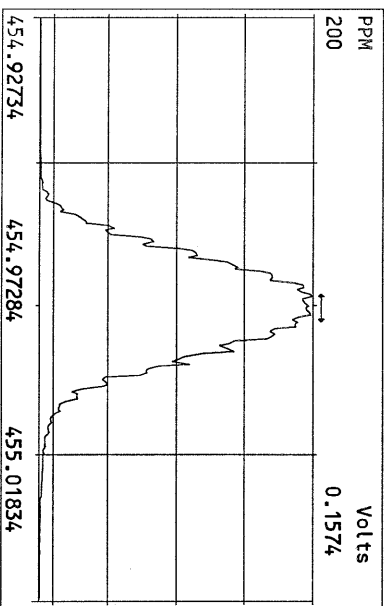
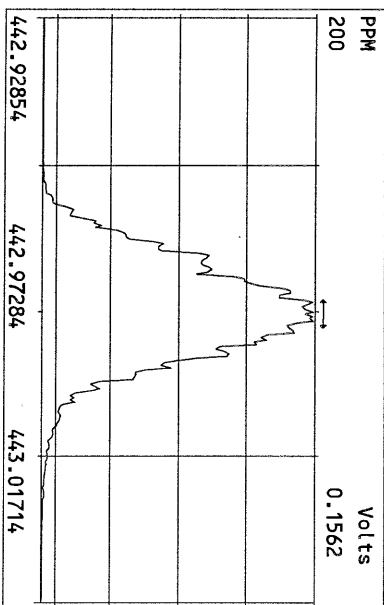
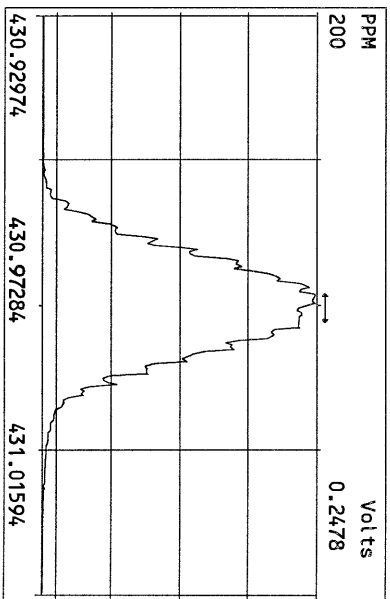
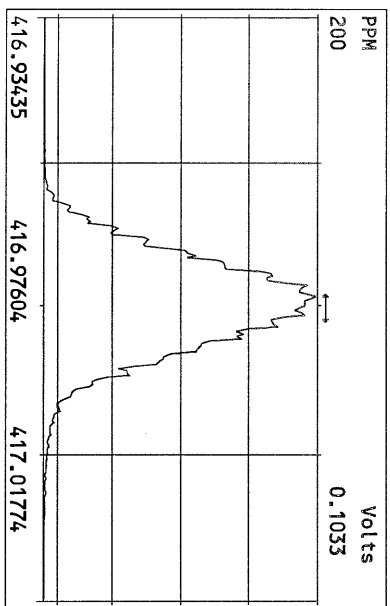
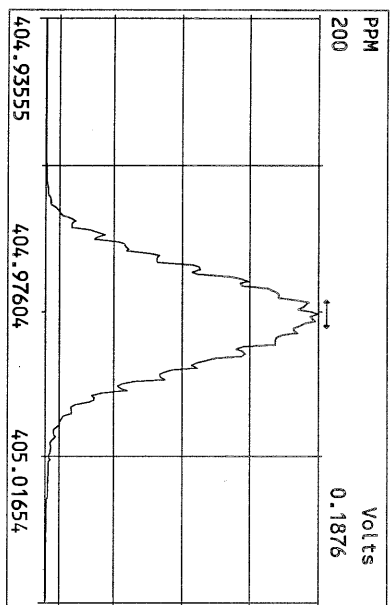
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

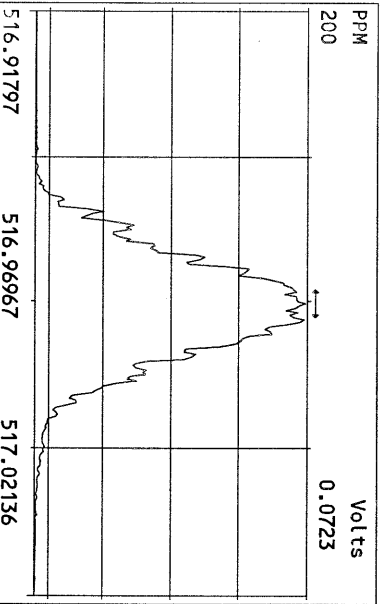
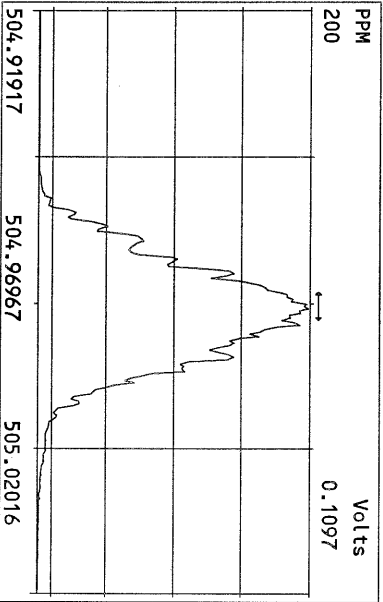
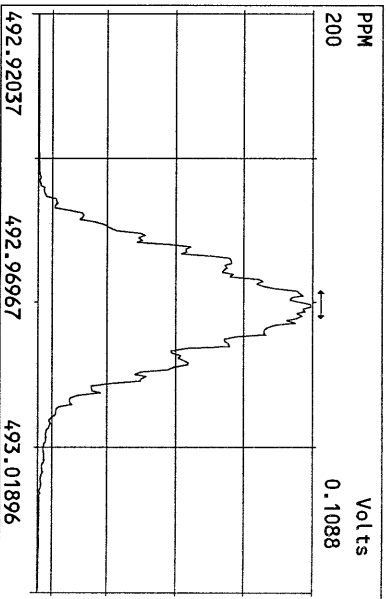
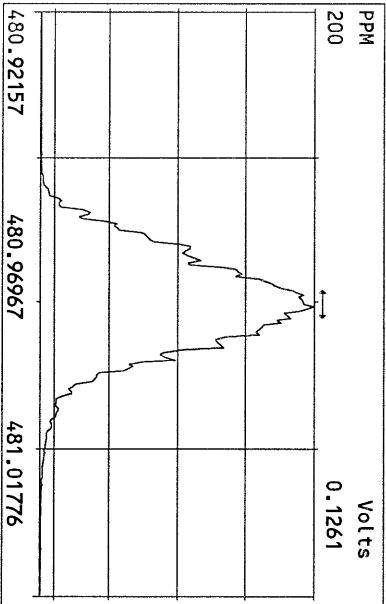
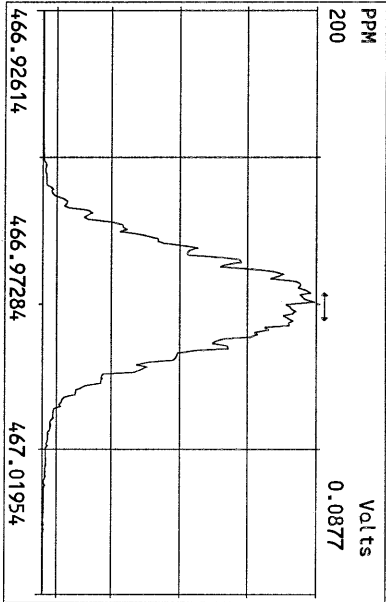
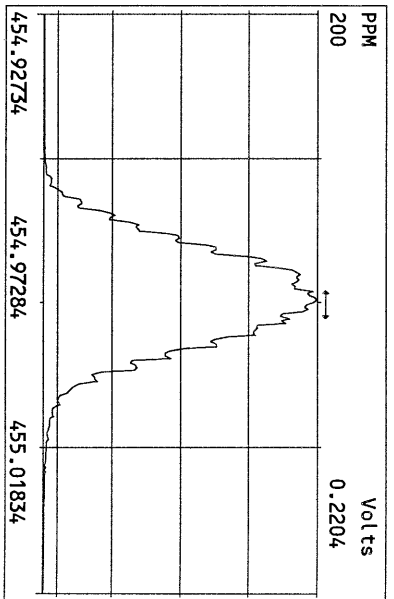
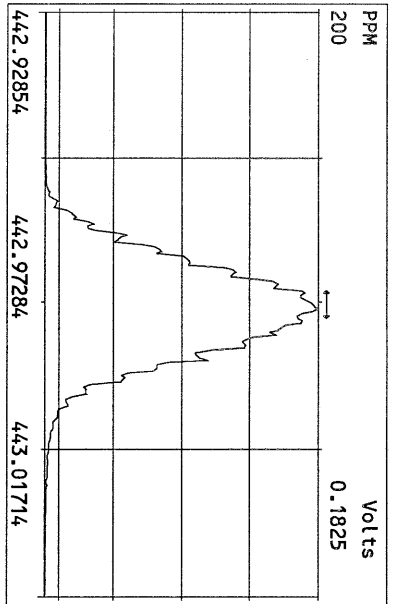
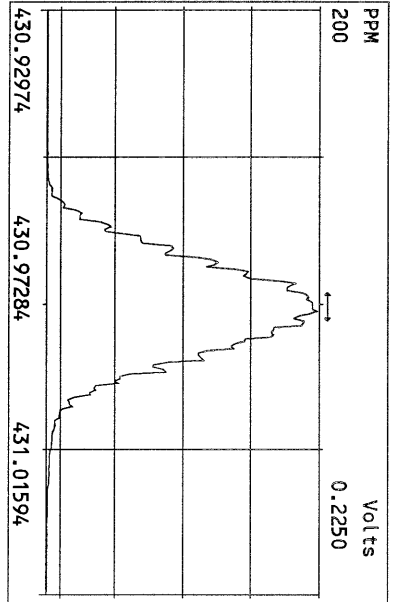












FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

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: 11FEB11M Sam:1

Analysis Date: 11-FEB-11 14:29:51

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	0.80	0.65-0.89	y	12.0	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.53	1.32-1.78	y	52.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	53.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	52.5	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	55.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.98	0.88-1.20	y	47.6	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	98.3	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.70	0.65-0.89	y	9.71	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	y	52.4	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	y	51.0	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	53.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	55.7	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	54.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	55.4	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.06	0.88-1.20	y	51.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.09	0.88-1.20	y	52.3	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	110	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: 2/11/11

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:
Contract No.: SAS No.:
Instrument ID: FAL3 Initial Calibration Date: 8/23/10
RT Window Data Filename: 11FEB11M Sam:1 Analysis Date: 11-FEB-11 Time: 14:29:51
DB-5 IS Data Filename: 11FEB11M Sam:1 Analysis Date: 11-FEB-11 Time: 14:29:51
DB-225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:28	1,3,6,8-TCDF (F)	23:06
1,2,8,9-TCDD (L)	28:27	1,2,8,9-TCDF (L)	28:41
1,2,4,7,9-PeCDD (F)	30:22	1,3,4,6,8-PeCDF (F)	28:31
1,2,3,8,9-PeCDD (L)	33:57	1,2,3,8,9-PeCDF (L)	34:23
1,2,4,6,7,9-HxCDD (F)	36:16	1,2,3,4,6,8-HxCDF (F)	35:23
1,2,3,7,8,9-HxCDD (L)	39:22	1,2,3,7,8,9-HxCDF (L)	39:57
1,2,3,4,6,7,9-HpCDD (F)	42:59	1,2,3,4,6,7,8-HpCDF (F)	42:28
1,2,3,4,6,7,8-HpCDD (L)	44:22	1,2,3,4,7,8,9-HpCDF (L)	45:18

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

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

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

Analyst: 

Date: 2/14/11

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: 11-FEB-11 14:29:51

CS3 or VER Data Filename: 11FEB11M

Sam:1

NATIVE ANALYTES	RETENTION TIME		RRT	RRT
	REFERENCE			QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD		1.001	0.999-1.002
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		1.023	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			1.239	1.000-1.567
13C-1,2,3,7,8-PeCDF			1.175	0.923-1.203
13C-2,3,4,7,8-PeCDF			1.225	0.923-1.303

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

Analyst: Date: 

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: 11-FEB-11 14:29:51

CS3 or VER Data Filename: 11FEB11M


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	1.001	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	1.000	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	0.984	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: 

Results:		GC Column: DB5	Amount: 1.000	NATO 1989 Tox:	107	WHO 1998 Tox:	133	WHO 2005 Tox:	121	
Name	Resp	RA	RT	RRF	Conc	Qual	Fac Noise-1	Noise-2	DL	
2,3,7,8-TCDD	2.79e+06	0.80 y	27:30	1.11	12.0		2.50	-	*	
1,2,3,7,8-PeCDD	1.17e+07	1.53 y	33:21	1.10	52.0		2.50	-	*	
1,2,3,4,7,8-HxCDD	1.19e+07	1.27 y	38:45	1.37	53.3		2.50	-	*	
1,2,3,6,7,8-HxCDD	1.08e+07	1.29 y	38:55	1.37	52.5		2.50	-	*	
1,2,3,7,8,9-HxCDD	1.17e+07	1.26 y	39:22	1.36	55.1		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	9.12e+06	0.98 y	44:22	1.45	47.6		2.50	-	*	
OCDD	1.29e+07	0.89 y	49:59	1.43	98.3		2.50	-	*	
2,3,7,8-TCDF	5.11e+06	0.70 y	26:45	1.50	9.71		2.50	-	*	
1,2,3,7,8-PeCDF	1.62e+07	1.53 y	31:38	0.94	52.4		2.50	-	*	
2,3,4,7,8-PeCDF	1.52e+07	1.53 y	32:57	0.94	51.0		2.50	-	*	
1,2,3,4,7,8-HxCDF	1.34e+07	1.24 y	37:21	0.93	53.5		2.50	-	*	
1,2,3,6,7,8-HxCDF	1.59e+07	1.25 y	37:33	0.82	55.7		2.50	-	*	
2,3,4,6,7,8-HxCDF	1.42e+07	1.26 y	38:31	0.92	54.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	1.56e+07	1.24 y	39:57	1.00	55.4		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	1.12e+07	1.06 y	42:28	1.39	51.1		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	8.69e+06	1.09 y	45:18	1.36	52.3		2.50	-	*	
OCDF	1.40e+07	0.90 y	50:21	0.79	110		2.50	-	*	
									Rec	
13C-2,3,7,8-TCDD	2.09e+07	0.79 y	27:29	1.02	91.9				91.9	
13C-1,2,3,7,8-PeCDD	2.05e+07	1.72 y	33:20	0.84	109				109	
13C-1,2,3,4,7,8-HxCDD	1.63e+07	1.26 y	38:43	1.07	97.8				97.8	
13C-1,2,3,6,7,8-HxCDD	1.50e+07	1.26 y	38:53	1.01	95.3				95.3	
13C-1,2,3,4,6,7,8-HpCDD	1.32e+07	1.05 y	44:21	0.86	99.3				99.3	
13C-OCDD	1.82e+07	1.00 y	49:57	0.55	215				108	
13C-2,3,7,8-TCDF	3.50e+07	0.88 y	26:44	0.99	94.2				94.2	
13C-1,2,3,7,8-PeCDF	3.27e+07	1.66 y	31:36	0.84	105				105	
13C-2,3,4,7,8-PeCDF	3.19e+07	1.68 y	32:56	0.81	105				105	
13C-1,2,3,4,7,8-HxCDF	2.70e+07	0.51 y	37:19	1.85	94.1				94.1	
13C-1,2,3,6,7,8-HxCDF	3.47e+07	0.51 y	37:32	2.54	88.4				88.4	
13C-2,3,4,6,7,8-HxCDF	2.83e+07	0.52 y	38:29	2.01	90.8				90.8	
13C-1,2,3,7,8,9-HxCDF	2.82e+07	0.52 y	39:55	2.03	89.6				89.6	
13C-1,2,3,4,6,7,8-HpCDF	1.58e+07	0.47 y	42:27	1.11	91.9				91.9	
13C-1,2,3,4,7,8,9-HpCDF	1.23e+07	0.47 y	45:17	0.80	98.4				98.4	
13C-OCDF	3.25e+07	0.91 y	50:20	1.08	193				96.7	
37Cl-2,3,7,8-TCDD	1.53e+06		27:30	0.69	10.1				101	
13C-1,2,3,4-TCDD	2.22e+07	0.80 y	26:54	-	49.5					
13C-1,2,3,4-TCDF	3.74e+07	0.88 y	25:38	-	51.7					
13C-1,2,3,7,8,9-HxCDD	1.55e+07	1.32 y	39:21	-	56.2					
Total Tetra-Dioxins	1.46e+07		22:54	1.11	63.0		2.50	-	*	32
Total Penta-Dioxins	2.61e+07		30:22	1.10	116		2.50	-	*	9
Total Hexa-Dioxins	3.98e+07		36:16	1.37	186		2.50	-	*	21
Total Hepta-Dioxins	1.97e+07		42:59	1.45	103		2.50	-	*	26
Total Tetra-Furans	2.47e+07		23:06	1.50	47.0		2.50	-	*	29
1st Fn. Tot Penta-Furans	1.69e+07		28:31	0.94	55.8		2.50	-	*	PeCDF 5
Total Penta-Furans	4.58e+07		30:09	0.94	151		2.50	-	*	207 15
Total Hexa-Furans	6.98e+07		35:23	0.91	259		2.50	-	*	28
Total Hepta-Furans	2.11e+07		42:28	1.38	110		2.50	-	*	34

Analyst: 

Date: 

