Run #2 Filename 23AUG10M S: 4 Acquired: 23-AUG-10 17:12:02 Cal: PCDDFAL3-8-23-10
Client ID: ST082310M1 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 S: 5 Acquired: 23-AUG-10 18:07:23 Cal: PCDDFAL3-8-23-10
Client ID: ST082310M2 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 #4 Filename 23AUG10M S: 1 Acquired: 23-AUG-10 14:25:46 Cal: PCDDFAL3-8-23-10
Client ID: ST082310M3 Analyte: FAL ID: 1613 CS3 100511J

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	10.00	5.04e+06	0.73	y	27:24	-	1.16	y
2	Unk	1,2,3,7,8-PeCDD	50.00	1.95e+07	1.64	y	33:14	-	1.11	y
3	Unk	1,2,3,4,7,8-HxCDD	50.00	1.81e+07	1.41	y	38:36	-	1.36	y
4	Unk	1,2,3,6,7,8-HxCDD	50.00	1.75e+07	1.39	y	38:46	-	1.32	y
5	Unk	1,2,3,7,8,9-HxCDD	50.00	1.74e+07	1.41	y	39:13	-	1.30	y
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	1.56e+07	1.04	y	44:13	-	1.44	y
7	Unk	OCDD	100.00	1.96e+07	0.95	y	49:47	-	1.44	y
8	Unk	2,3,7,8-TCDF	10.00	9.40e+06	0.67	y	26:39	-	1.40	y
9	Unk	1,2,3,7,8-PeCDF	50.00	2.67e+07	1.53	y	31:30	-	0.959	y
10	Unk	2,3,4,7,8-PeCDF	50.00	2.56e+07	1.52	y	32:49	-	0.933	y
11	Unk	1,2,3,4,7,8-HxCDF	50.00	2.15e+07	1.29	y	37:12	-	0.905	y
12	Unk	1,2,3,6,7,8-HxCDF	50.00	2.72e+07	1.26	y	37:24	-	0.826	y
13	Unk	2,3,4,6,7,8-HxCDF	50.00	2.34e+07	1.24	y	38:21	-	0.892	y
14	Unk	1,2,3,7,8,9-HxCDF	50.00	2.60e+07	1.28	y	39:47	-	1.00	y
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	1.95e+07	1.04	y	42:18	-	1.39	y
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	1.37e+07	1.04	y	45:08	-	1.35	y
17	Unk	OCDF	100.00	2.16e+07	0.93	y	50:09	-	0.785	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	4.35e+07	0.86	y	27:23	-	0.982	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	3.51e+07	1.77	y	33:13	-	0.793	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	2.66e+07	1.26	y	38:35	-	1.01	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	2.66e+07	1.27	y	38:45	-	1.02	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	2.18e+07	1.04	y	44:11	-	0.830	y
23	IS	13C-OCDD	200.00	2.73e+07	0.93	y	49:45	-	0.521	y
24	IS	13C-2,3,7,8-TCDF	100.00	6.73e+07	0.86	y	26:38	-	0.959	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	5.57e+07	1.78	y	31:28	-	0.794	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	5.49e+07	1.74	y	32:48	-	0.783	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	4.74e+07	0.56	y	37:11	-	1.81	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	6.58e+07	0.55	y	37:23	-	2.51	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	5.25e+07	0.54	y	38:19	-	2.00	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	5.18e+07	0.55	y	39:45	-	1.98	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.80e+07	0.42	y	42:17	-	1.07	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	2.02e+07	0.42	y	45:06	-	0.772	y
33	IS	13C-OCDF	200.00	5.49e+07	0.98	y	50:08	-	1.05	y
34	C/Up	37Cl-2,3,7,8-TCDD	10.00	2.77e+06			27:24	-	0.626	y
35	RS	13C-1,2,3,4-TCDD	100.00	4.42e+07	0.84	y	26:49	4.42e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	7.01e+07	0.87	y	25:33	7.01e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	2.62e+07	1.28	y	39:11	2.62e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.16	y
39	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	1.11	y
40	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.33	y
41	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.44	y
42	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.40	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	-	n	-	-	0.946	y
44	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.946	y
45	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	0.902	y
46	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.37	y

Analyst: _____ Date: 8/24/10

Run #5 Filename 23AUG10M S: 6 Acquired: 23-AUG-10 19:02:46 Cal: PCDDFAL3-8-23-10
Client ID: ST082310M4 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 S: 7 Acquired: 23-AUG-10 19:58:08 Cal: PCDDFAL3-8-23-10
Client ID: ST082310M5 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)
	CS1	CS2	CS3	CS4	CS5	CS6		
LABELED COMPOUNDS								
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

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS						QC LIMITS
		CS1	CS2	CS3	CS4	CS5	CS6	
NATIVE ANALYTES								
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 CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS
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

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.86	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: 8/24/10

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: 23AUG10M Sam:1 Analysis Date: 23-AUG-10 Time: 14:25:46

DB-5 IS Data Filename: 23AUG10M Sam:1 Analysis Date: 23-AUG-10 Time: 14:25:46

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)	24:24	1,3,6,8-TCDF (F)	23:04
1,2,8,9-TCDD (L)	28:21	1,2,8,9-TCDF (L)	28:34
1,2,4,7,9-PeCDD (F)	30:15	1,3,4,6,8-PeCDF (F)	28:25
1,2,3,8,9-PeCDD (L)	33:48	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)	39:47
1,2,3,4,6,7,9-HpCDD (F)	42:49	1,2,3,4,6,7,8-HpCDF (F)	42:18
1,2,3,4,6,7,8-HpCDD (L)	44:13	1,2,3,4,7,8,9-HpCDF (L)	45:08

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

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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

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

Analyst: _____ Date: 8/24/10

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

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.239	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	0.923-1.203
13C-2,3,4,7,8-PeCDF		1.223	0.923-1.303

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

Analyst: _____ Date: 8/24/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

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

Instrument ID: FAL3 GC Column ID: db5

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

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.270	1.032-1.311
13C-OCDF		1.279	1.000-1.311

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

Analyst: _____ Date: 8/24/10

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

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

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

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

Analyst: _____ Date: 8/24/10

Frontier Analytical Laboratory - Acquisition Log

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

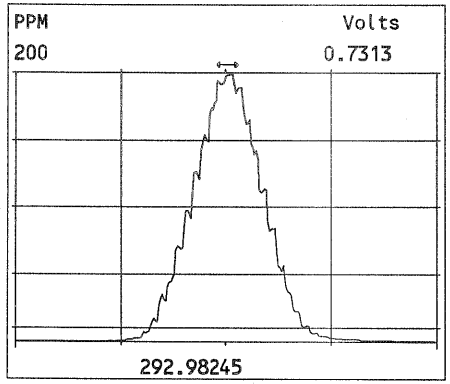
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
23AUG10M	1	ST082310M3	1613 CS3 100511J	23-AUG-10 14:25:46	ST082310M3	ST082310M6	BS
23AUG10M	2	ST082310M-1	1613 CS-1	23-AUG-10 15:21:08	NA	NA	BS
23AUG10M	3	ST082310M0	1613 CS0 100511G	23-AUG-10 16:16:35	NA	NA	BS
23AUG10M	4	ST082310M1	1613 CS1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

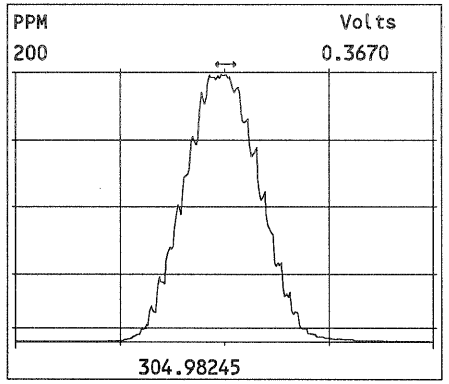
8/24/10

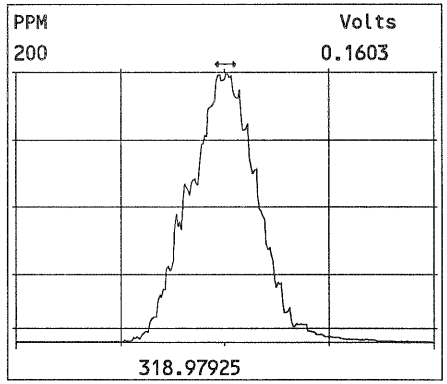
Data Backed Up:_____

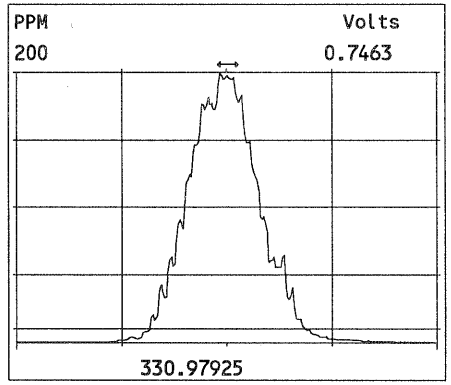
Date:_____

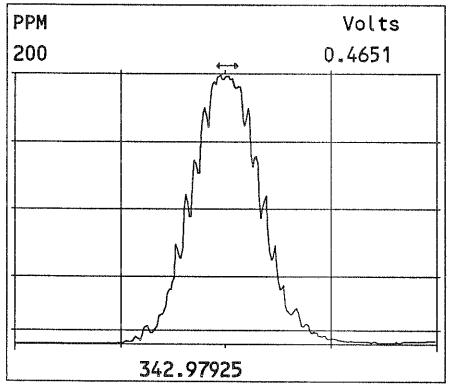
Peak Locate Examination:23-AUG-2010:14:23 File:23AUG10M
Experiment:PCDD Function:1 Reference:PFK

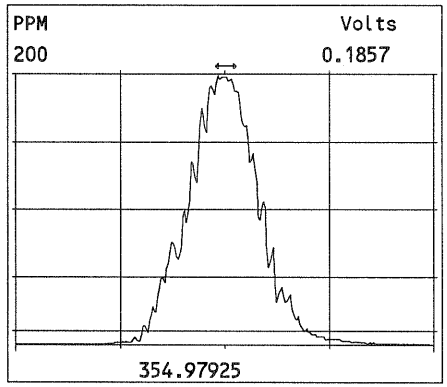


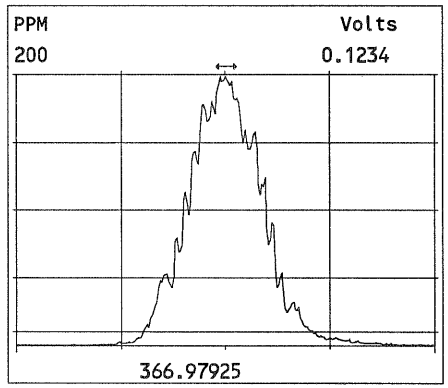


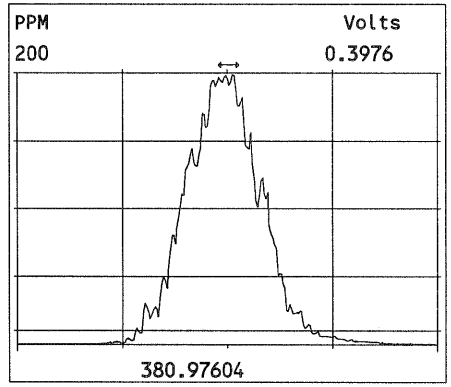


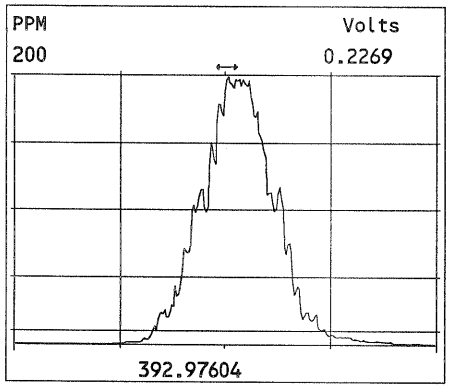


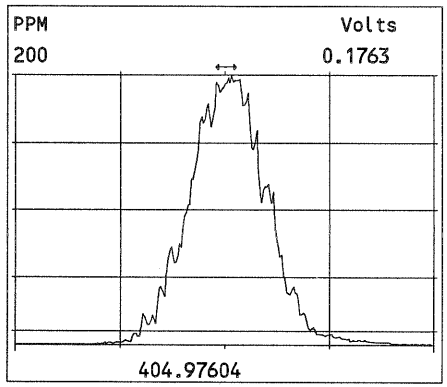


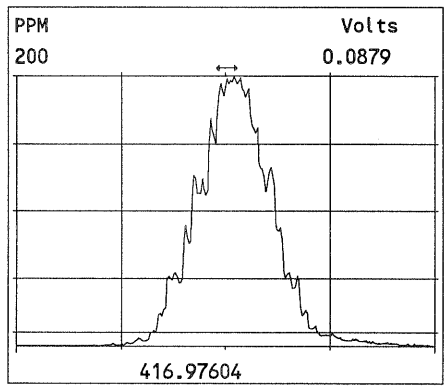




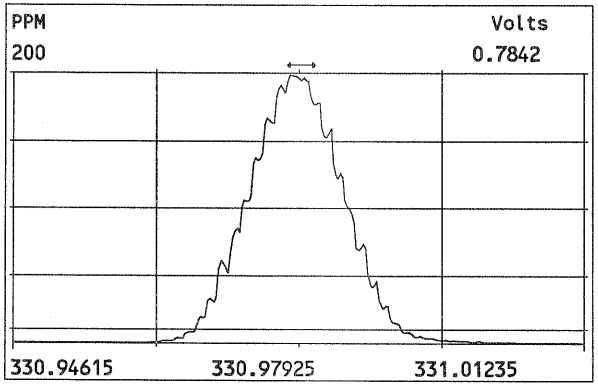


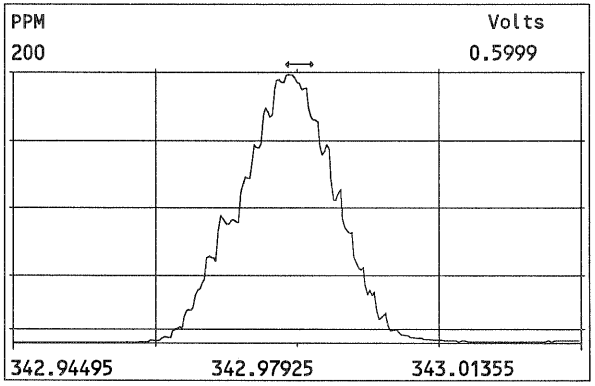


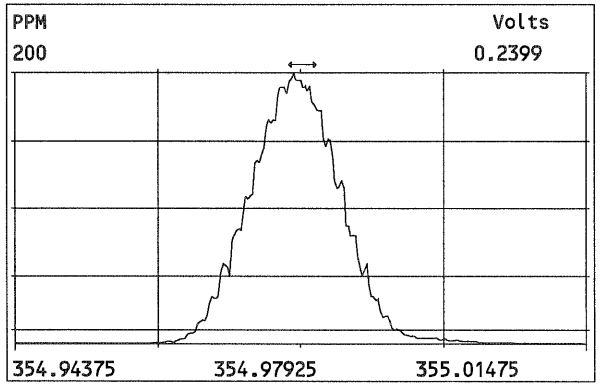


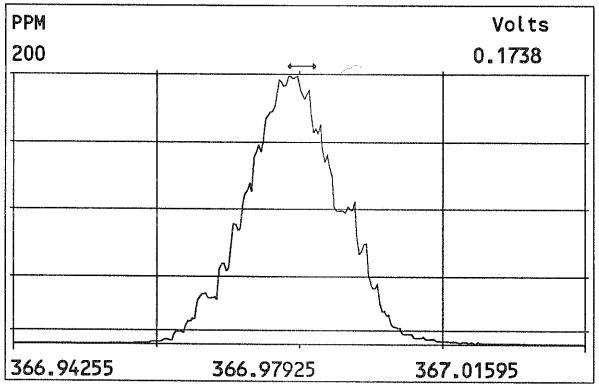


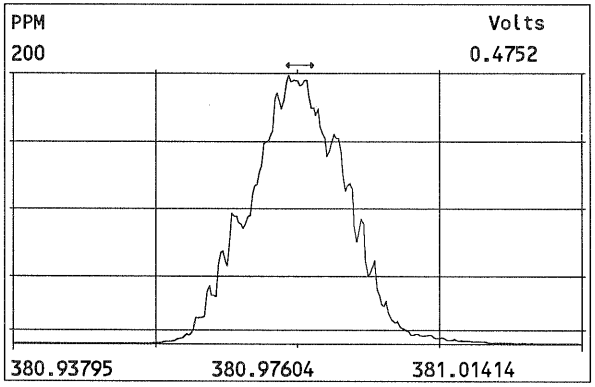
Peak Locate Examination:23-AUG-2010:14:24 File:23AUG10M
Experiment:PCDD Function:2 Reference:PFK

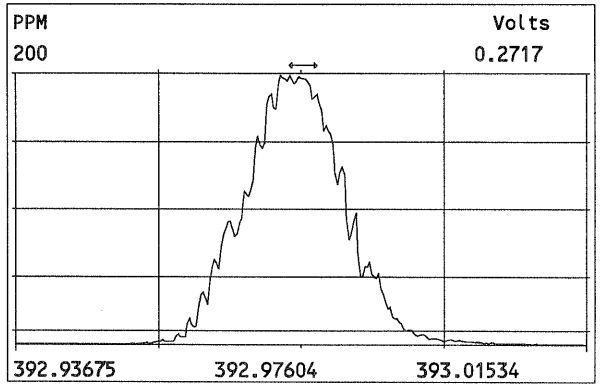


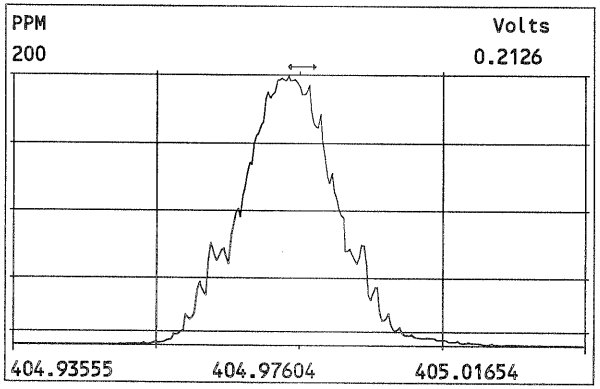


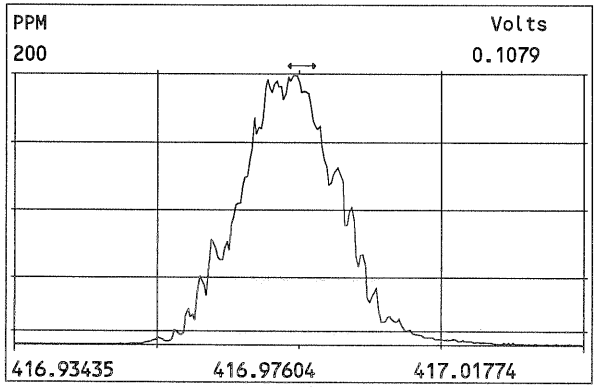




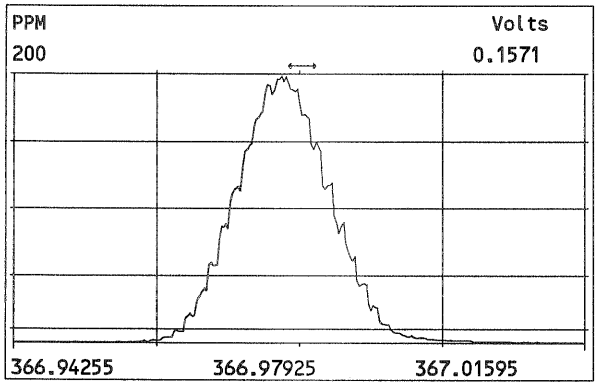


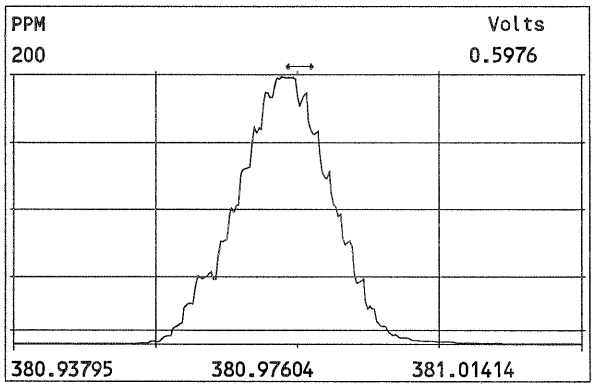


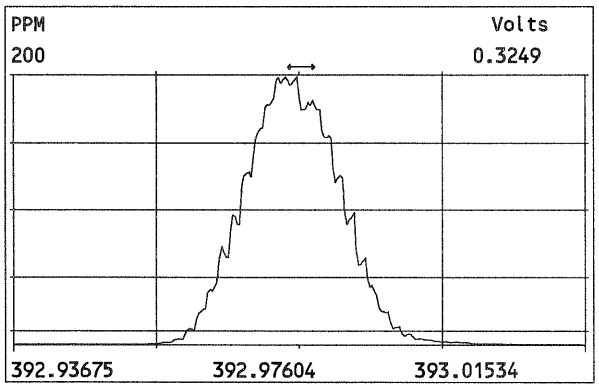


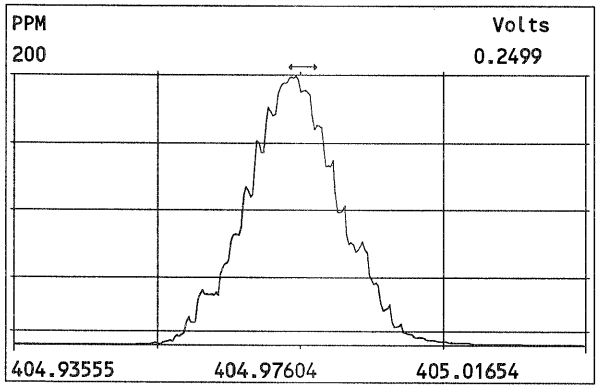


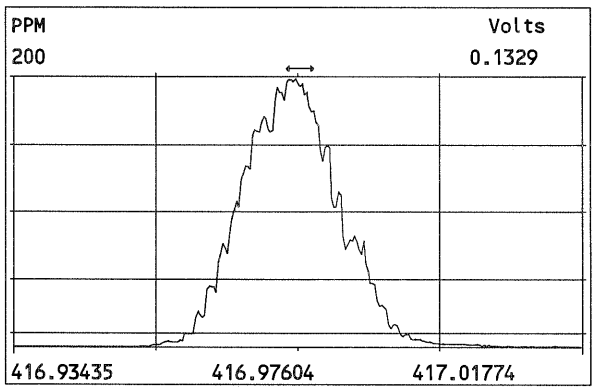
Peak Locate Examination:23-AUG-2010:14:24 File:23AUG10M
Experiment:PCDD Function:3 Reference:PFK

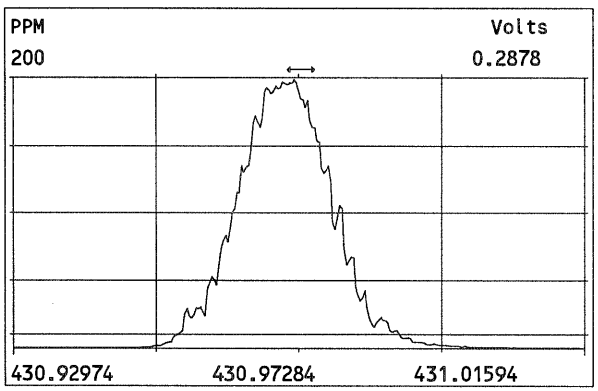


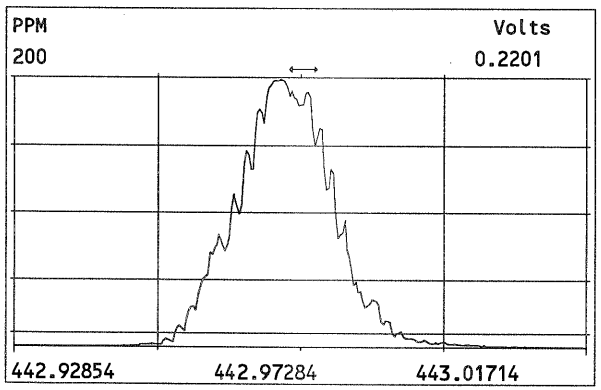


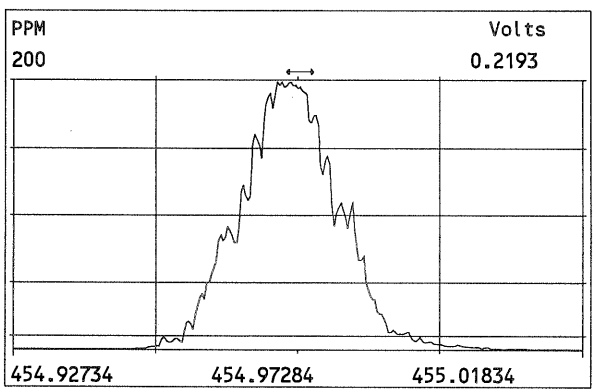




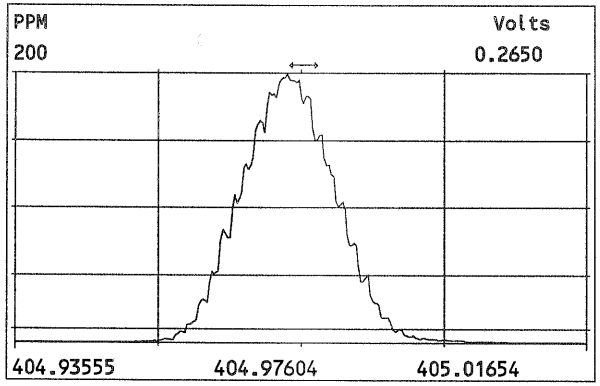


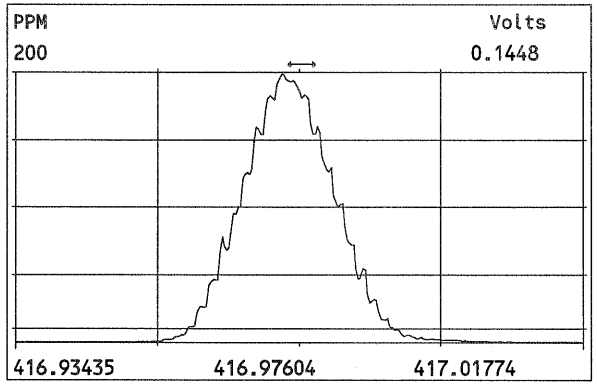


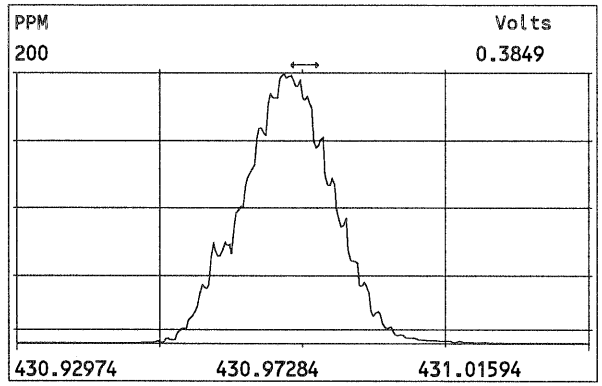


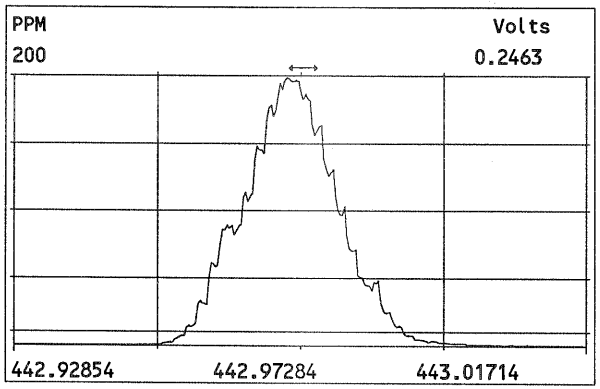


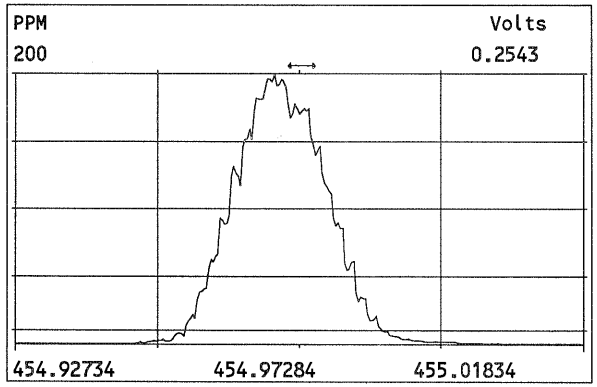
Peak Locate Examination:23-AUG-2010:14:25 File:23AUG10M
Experiment:PCDD Function:4 Reference:PFK

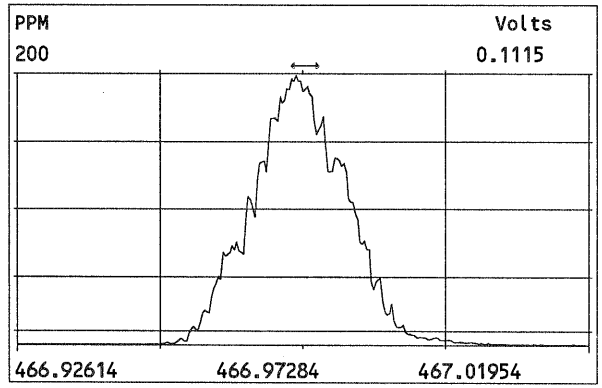


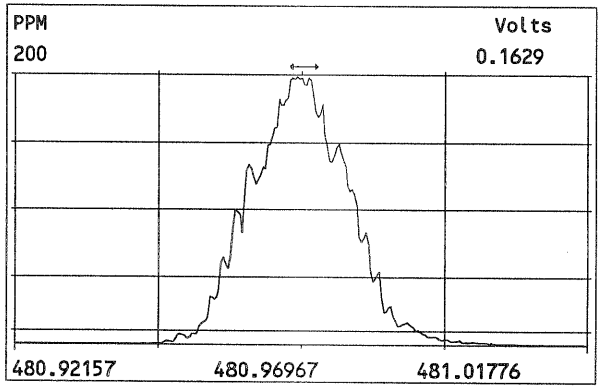




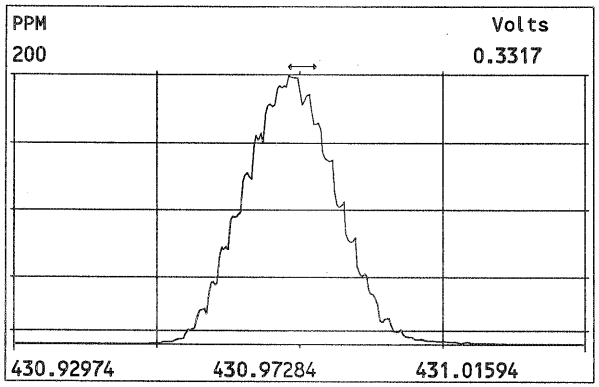


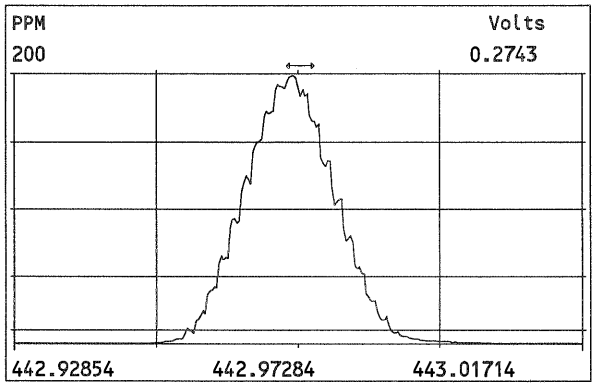


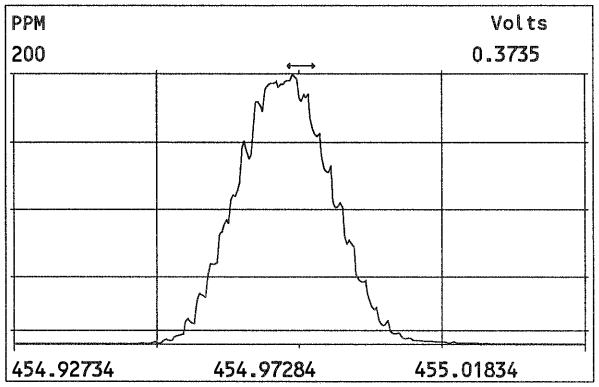


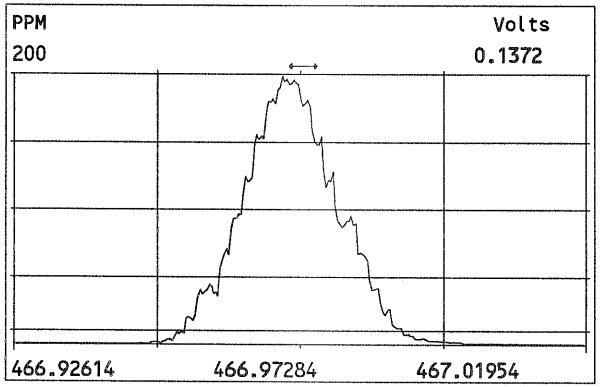


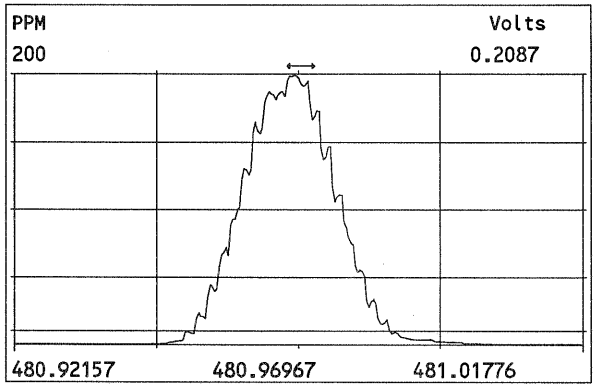
Peak Locate Examination:23-AUG-2010:14:25 File:23AUG10M
Experiment:PCDD Function:5 Reference:PFK

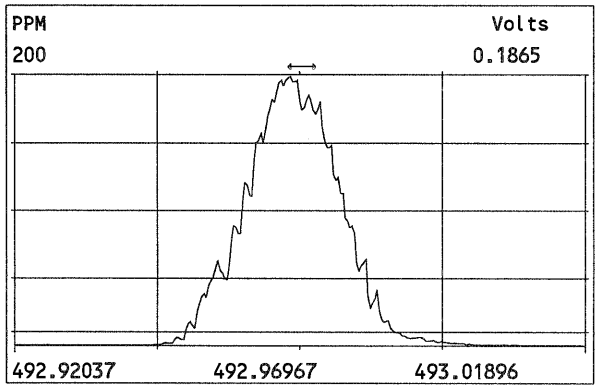


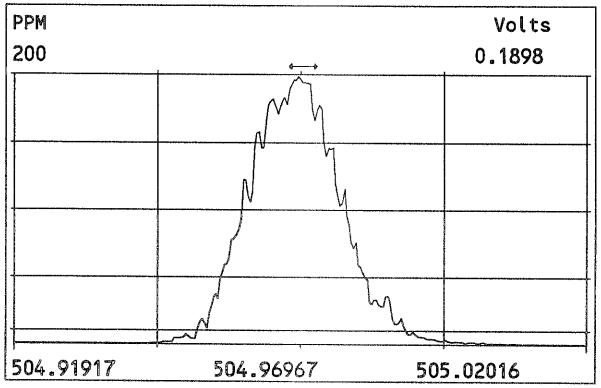


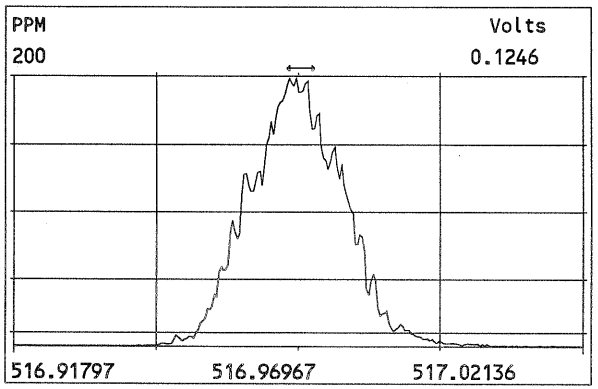




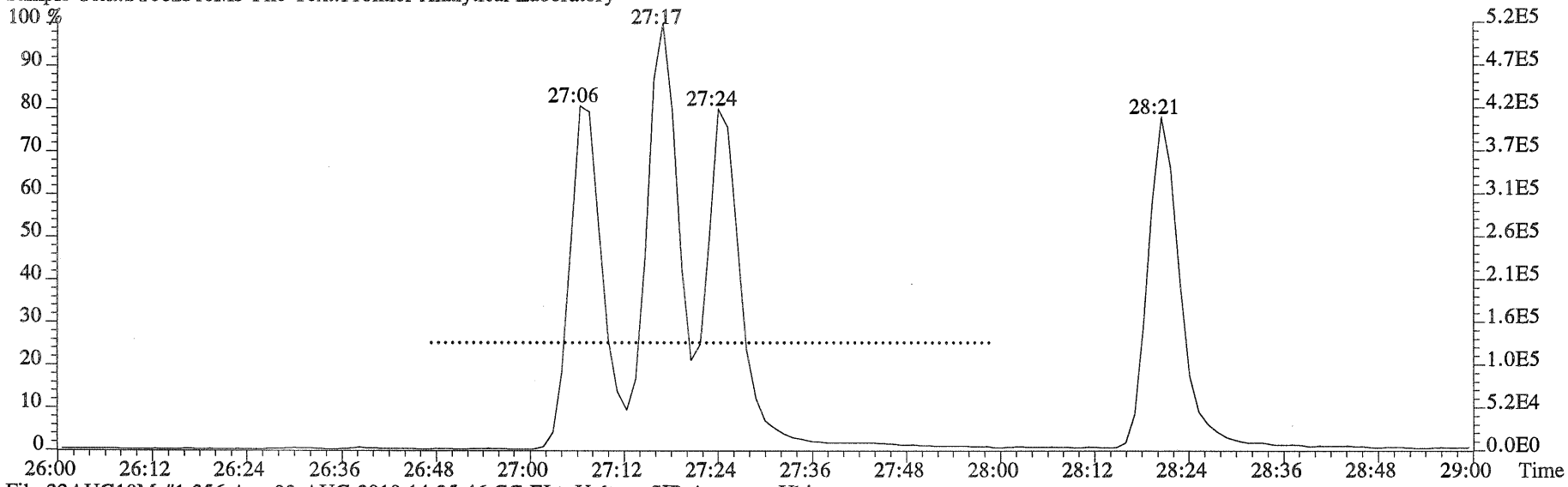




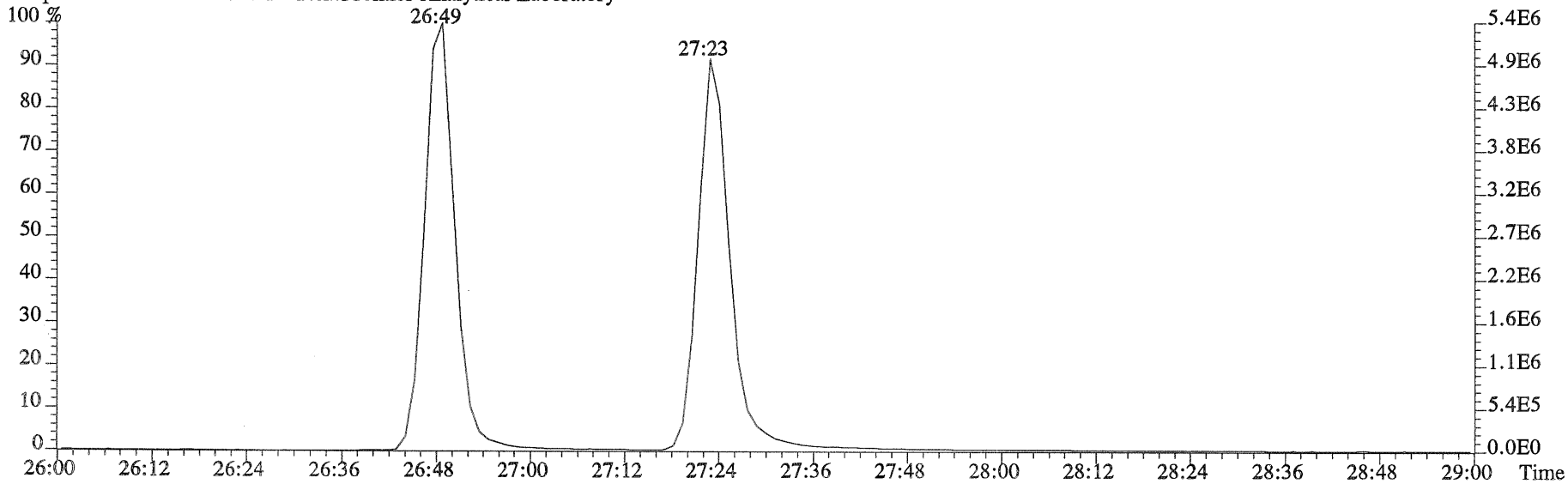




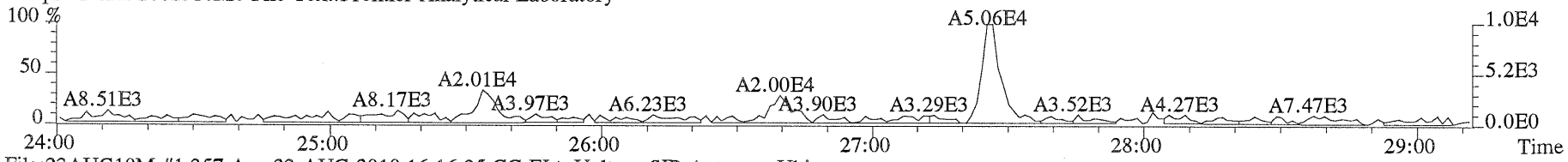
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



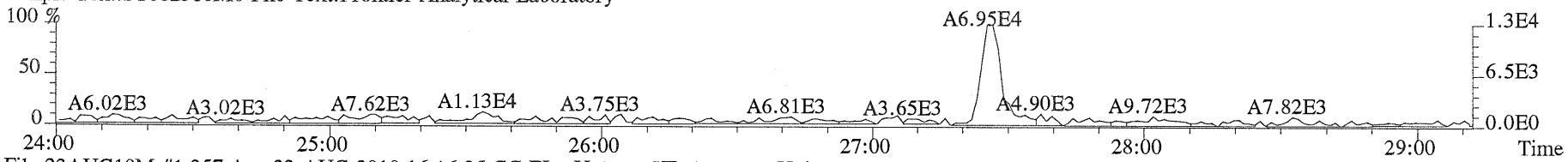
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