Frontier Analytical Laboratory - Acquisition Log

Run Name:11FEB11M

Instrument: FAL3

GC: DB5

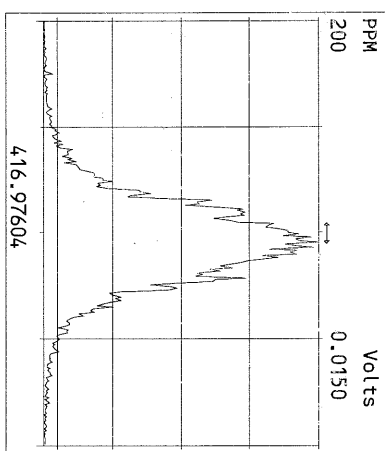
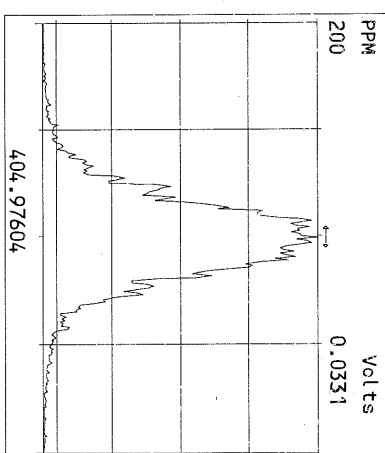
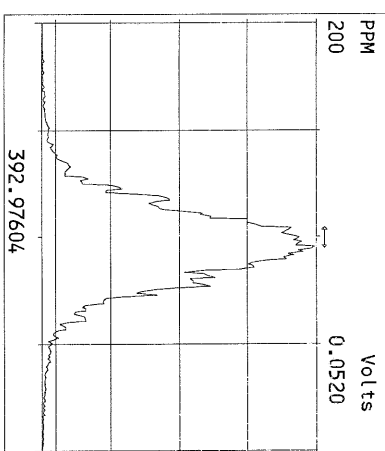
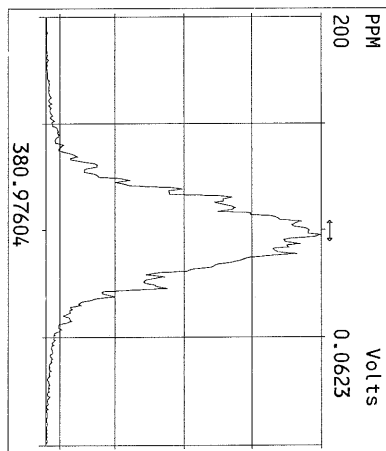
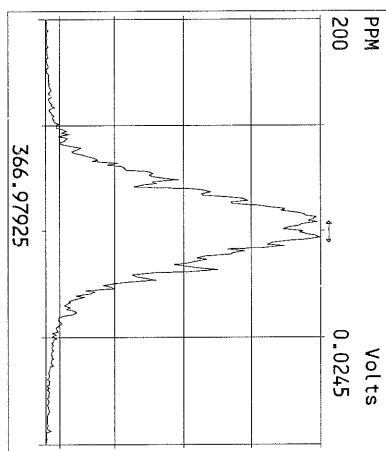
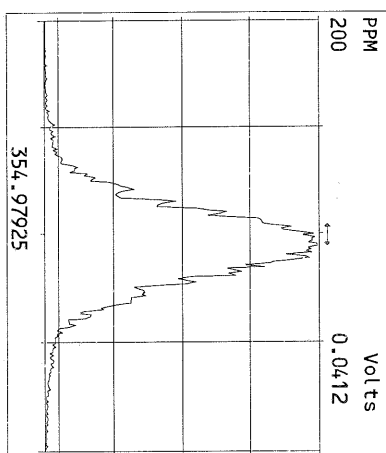
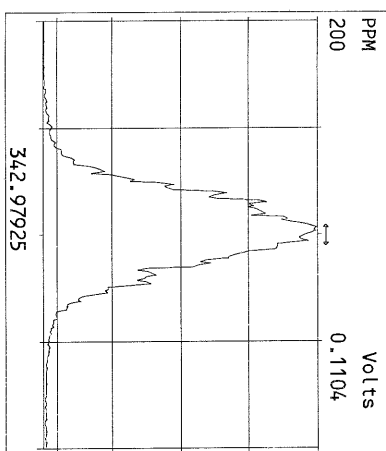
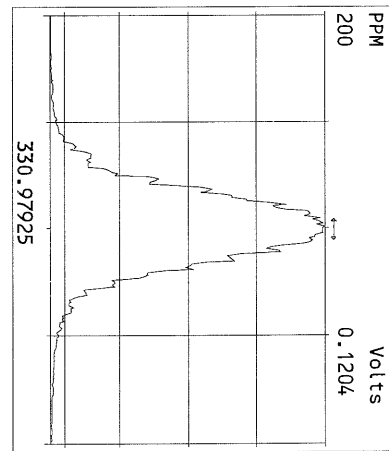
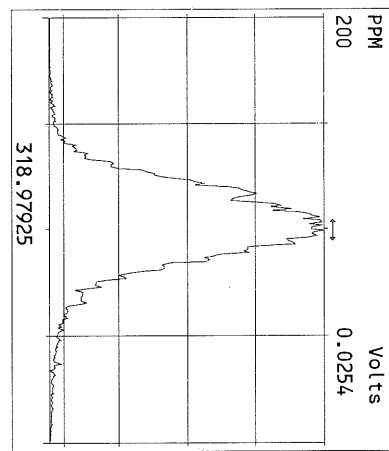
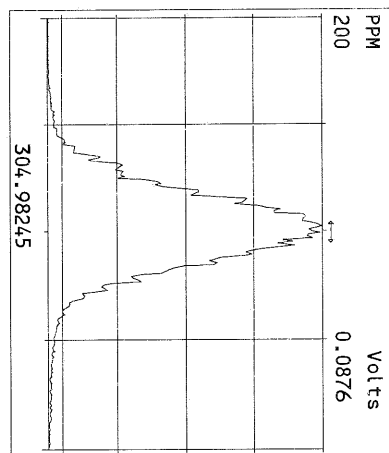
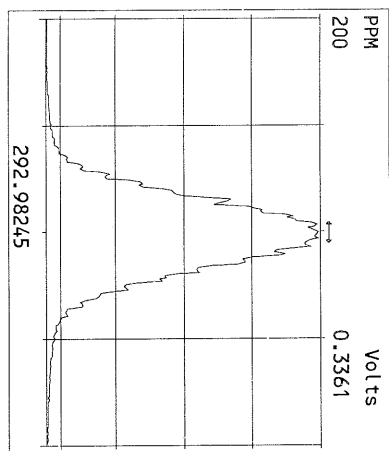
Experiment:OCDD