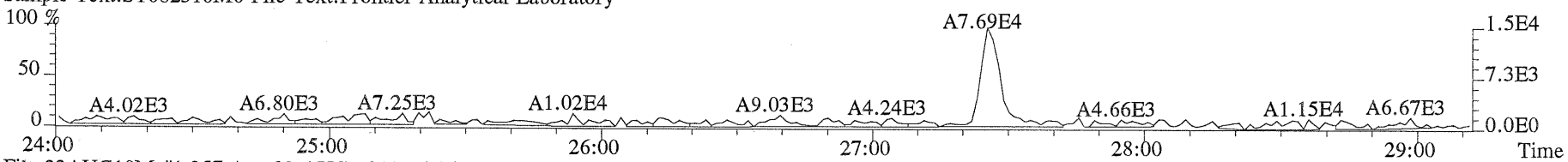
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



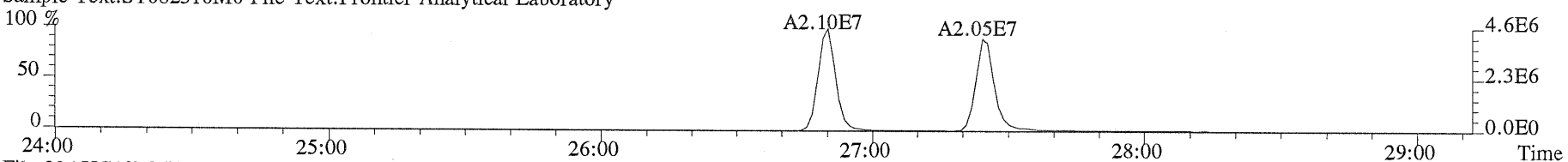
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



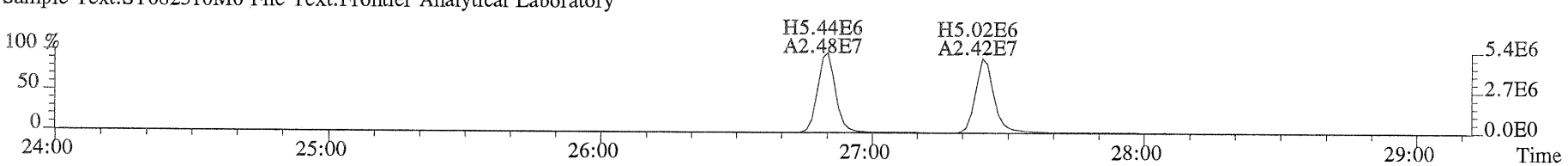
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



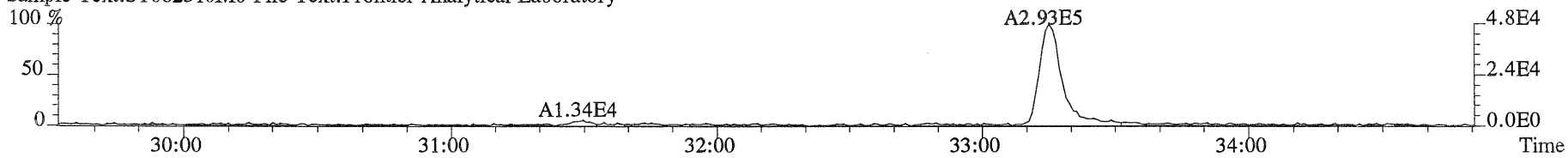
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



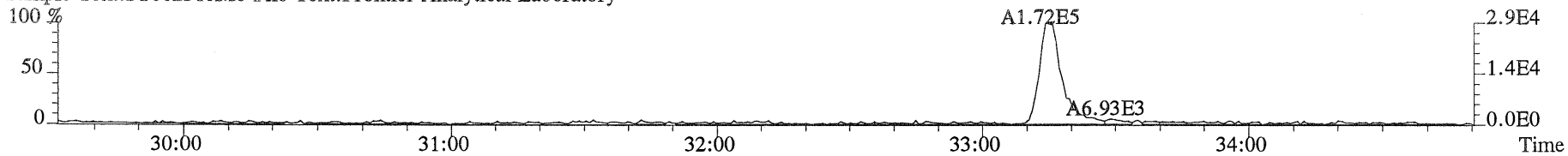
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



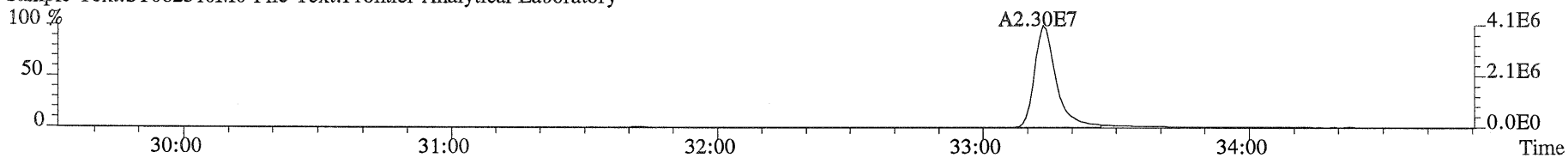
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



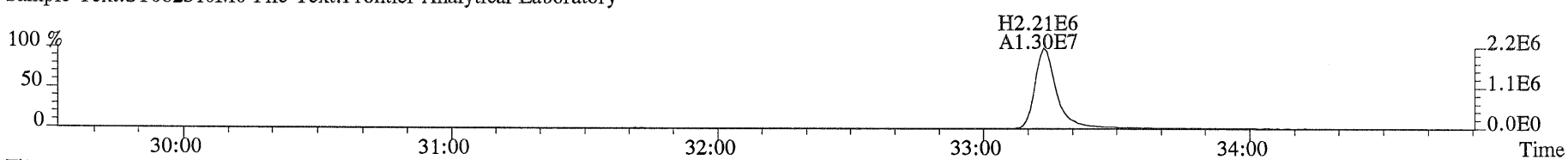
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



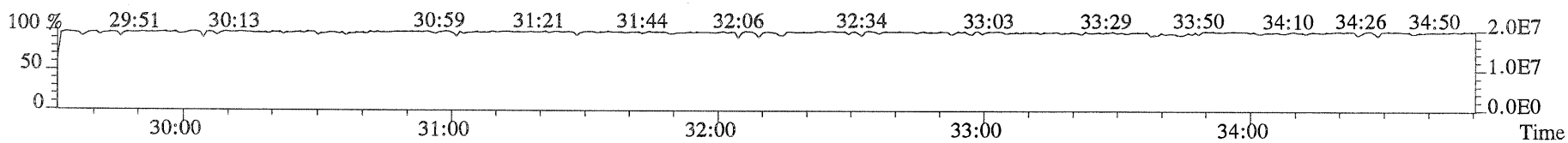
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



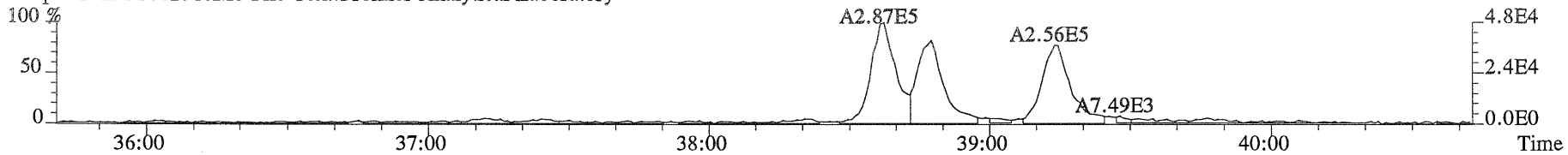
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



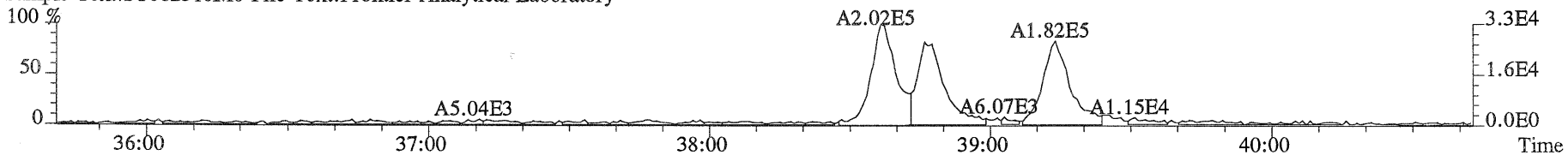
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



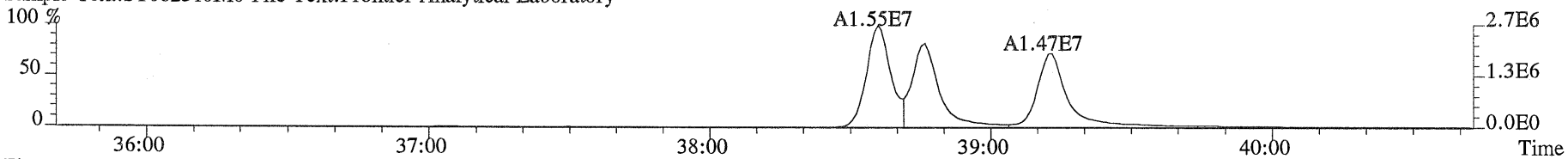
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



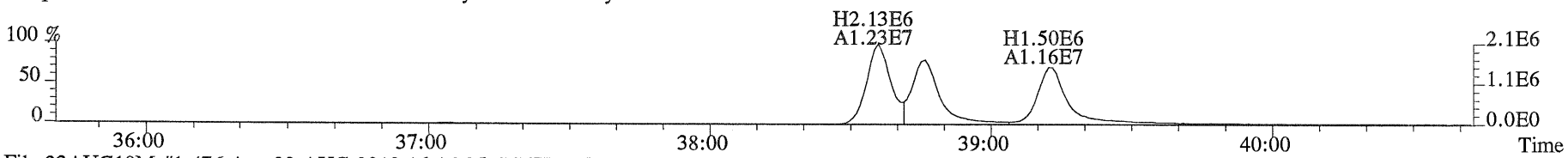
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



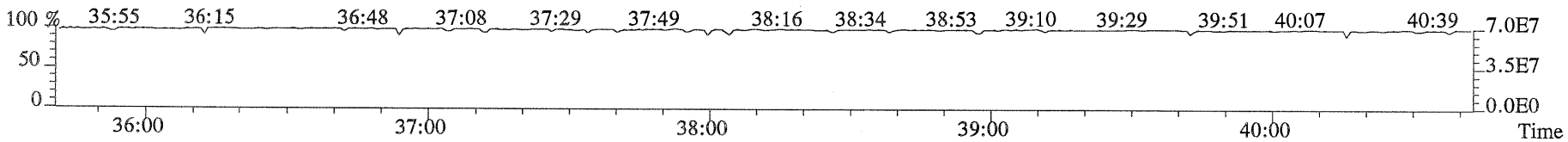
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



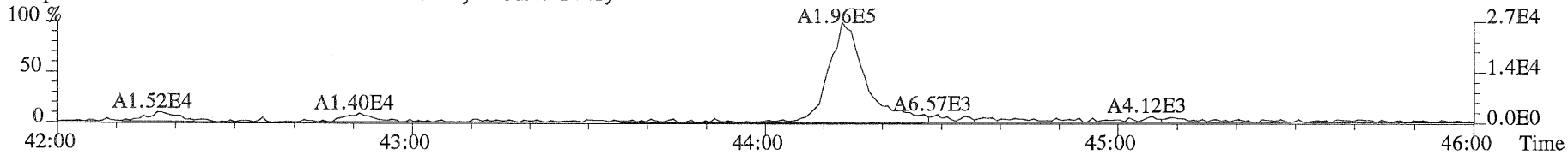
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



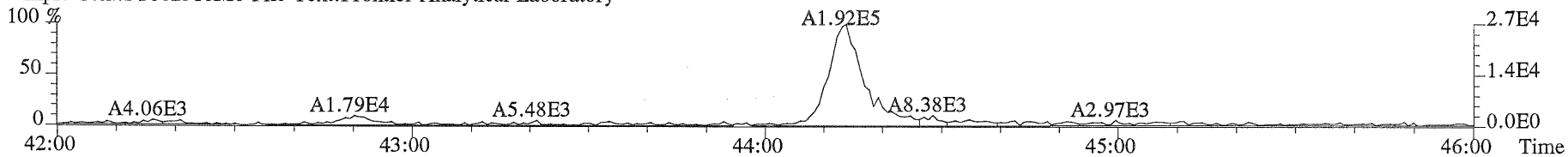
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



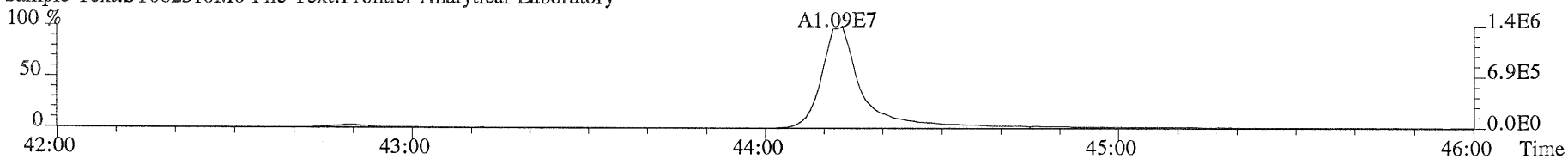
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



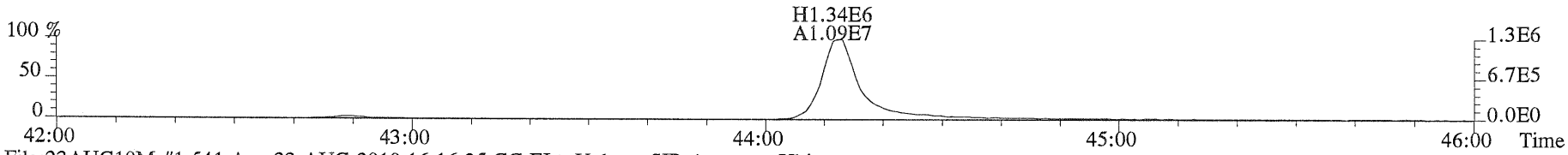
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



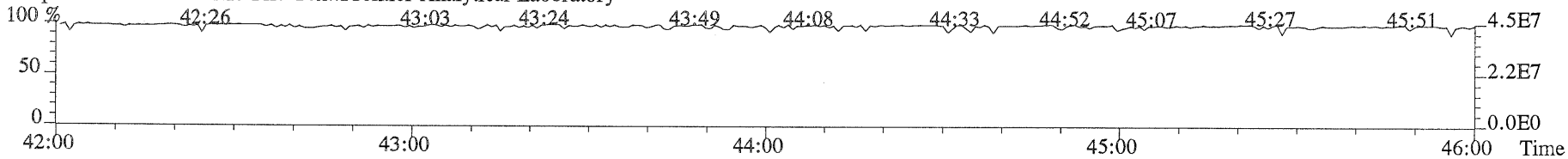
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



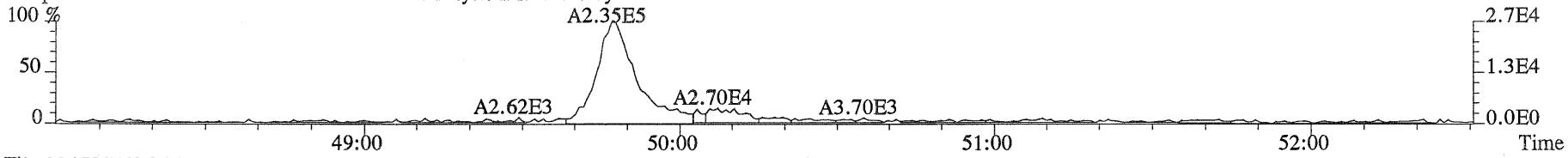
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



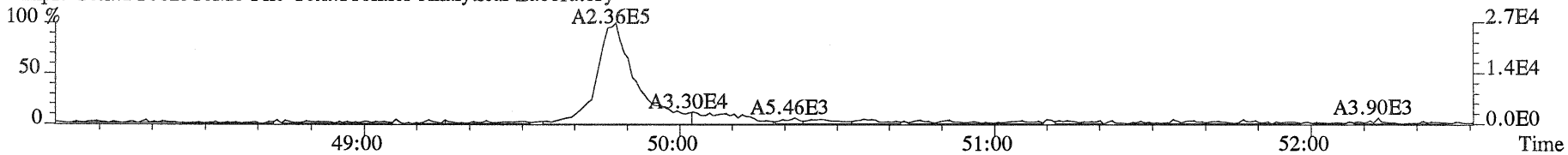
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



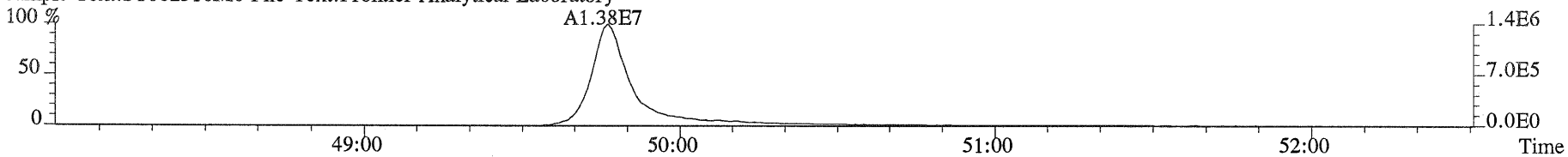
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



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

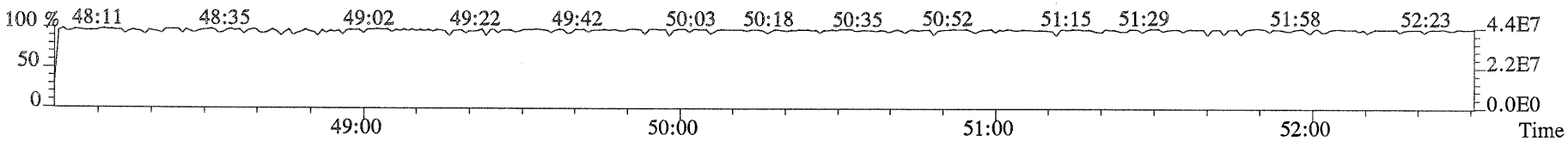


File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory

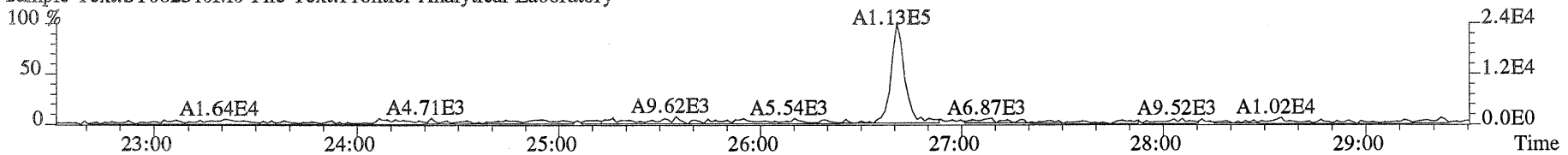


File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory

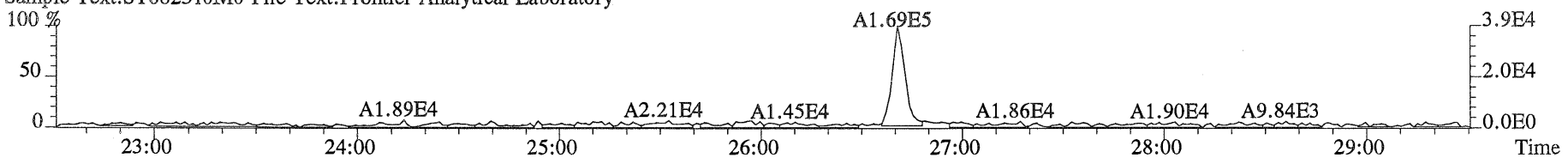
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



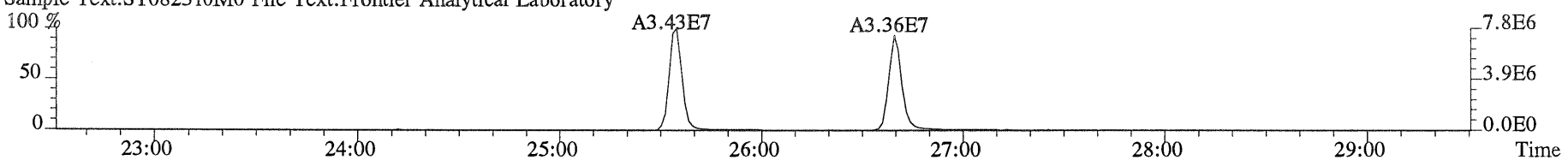
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



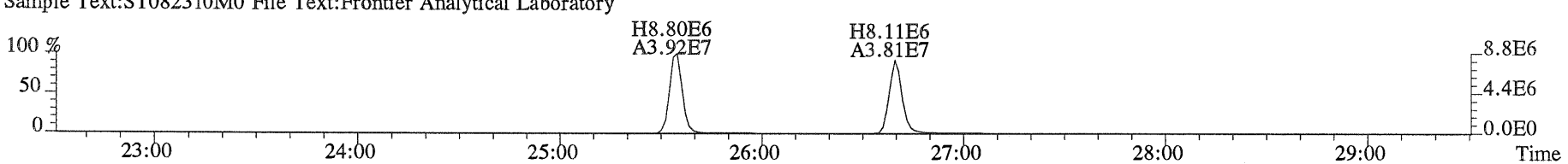
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



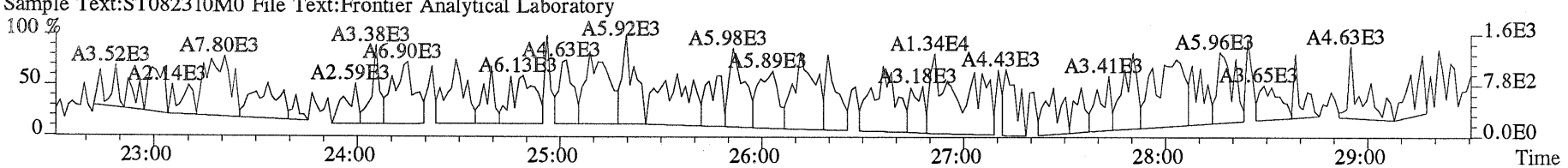
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



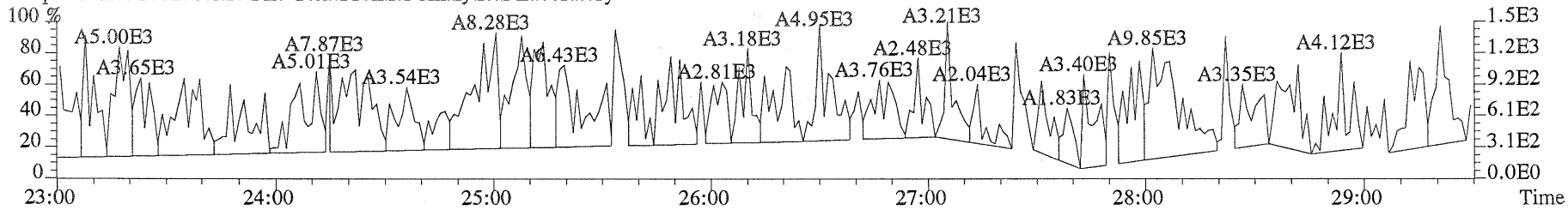
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



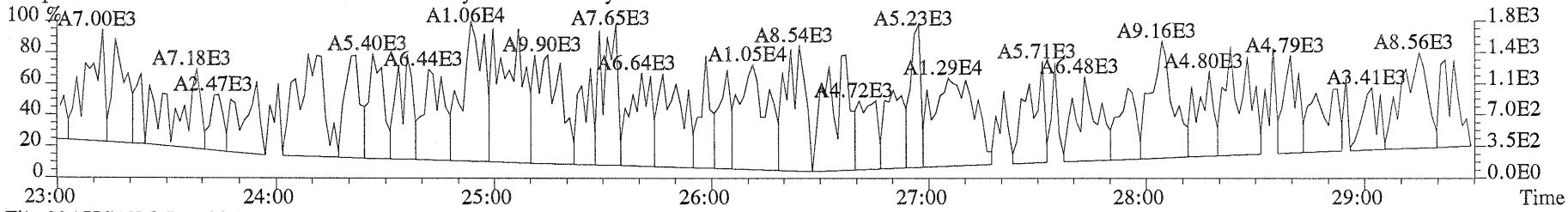
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



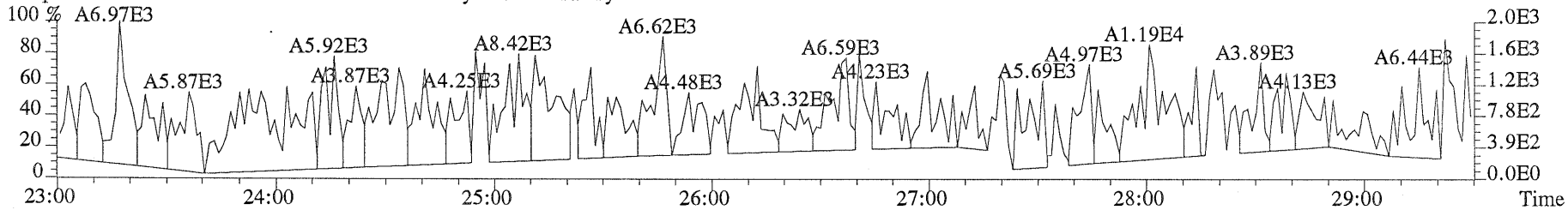
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



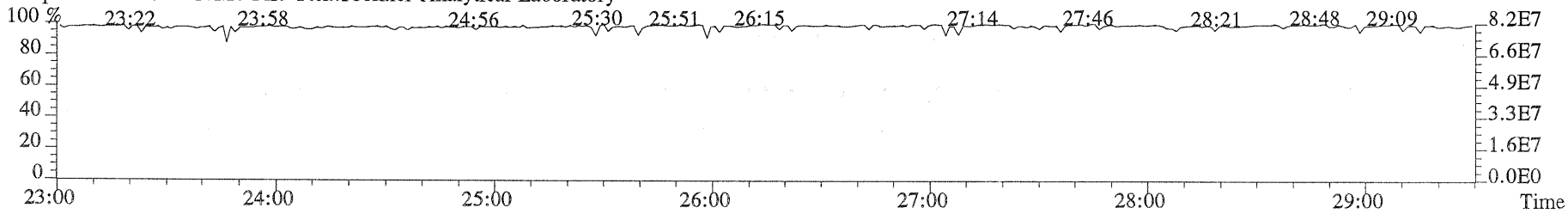
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



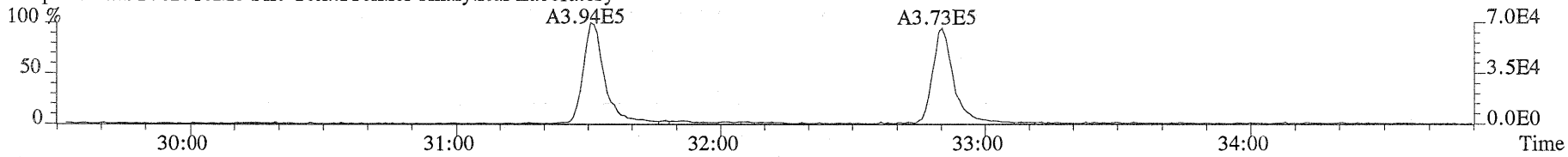
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



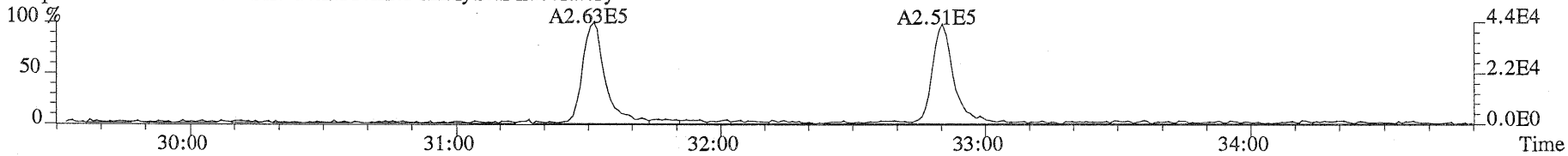
File:23AUG10M #1-357 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



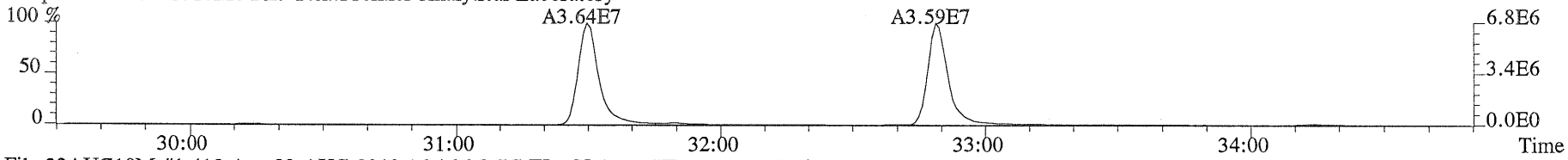
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



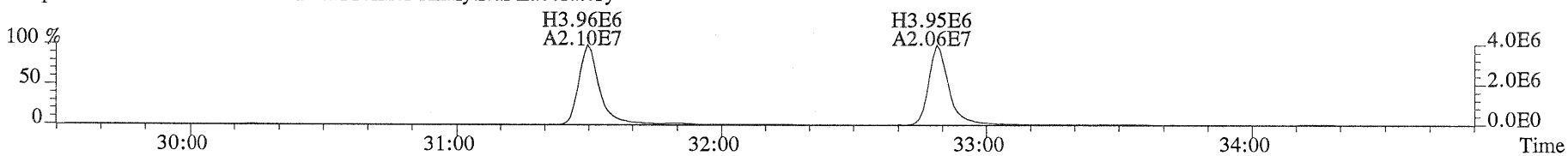
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



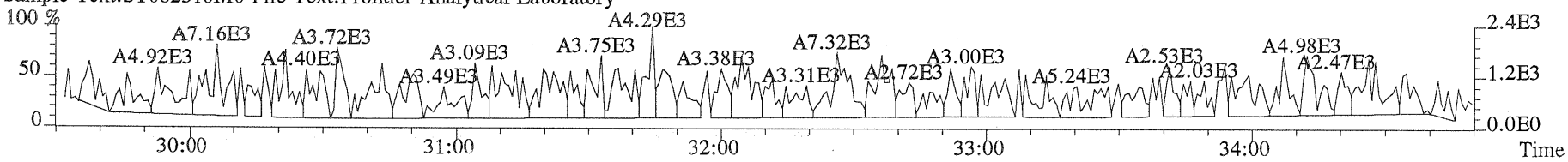
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



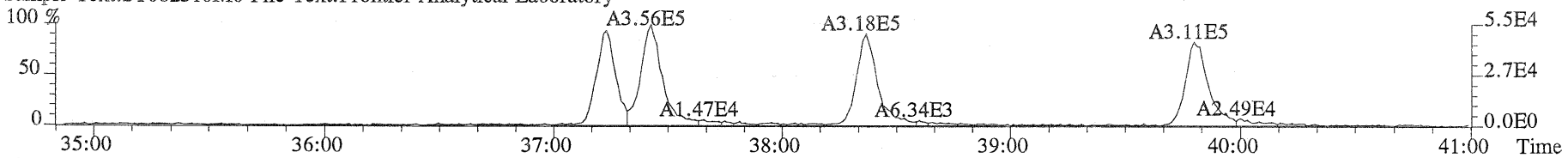
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



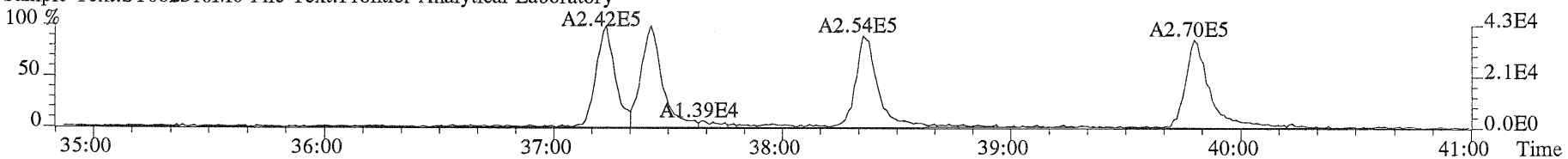
File:23AUG10M #1-412 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



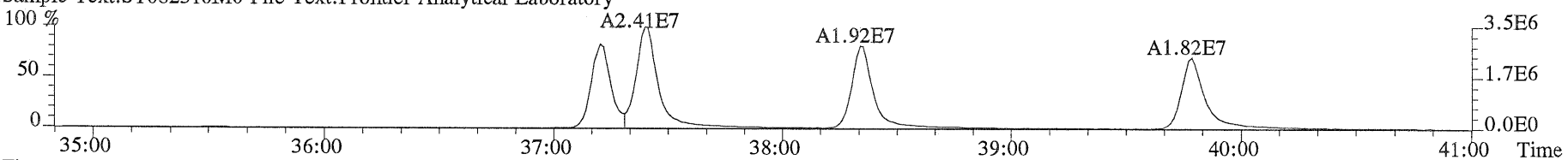
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



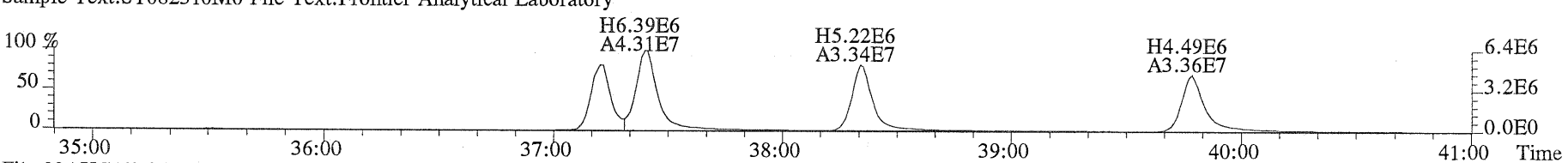
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



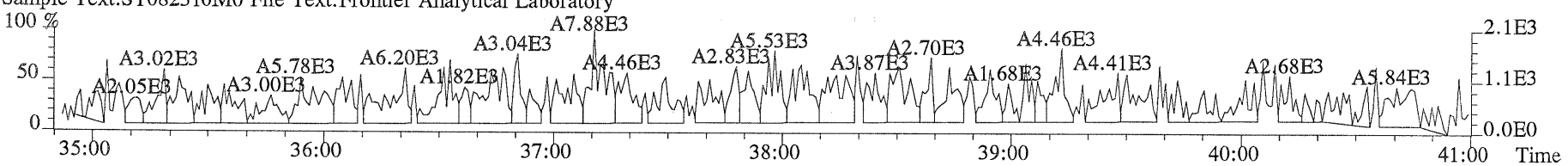
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



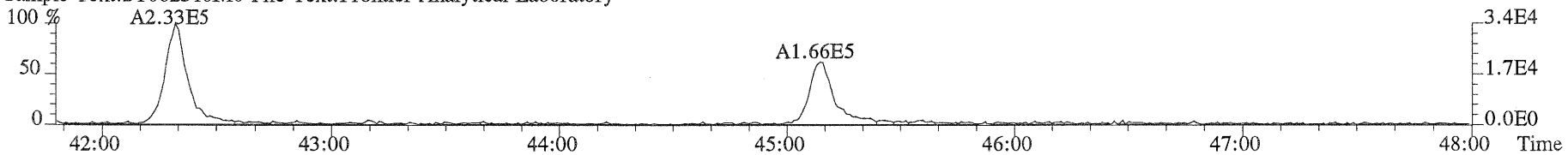
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



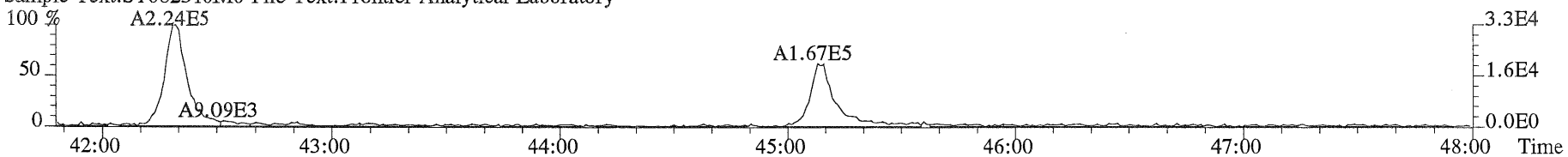
File:23AUG10M #1-476 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



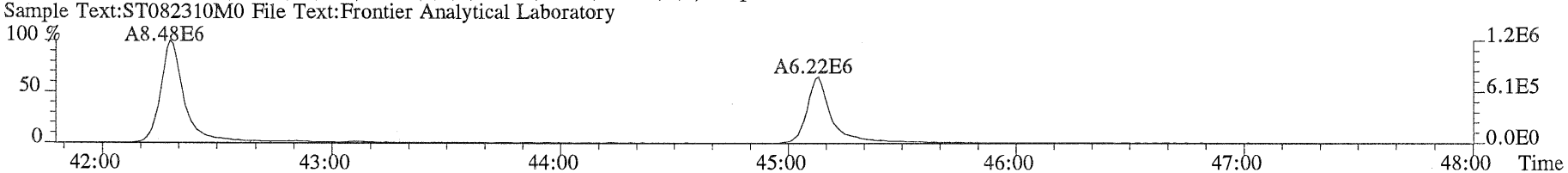
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



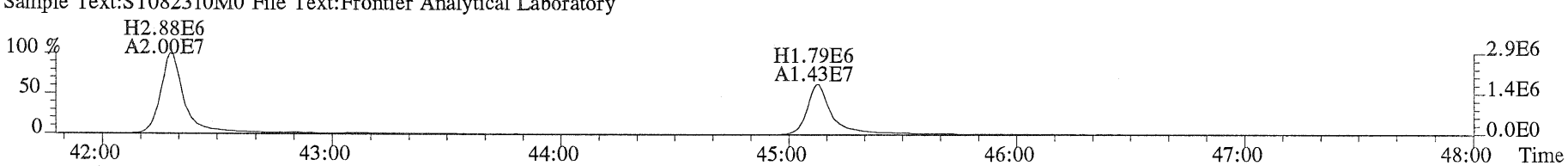
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



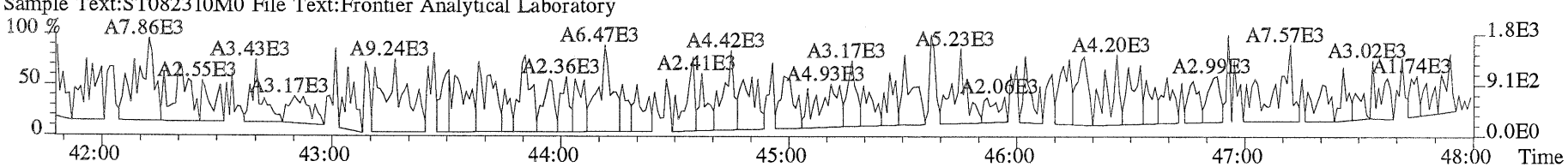
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



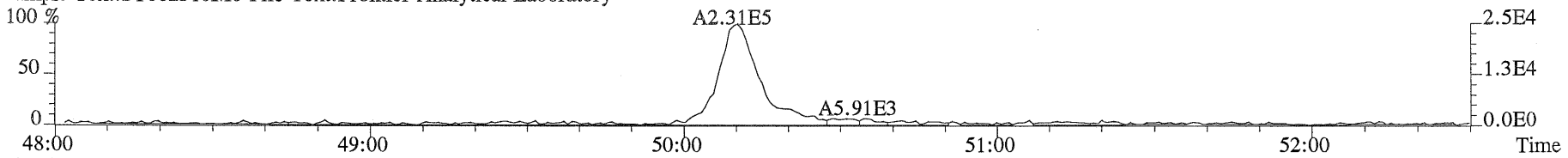
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



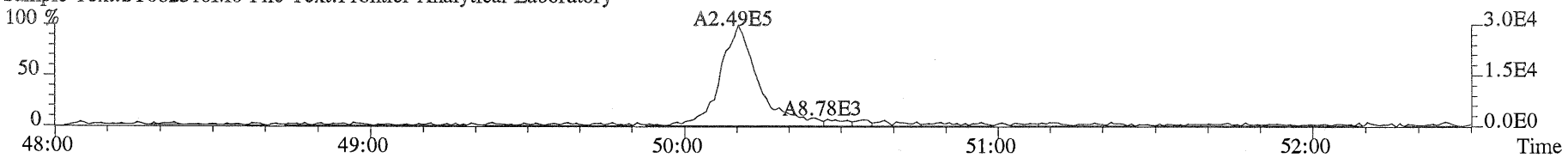
File:23AUG10M #1-541 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



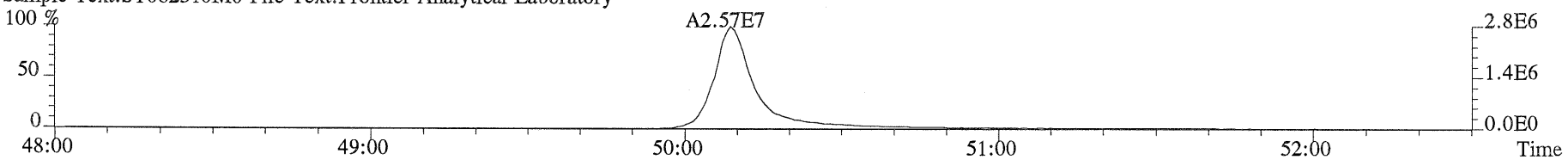
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



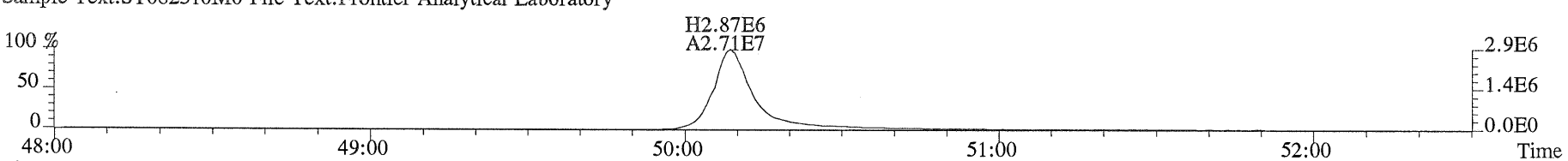
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



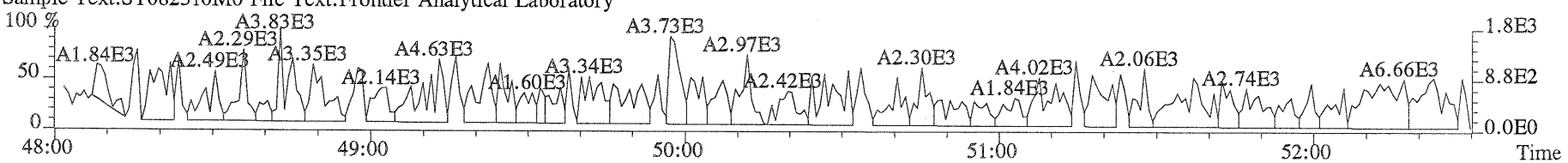
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



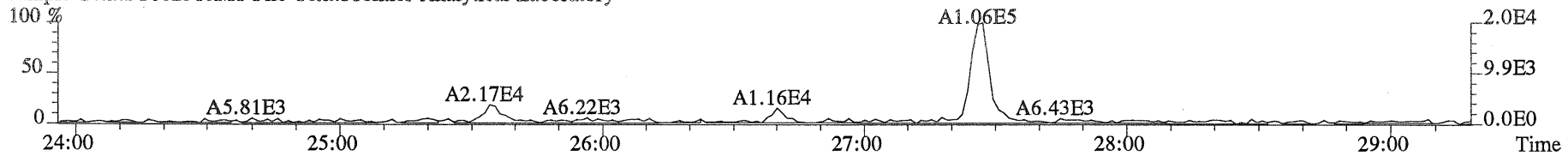
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



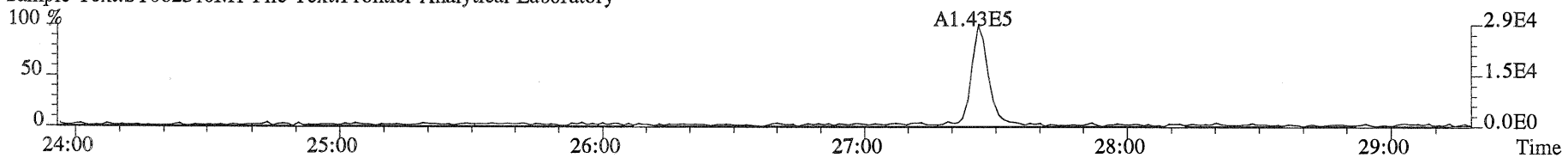
File:23AUG10M #1-348 Acq:23-AUG-2010 16:16:35 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M0 File Text:Frontier Analytical Laboratory



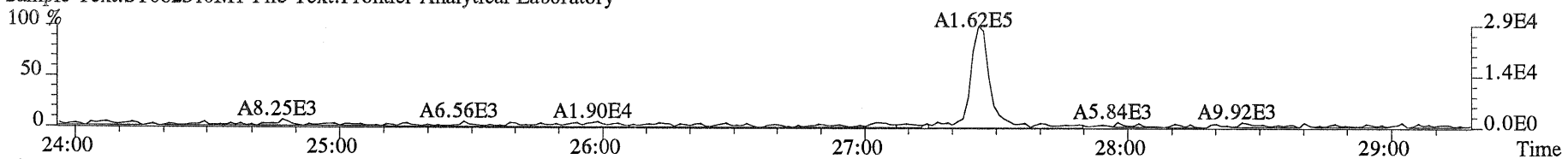
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



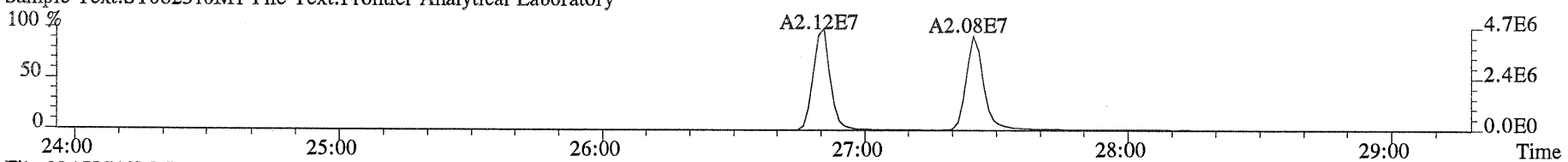
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



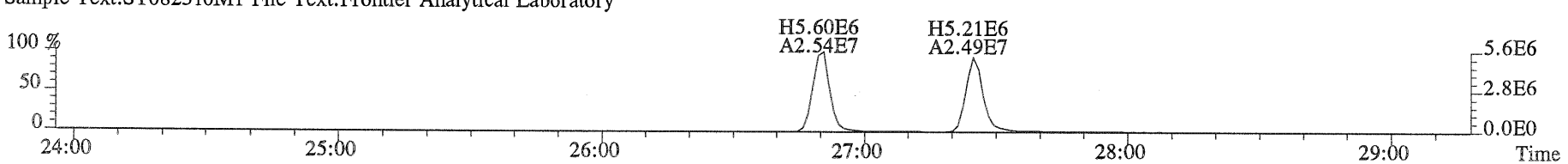
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



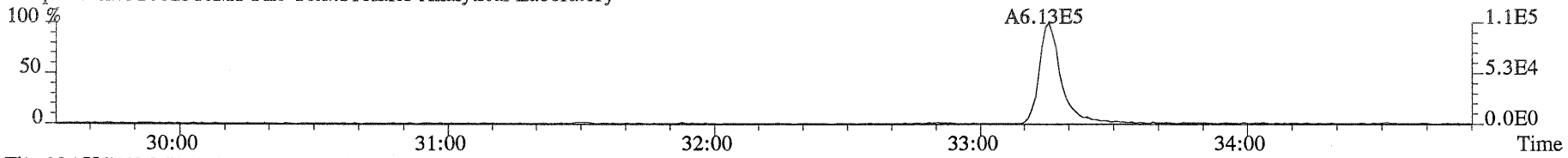
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



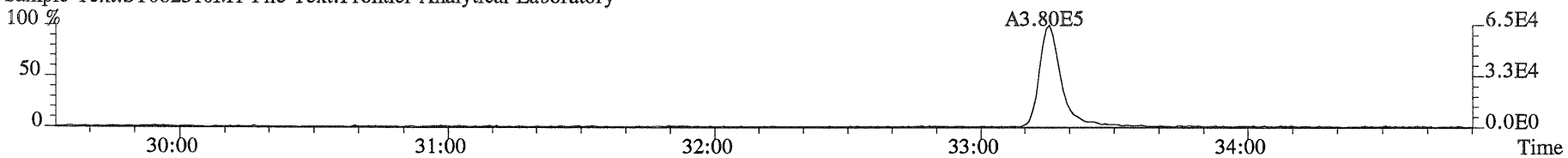
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



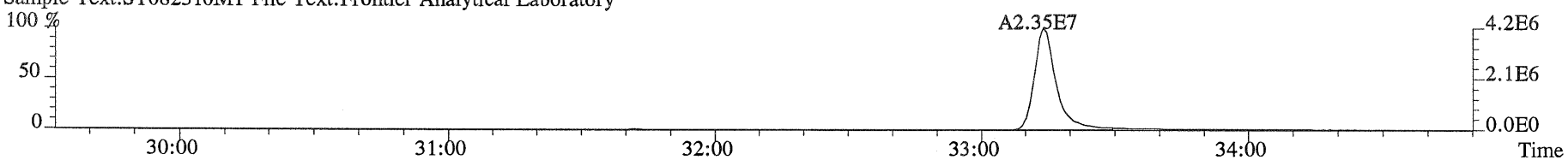
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



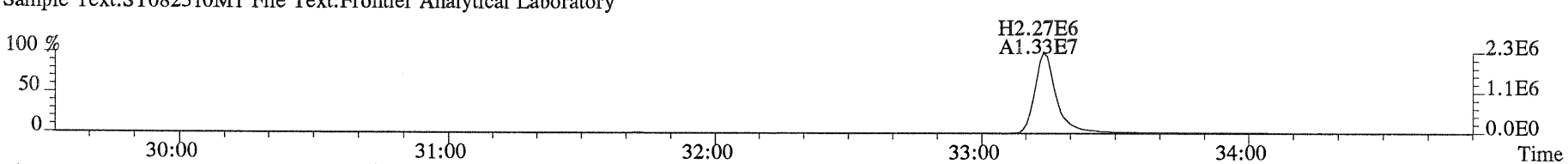
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



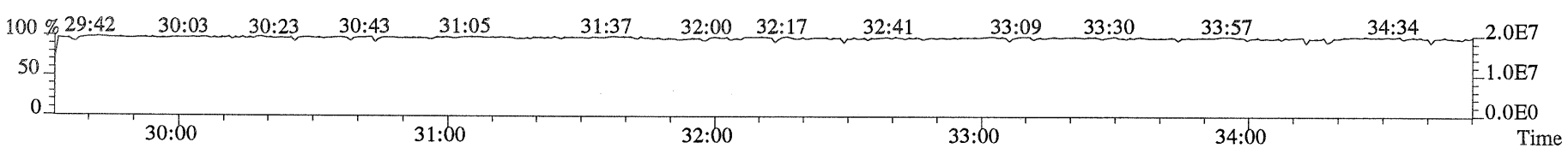
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



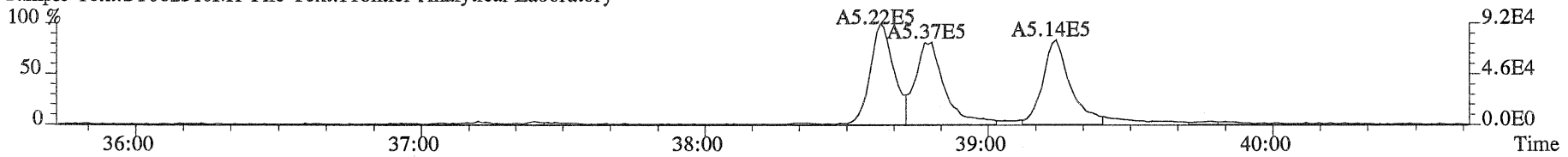
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



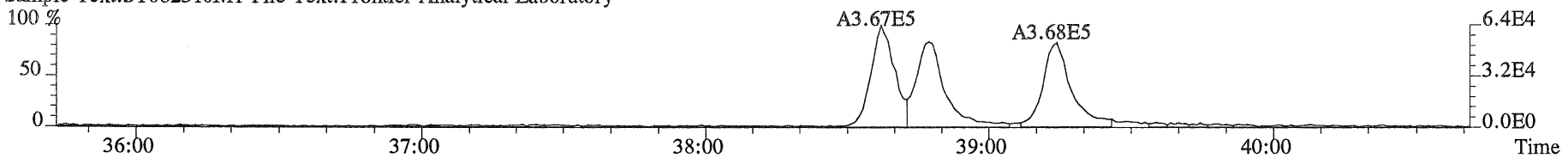
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



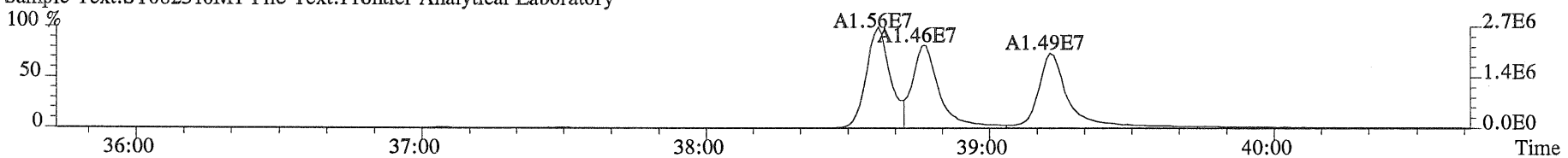
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



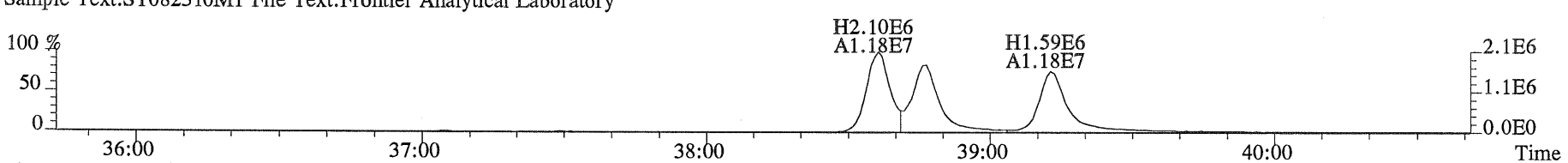
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



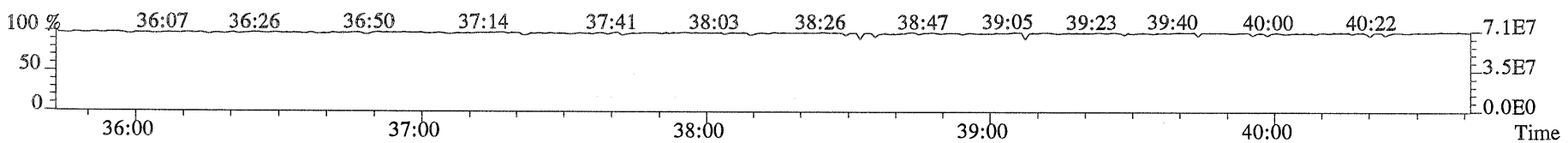
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



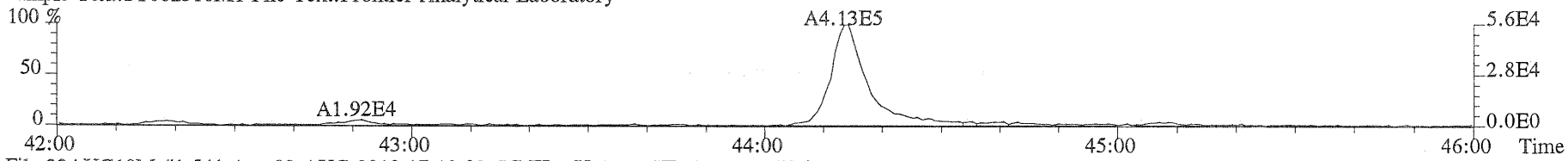
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



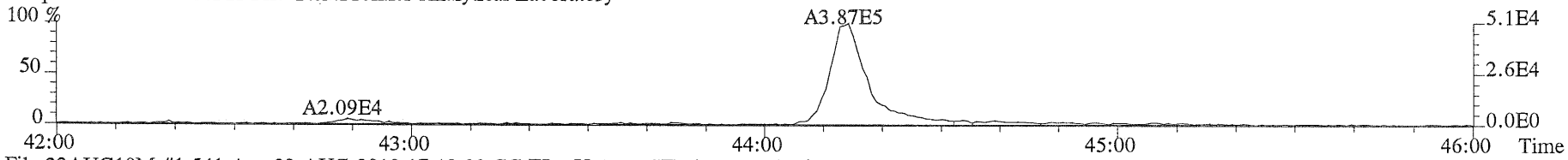
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



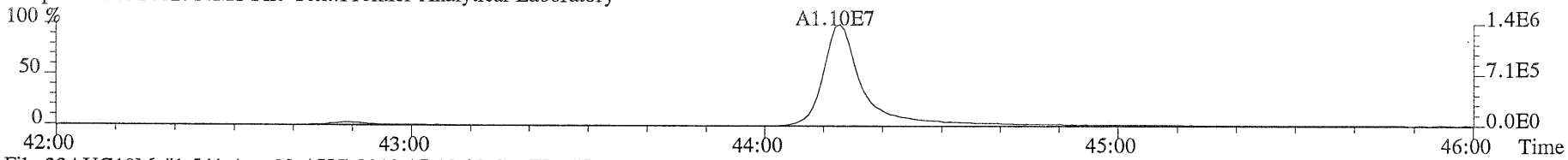
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



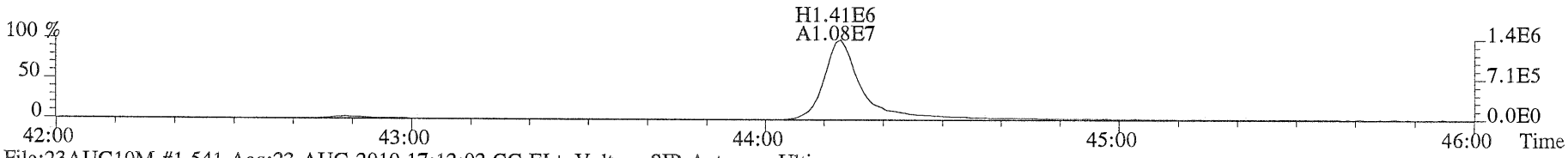
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



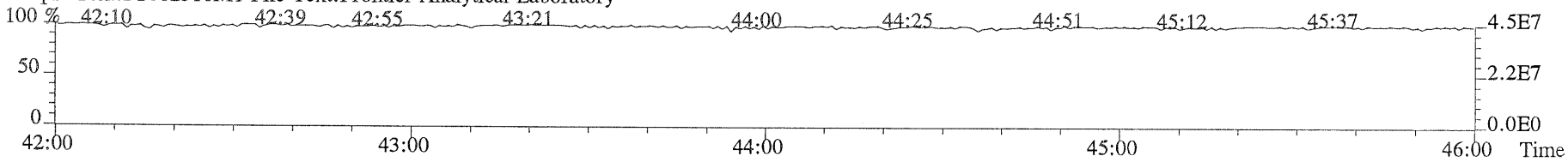
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



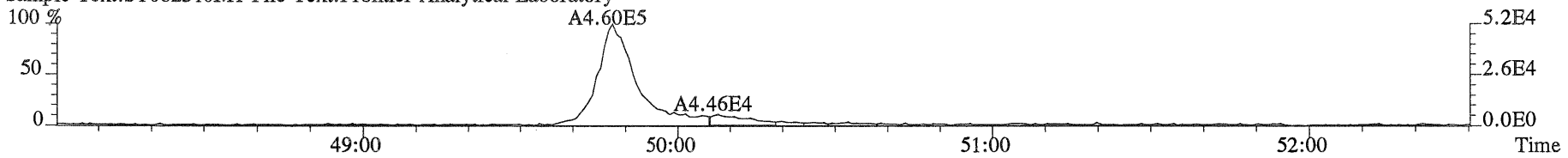
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



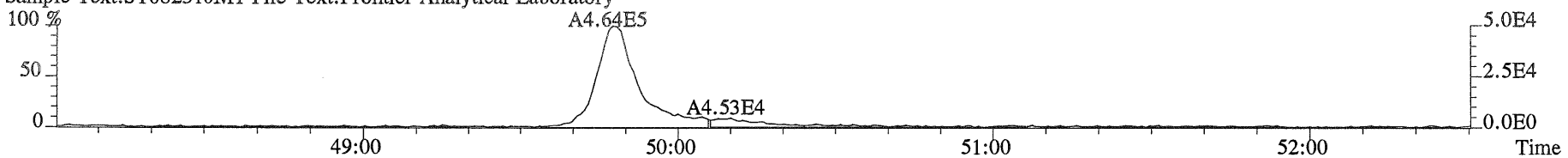
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



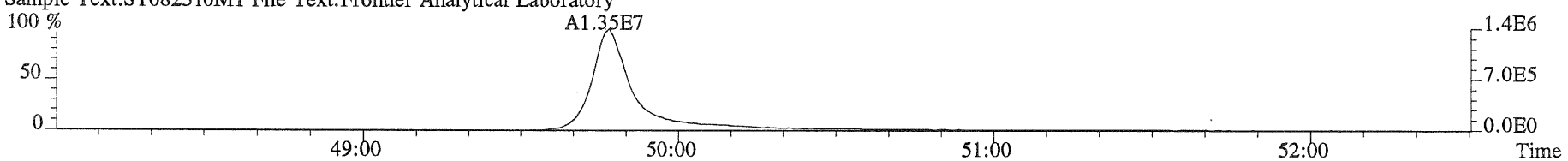
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



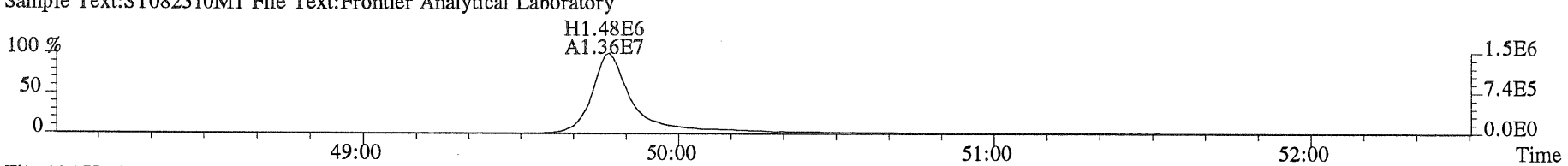
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



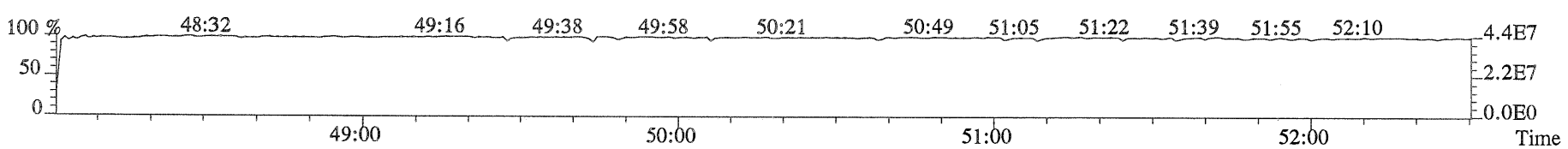
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



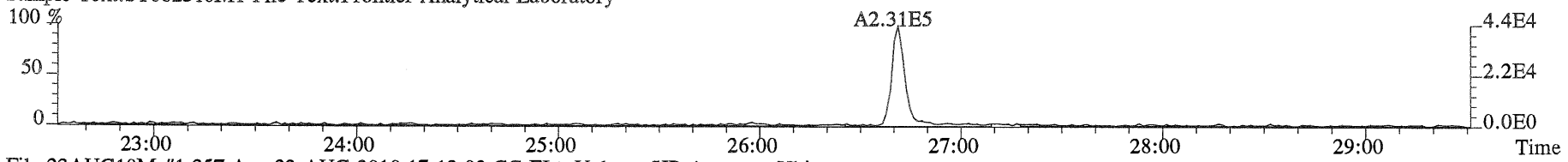
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



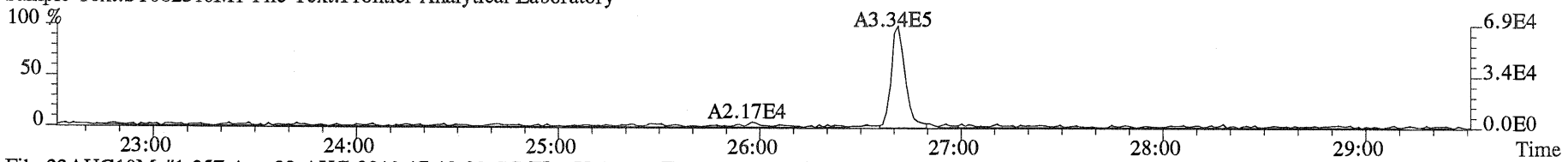
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



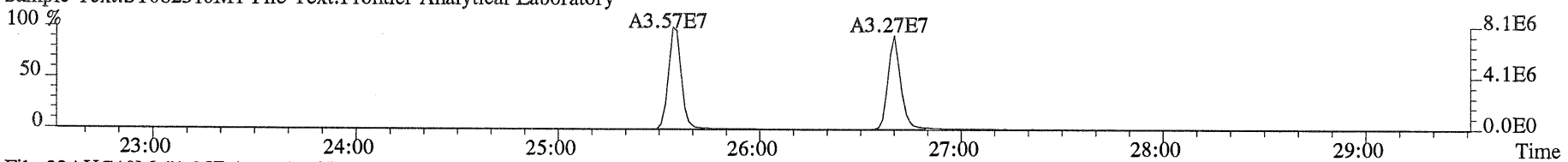
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



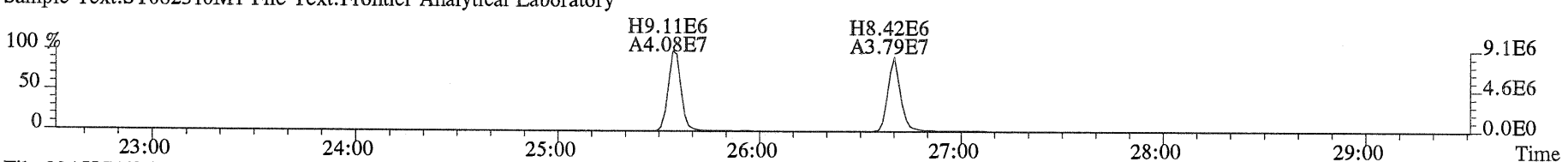
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



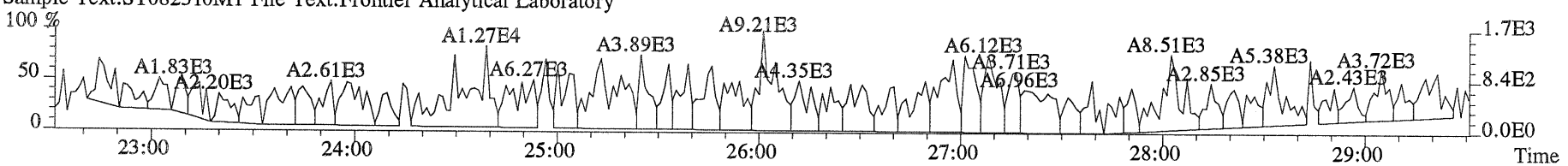
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



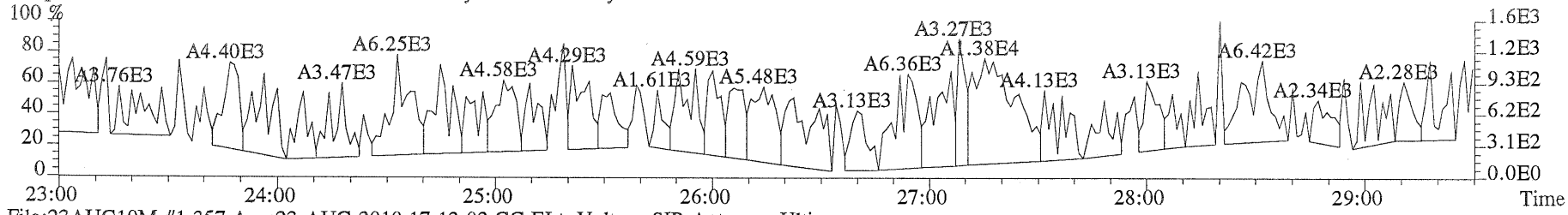
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



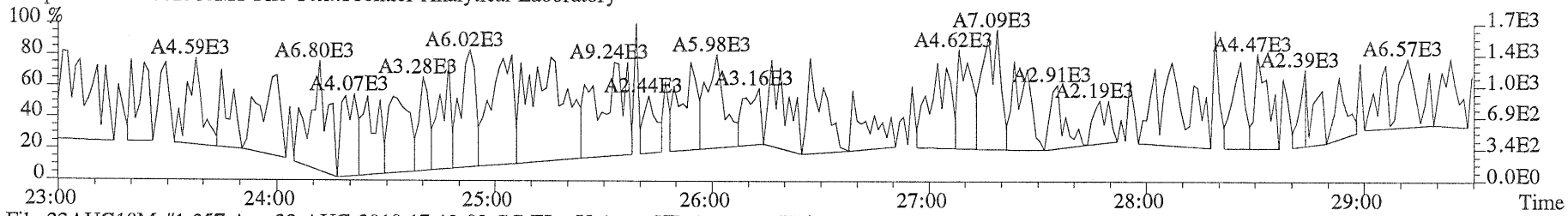
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



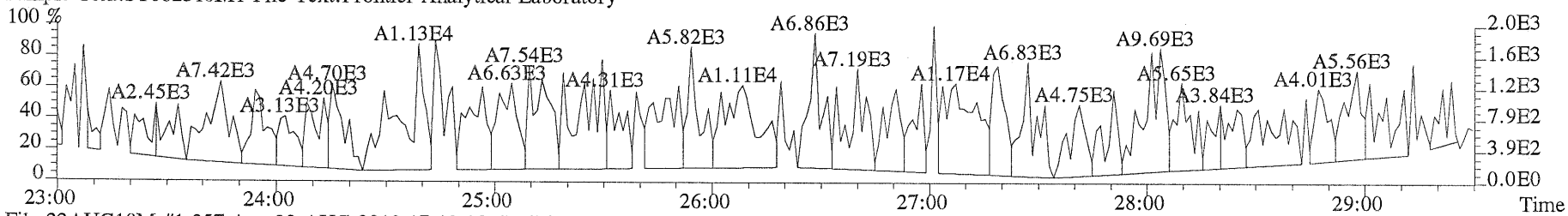
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



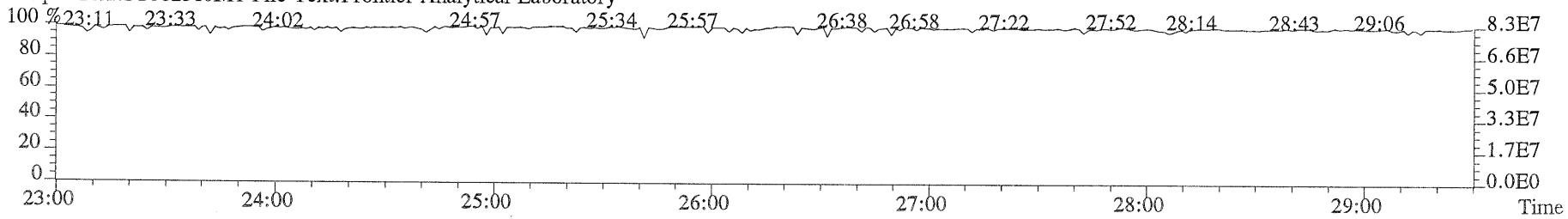
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



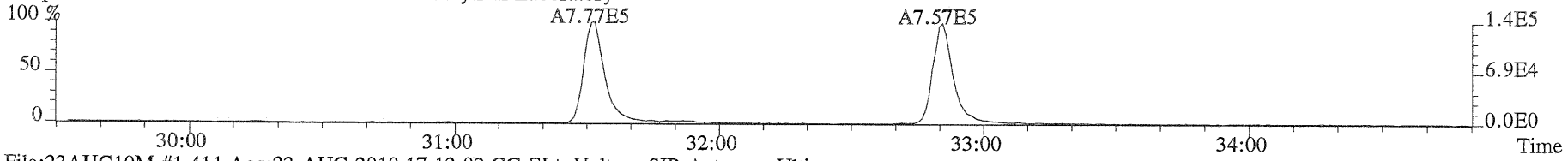
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



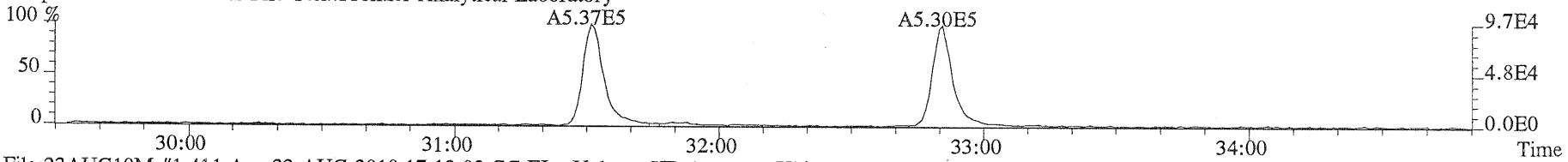
File:23AUG10M #1-357 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:4 Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



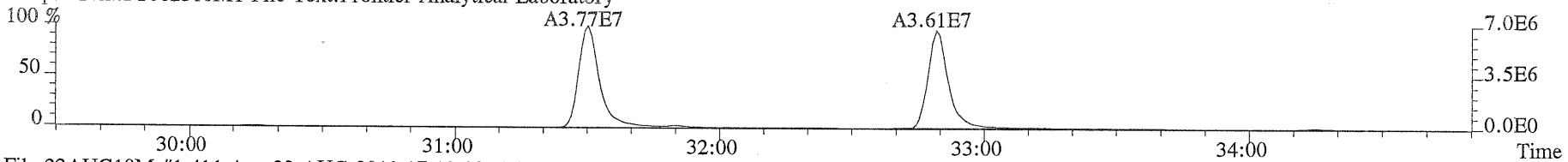
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



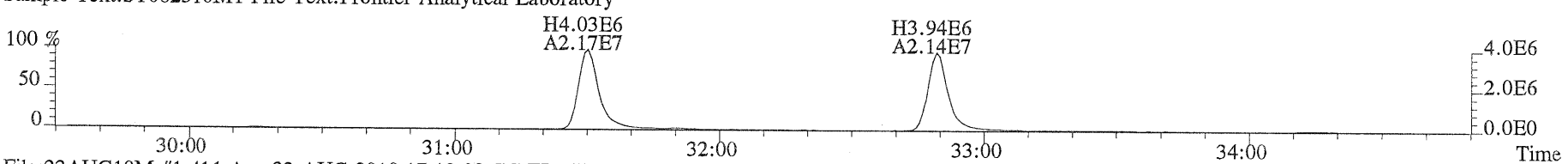
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



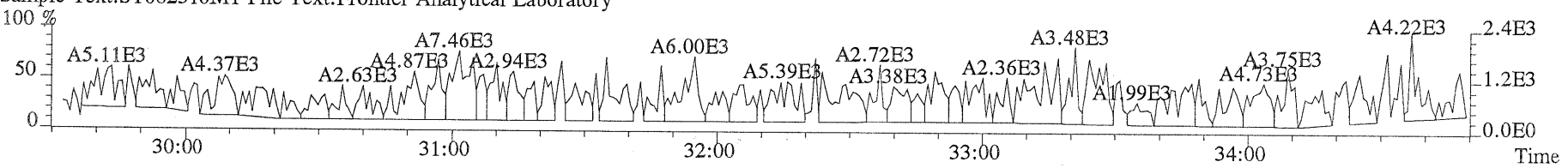
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



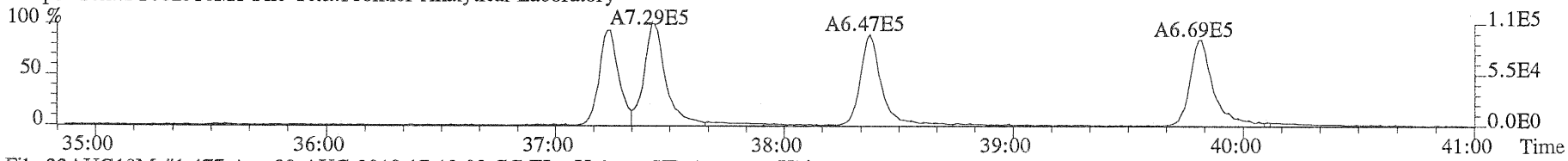
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



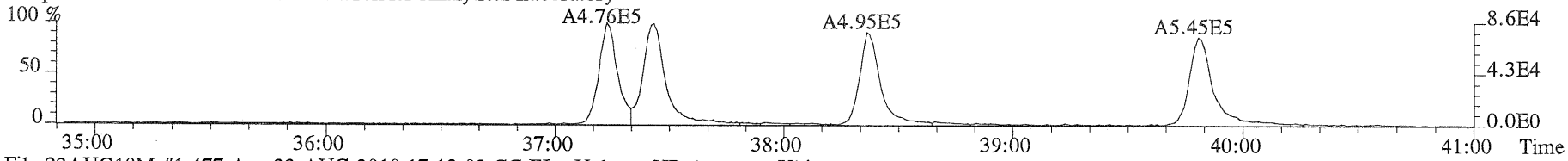
File:23AUG10M #1-411 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



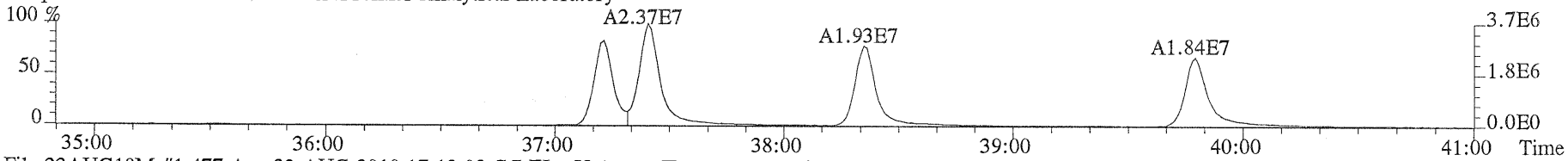
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



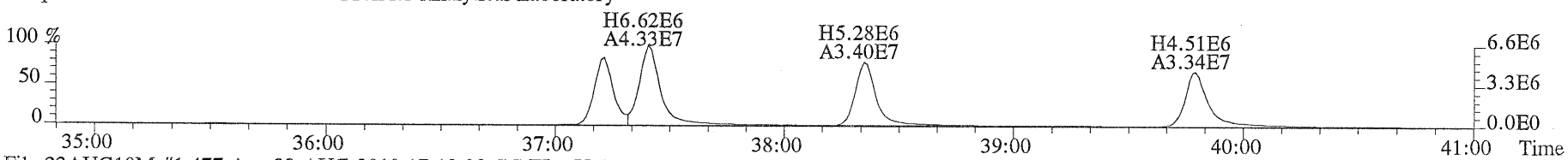
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



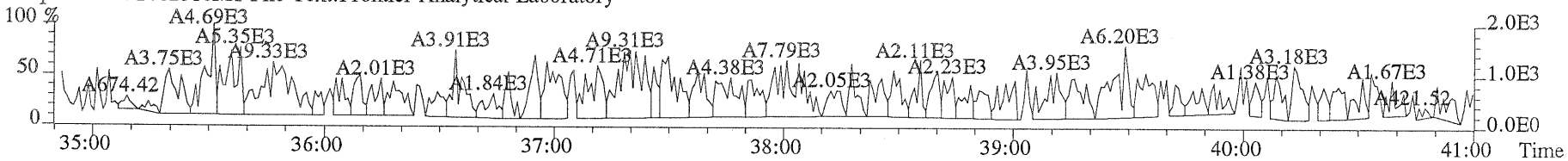
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



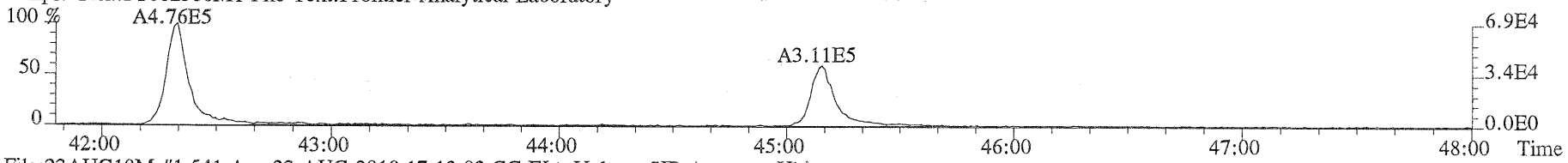
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



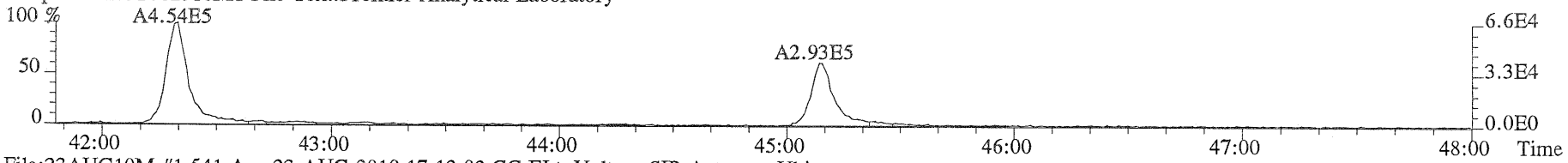
File:23AUG10M #1-477 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



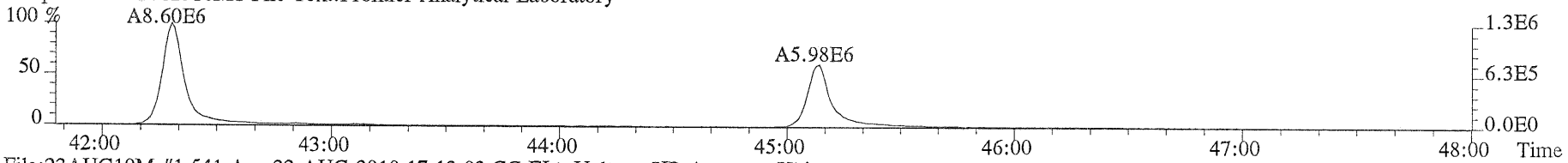
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



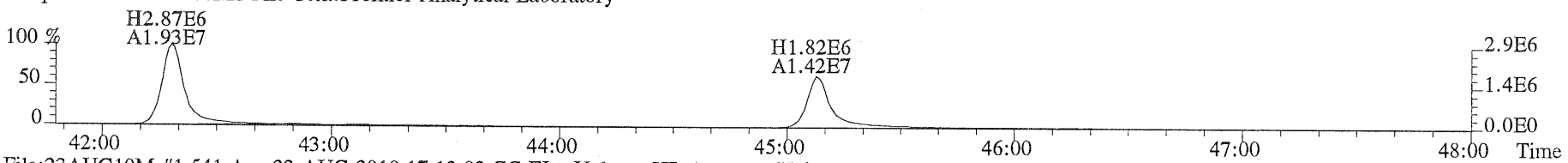
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



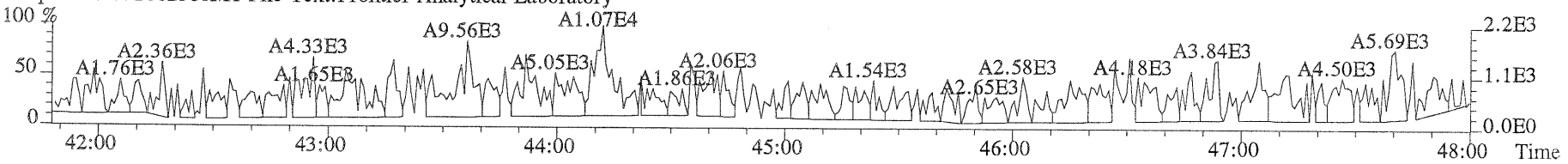
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



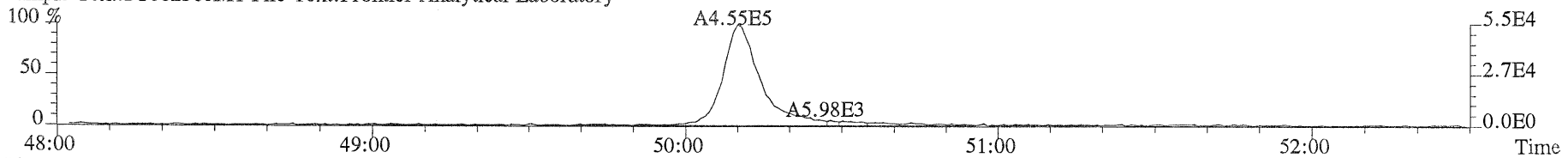
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



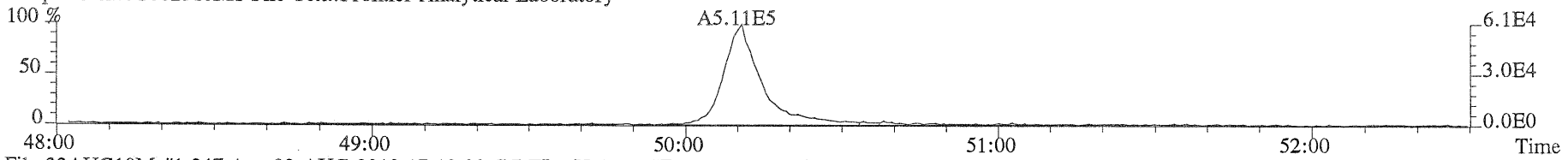
File:23AUG10M #1-541 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