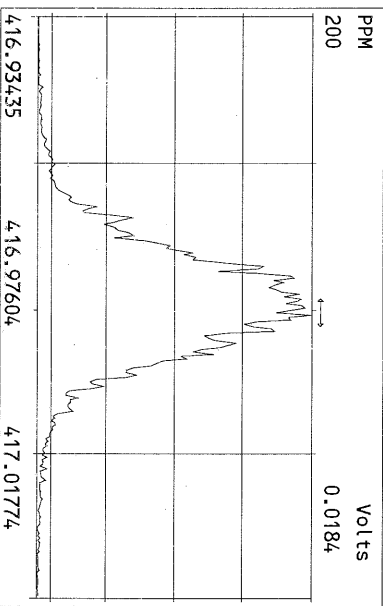
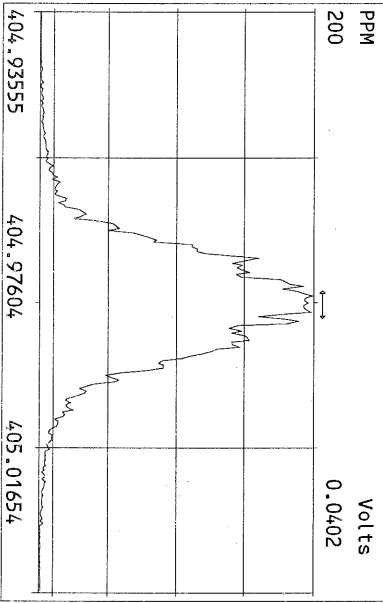
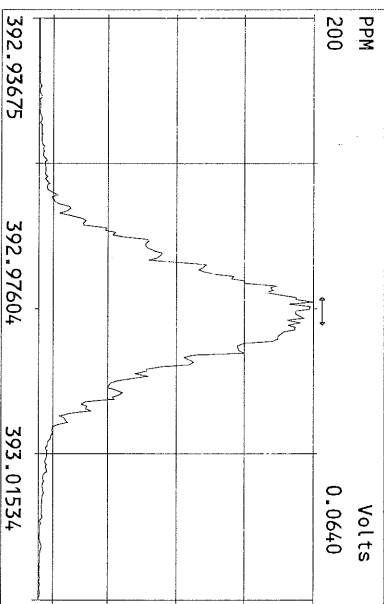
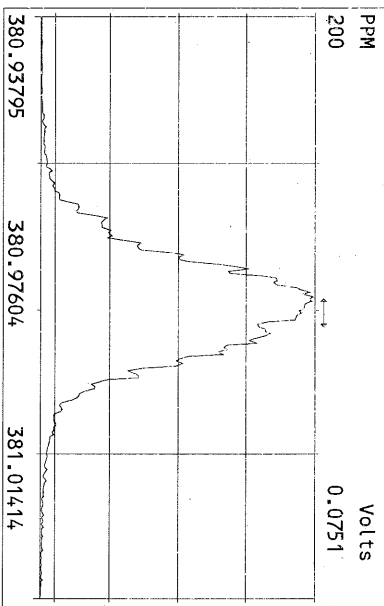
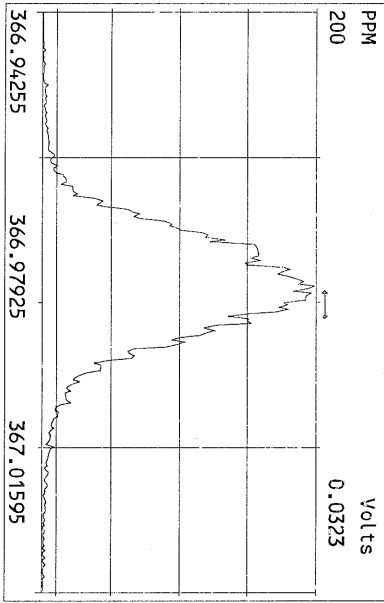
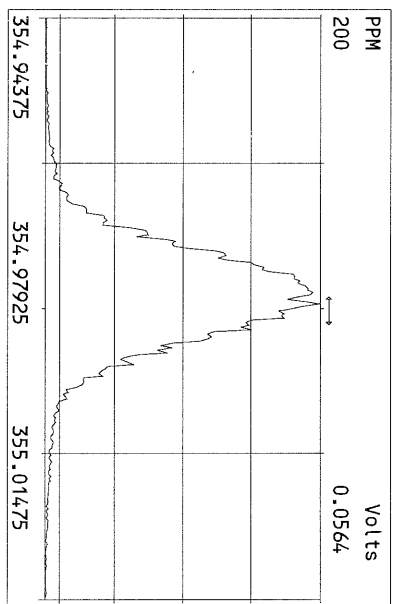
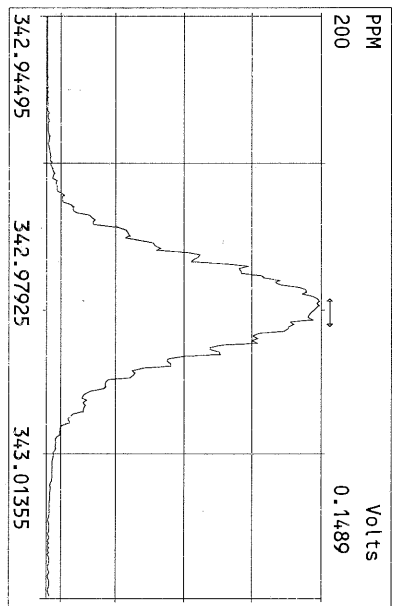
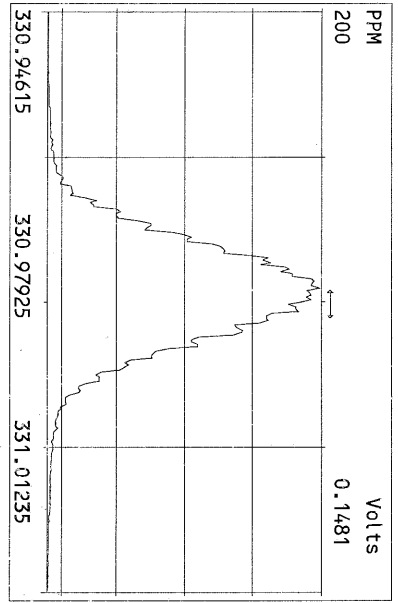
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
11FEB11M	1	ST021111M1	1613 CS3 100511J	11-FEB-11 14:29:51	ST021111M1	ST021111M2	TC
11FEB11M	2	2216-001-0001-OPR	OPR	11-FEB-11 15:25:09	ST021111M1	ST021111M2	TC
11FEB11M	3	2216-001-0001-MB	Method Blank	11-FEB-11 16:21:50	ST021111M1	ST021111M2	TC
11FEB11M	4	6556-001-0001-SA	PSB05-4-5-072810	11-FEB-11 17:17:09	ST021111M1	ST021111M2	TC
11FEB11M	5	6557-001-0001-SA	PSB12-14-17-072810	11-FEB-11 18:12:28	ST021111M1	ST021111M2	TC
11FEB11M	6	6558-001-0001-SA	PSB2-4-6-072910	11-FEB-11 19:07:47	ST021111M1	ST021111M2	TC
11FEB11M	7	SB021111M1	Solvent Blank	11-FEB-11 20:03:05	ST021111M1	ST021111M2	TC
11FEB11M	8	ST021111M2	1613 CS3 100511J	11-FEB-11 20:58:24	ST021111M1	ST021111M2	TC

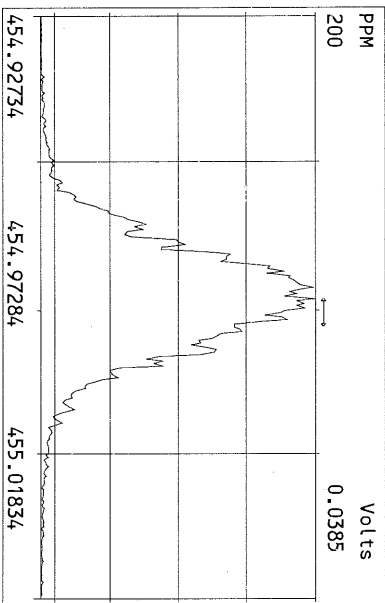
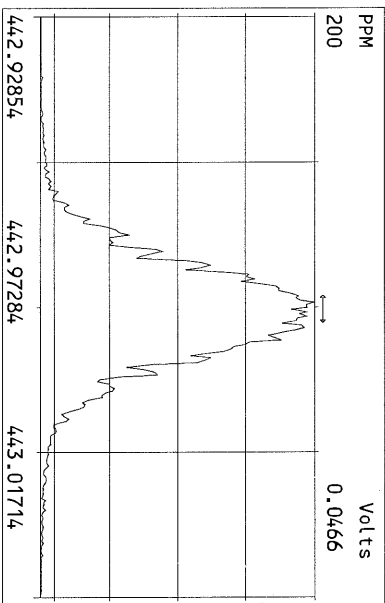
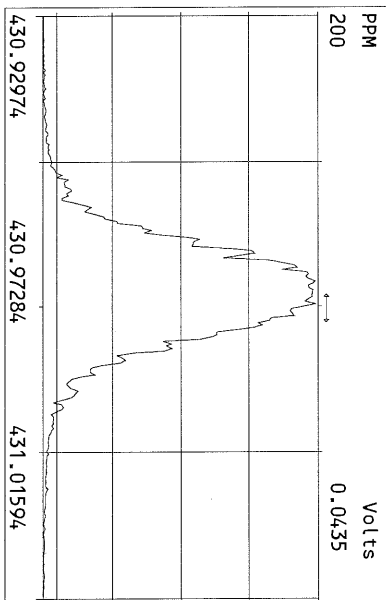
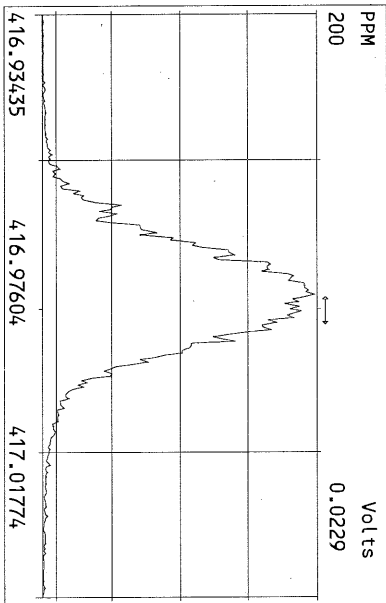
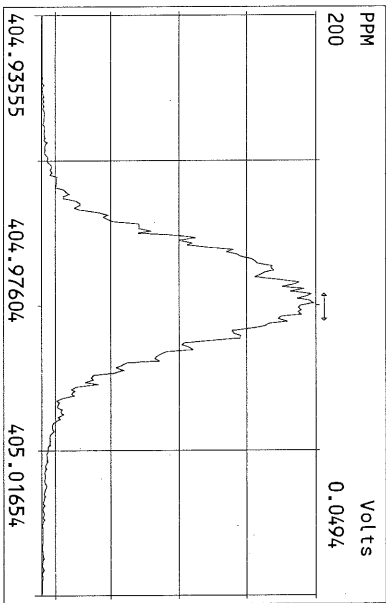
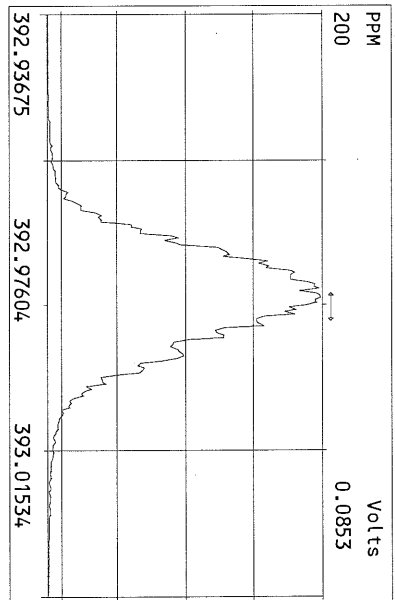
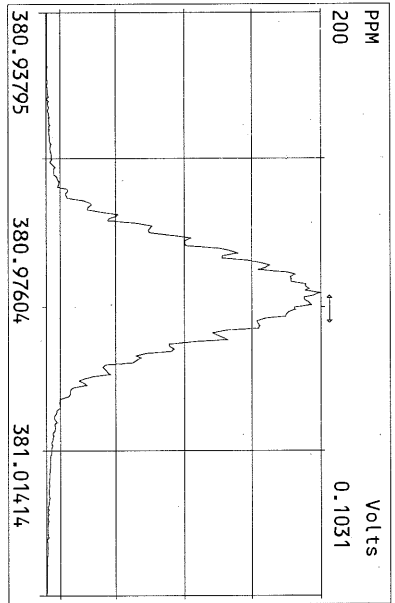
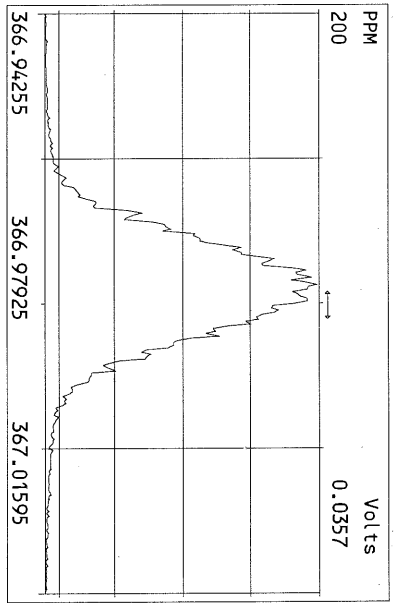
 2/14/11