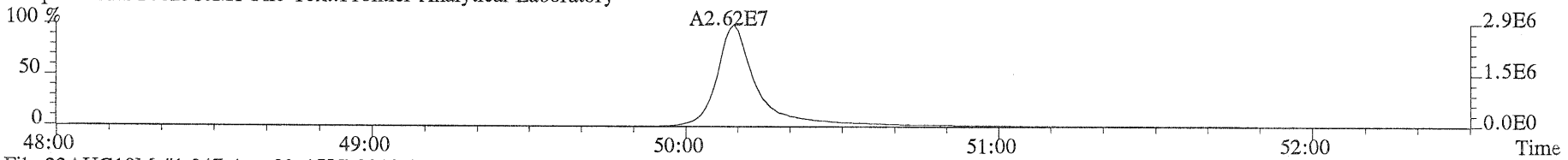
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



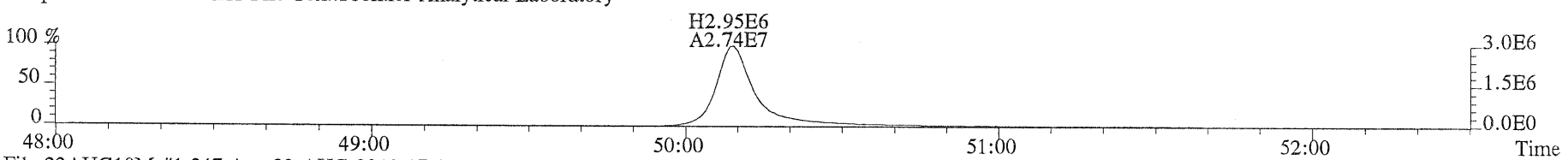
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



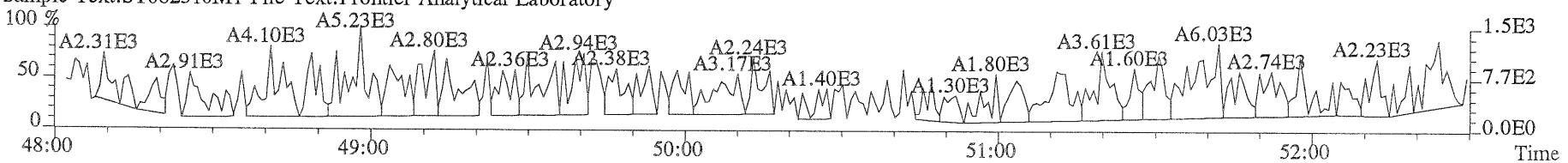
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



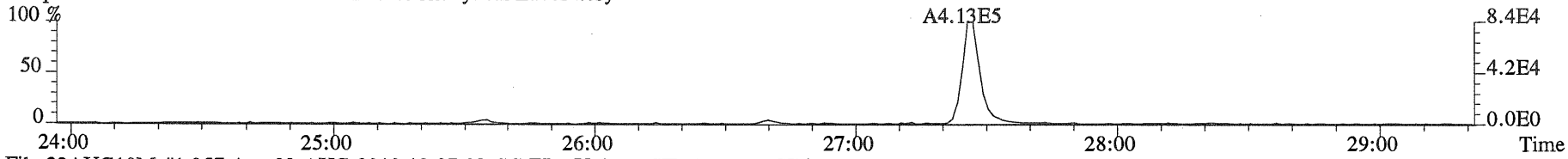
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



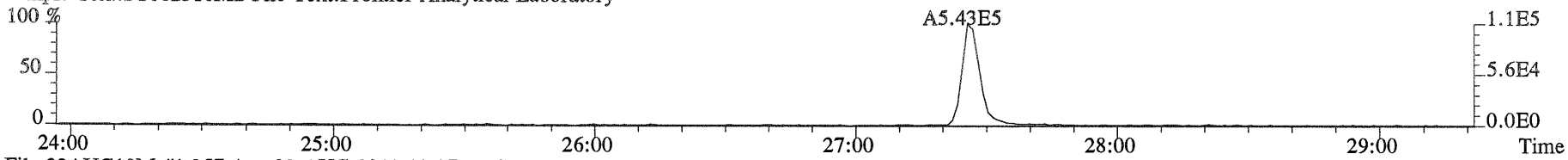
File:23AUG10M #1-347 Acq:23-AUG-2010 17:12:02 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M1 File Text:Frontier Analytical Laboratory



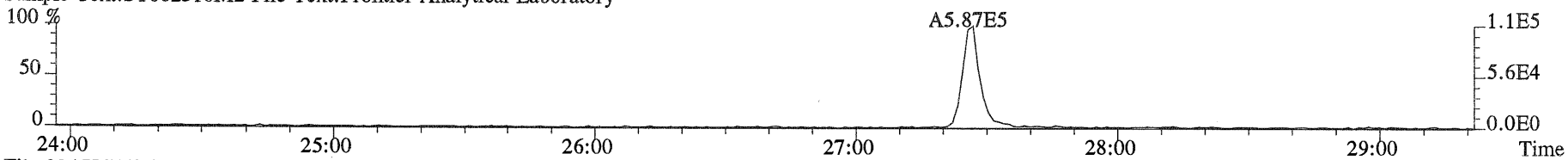
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



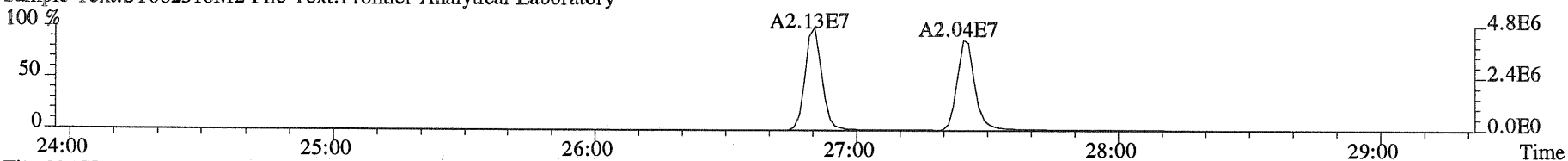
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



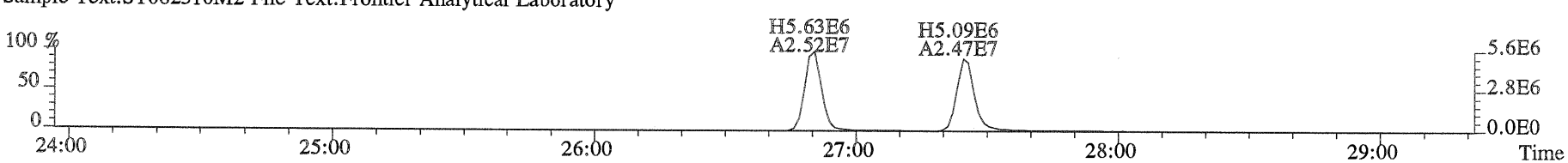
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



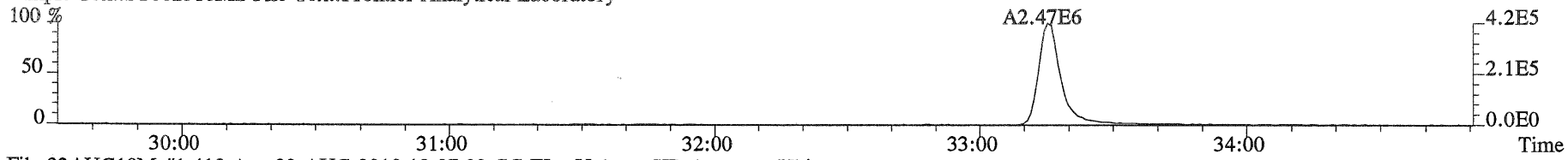
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



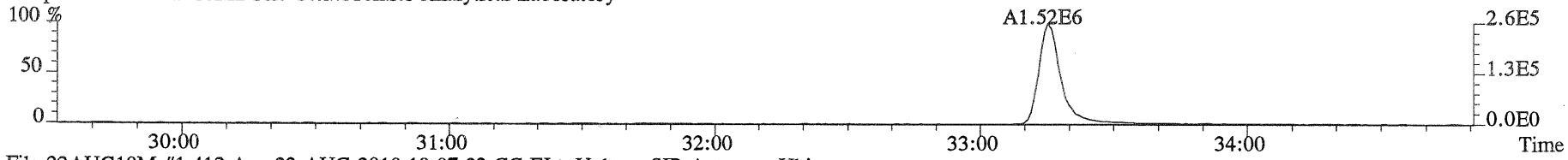
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



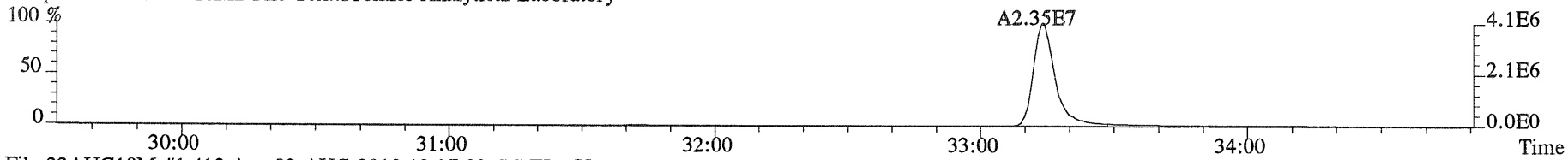
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



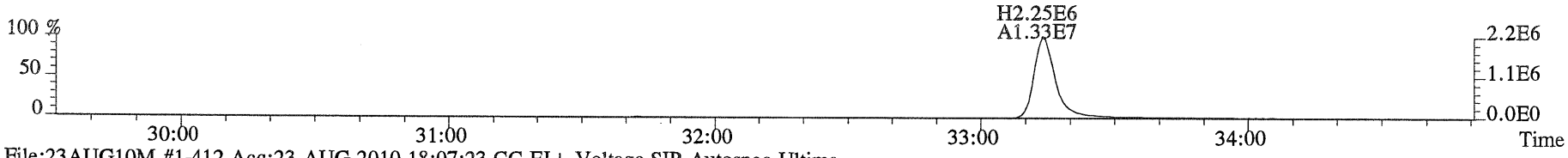
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



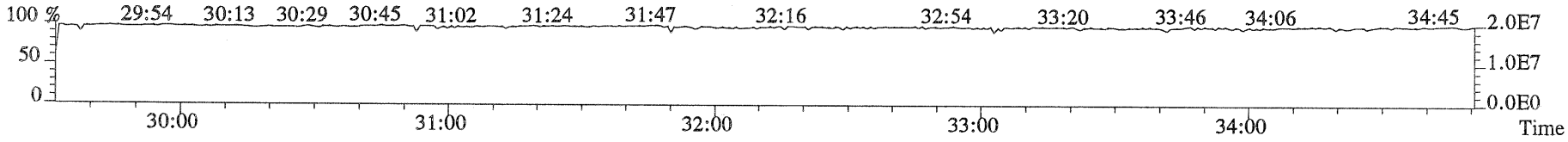
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



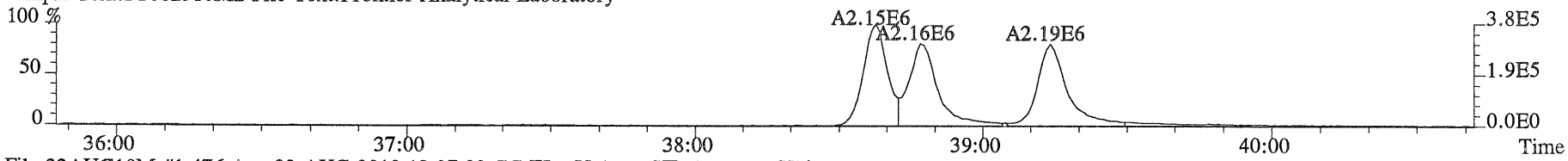
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



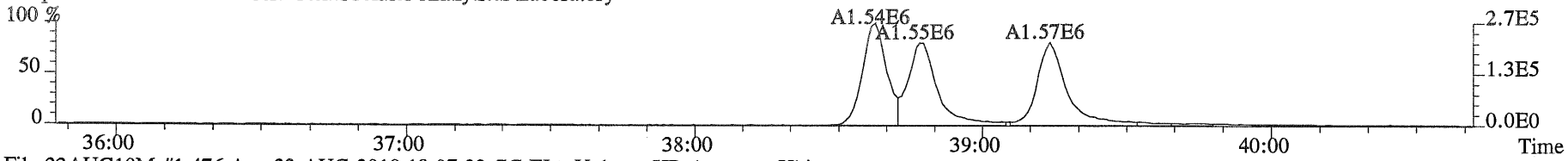
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



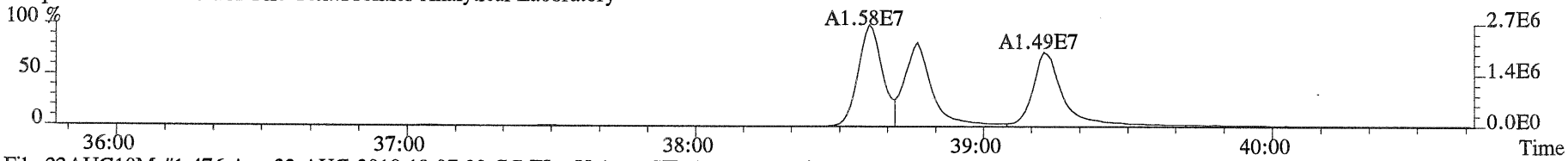
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



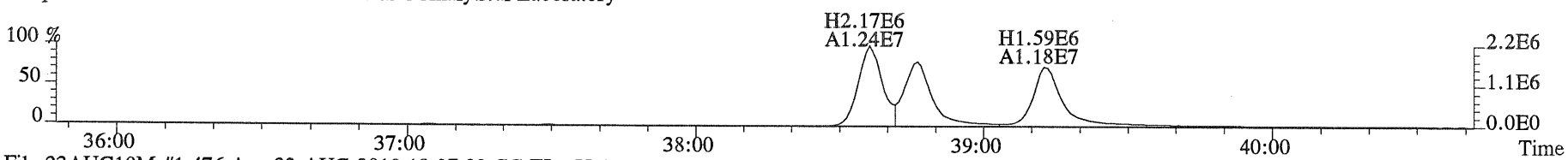
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



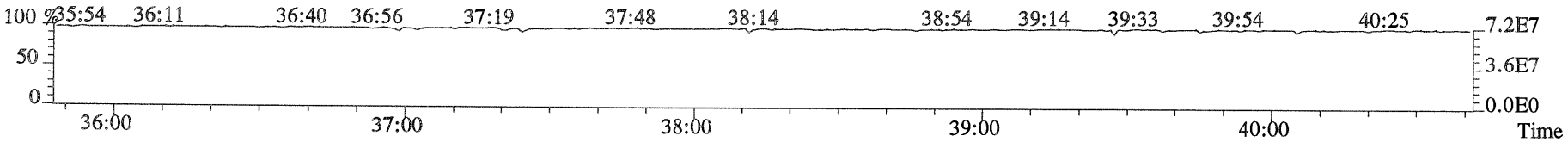
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



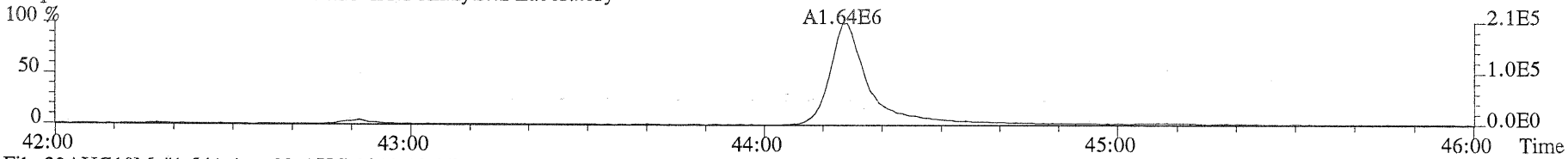
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



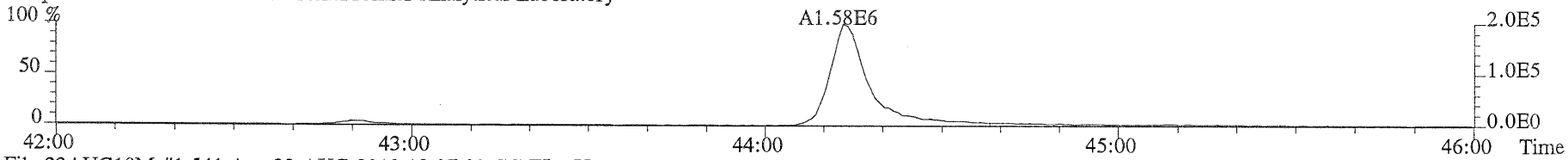
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



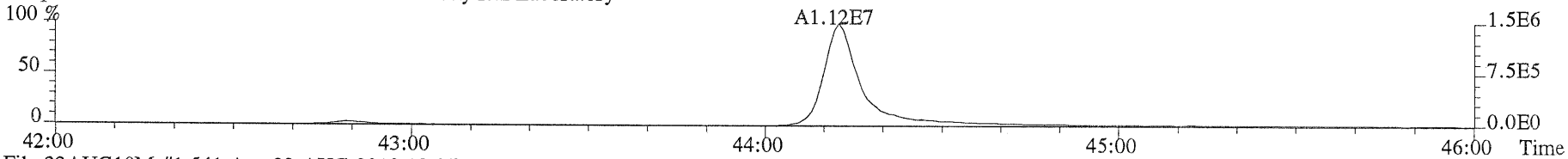
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



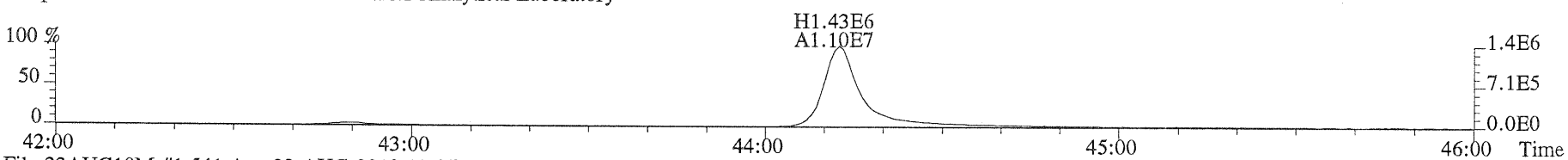
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



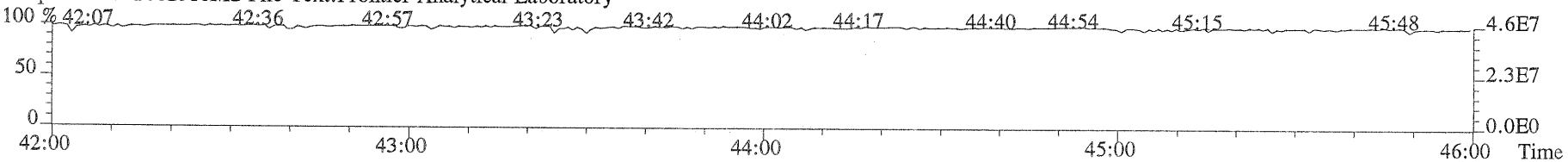
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



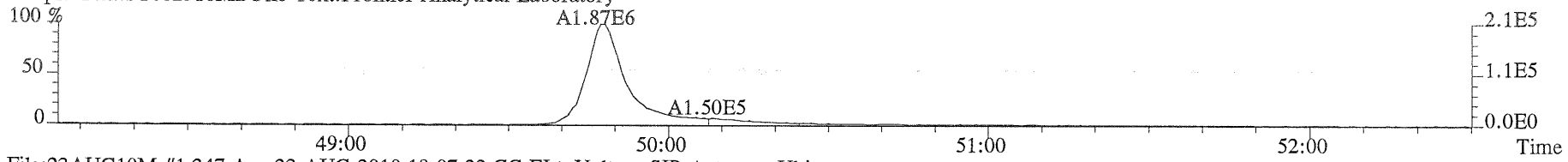
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



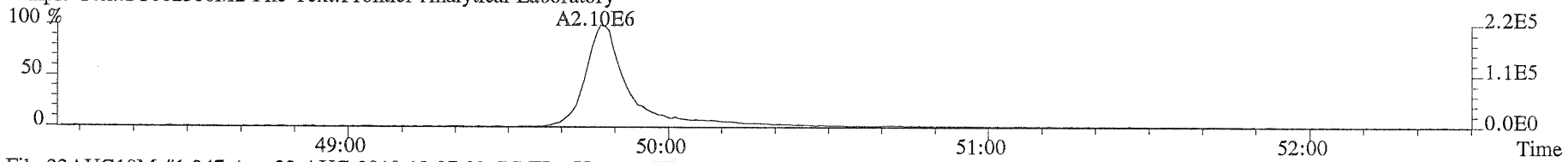
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



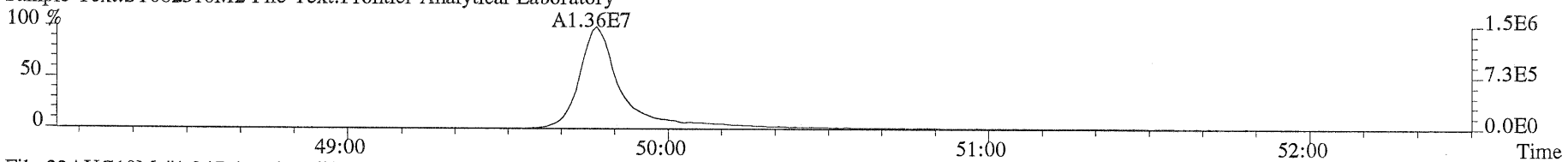
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



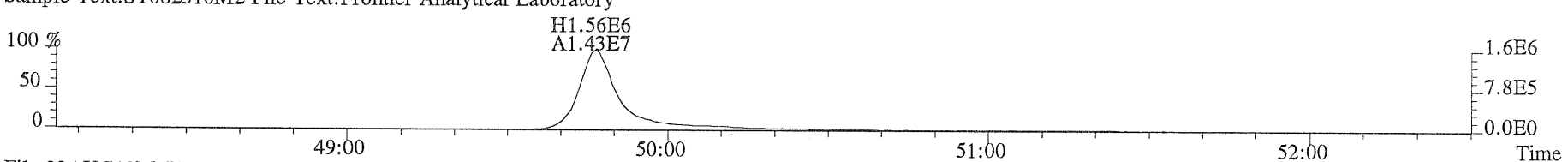
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



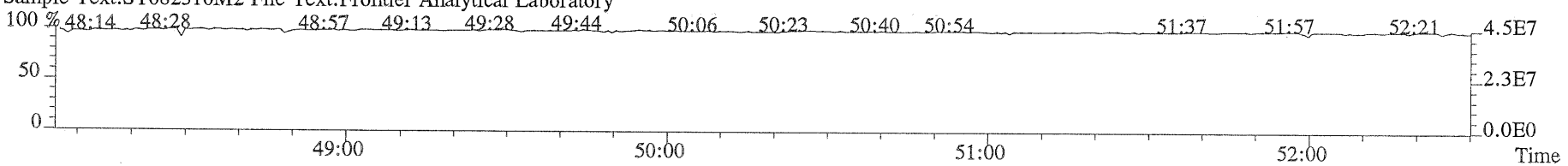
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



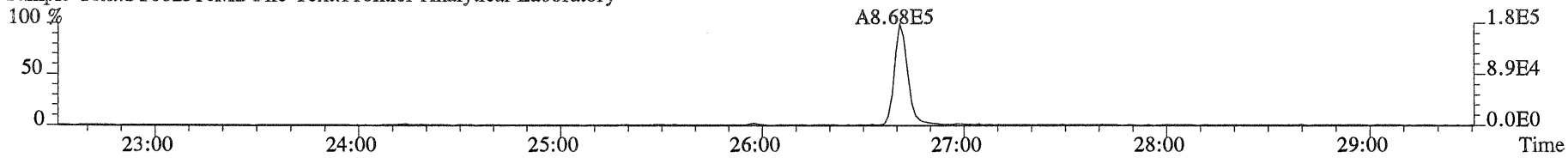
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



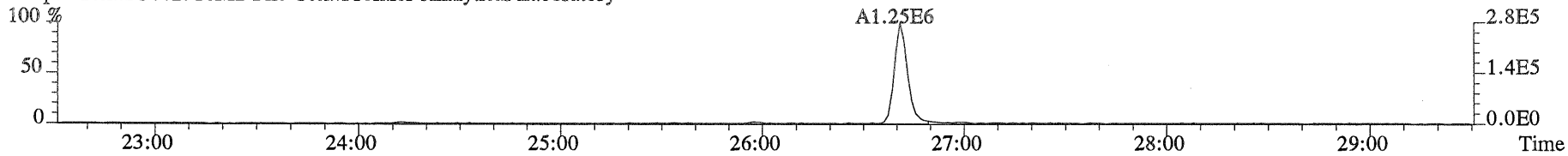
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



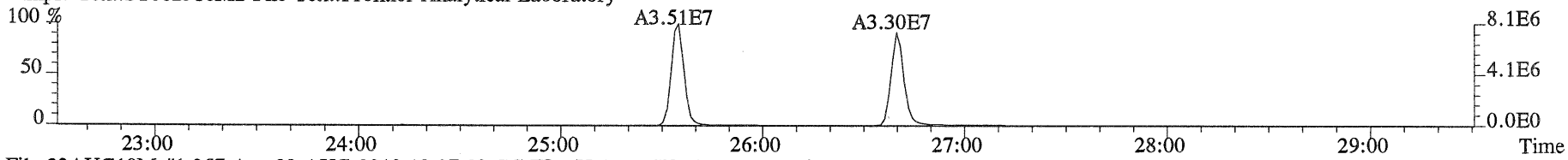
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



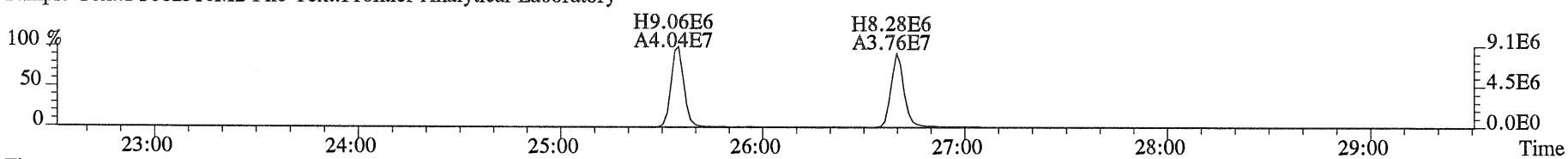
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



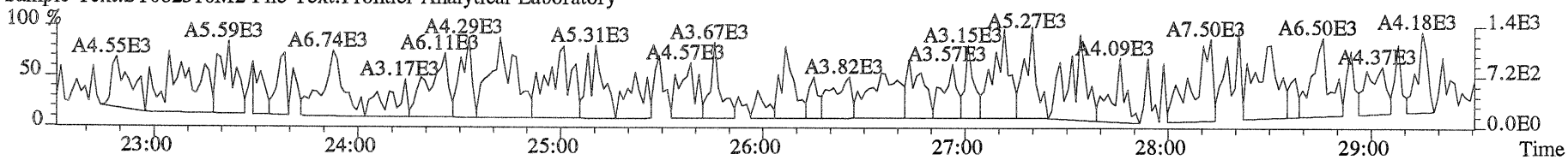
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



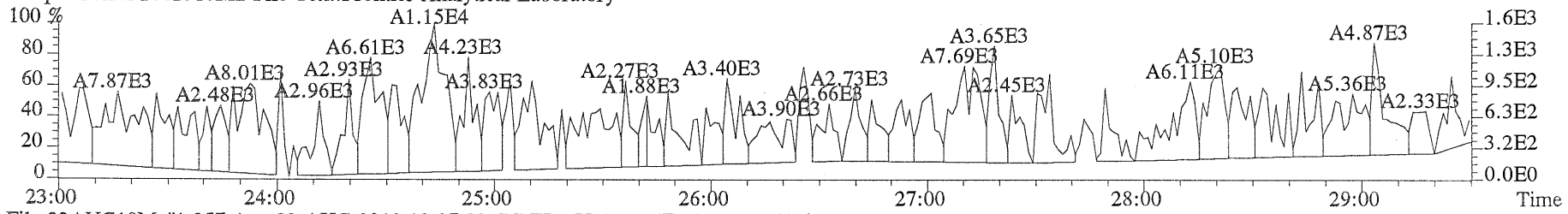
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



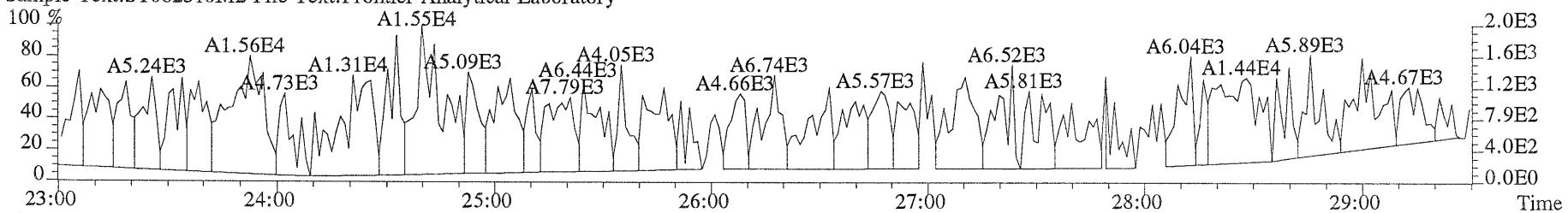
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



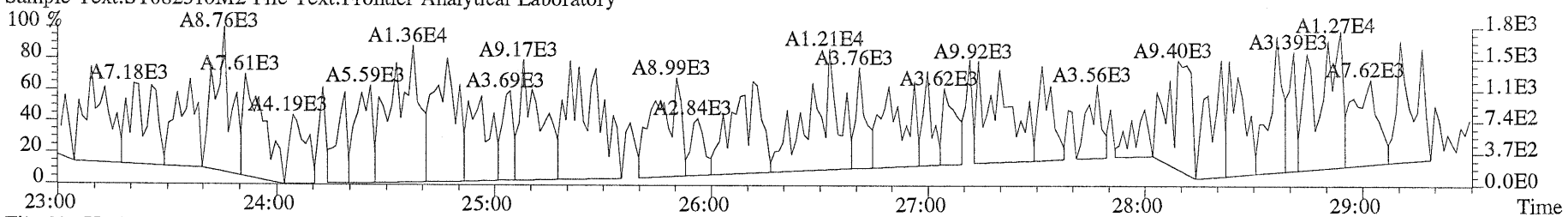
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



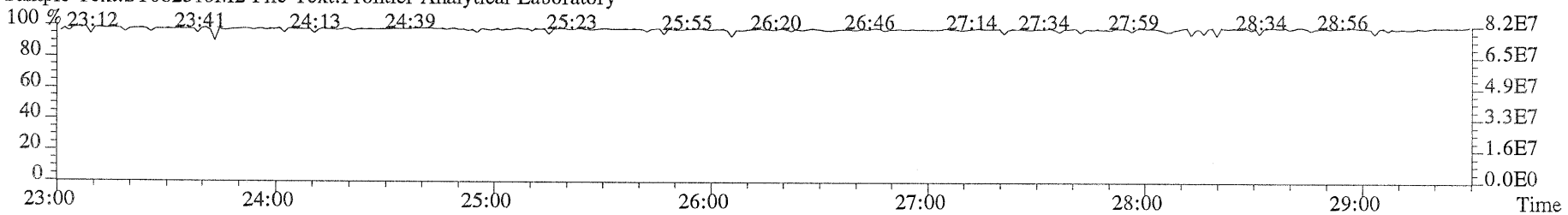
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



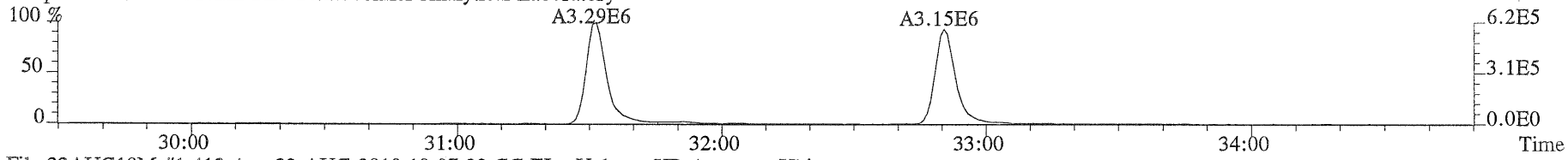
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



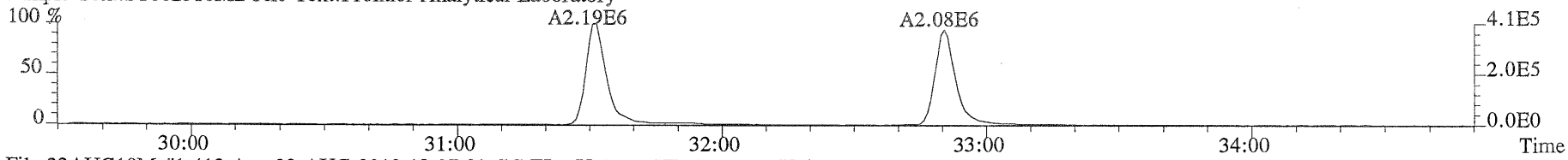
File:23AUG10M #1-357 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



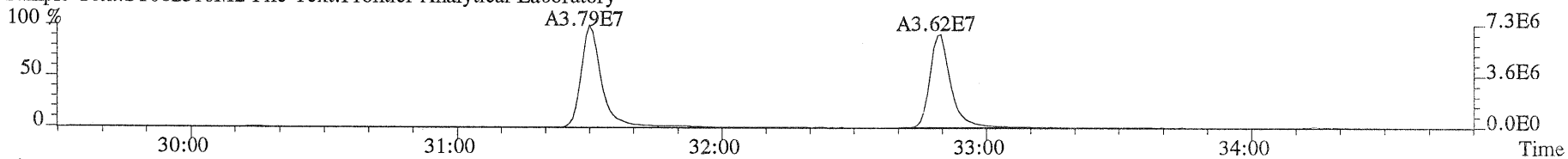
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



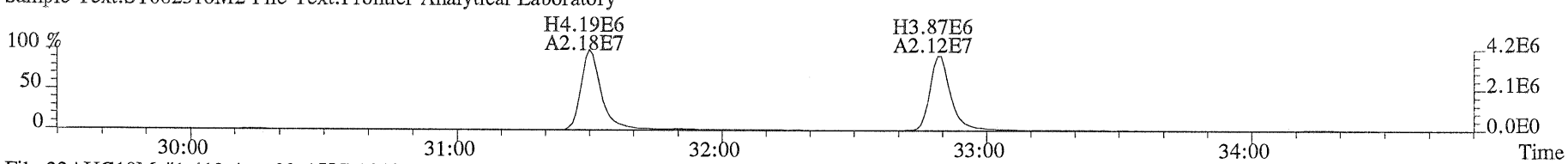
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



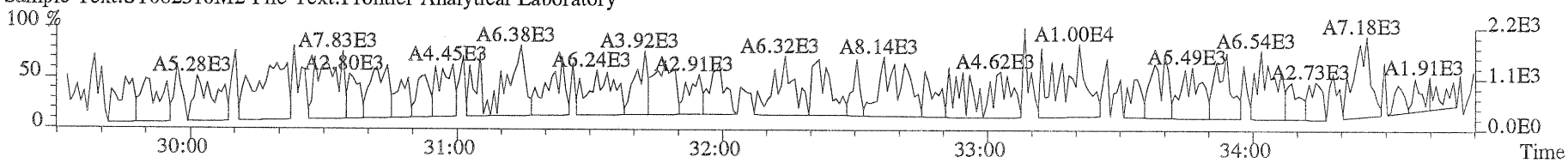
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



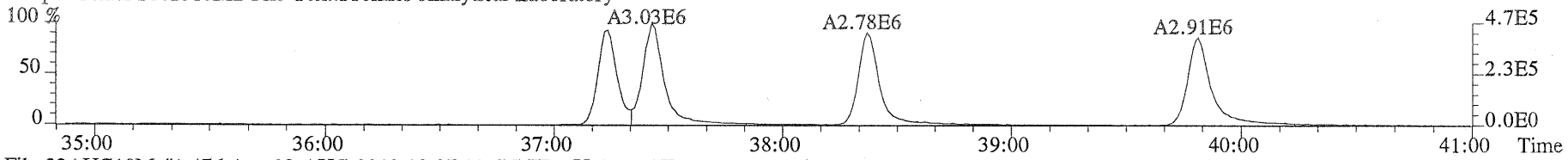
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



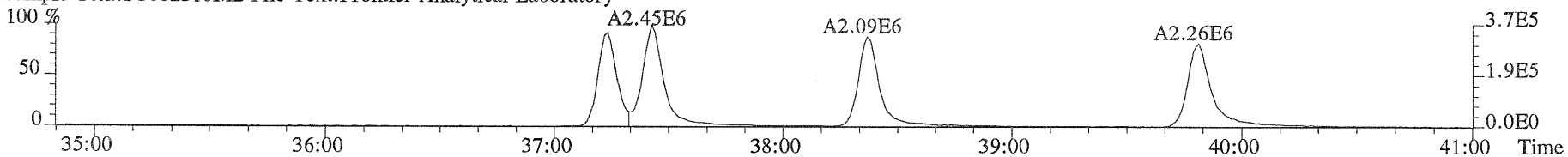
File:23AUG10M #1-412 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



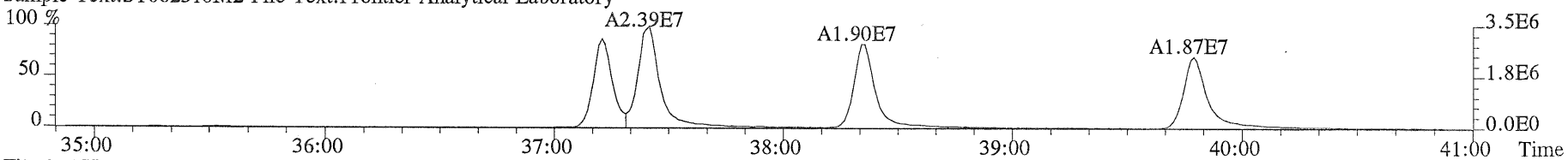
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



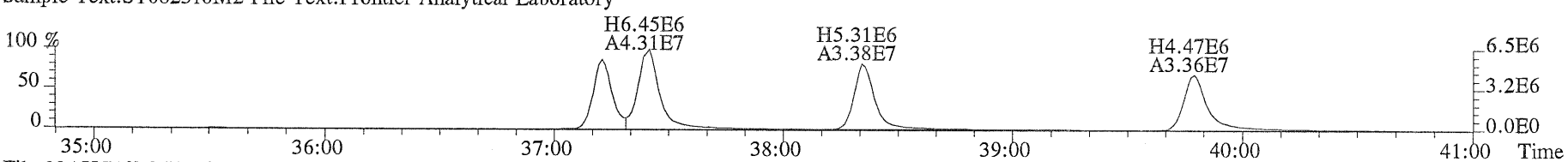
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



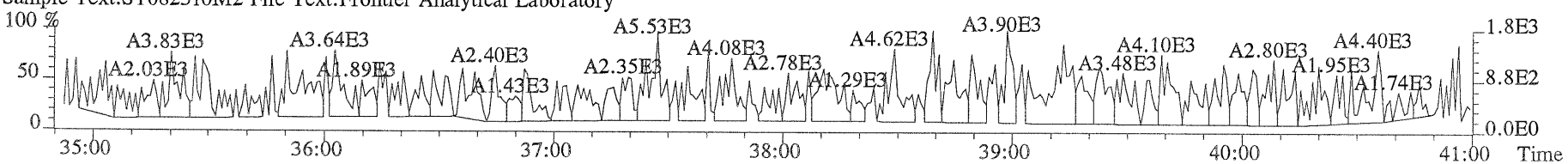
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



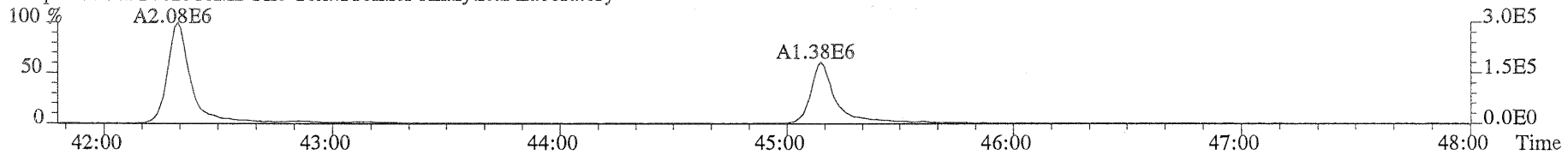
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



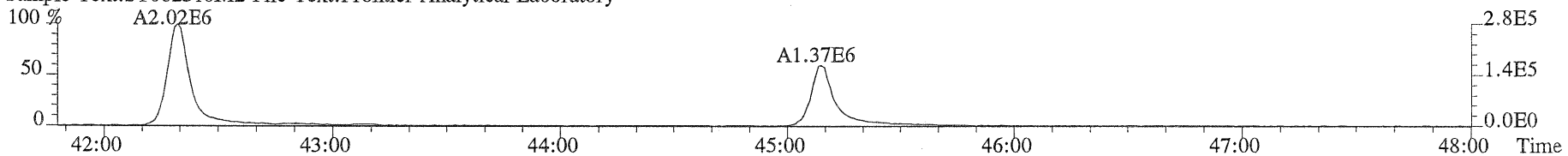
File:23AUG10M #1-476 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



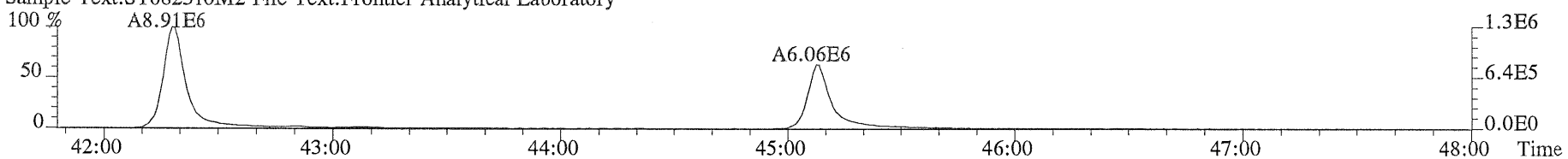
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



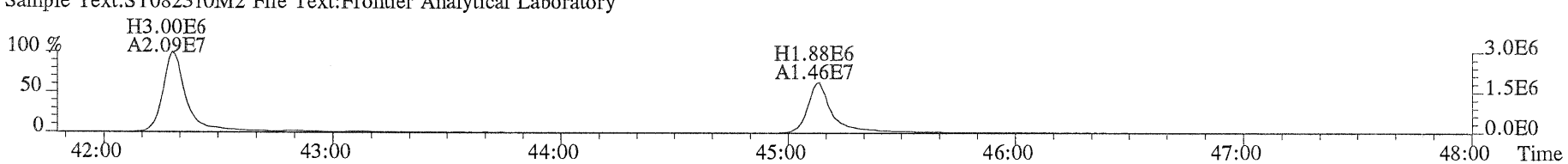
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



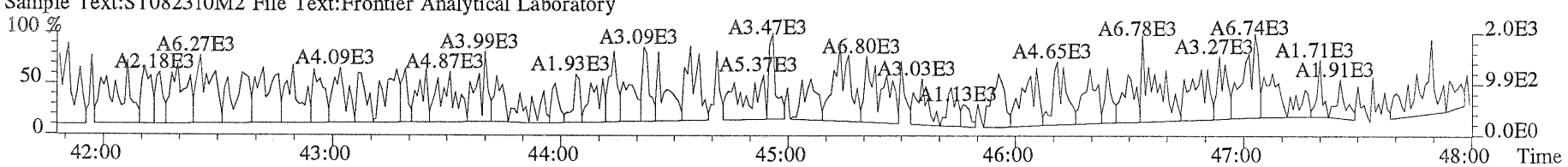
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



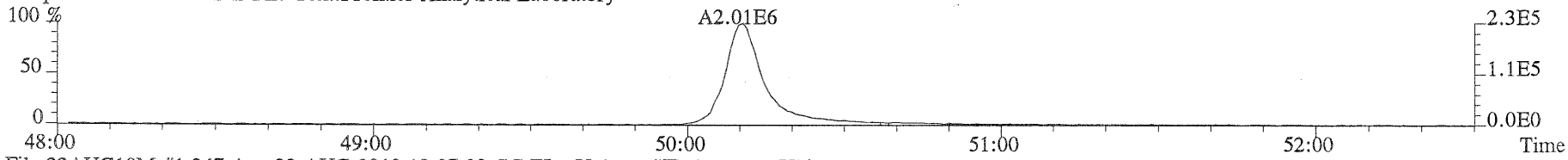
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



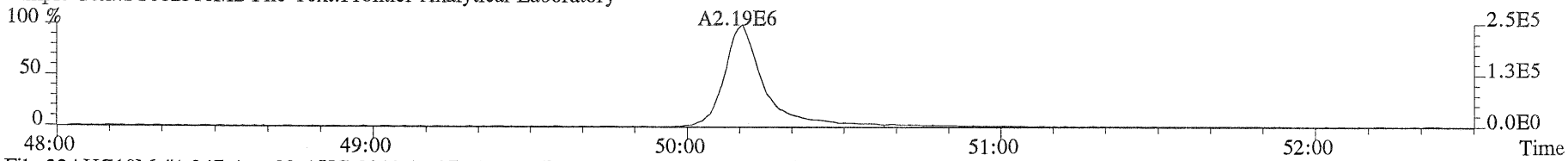
File:23AUG10M #1-541 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



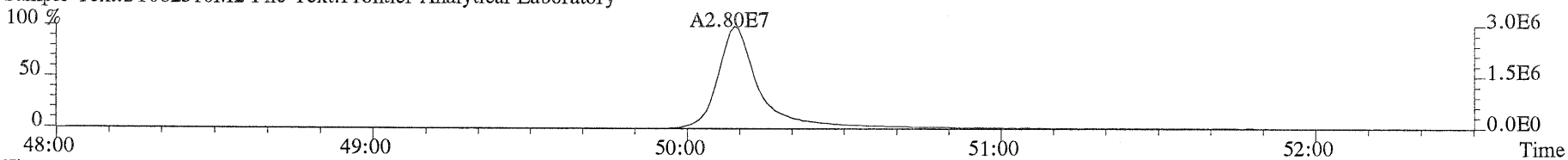
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



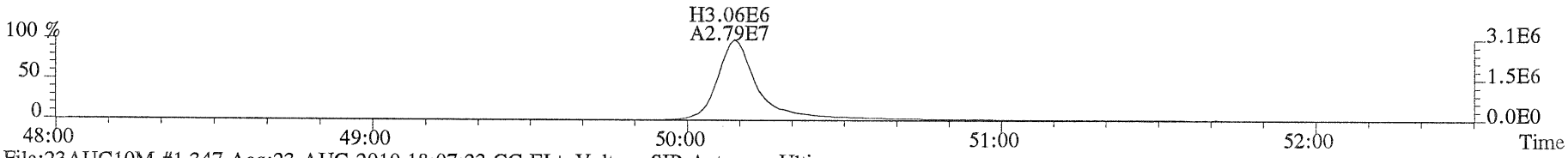
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



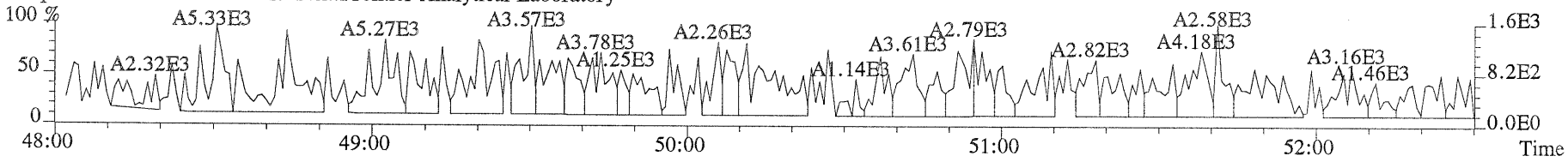
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



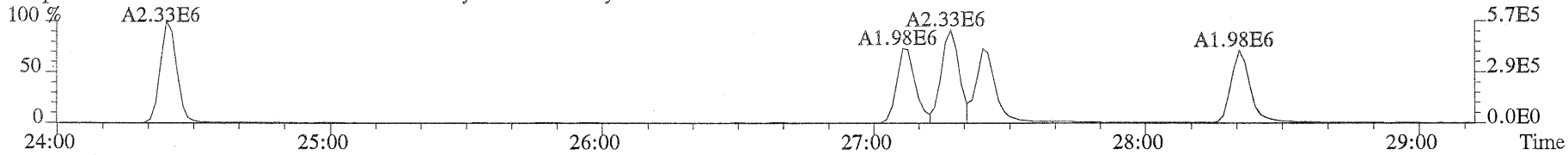
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



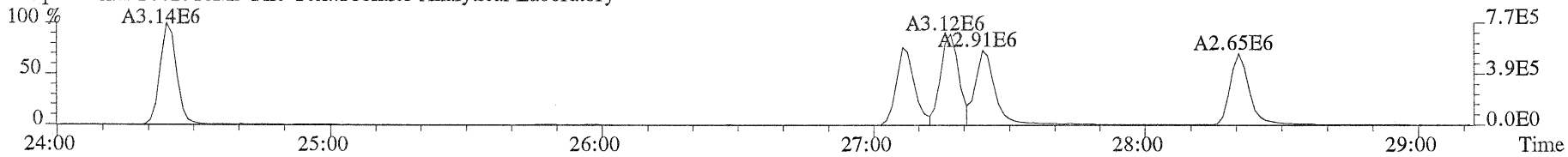
File:23AUG10M #1-347 Acq:23-AUG-2010 18:07:23 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M2 File Text:Frontier Analytical Laboratory



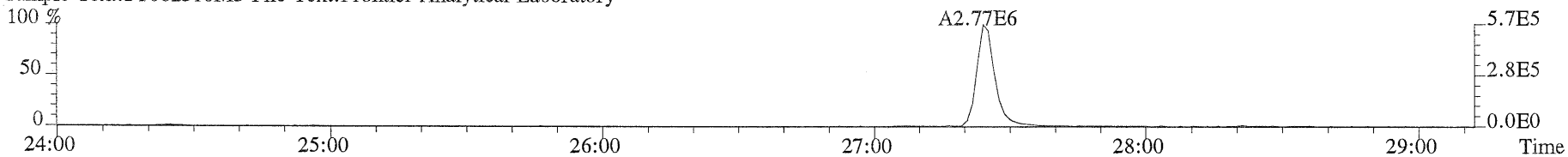
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



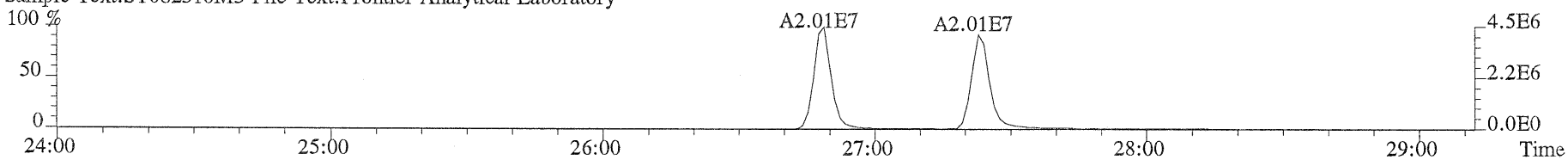
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



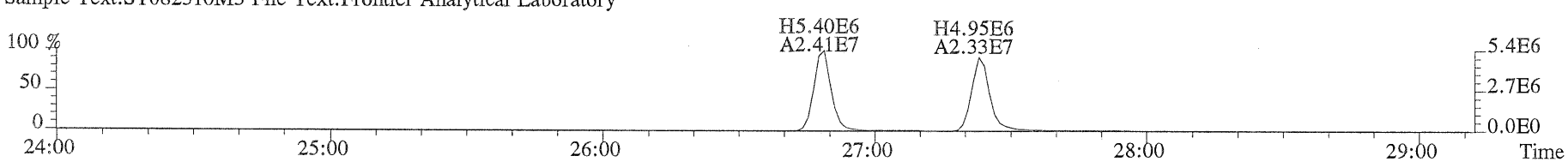
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



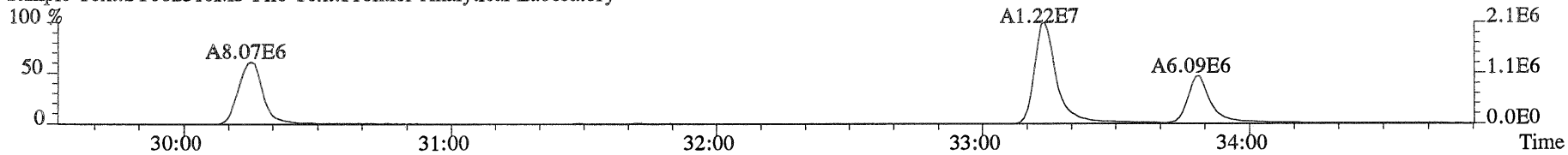
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



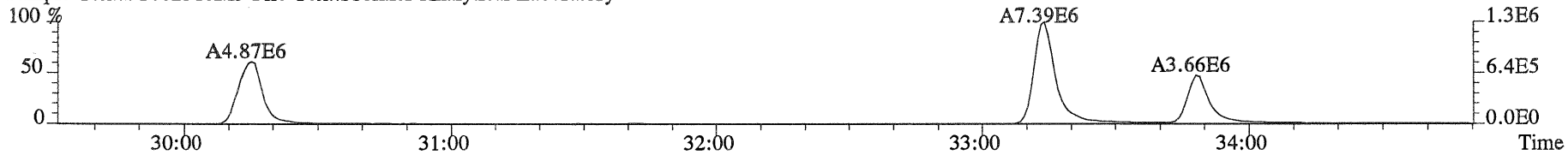
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



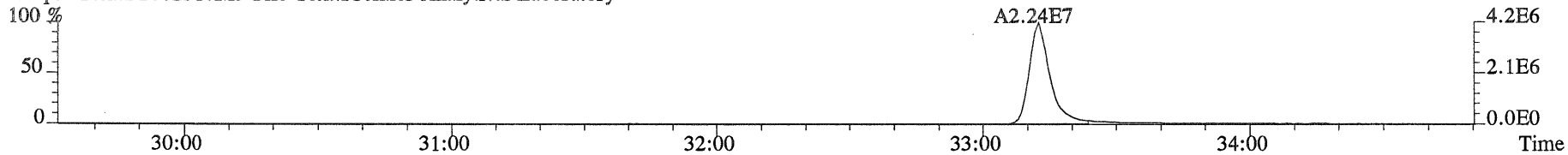
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



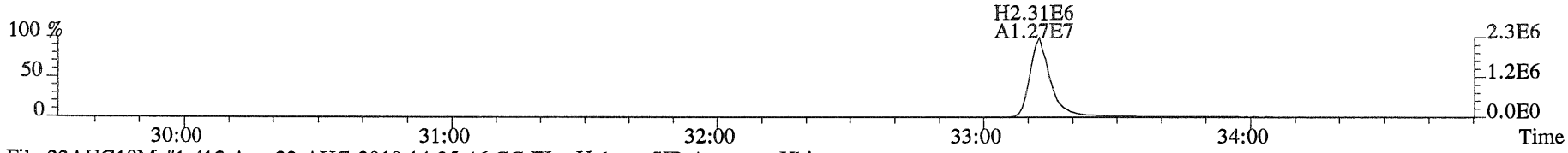
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



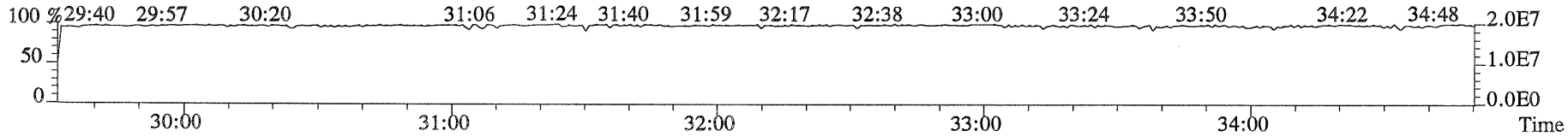
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



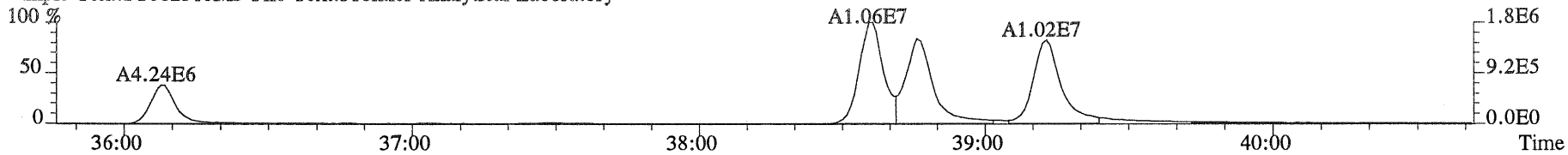
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



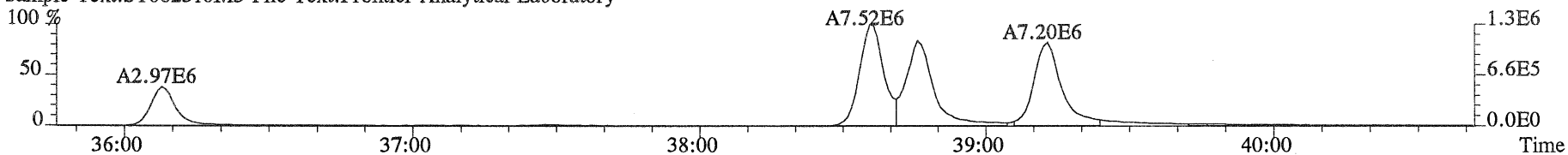
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



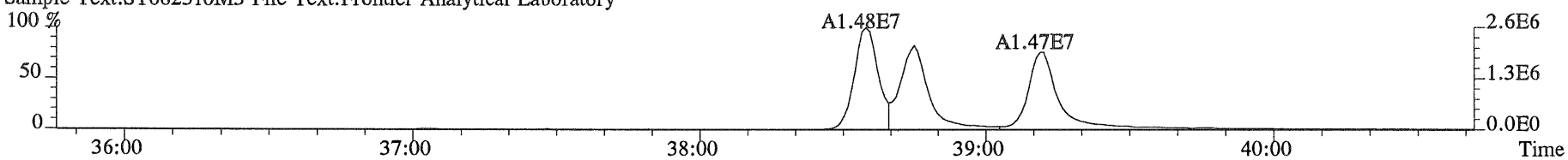
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



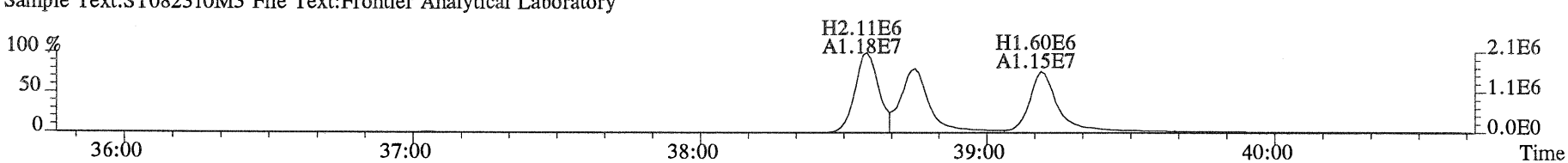
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



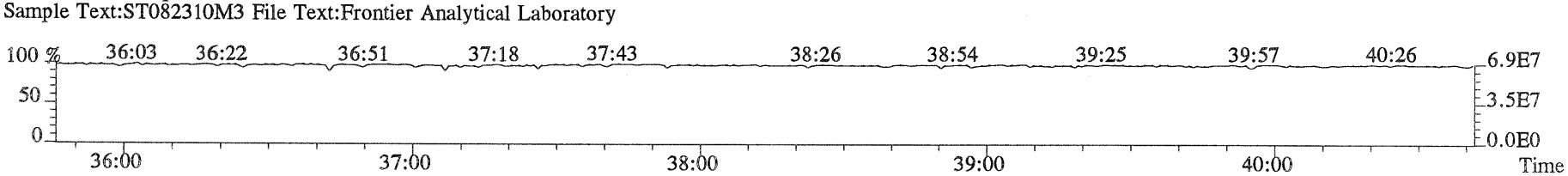
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



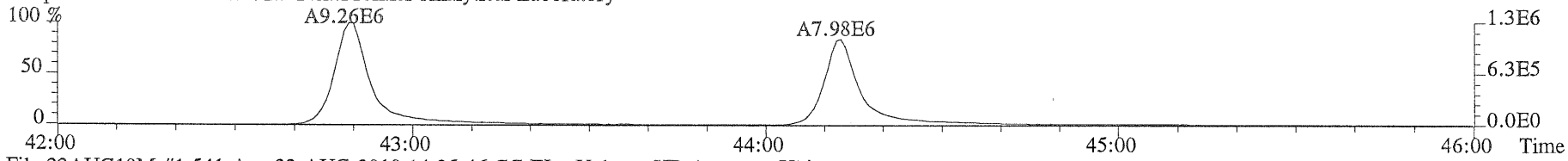
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



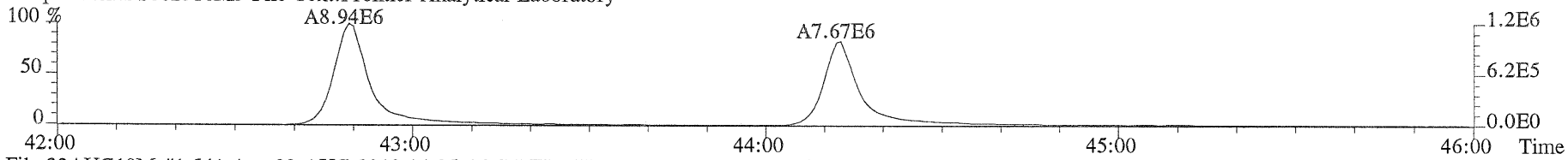
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



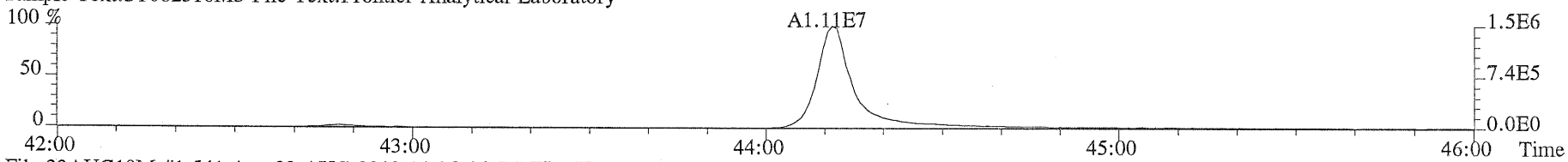
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



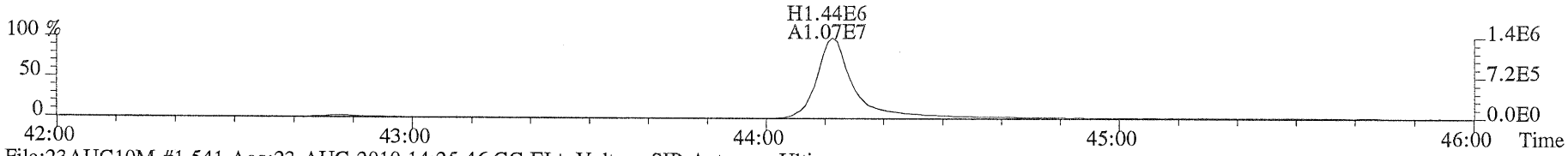
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



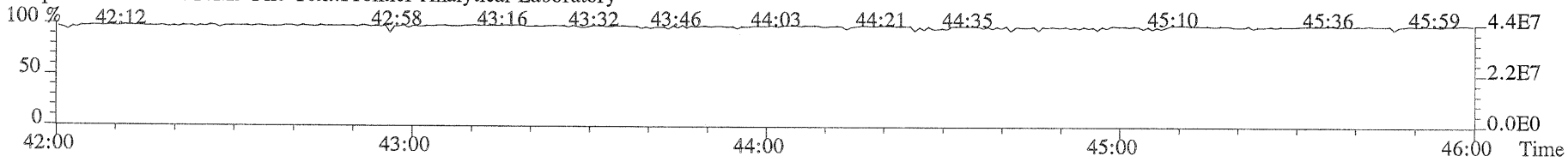
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



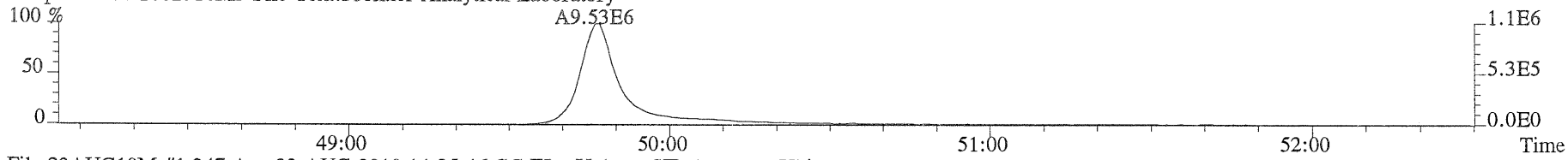
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



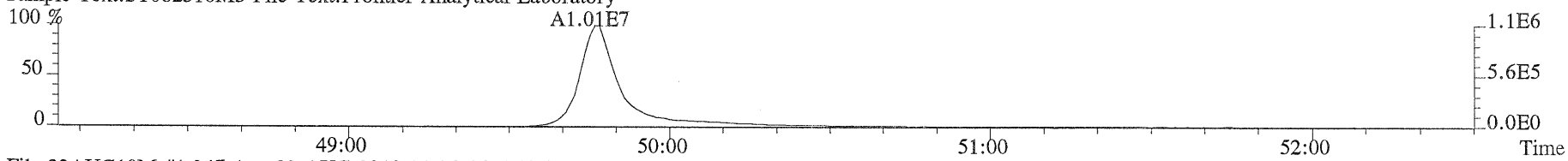
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



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

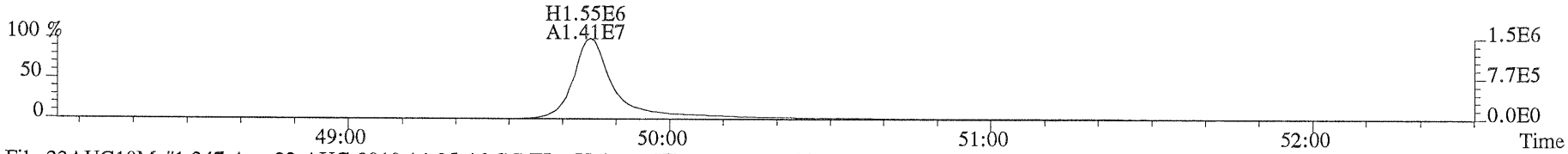


File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory

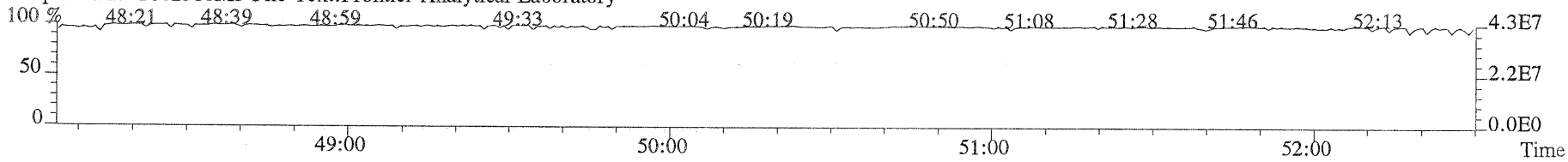


File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory

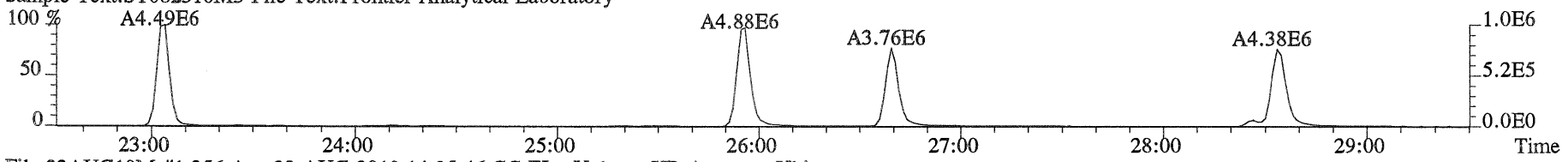
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



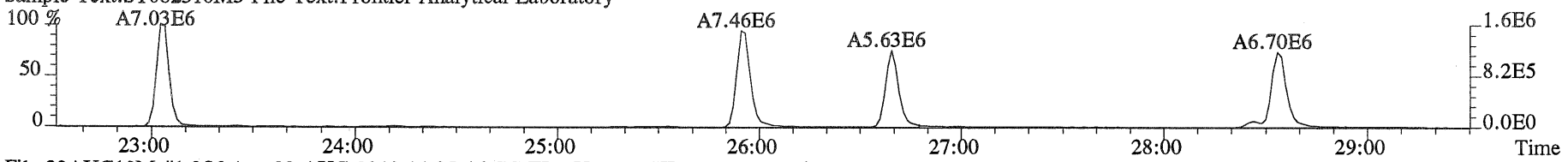
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



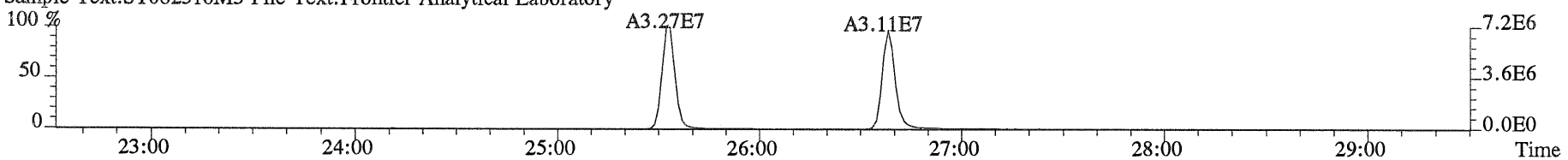
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



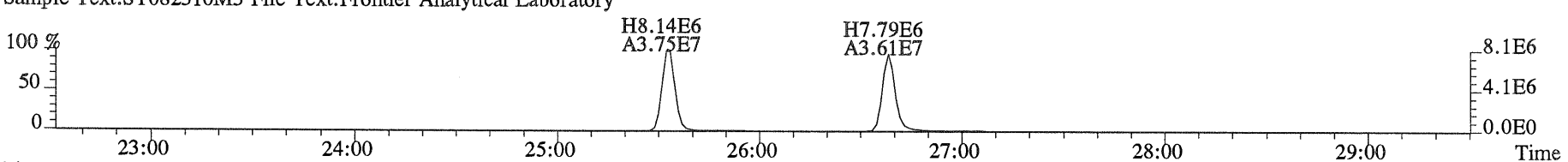
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



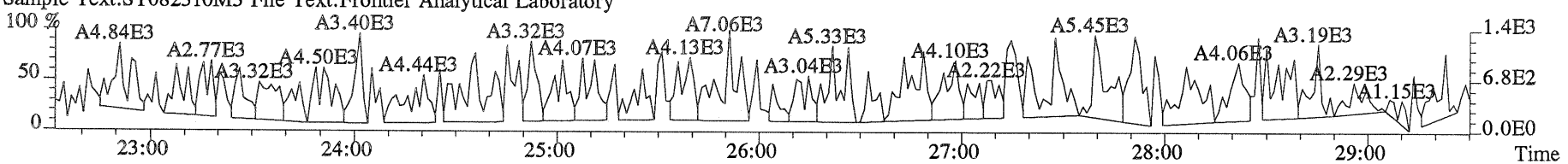
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



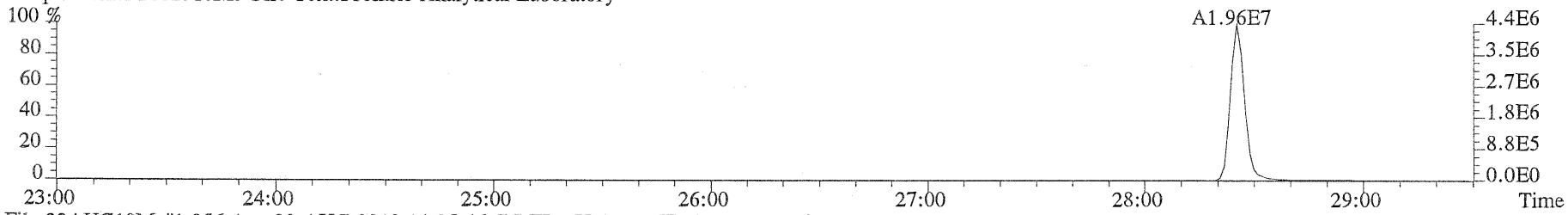
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



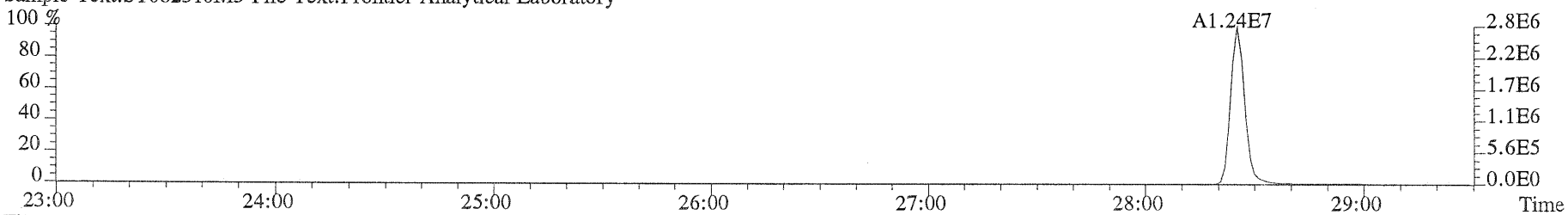
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



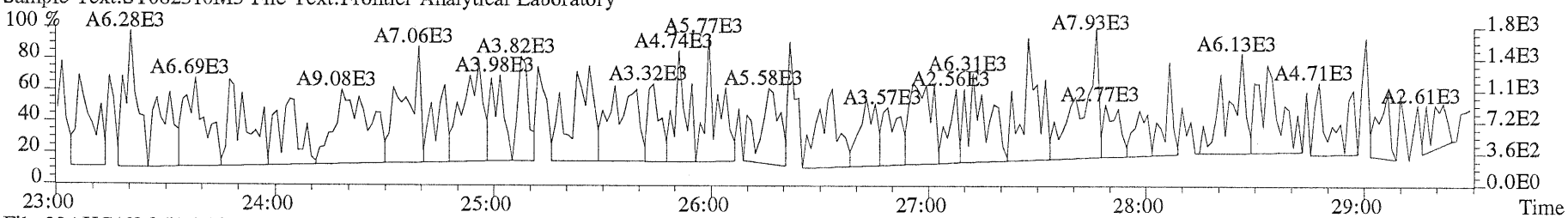
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



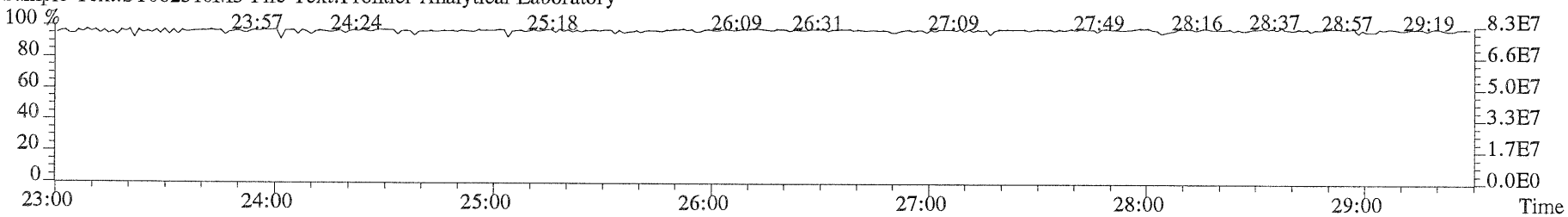
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



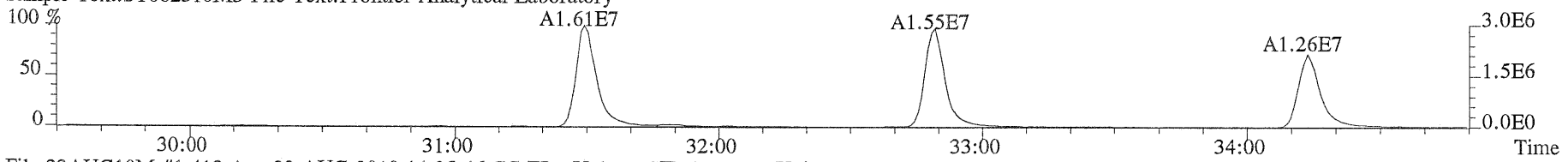
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



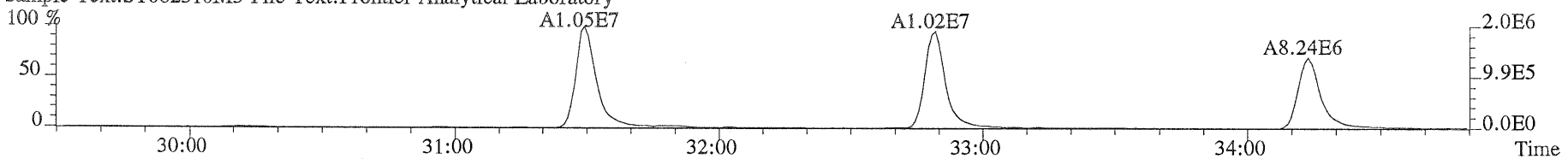
File:23AUG10M #1-356 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



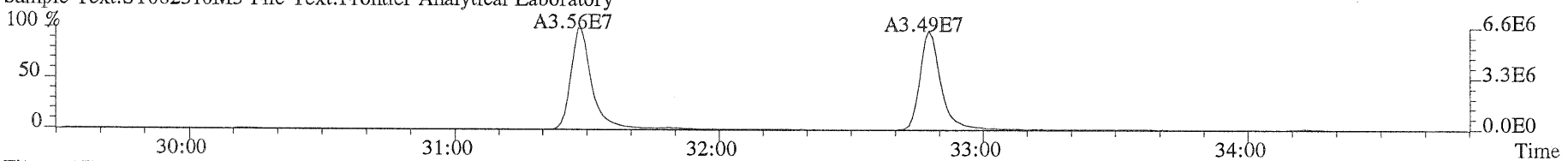
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



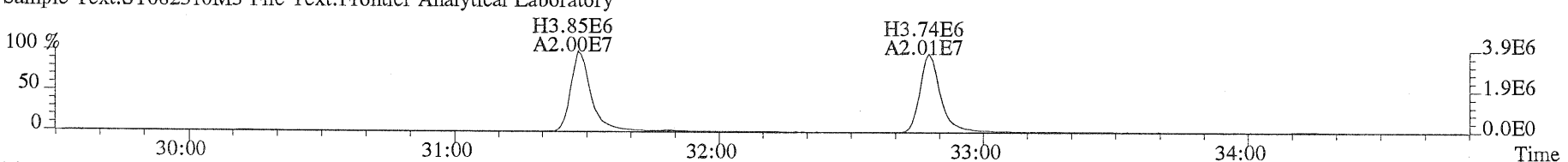
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



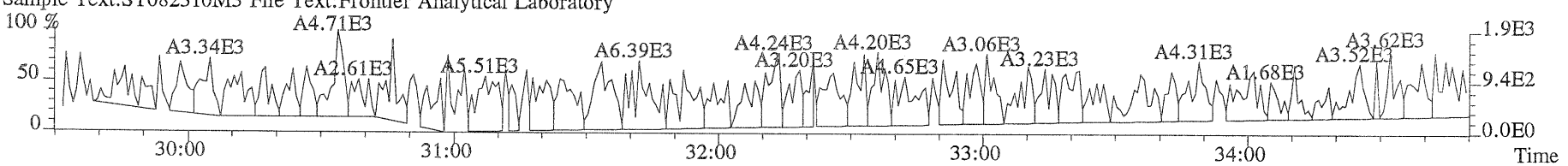
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



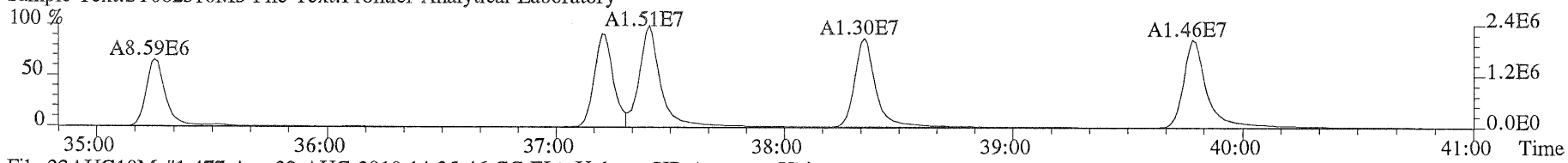
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



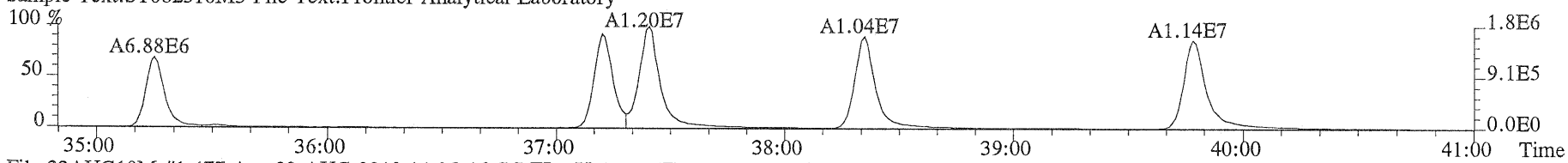
File:23AUG10M #1-412 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



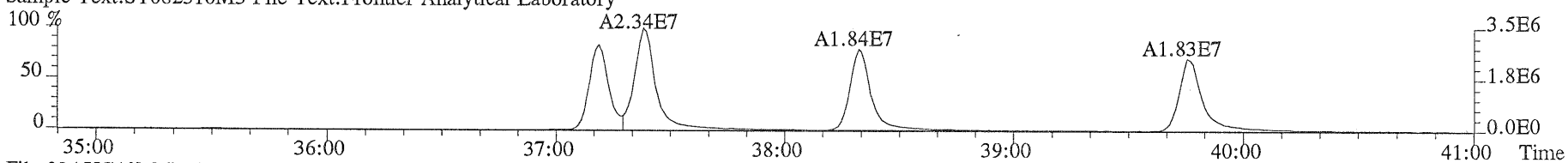
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



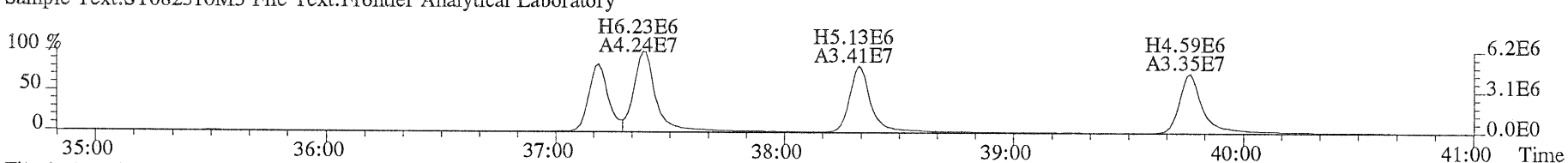
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



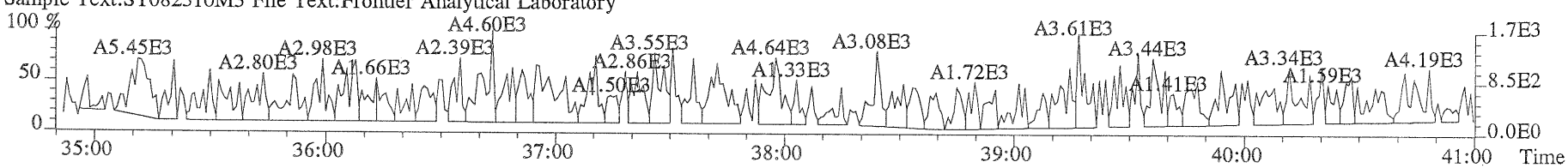
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



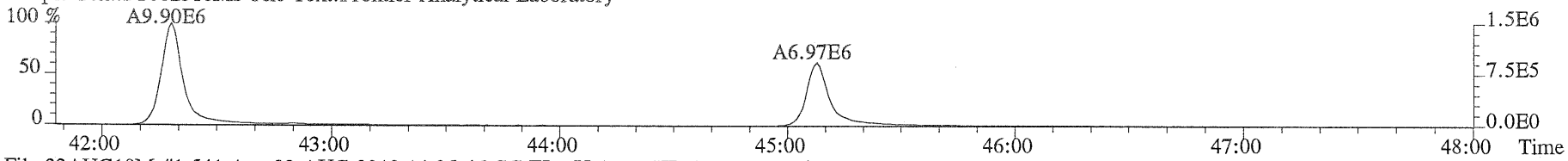
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