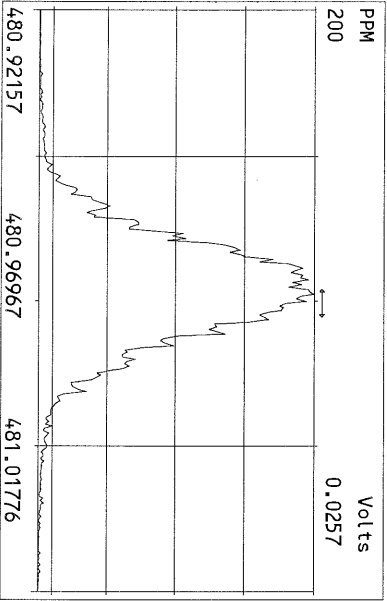
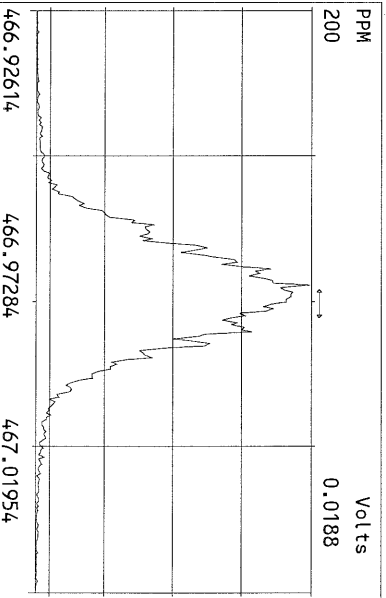
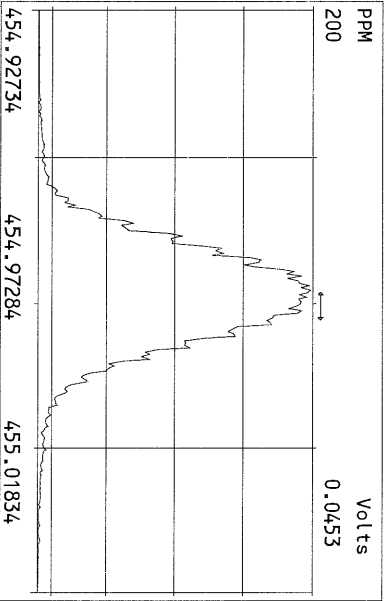
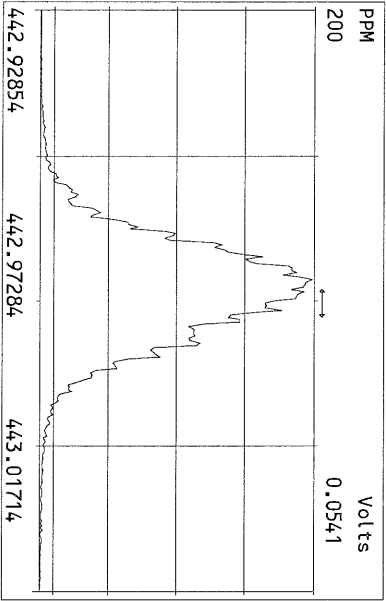
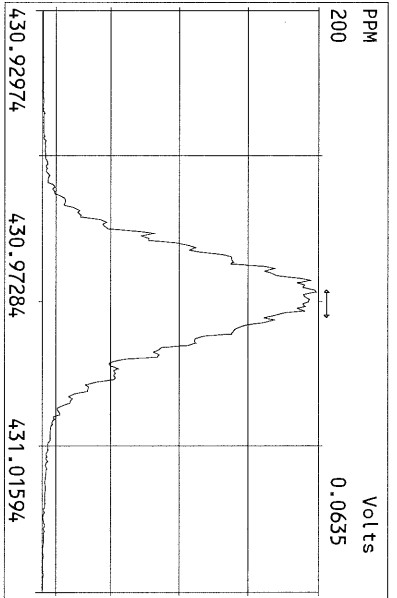
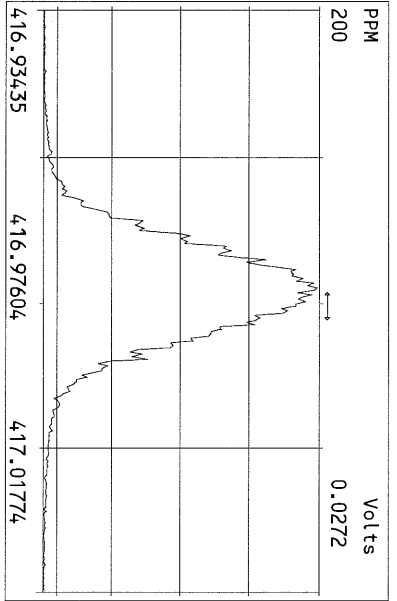
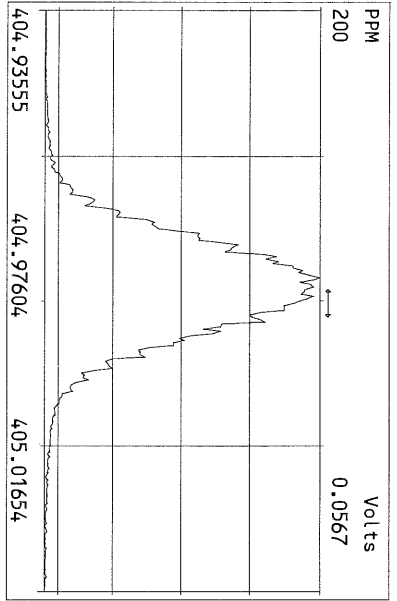
Data Backed Up: _____

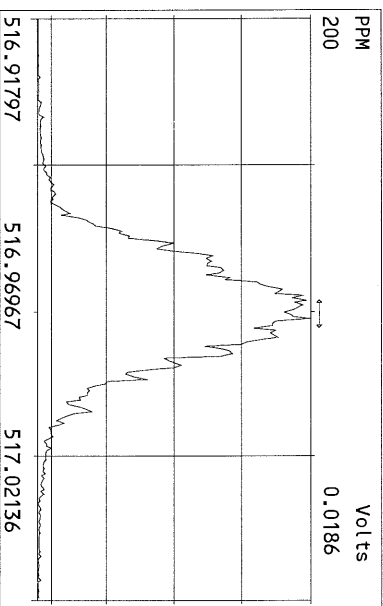
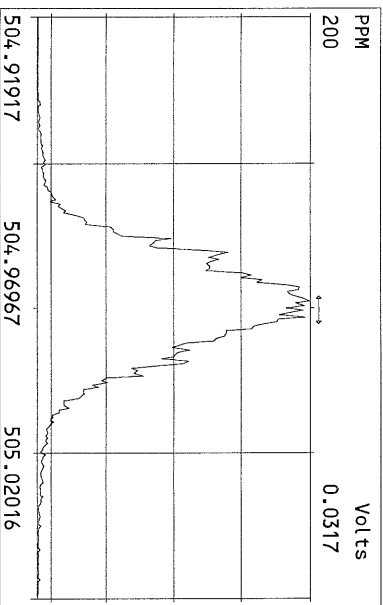
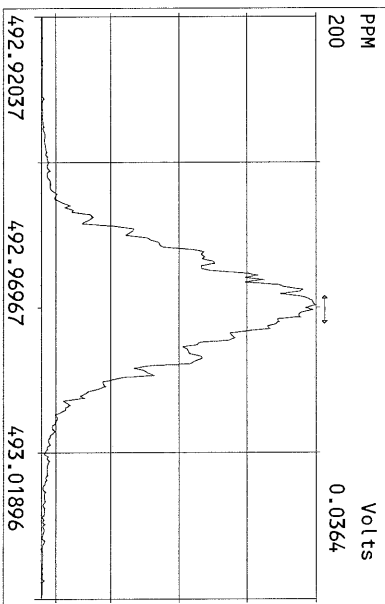
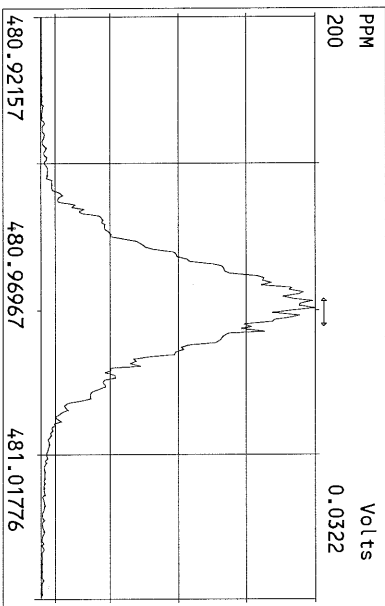
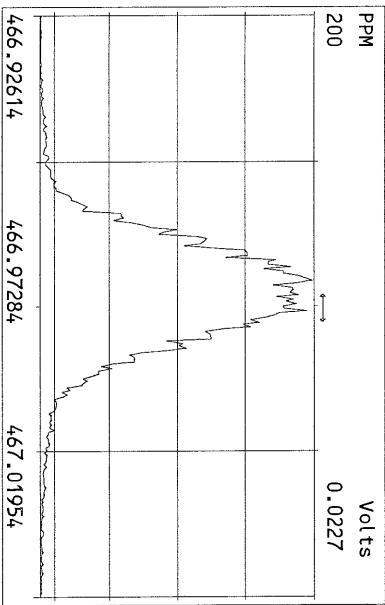
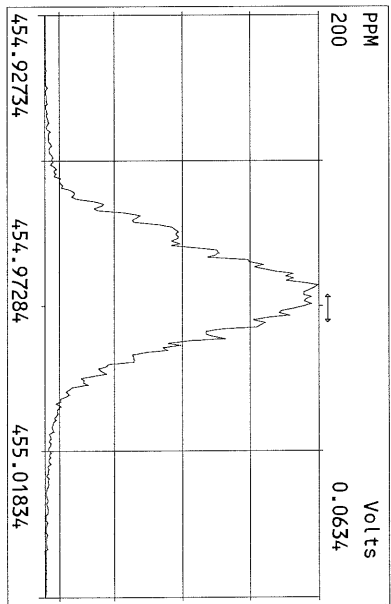
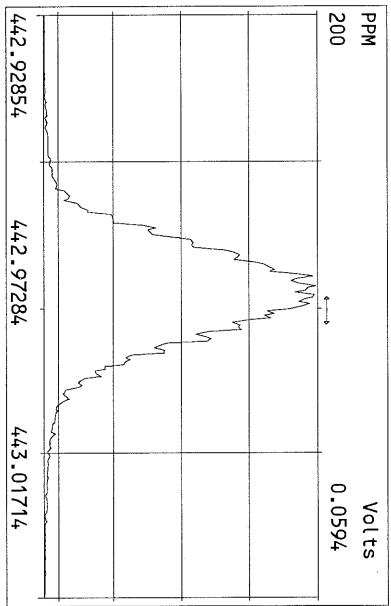
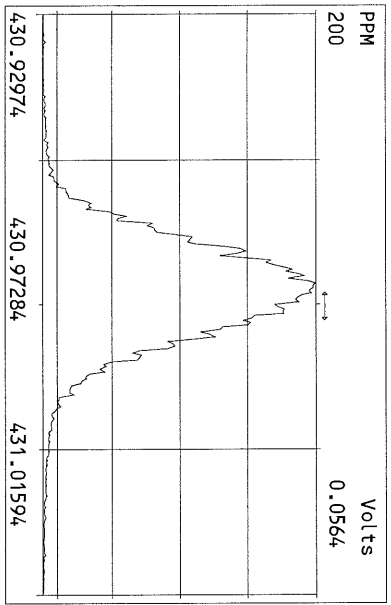
Date: _____



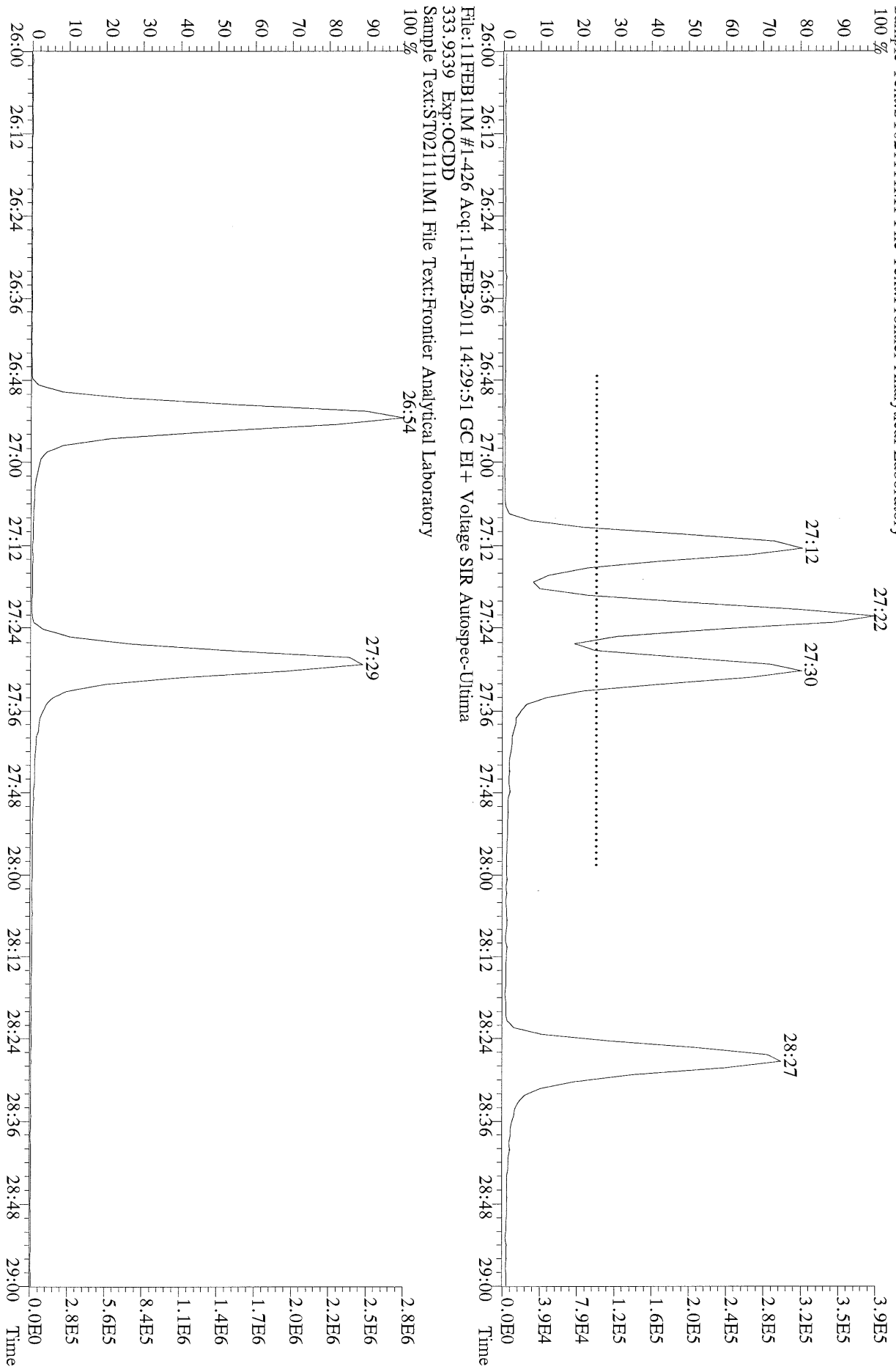






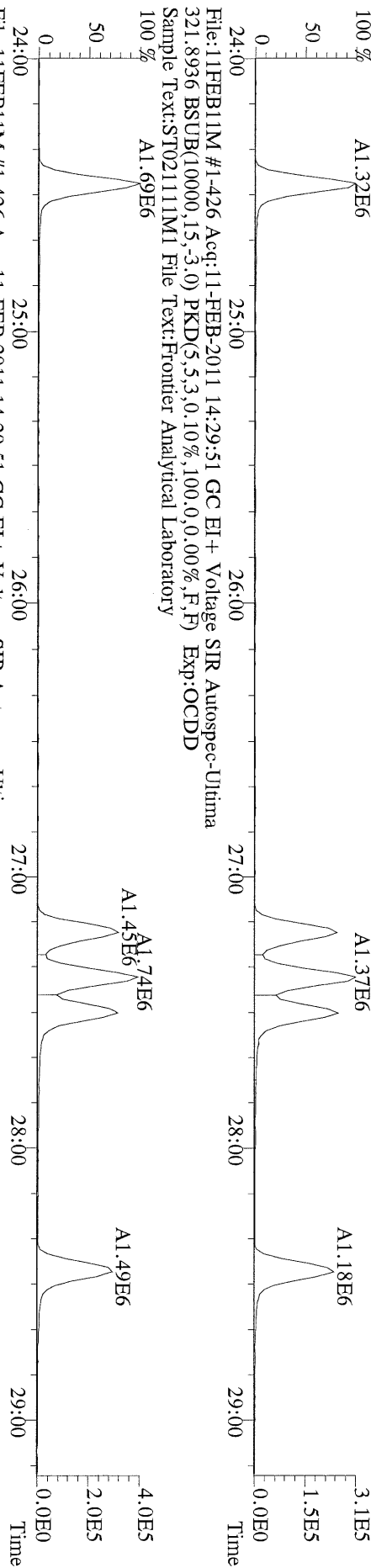


File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 GC EI+ Voltage SIR Autospec-Ultima
321.8936 Exp:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory