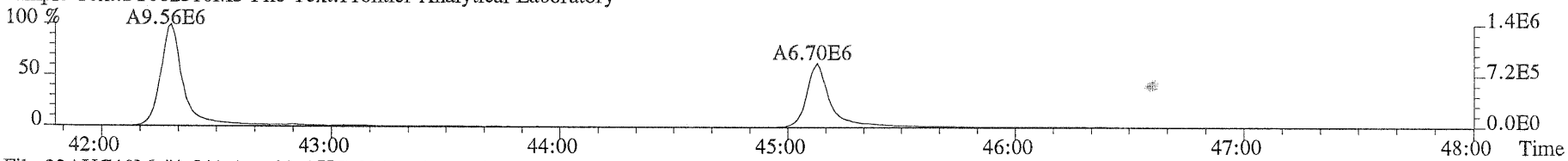
File:23AUG10M #1-477 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



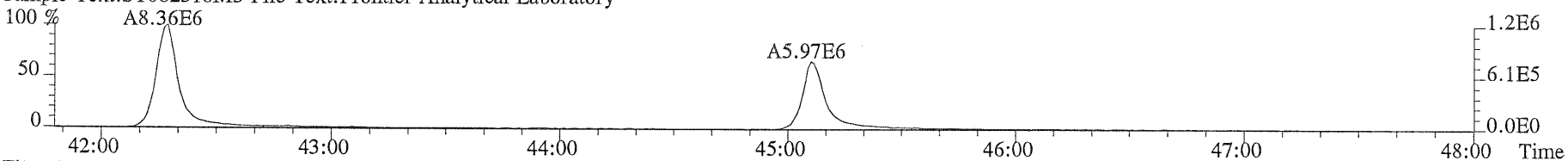
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



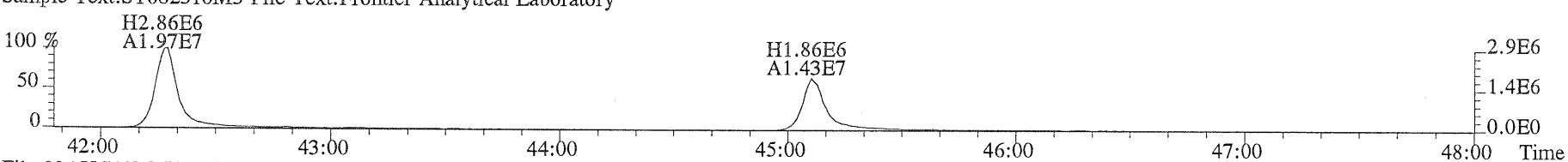
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



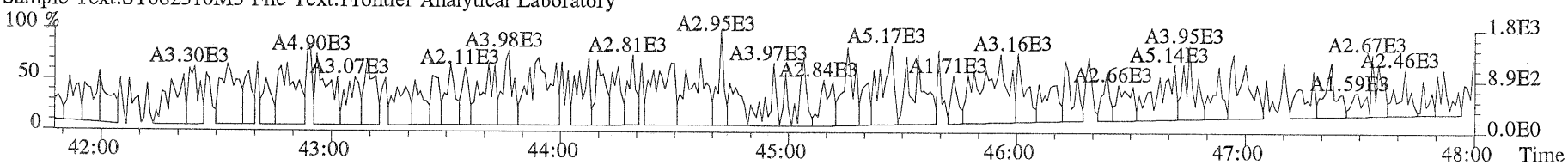
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



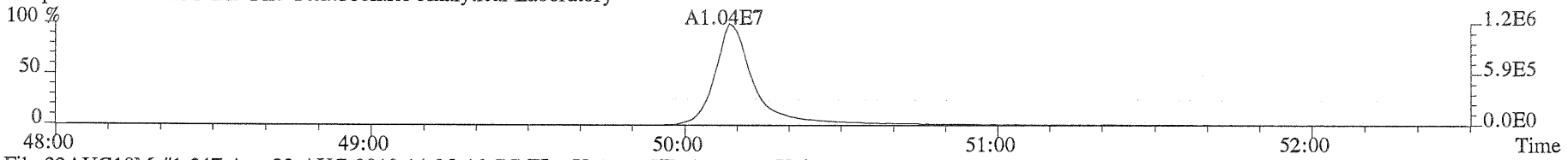
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



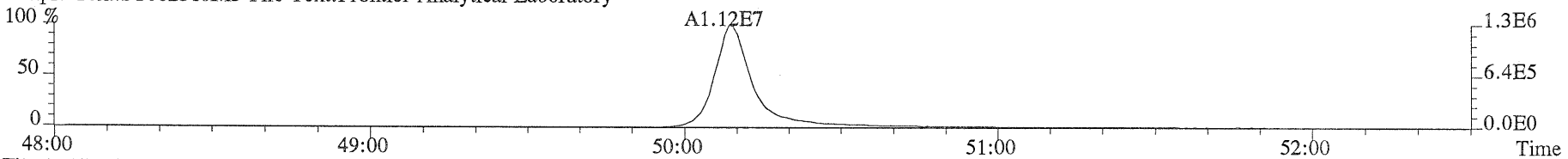
File:23AUG10M #1-541 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



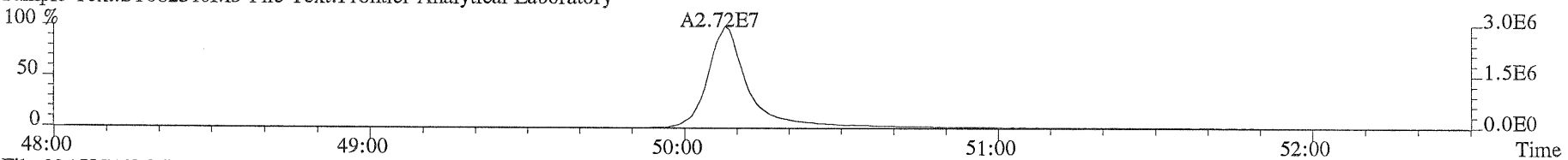
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



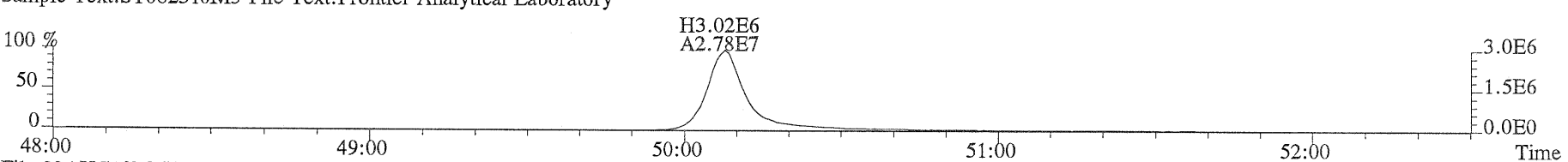
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



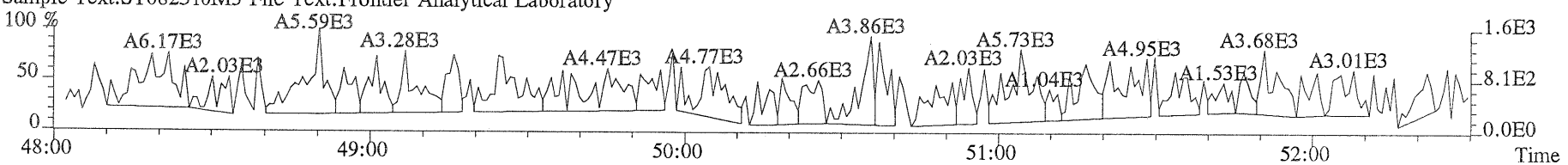
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



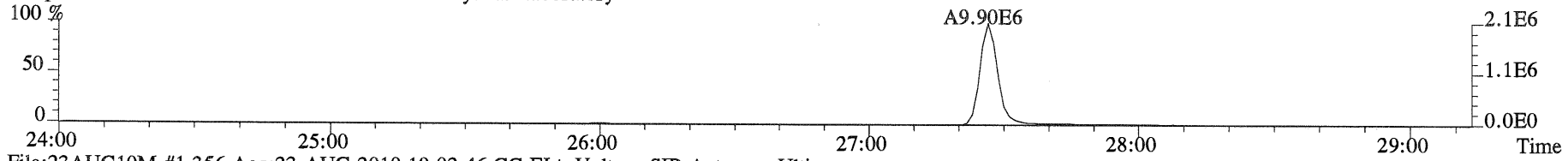
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



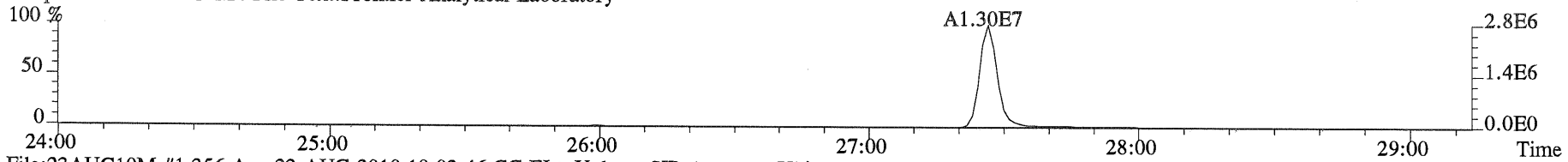
File:23AUG10M #1-347 Acq:23-AUG-2010 14:25:46 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M3 File Text:Frontier Analytical Laboratory



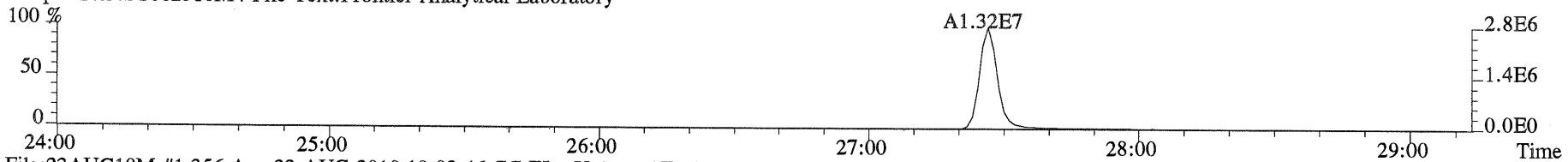
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



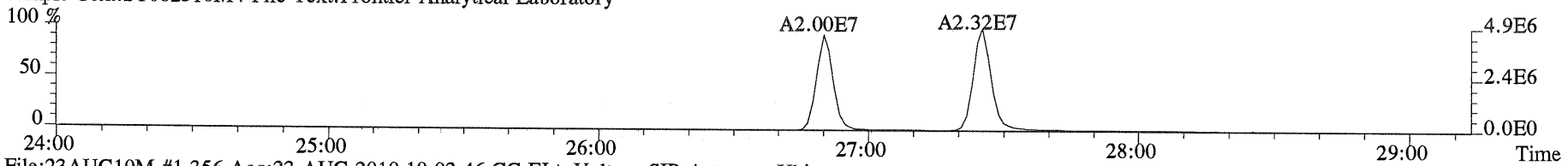
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



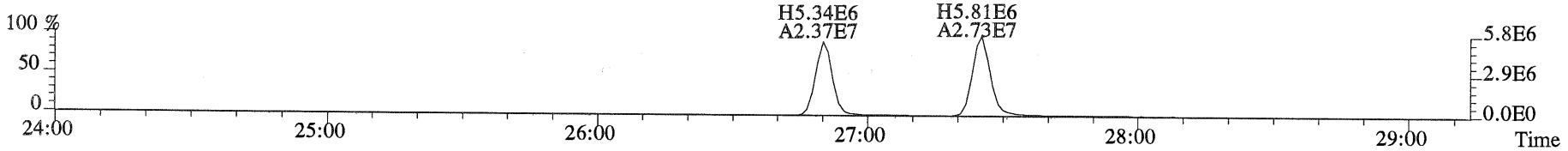
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



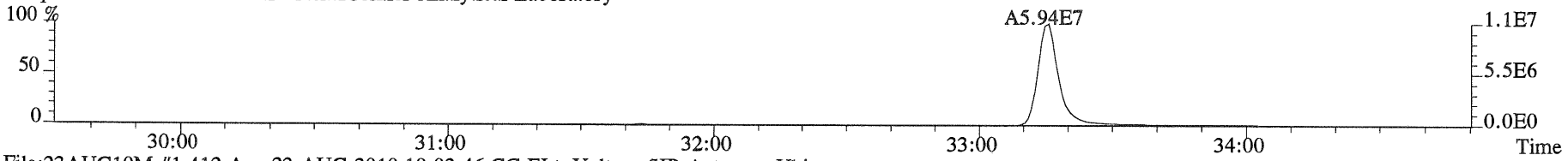
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



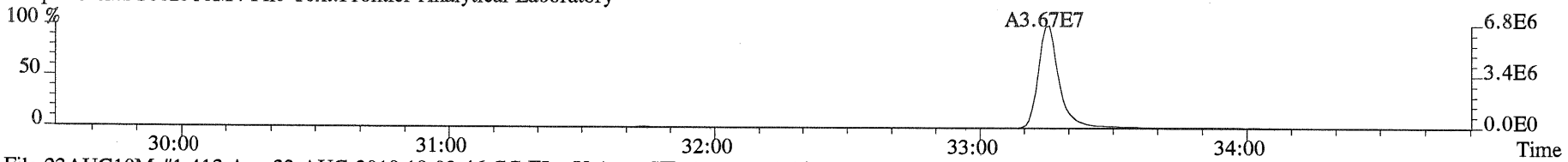
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



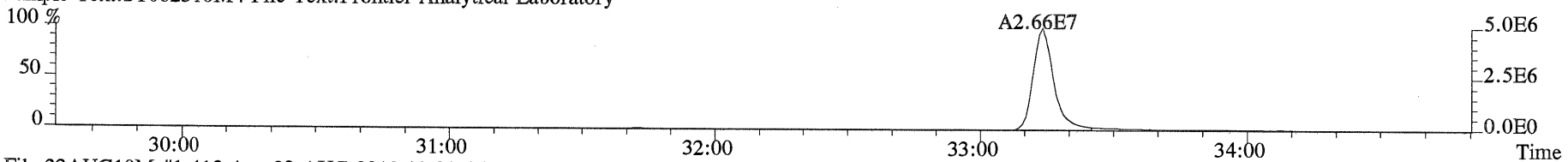
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



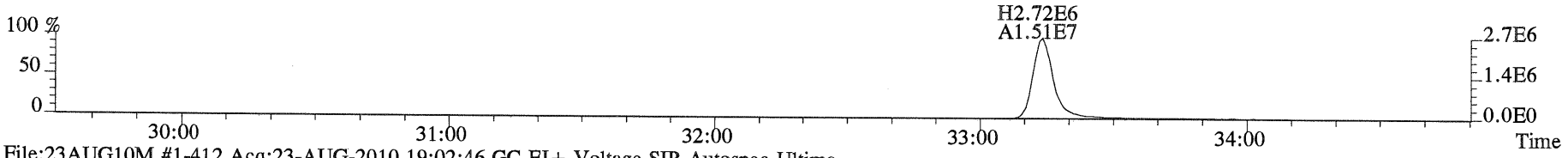
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



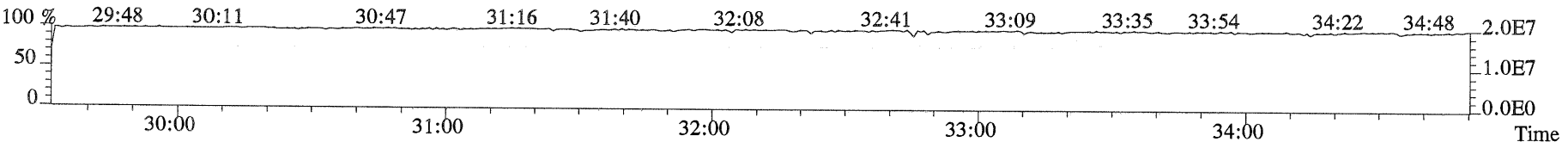
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



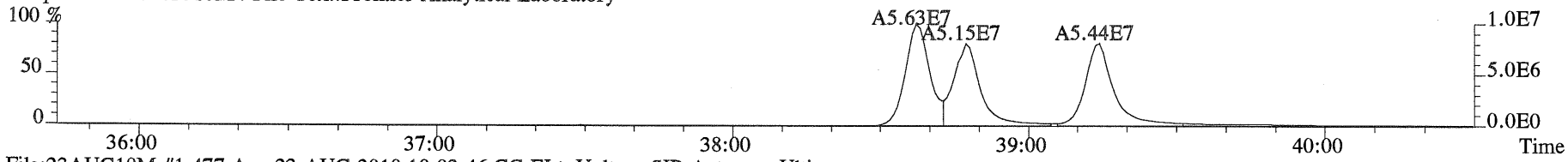
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



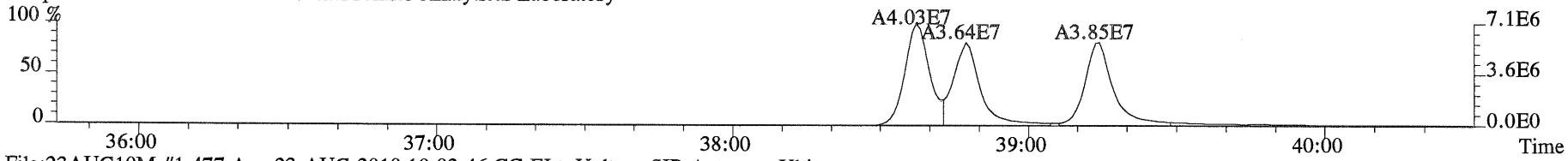
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



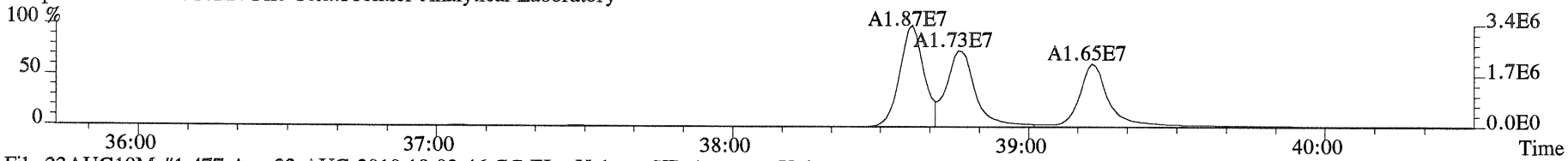
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



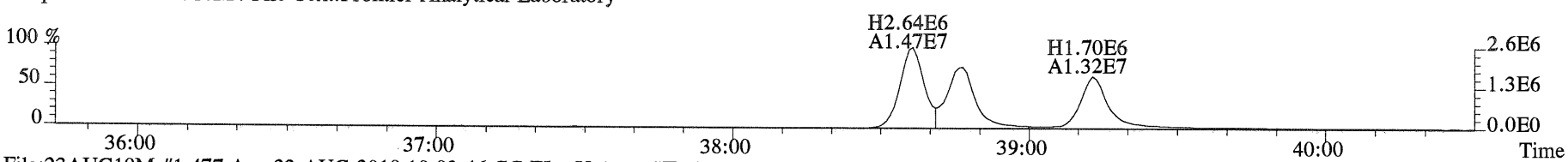
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



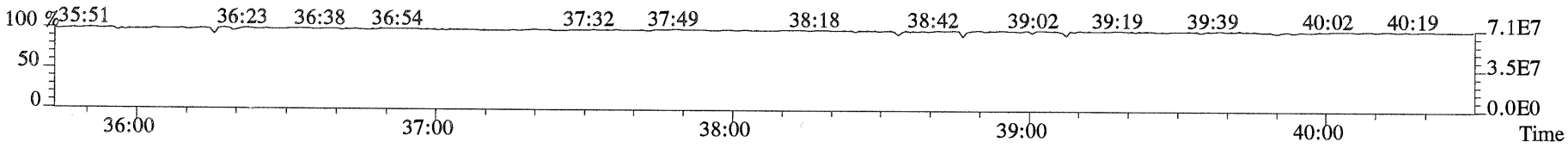
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



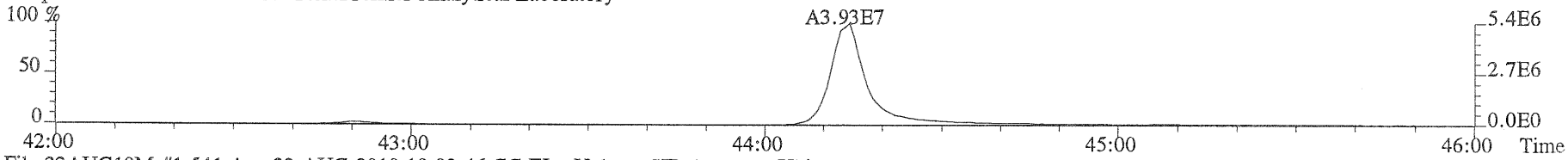
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



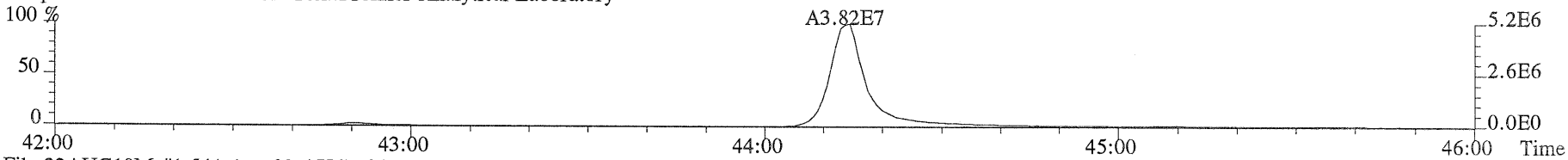
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



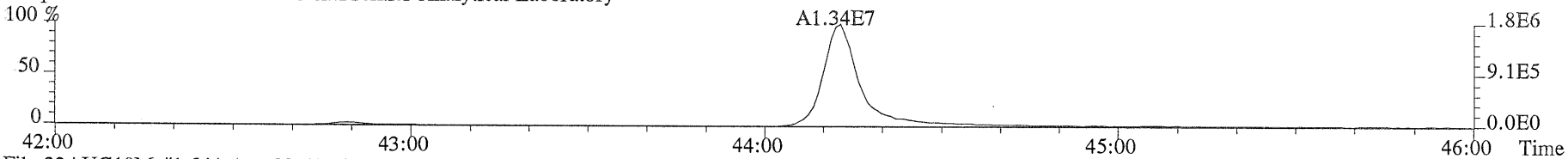
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



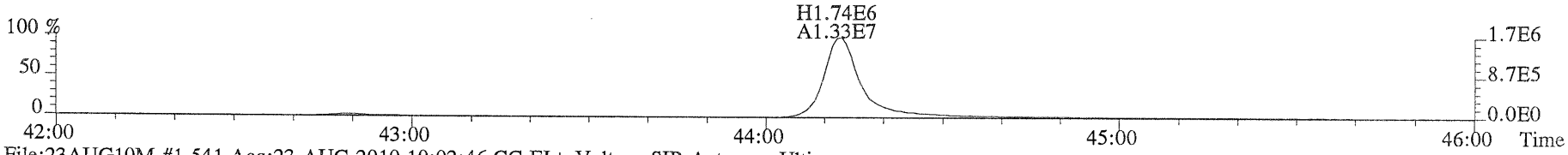
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



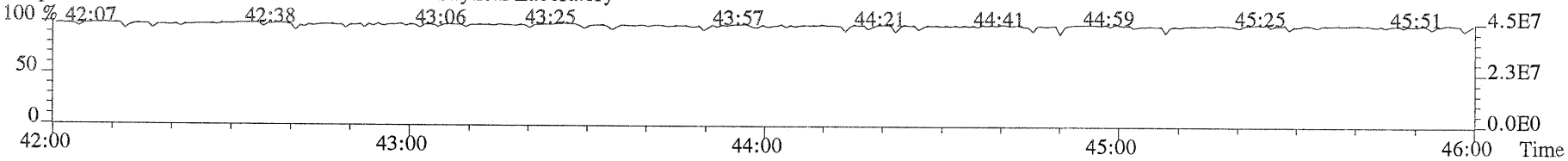
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



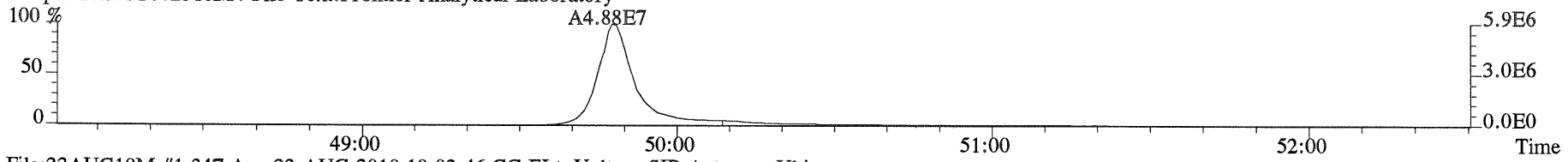
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



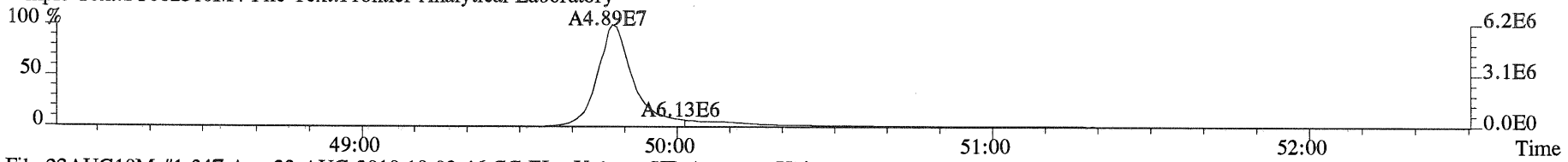
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



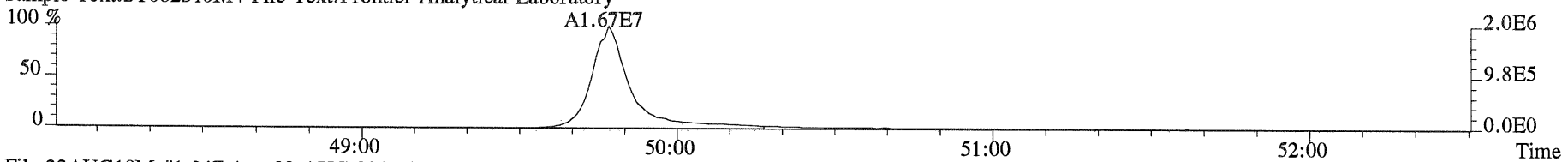
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



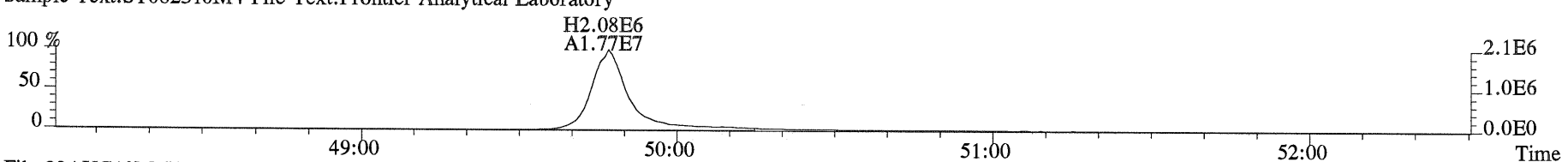
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



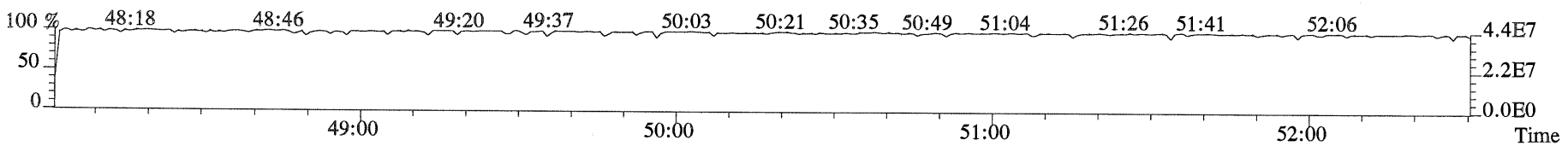
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



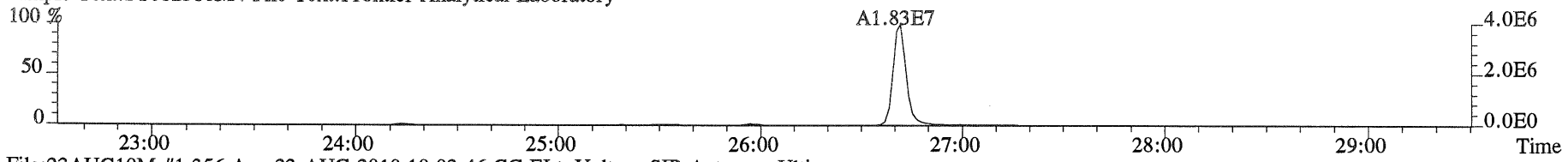
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



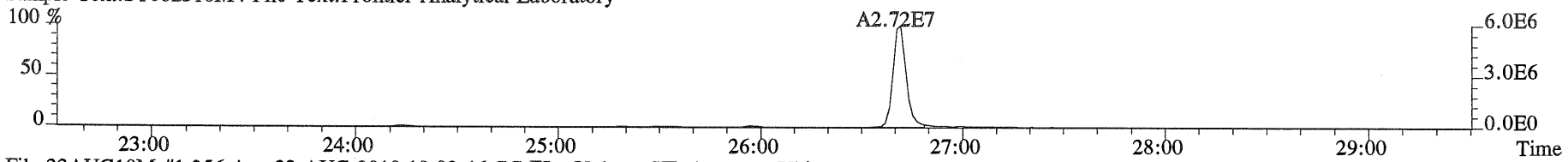
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



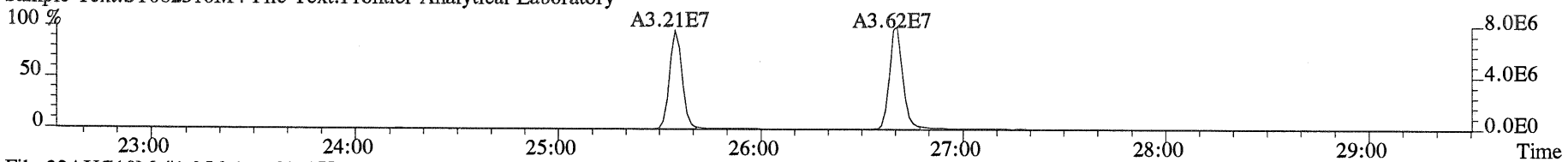
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



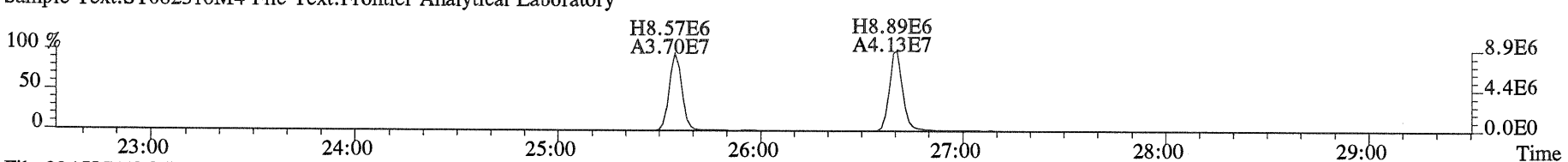
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



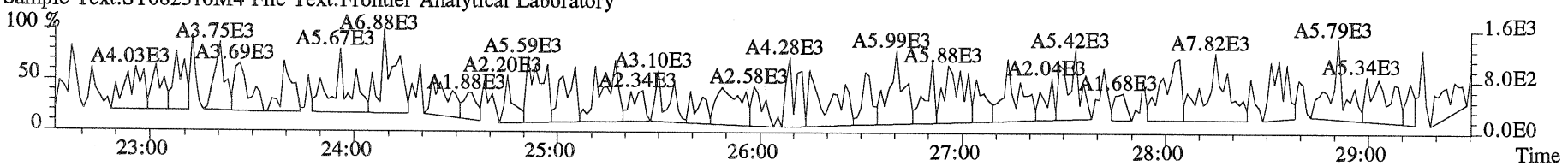
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



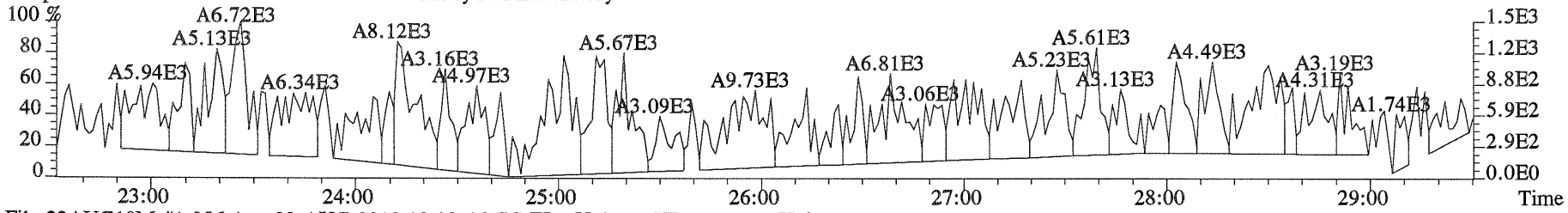
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



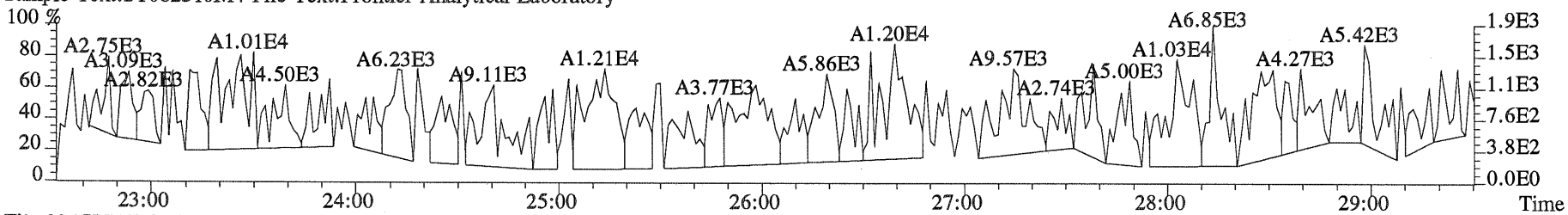
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



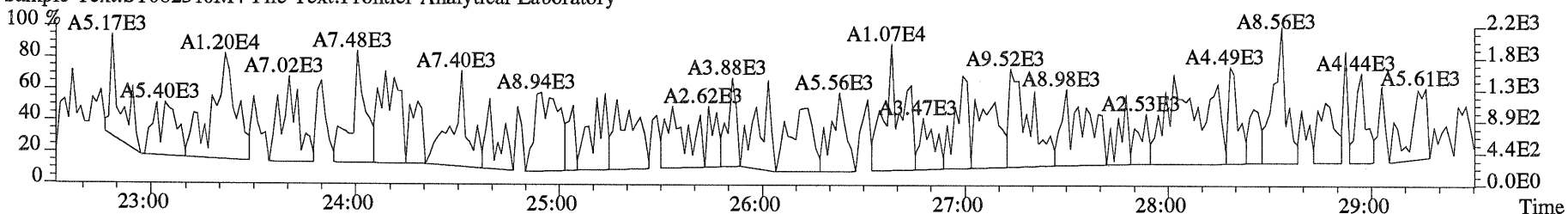
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



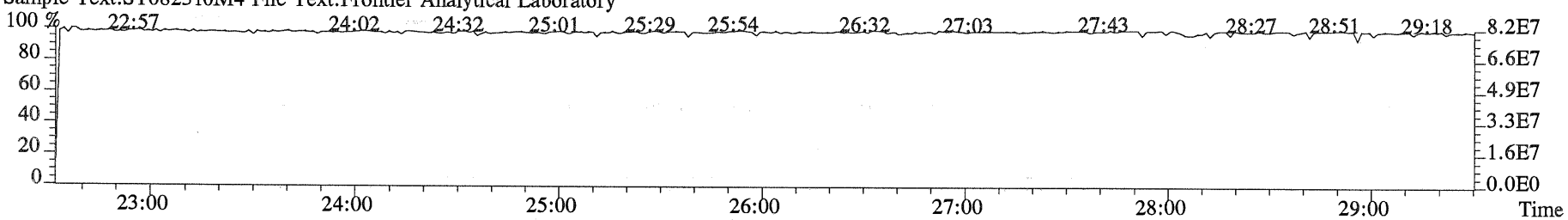
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



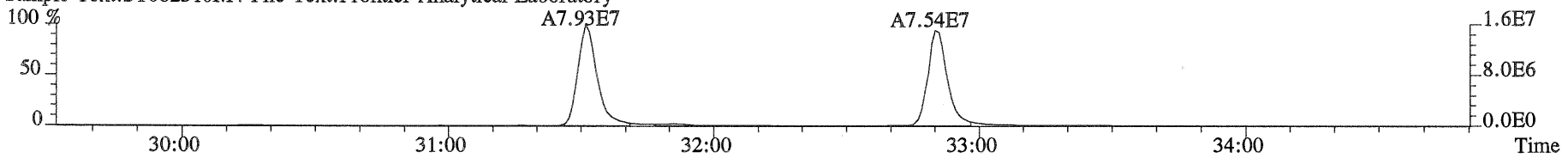
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



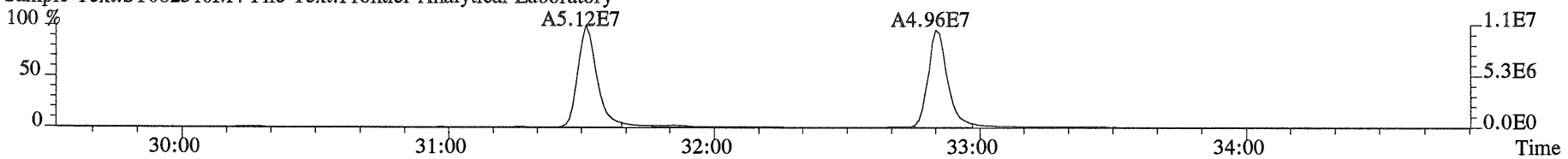
File:23AUG10M #1-356 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
LOCK_MASS_CHECK S:6 Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



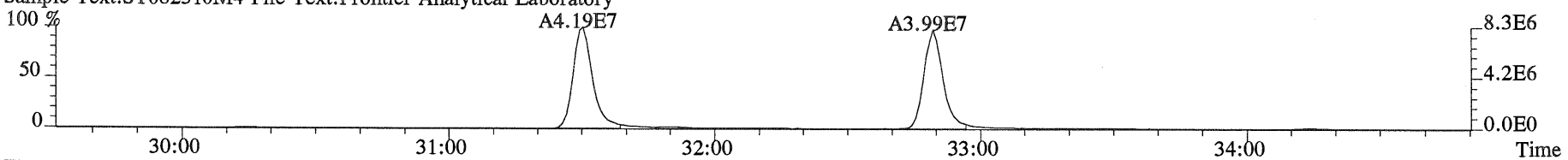
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



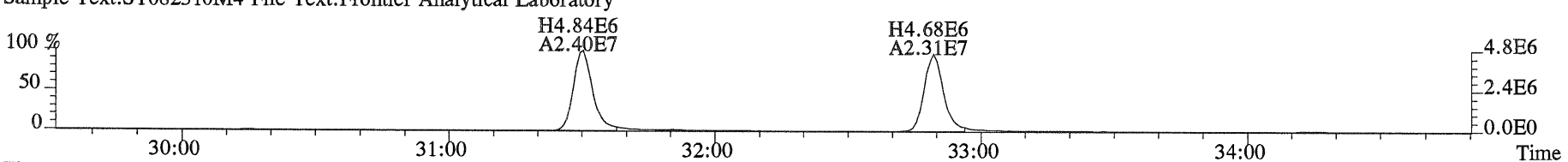
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



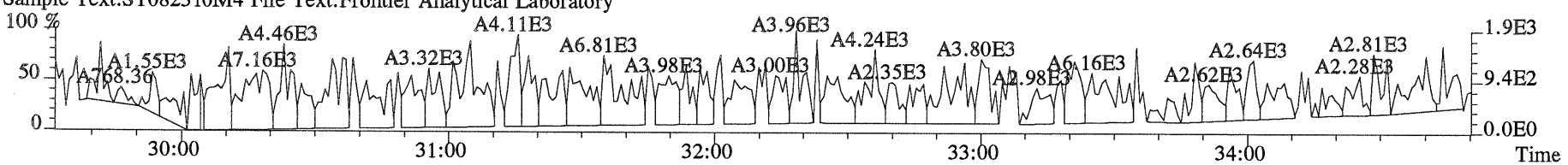
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



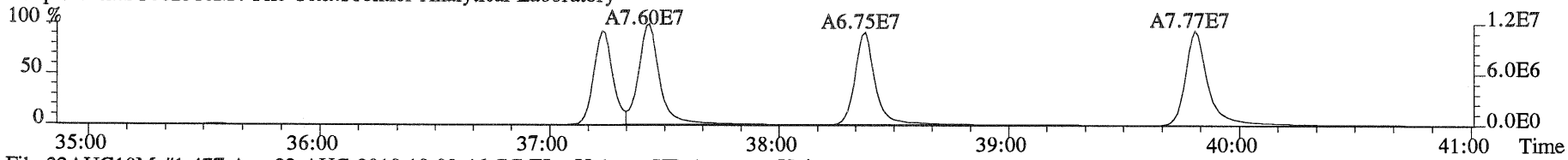
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



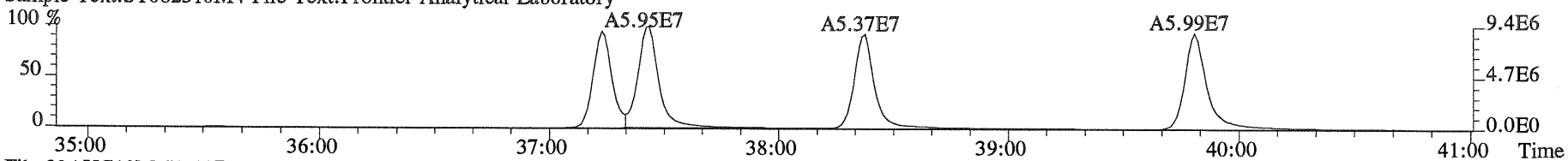
File:23AUG10M #1-412 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



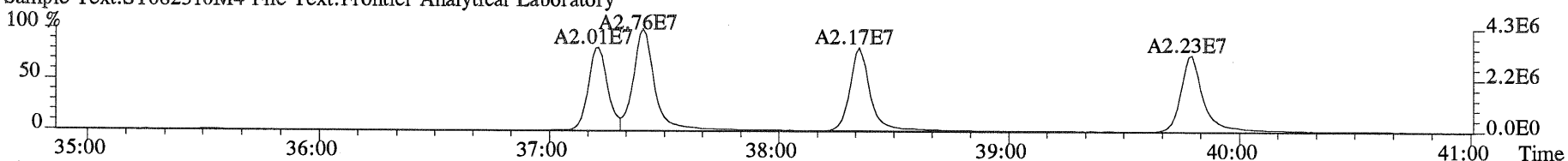
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



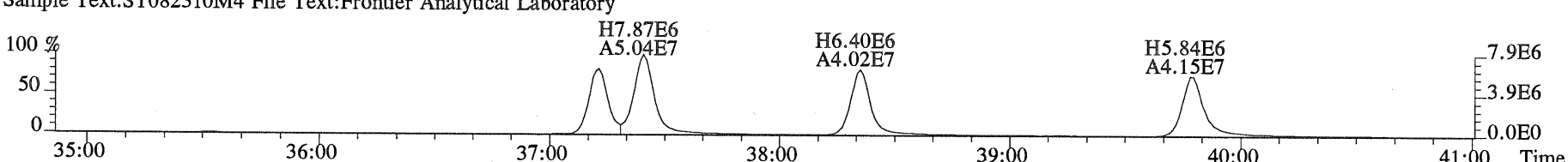
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



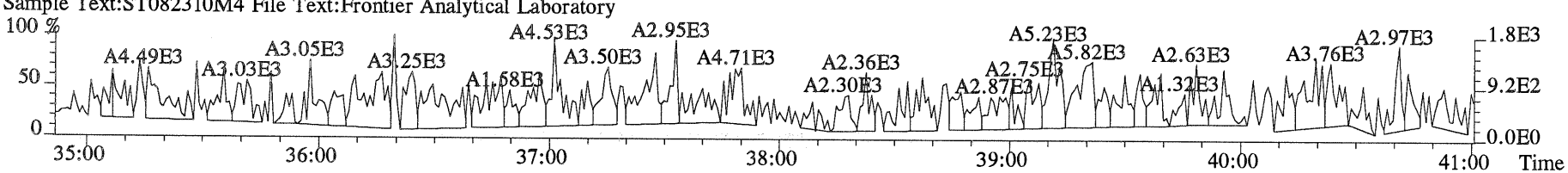
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



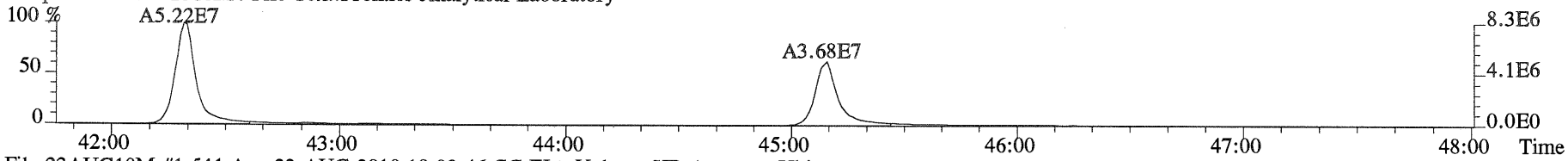
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



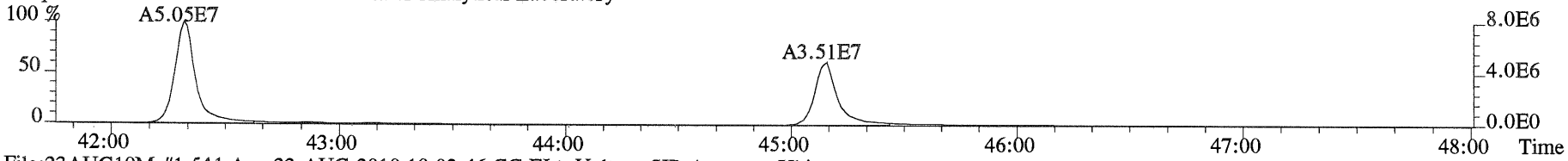
File:23AUG10M #1-477 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



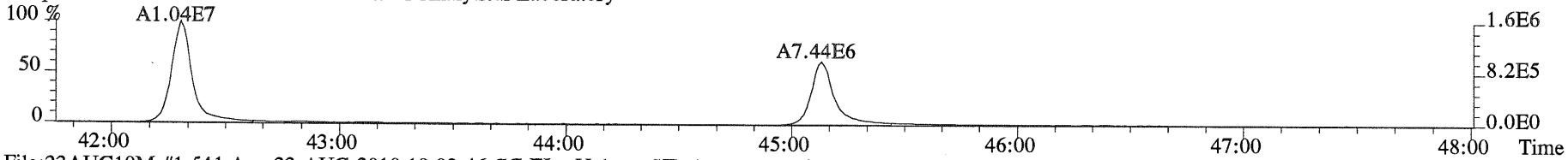
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



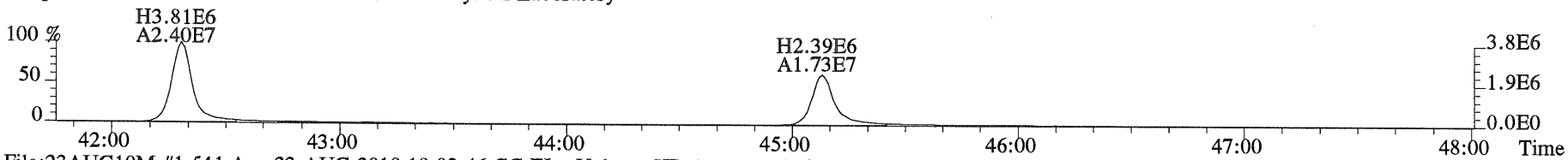
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



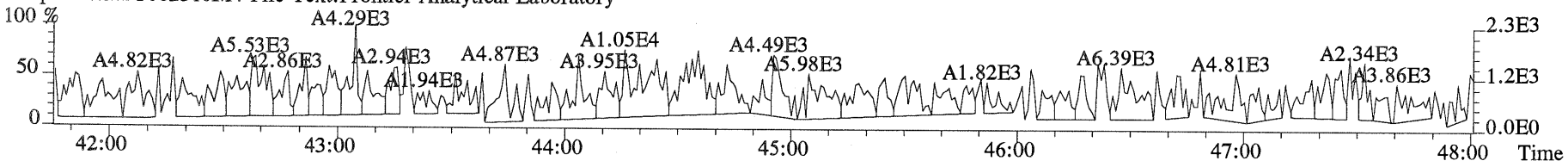
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



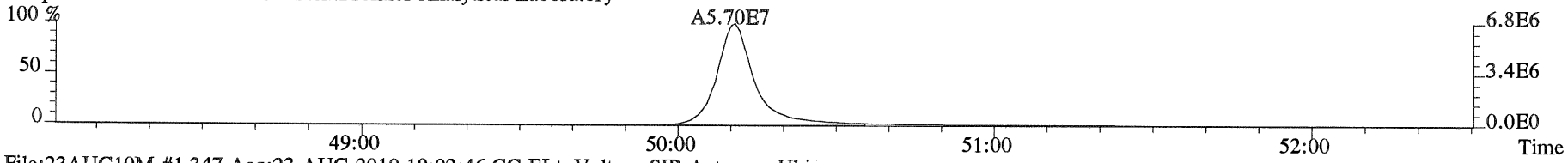
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



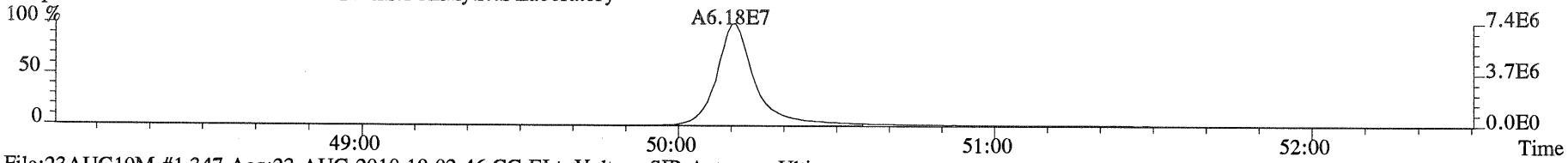
File:23AUG10M #1-541 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



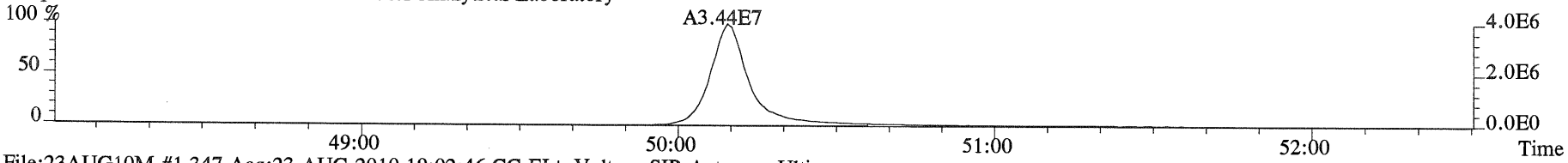
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



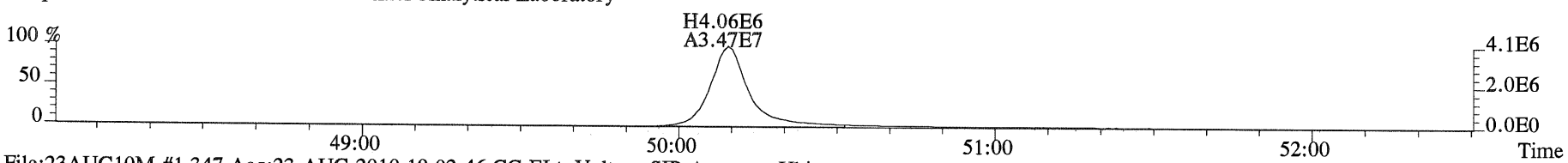
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



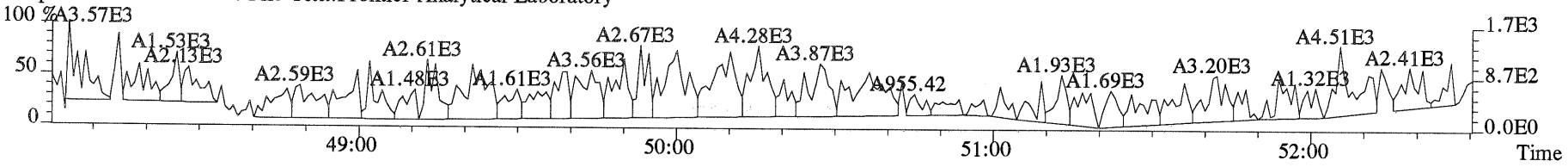
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



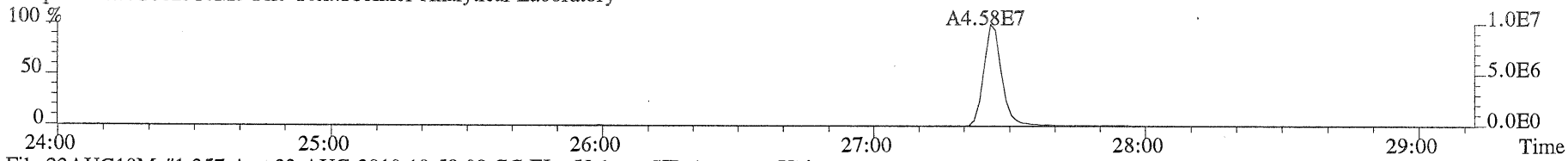
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



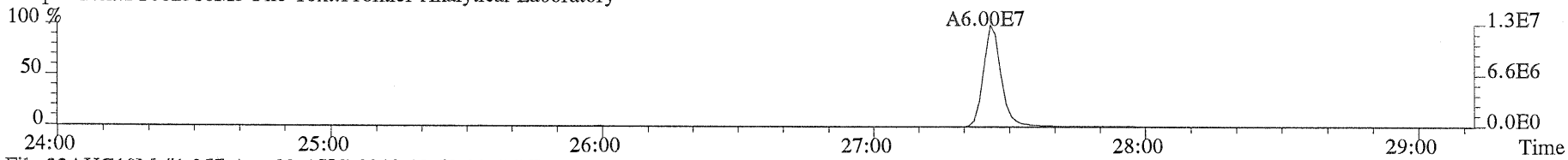
File:23AUG10M #1-347 Acq:23-AUG-2010 19:02:46 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M4 File Text:Frontier Analytical Laboratory



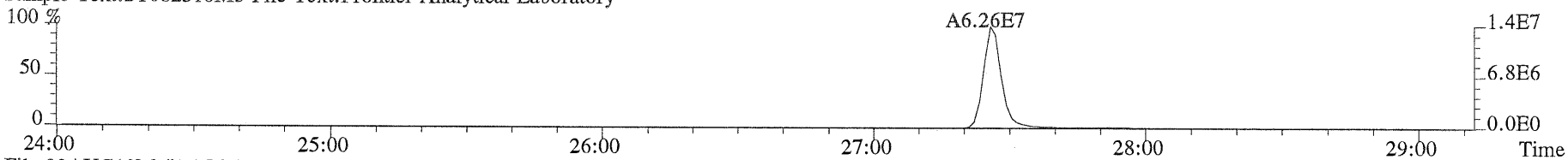
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



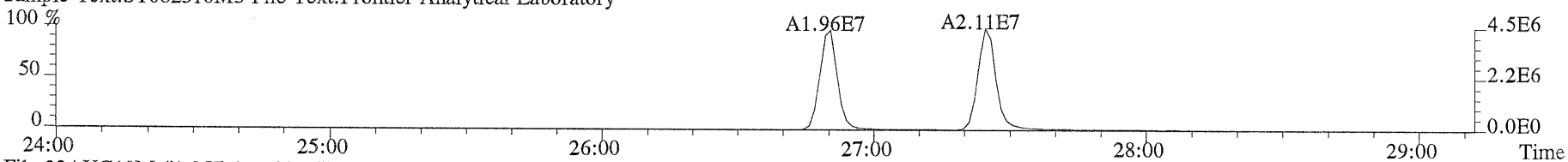
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



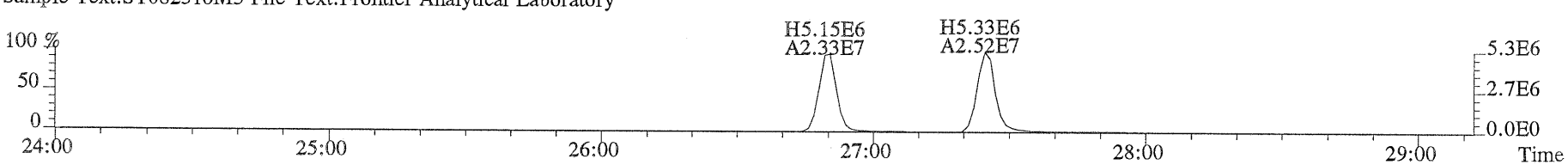
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



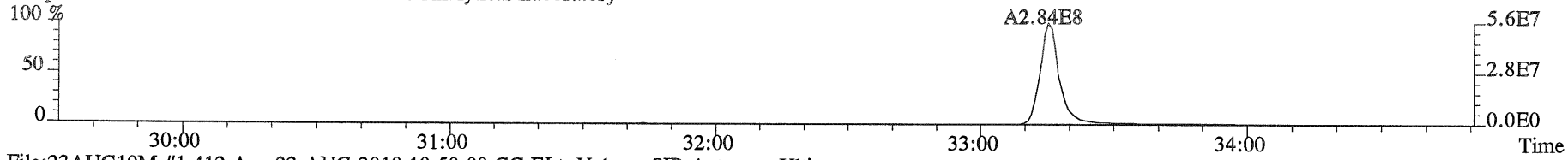
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



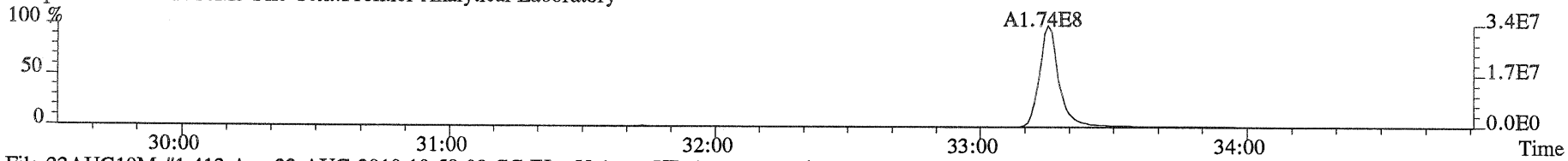
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



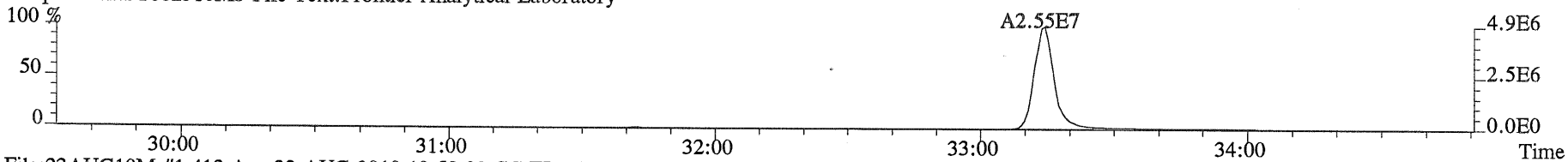
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



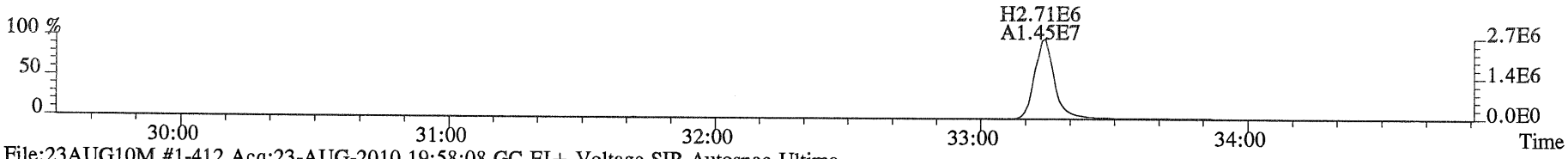
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



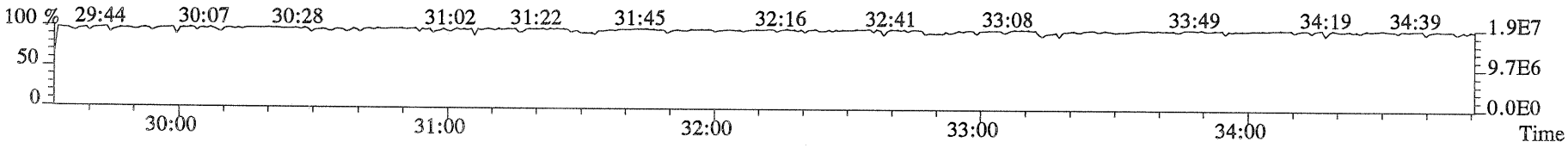
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



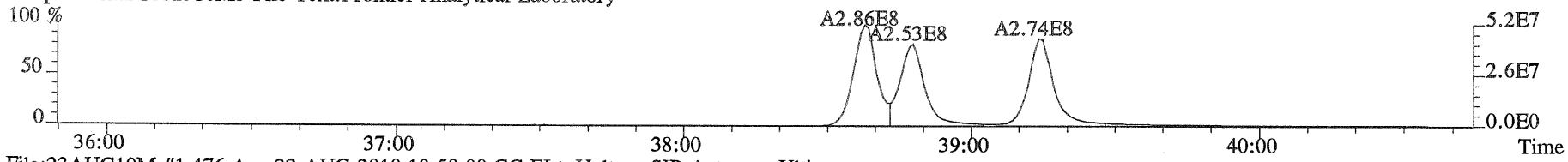
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



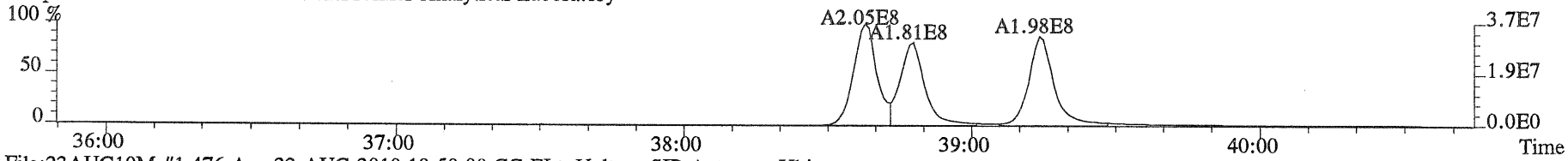
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:7 F:2 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



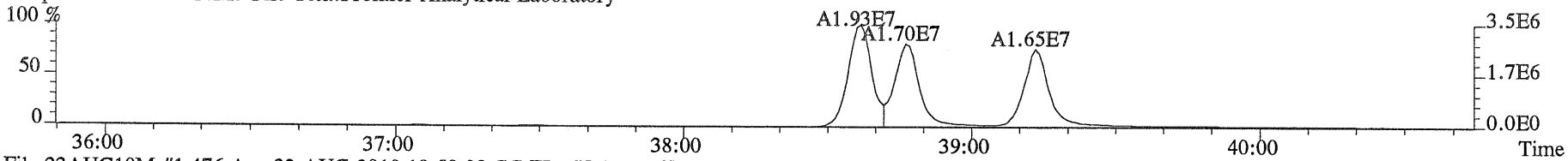
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



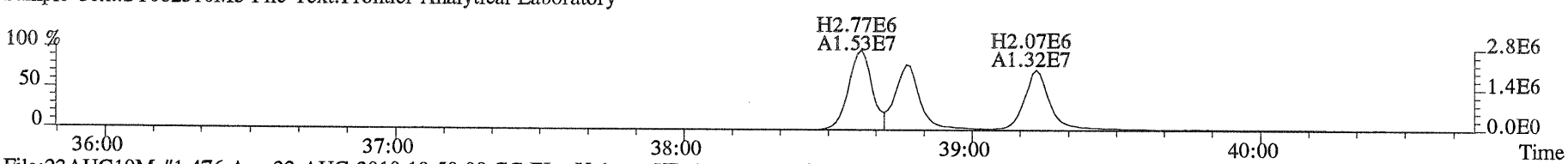
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



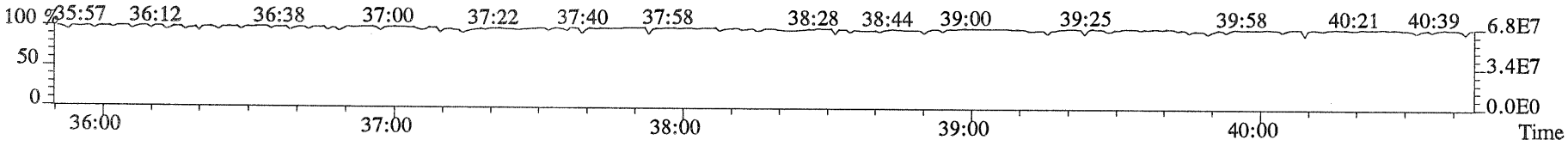
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



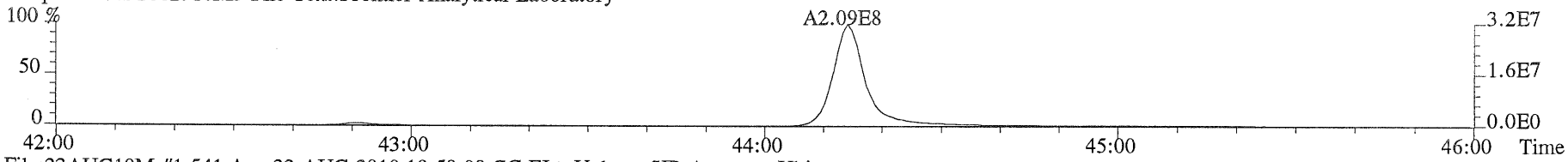
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



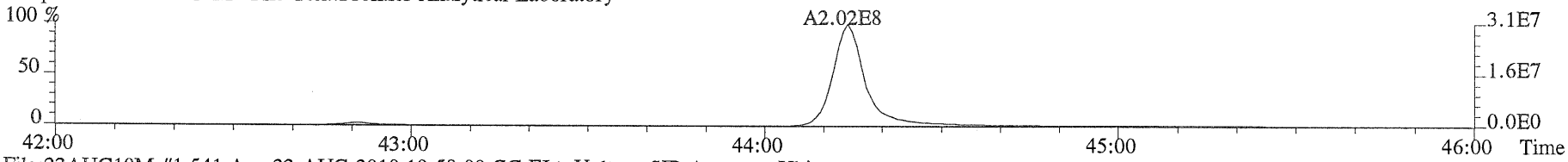
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:7 F:3 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



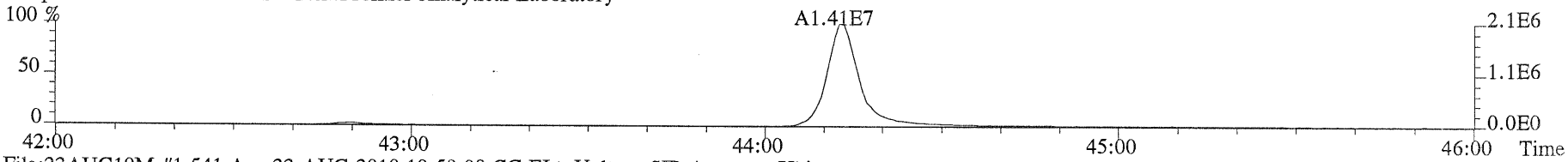
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



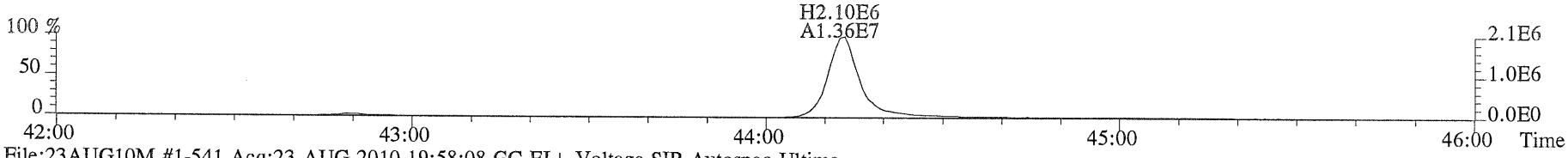
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



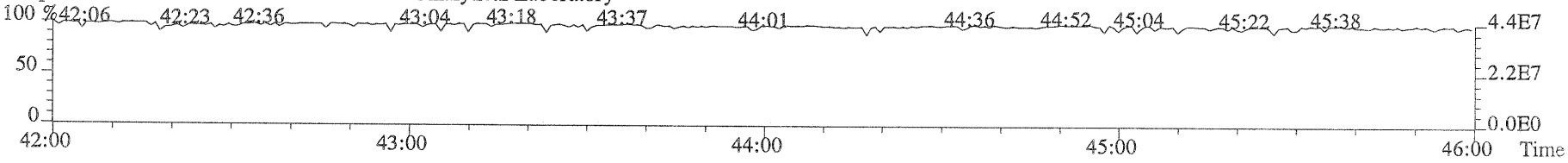
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



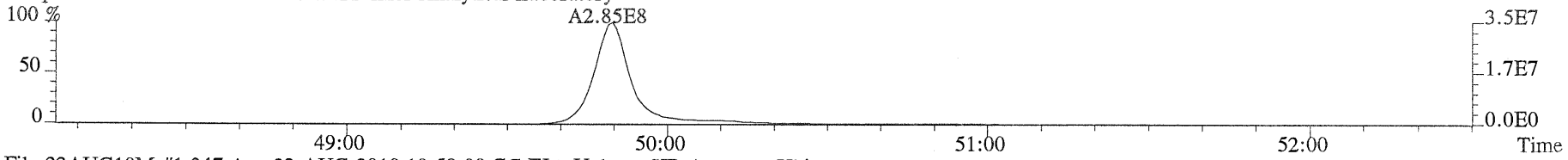
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



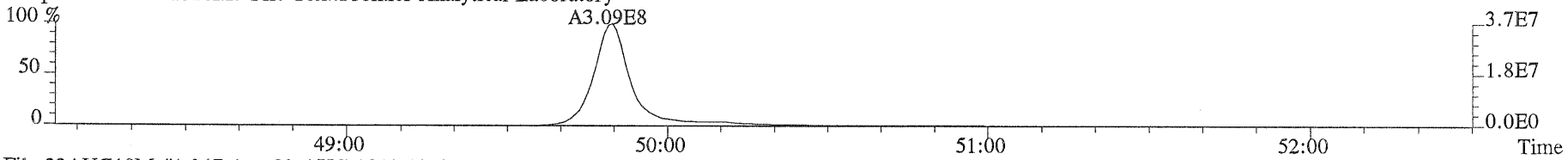
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:7 F:4 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



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

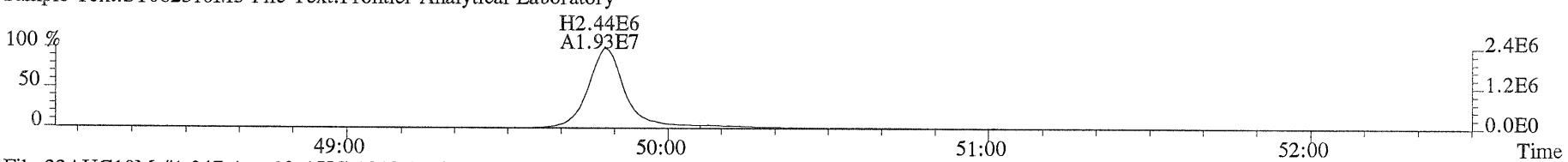


File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

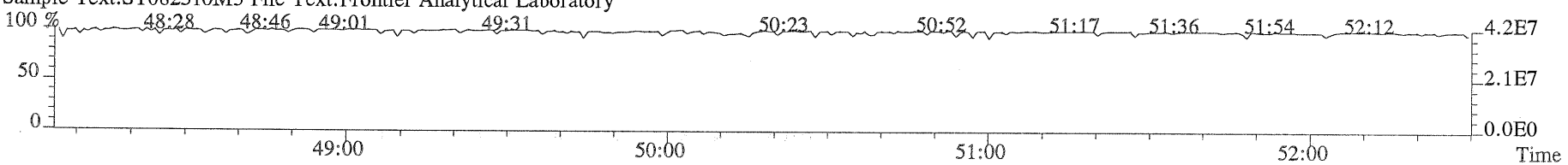


File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

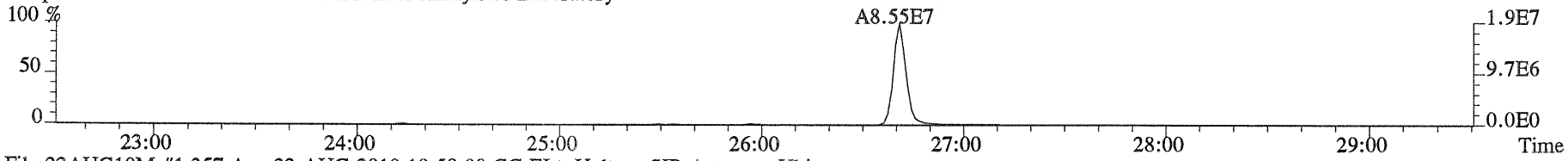
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



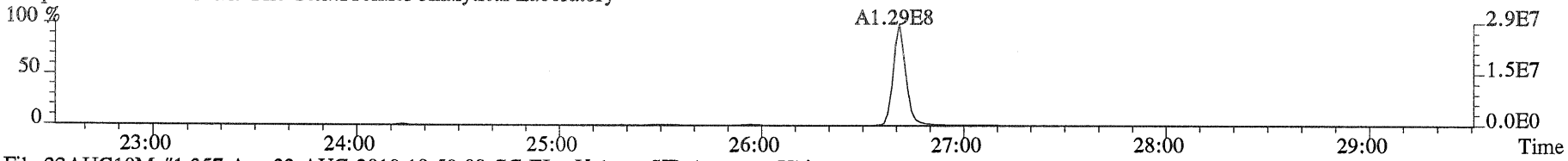
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:7 F:5 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



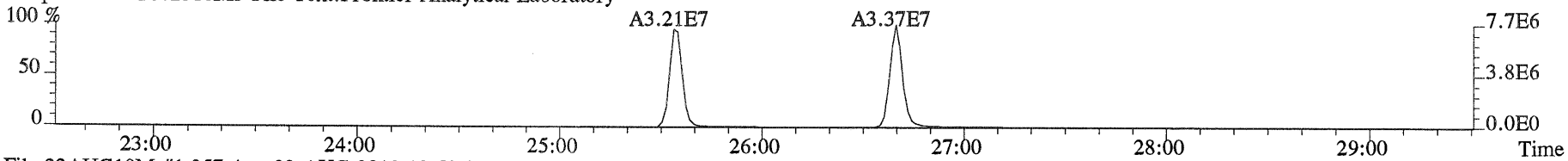
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



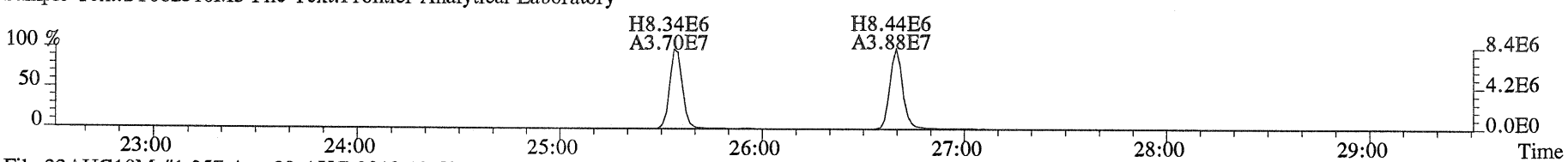
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



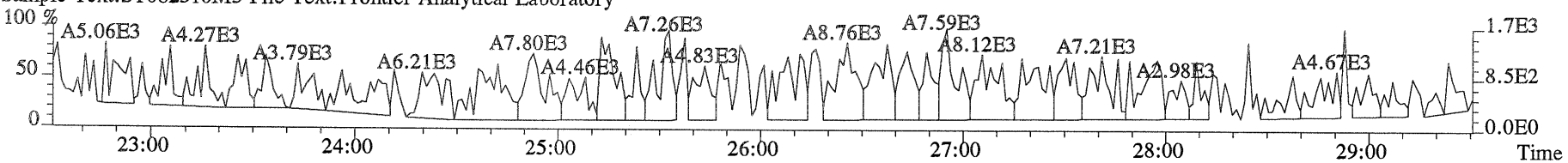
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



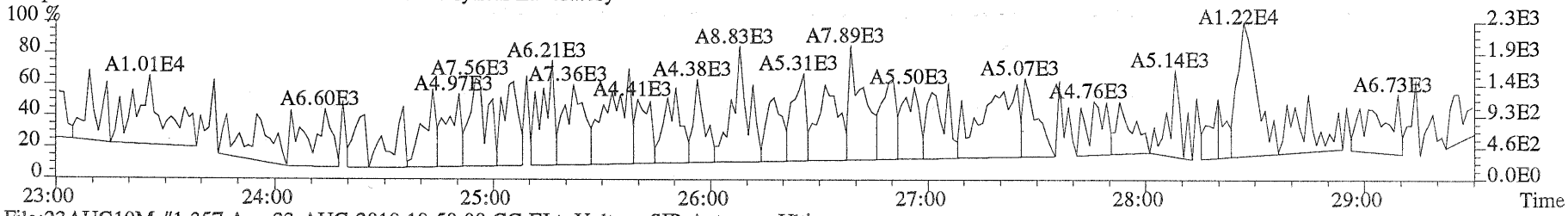
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



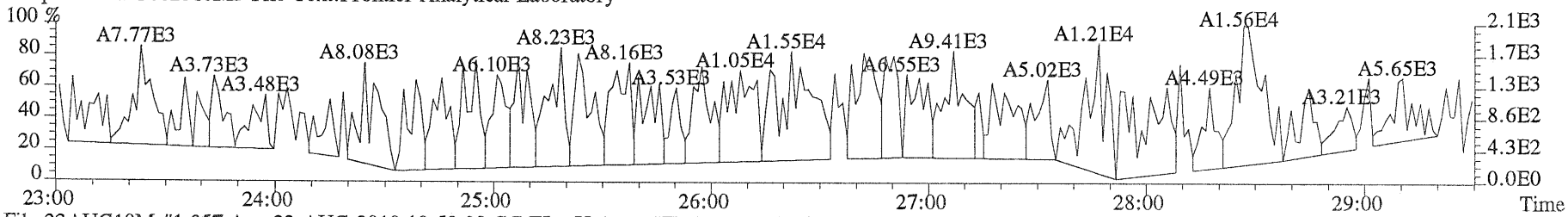
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



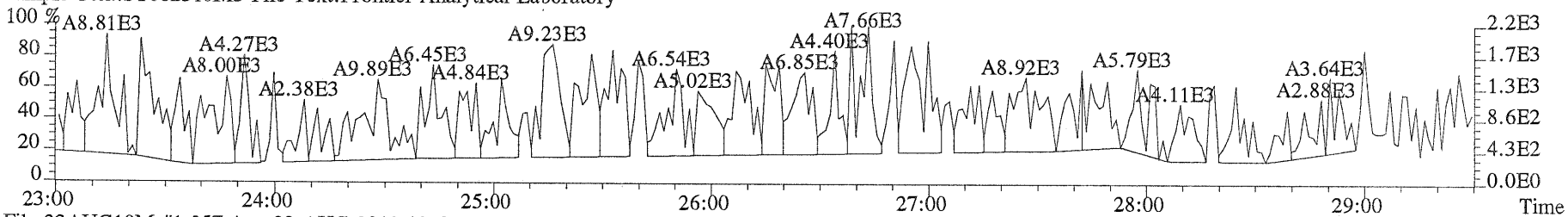
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



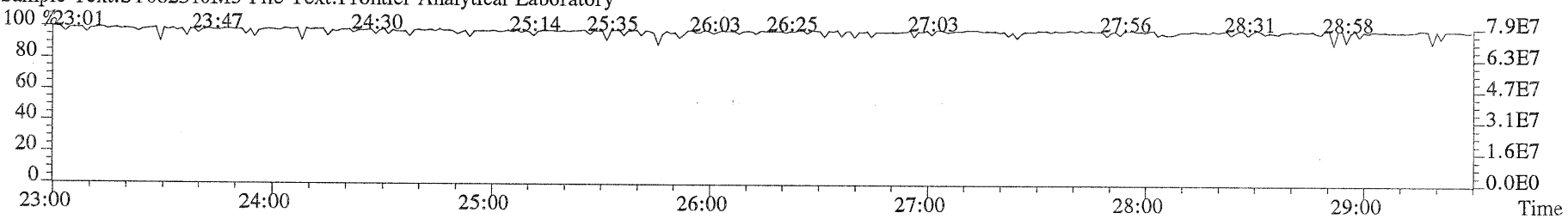
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



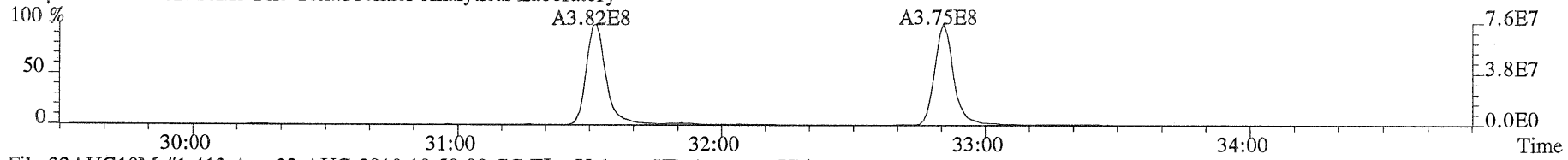
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



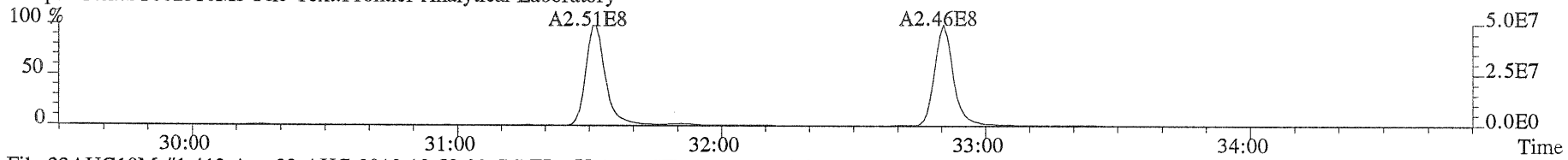
File:23AUG10M #1-357 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:7 Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



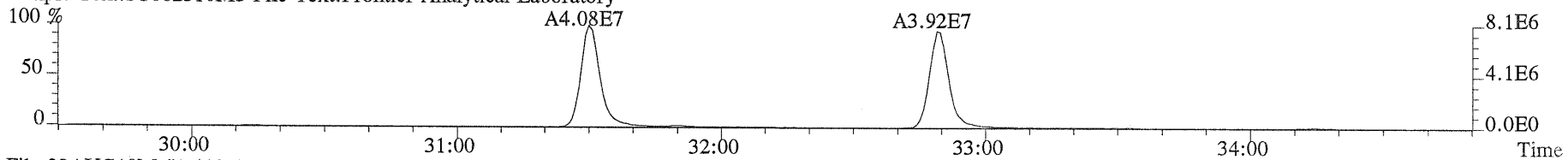
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



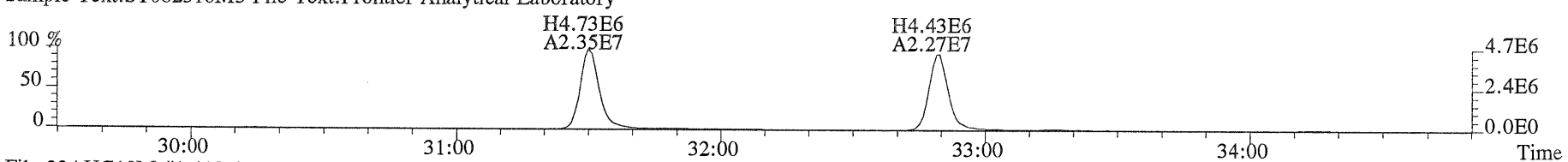
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



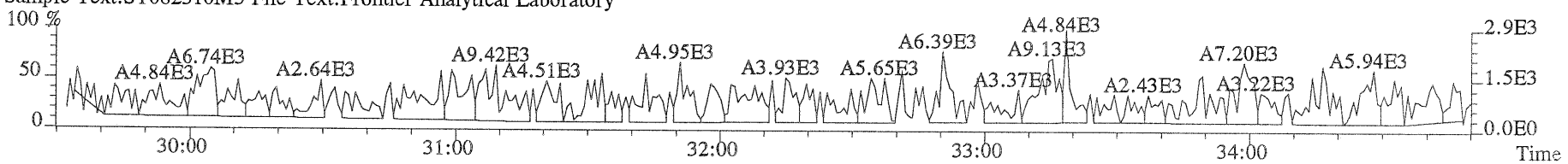
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



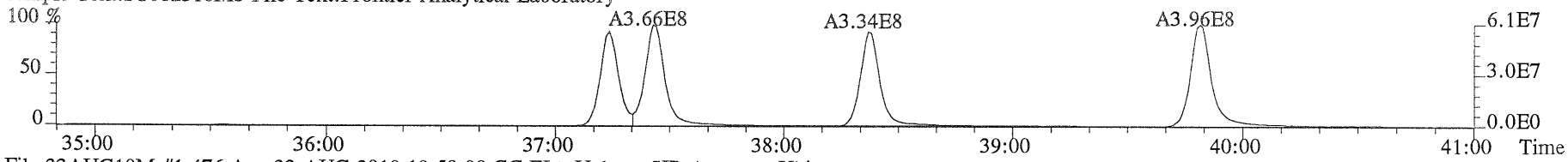
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