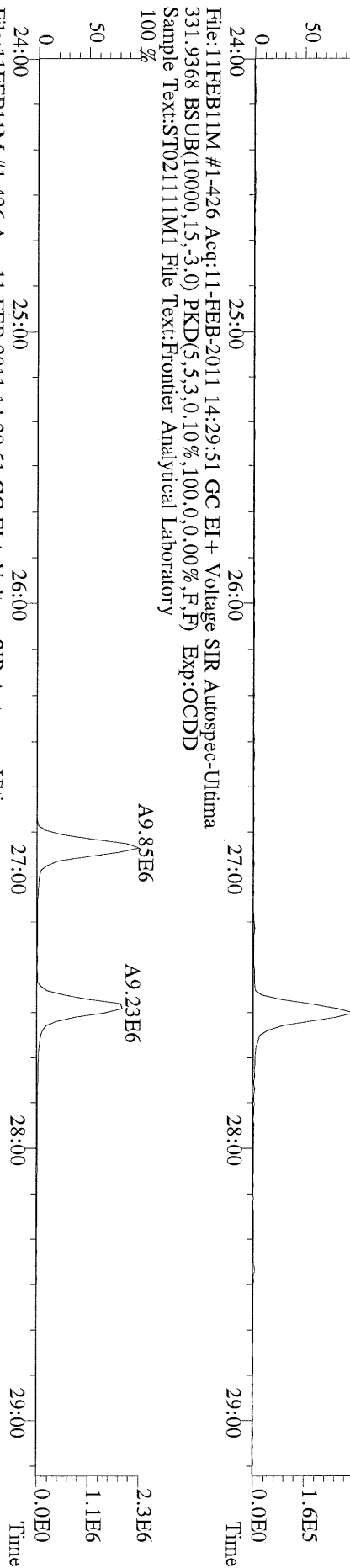


File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory

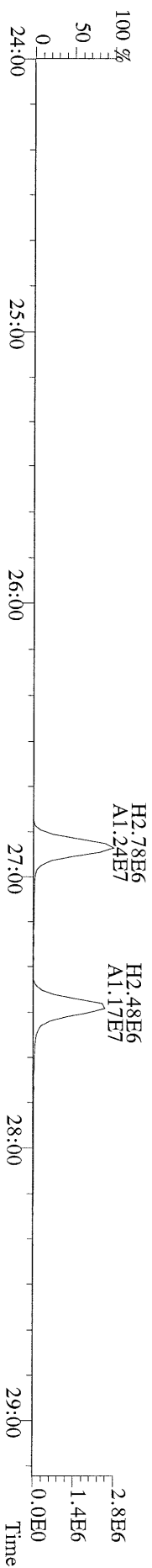
File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory



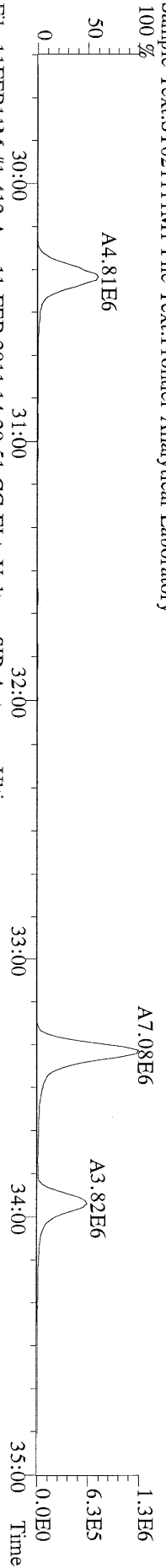
File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory



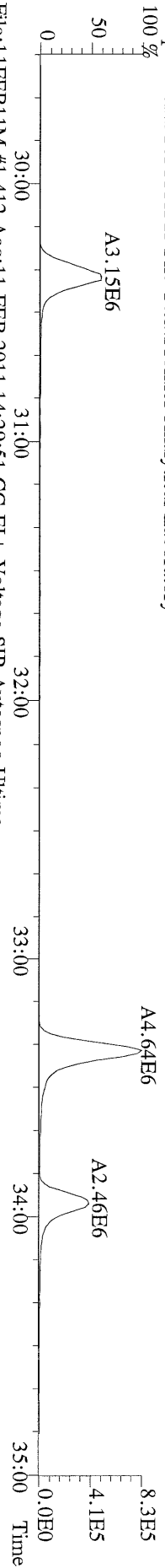
File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory



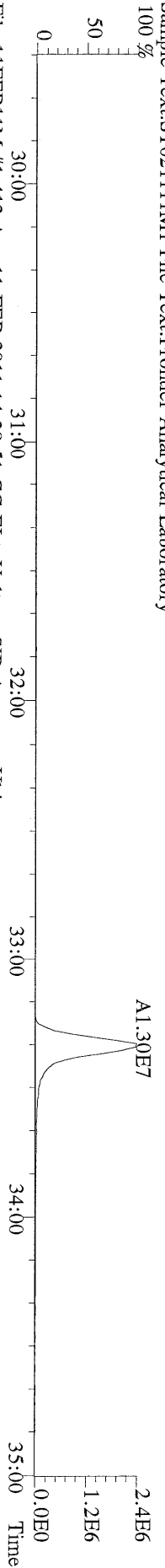
File: 11FEB11M #1-412 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



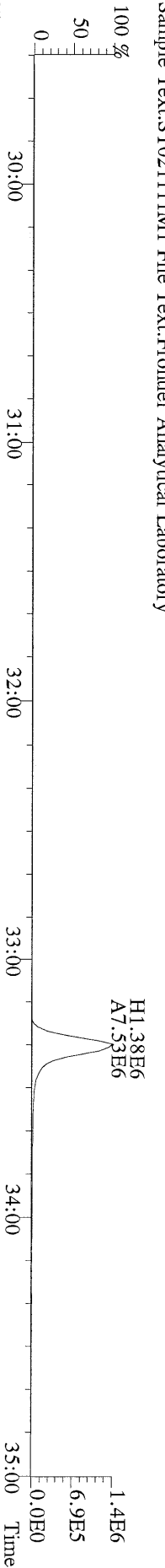
File: 11FEB11M #1-412 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



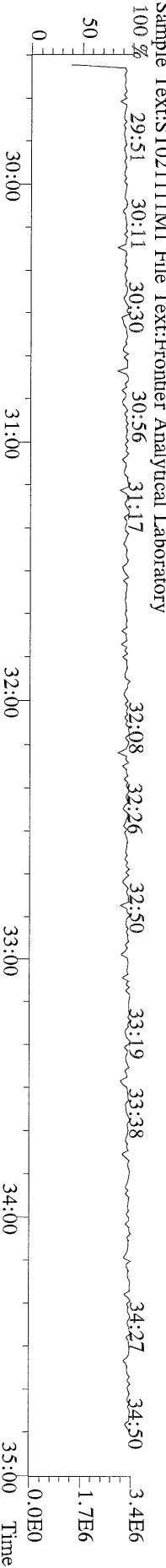
File: 11FEB11M #1-412 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



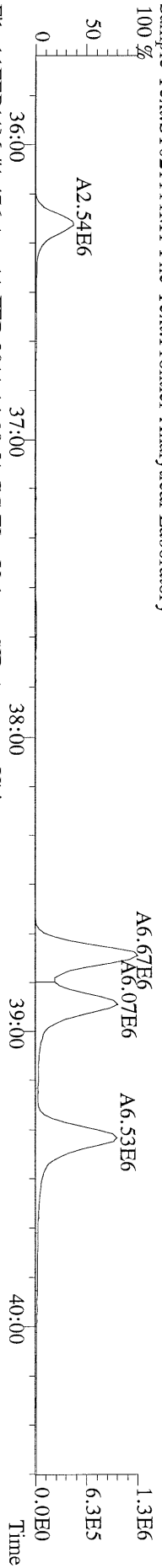
File: 11FEB11M #1-412 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100,0,0.00%,F,F) Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



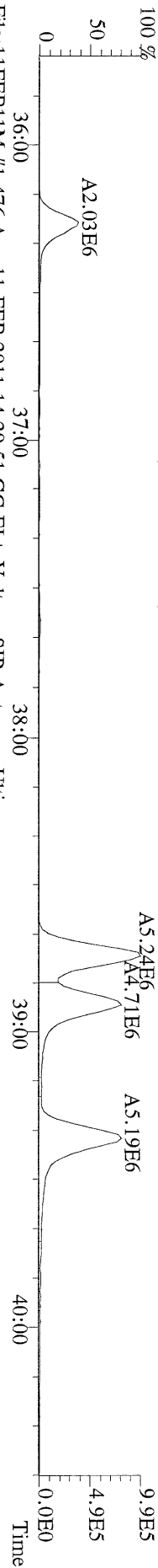
File: 11FEB11M #1-412 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
366.9792 F:2 Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



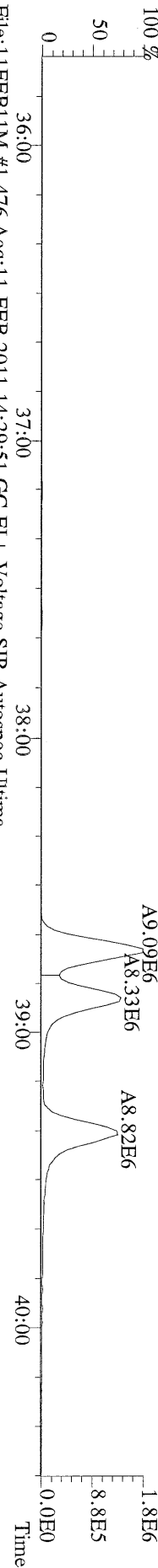
File: 11FEB11M #1-476 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0,0.00%,F,F) Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



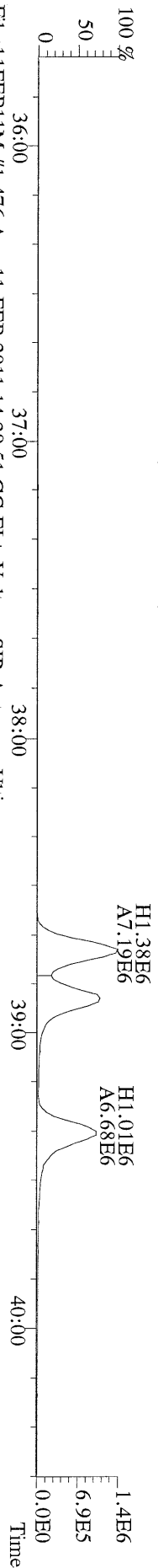
File: 11FEB11M #1-476 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0,0.00%,F,F) Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



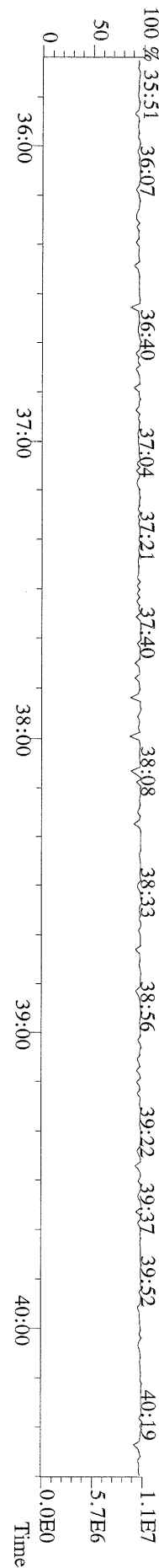
File: 11FEB11M #1-476 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0,0.00%,F,F) Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



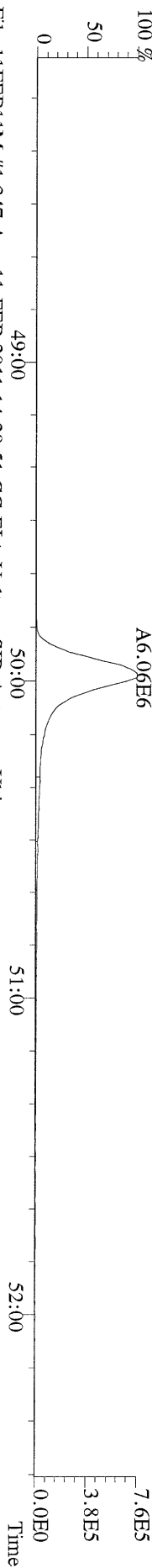
File: 11FEB11M #1-476 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0,0.00%,F,F) Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



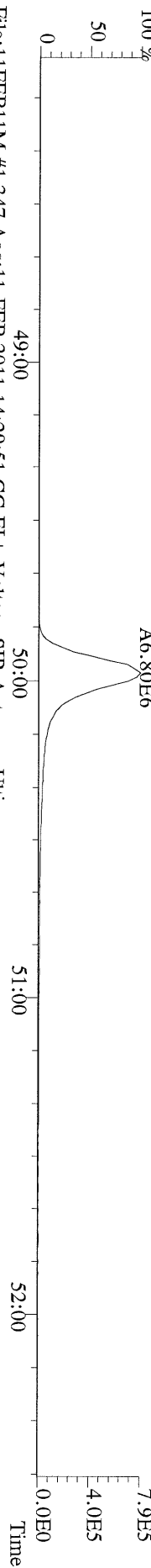
File: 11FEB11M #1-476 Acq: 11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
380.9760 F:3 Exp: OCDD
Sample Text: ST021111M1 File Text: Frontier Analytical Laboratory



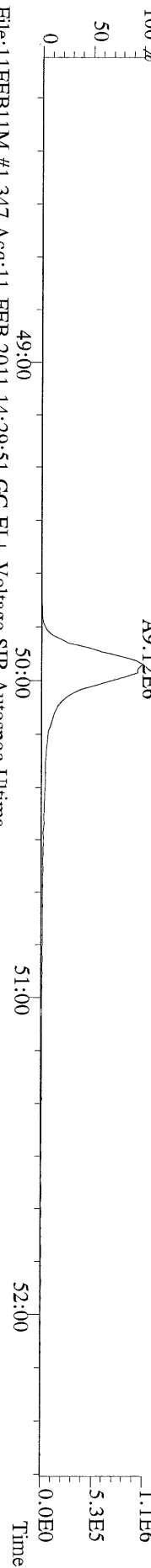
File:11FEB11M #1-347 Acq:11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST021111M1 File Text:Fronier Analytical Laboratory



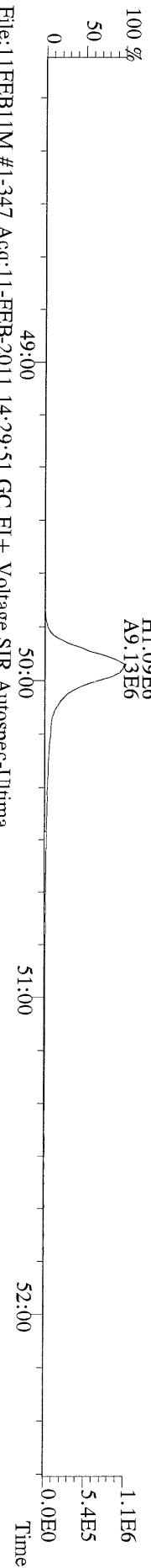
File:11FEB11M #1-347 Acq:11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST021111M1 File Text:Fronier Analytical Laboratory



File:11FEB11M #1-347 Acq:11-FEB-2011 14:29:51 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:OCDD
Sample Text:ST021111M1 File Text:Fronier Analytical Laboratory



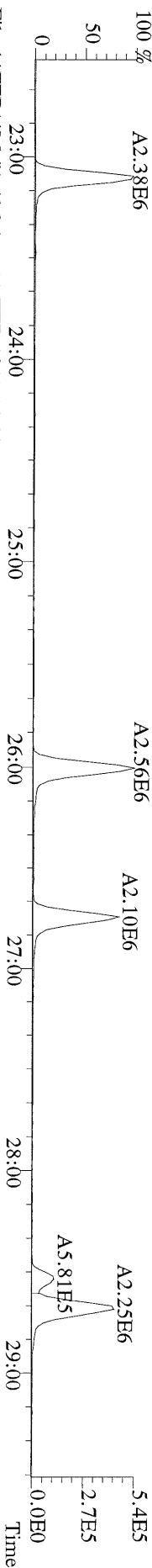
File:11FEB11M #1-347 Acq:11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3.0,10%,100,0,0.00%,F,F) Exp:OCDD
Sample Text:ST021111M1 File Text:Fronier Analytical Laboratory



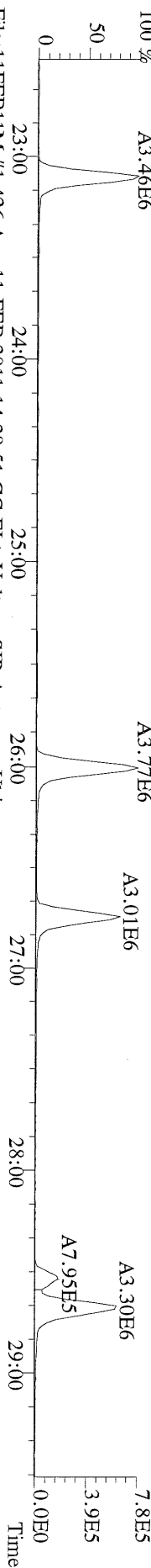
File:11FEB11M #1-347 Acq:11-FEB-2011 14:29:51 GC EI + Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:OCDD
Sample Text:ST021111M1 File Text:Fronier Analytical Laboratory



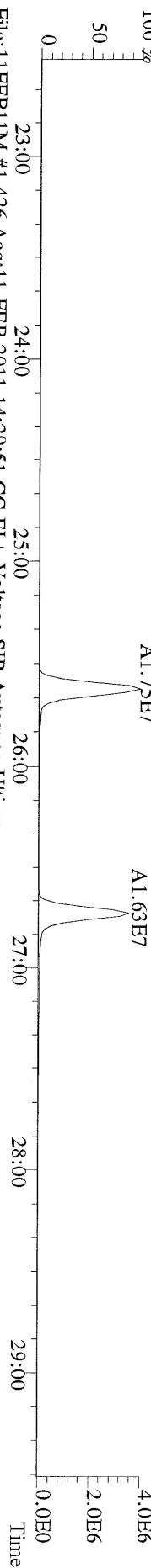
File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory



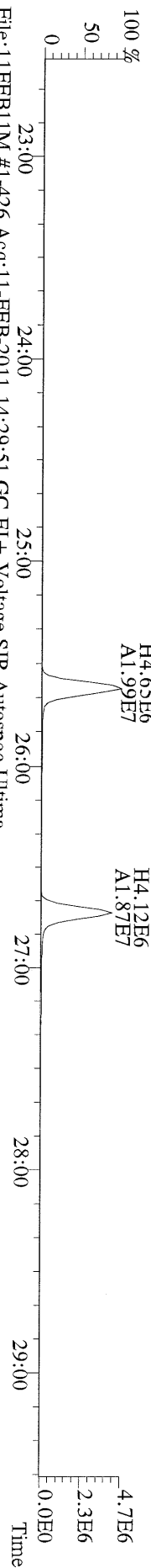
File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5.3,0.10%,100.0,0.00%,F,F) Exp:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory



File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 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:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory



File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 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:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory



File:11FEB11M #1-426 Acq:11-FEB-2011 14:29:51 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:OCDD
Sample Text:ST021111M1 File Text:Frontier Analytical Laboratory