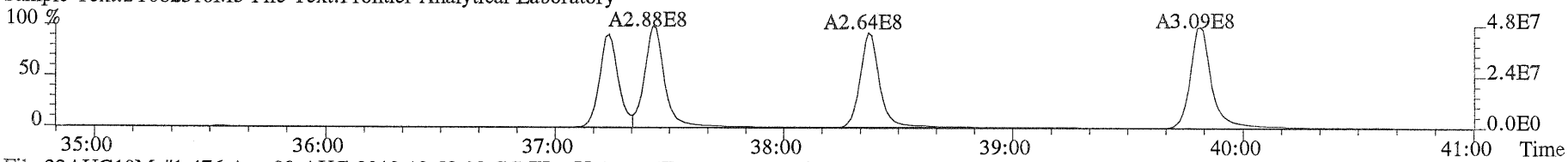
File:23AUG10M #1-412 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



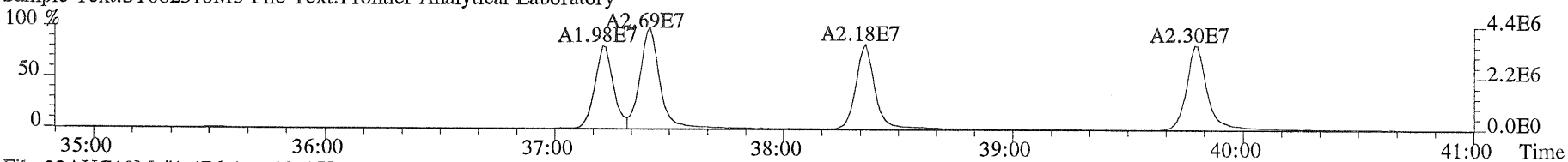
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



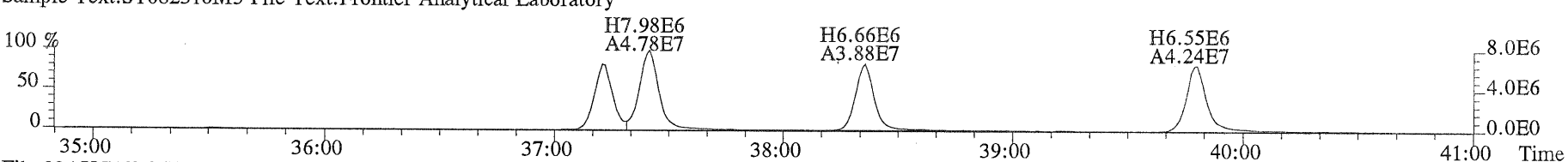
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



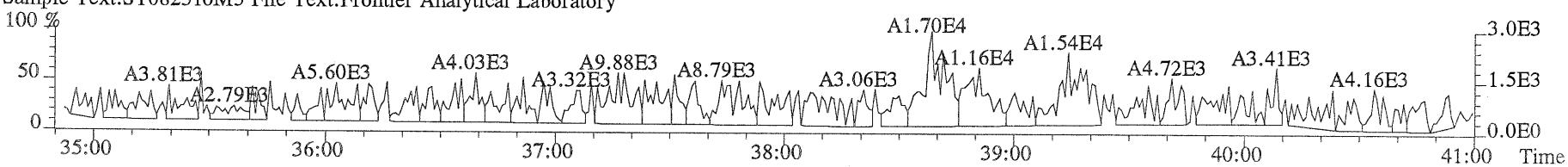
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



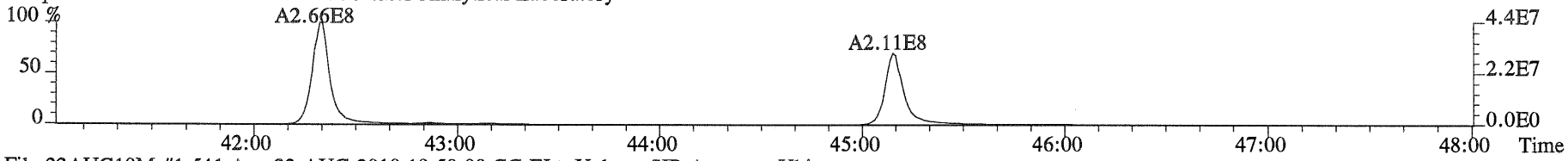
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



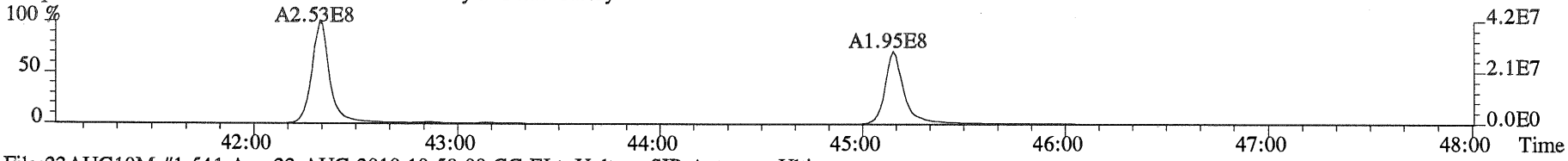
File:23AUG10M #1-476 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



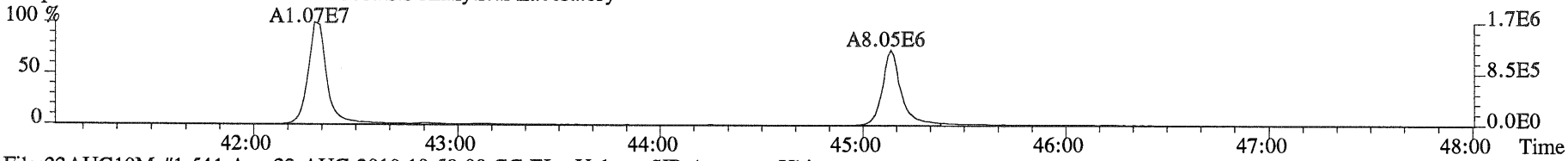
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



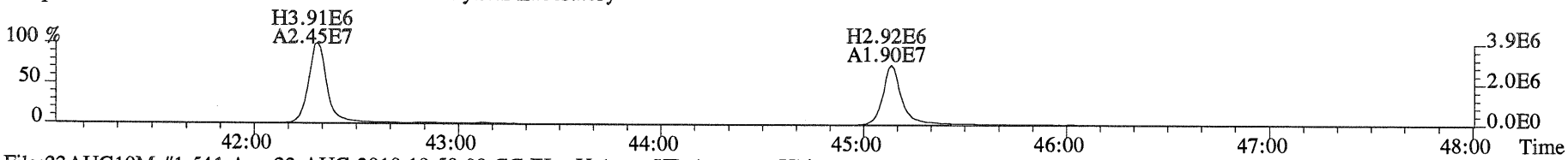
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



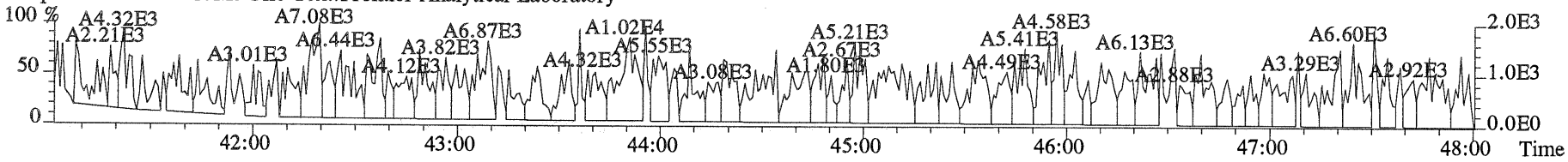
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



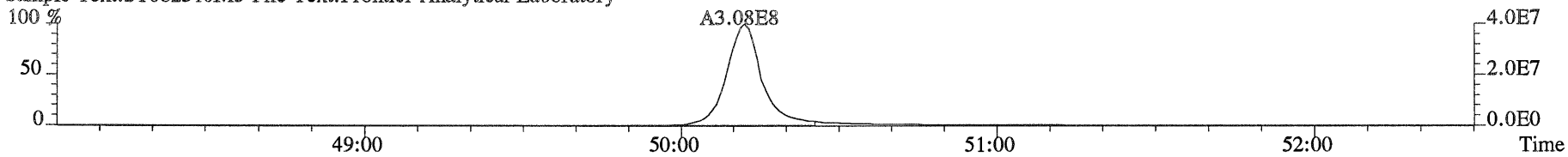
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



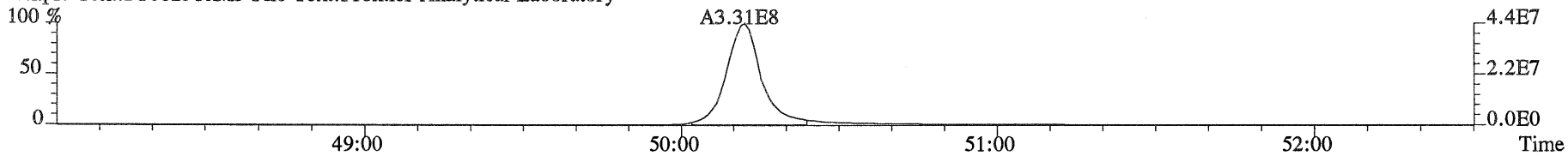
File:23AUG10M #1-541 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



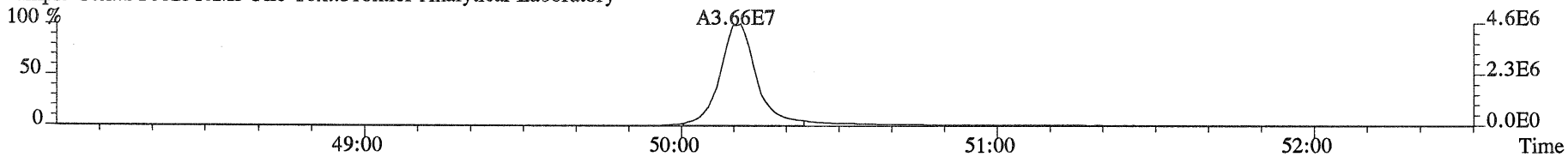
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



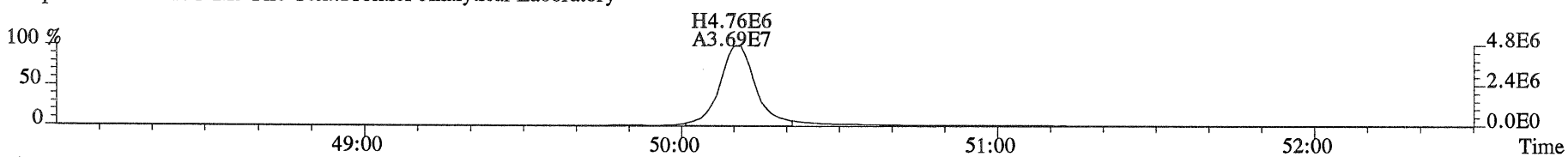
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



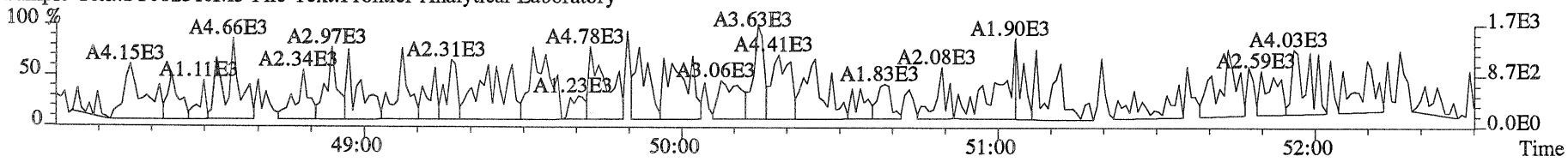
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory



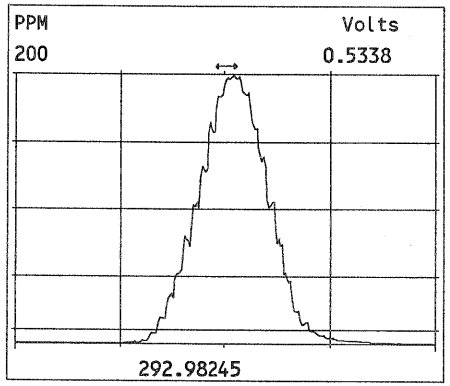
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

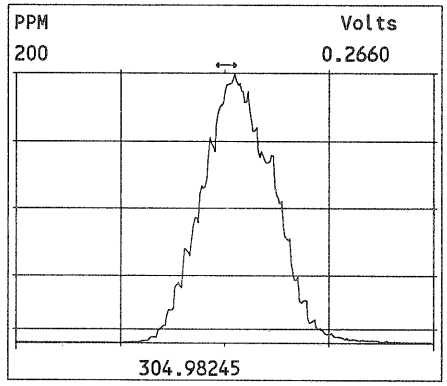


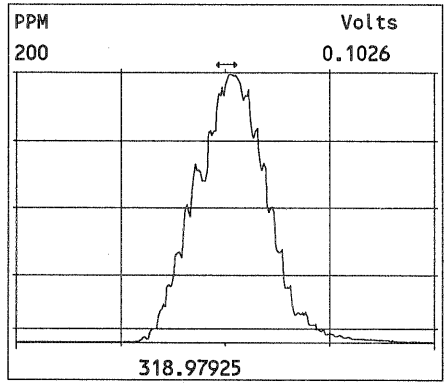
File:23AUG10M #1-347 Acq:23-AUG-2010 19:58:08 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST082310M5 File Text:Frontier Analytical Laboratory

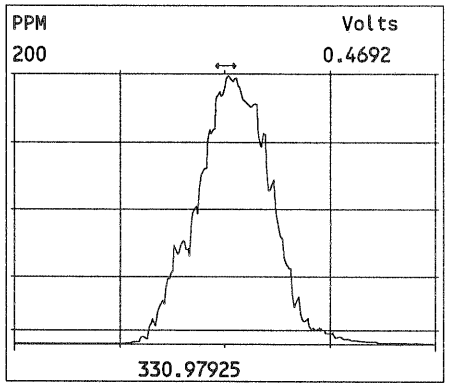


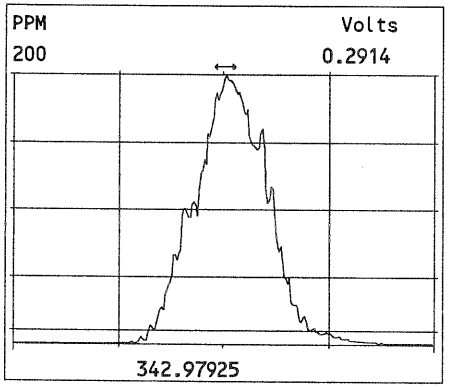
Peak Locate Examination:24-AUG-2010:09:50 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

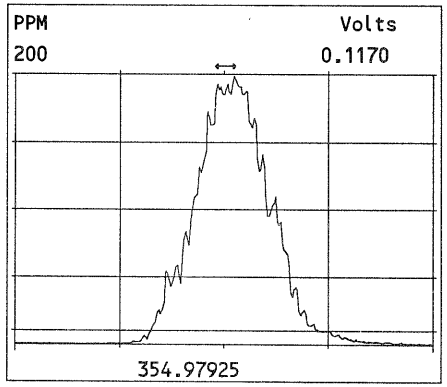


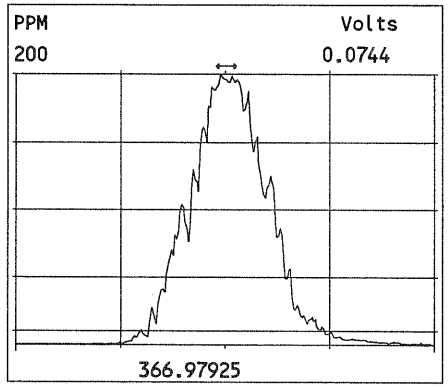


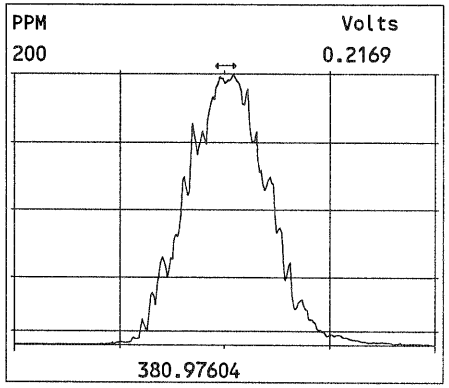


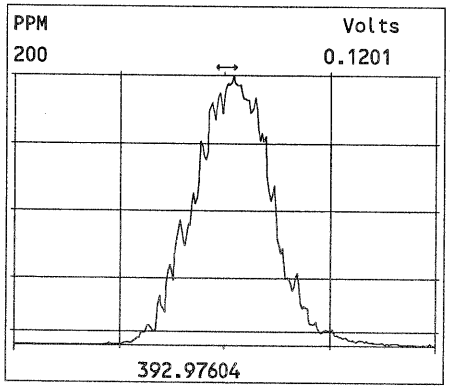


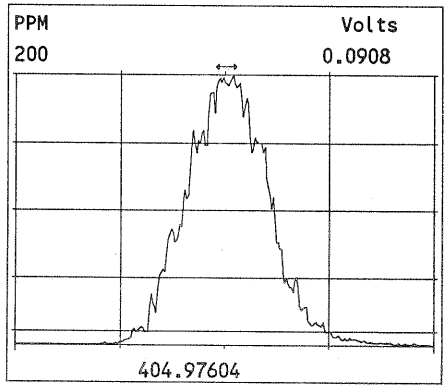


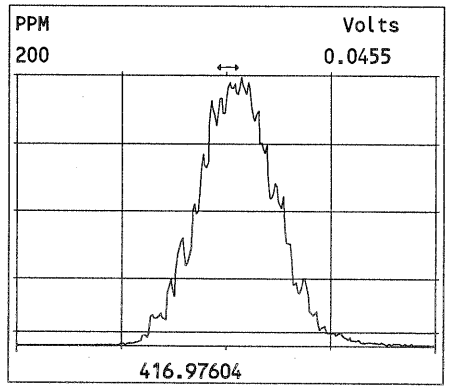




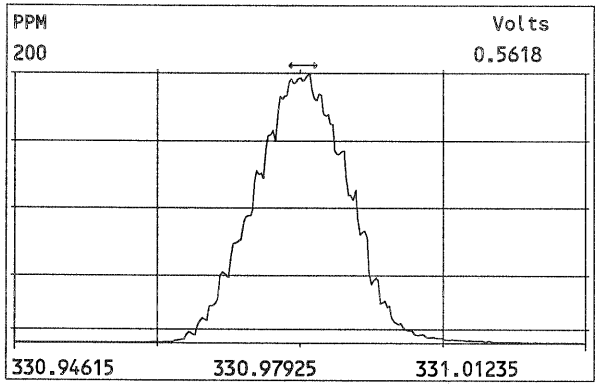


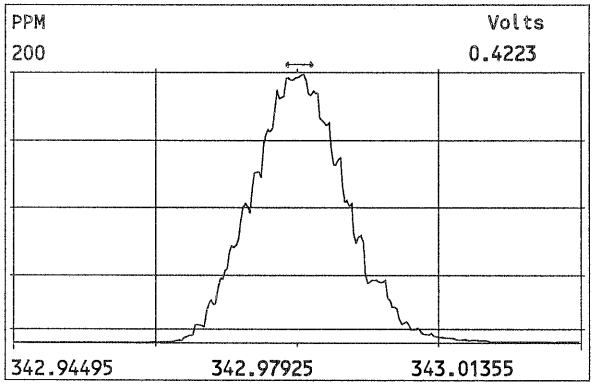


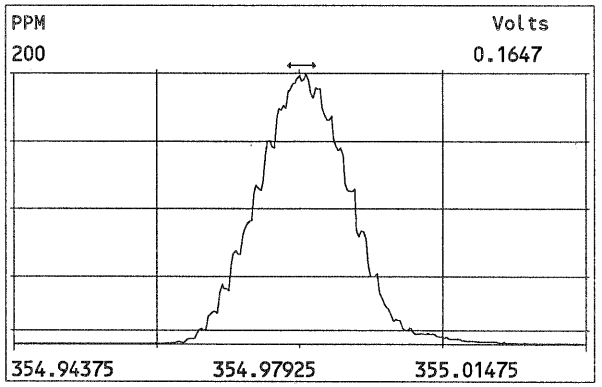


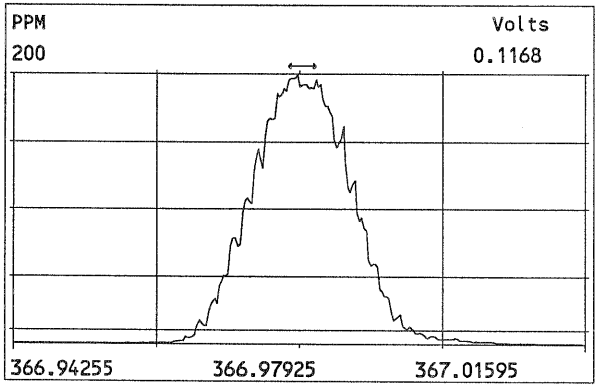


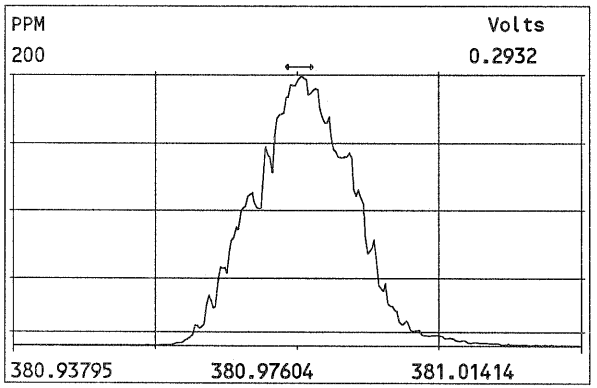
Peak Locate Examination:24-AUG-2010:09:52 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

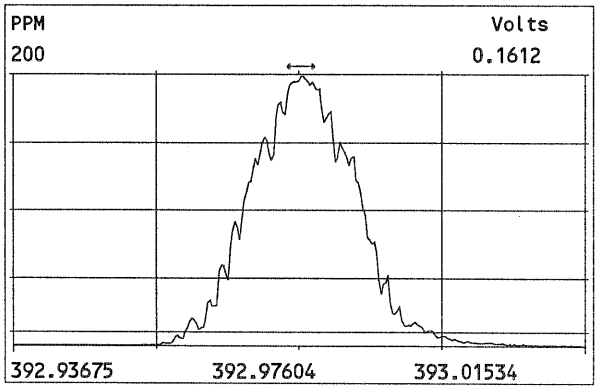


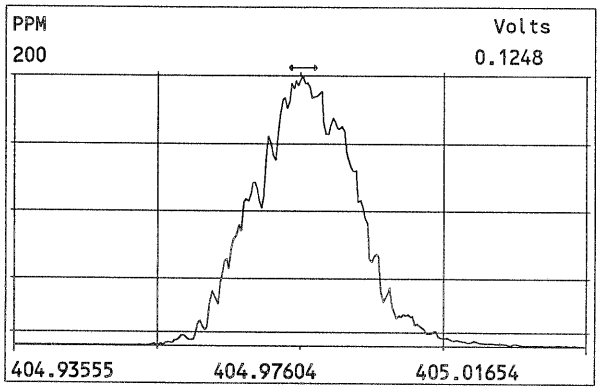


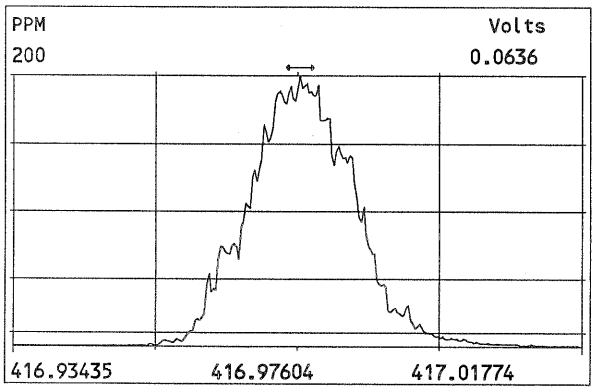




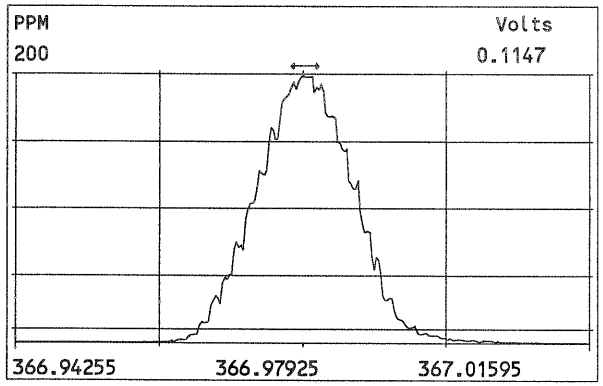


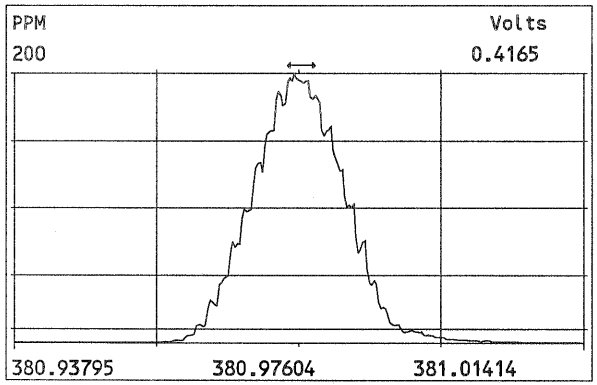


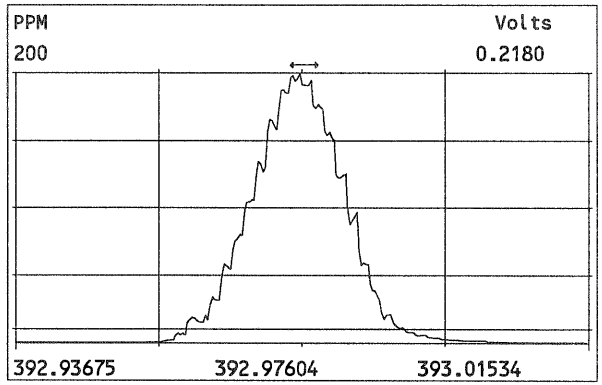


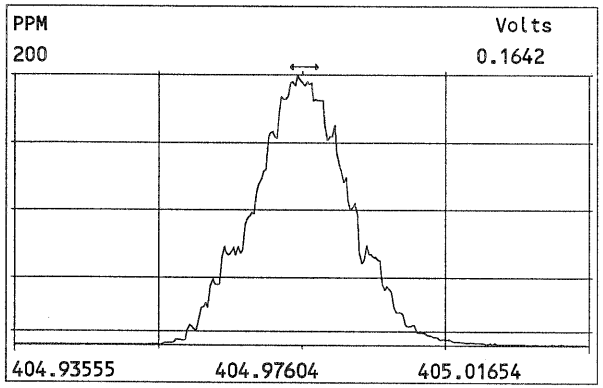


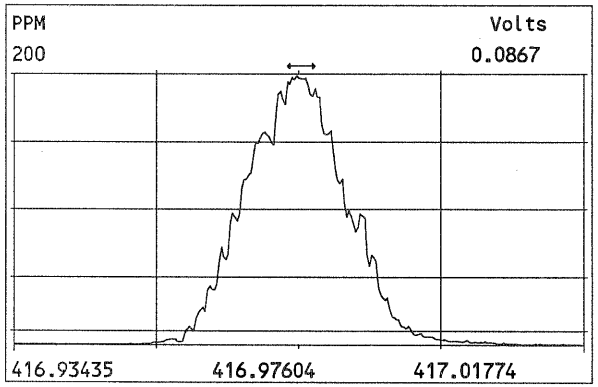
Peak Locate Examination:24-AUG-2010:09:54 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

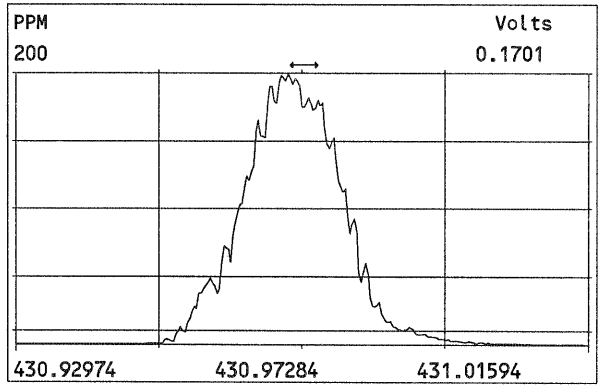


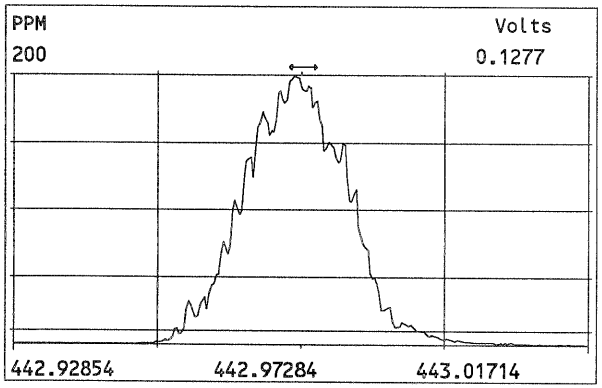


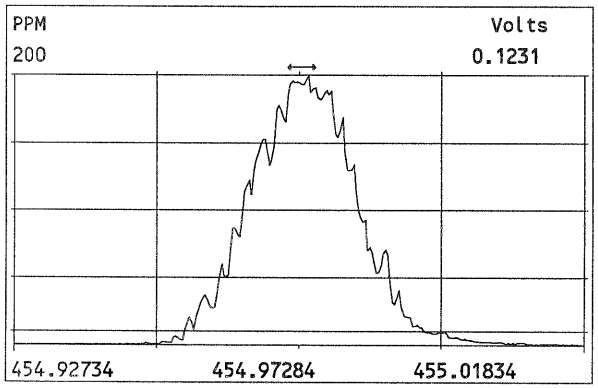




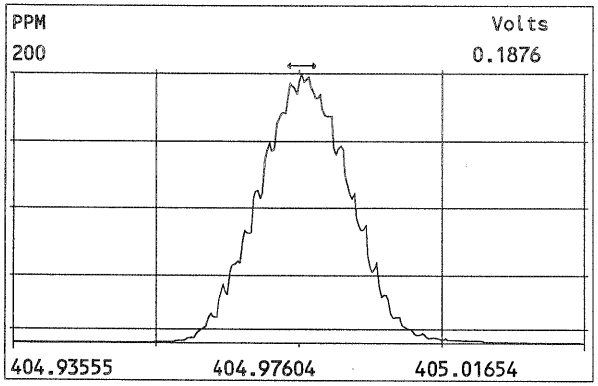


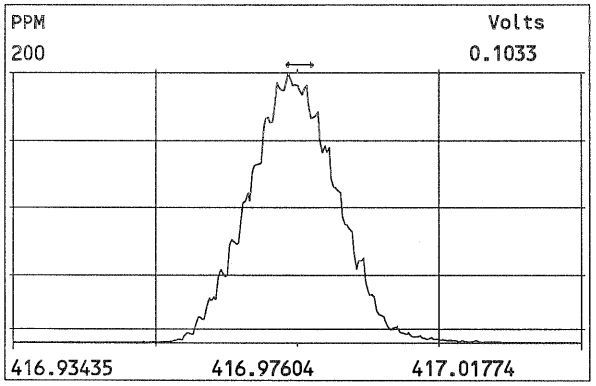


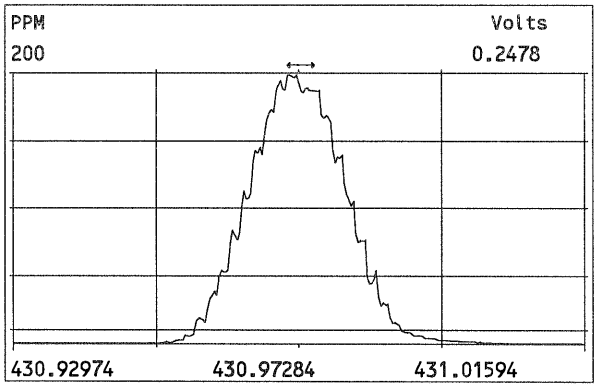


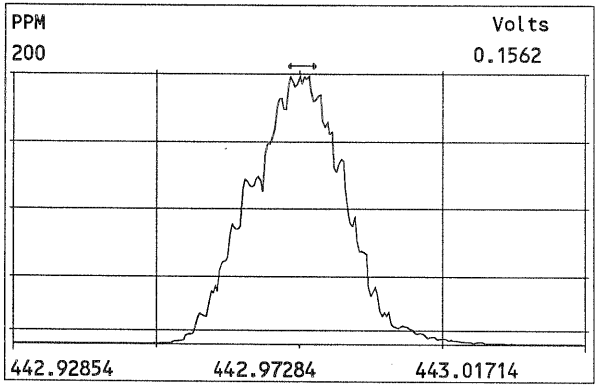


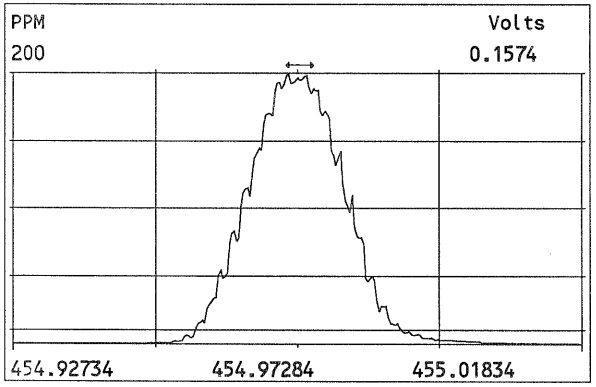
Peak Locate Examination:24-AUG-2010:09:56 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

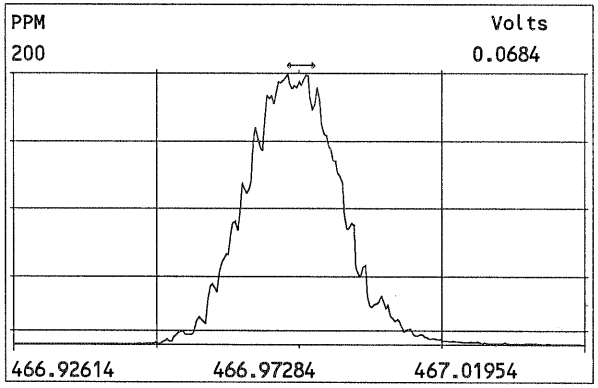


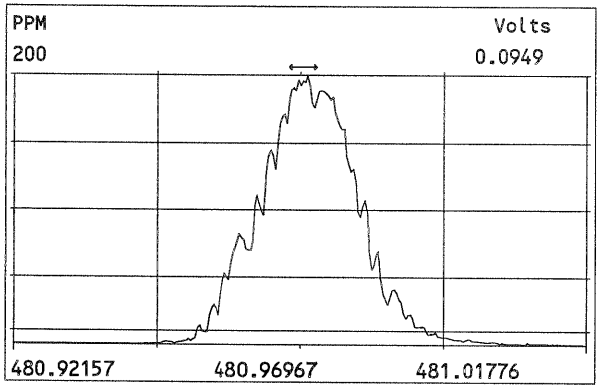




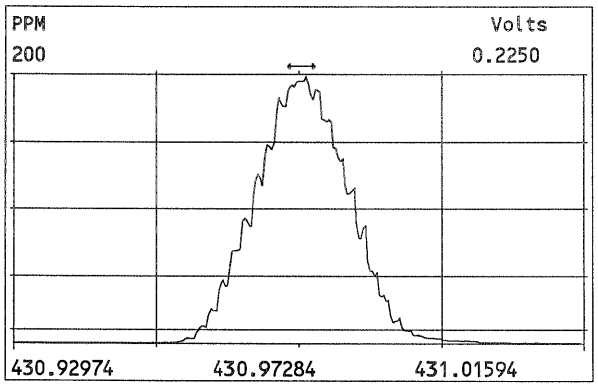


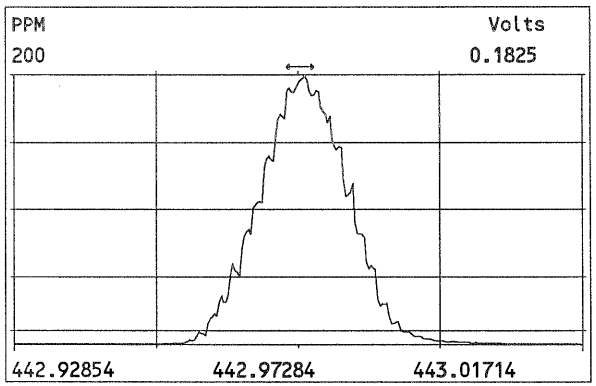


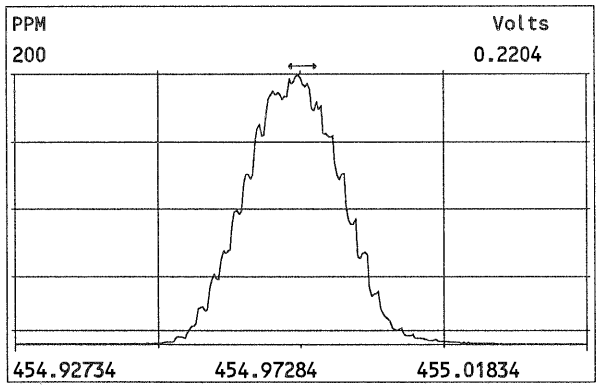


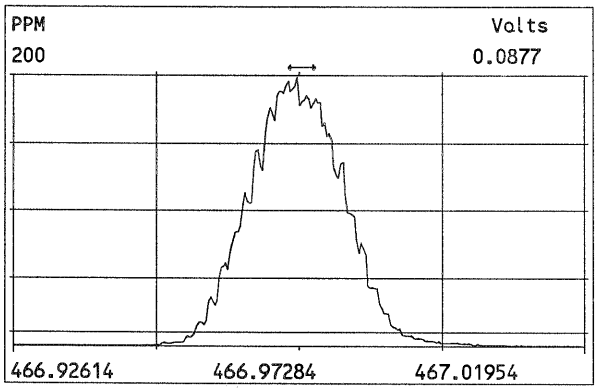


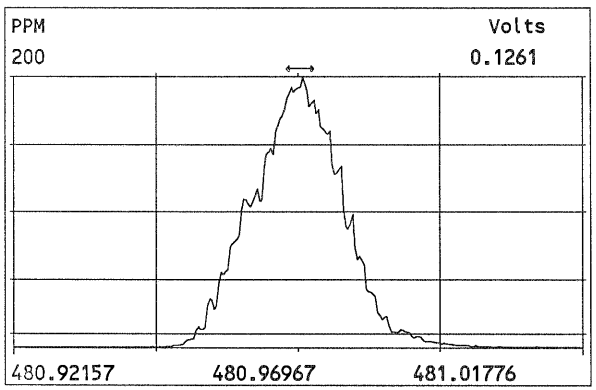
Peak Locate Examination:24-AUG-2010:09:58 File:23AUG10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

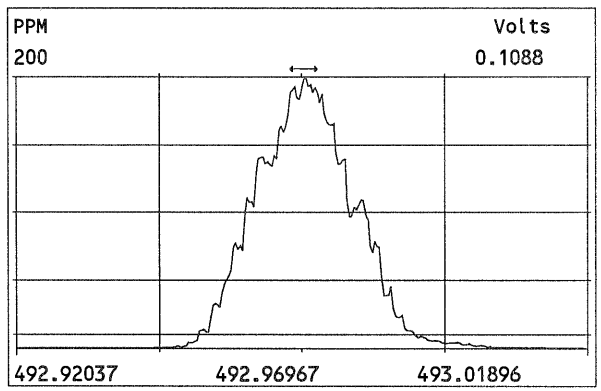


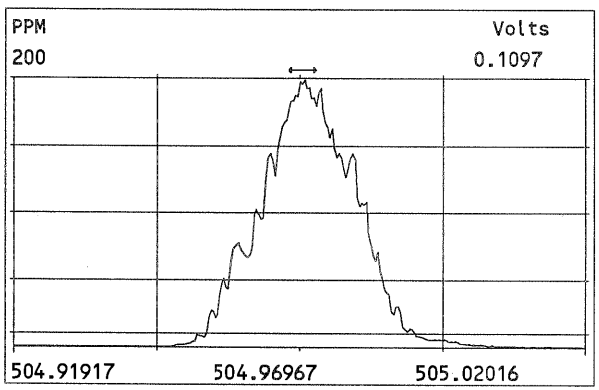


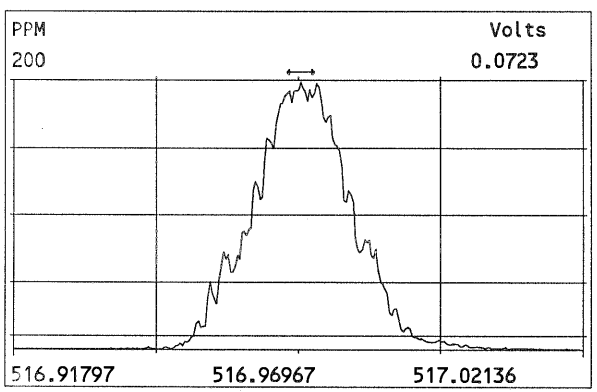












USEPA - ITD

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: 31AUG10M Sam:1 Analysis Date: 31-AUG-10 14:34:42

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	11.1	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.50	1.32-1.78	y	53.5	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.35	1.05-1.43	y	48.5	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.36	1.05-1.43	y	49.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.34	1.05-1.43	y	52.3	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.93	0.88-1.20	y	49.9	43.0 - 58.0
OCDD	M+2/M+4	1.00	0.76-1.02	y	98.3	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.67	0.65-0.89	y	9.82	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	52.2	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	52.3	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	48.6	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	48.7	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	48.2	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	y	50.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.06	0.88-1.20	y	51.4	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.06	0.88-1.20	y	50.7	43.0 - 58.0
OCDF	M+2/M+4	0.86	0.76-1.02	y	95.2	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: _____ Date: 9/1/10

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: 31AUG10M Sam:1 Analysis Date: 31-AUG-10 14:34:42

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.84	0.65-0.89	y	97.9	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.76	1.32-1.78	y	108	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	94.8	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	102	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.92	0.88-1.20	y	102	72.0 - 138
13C-OCDD	M+2/M+4	0.96	0.76-1.02	y	216	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.86	0.65-0.89	y	96.4	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.72	1.32-1.78	y	97.3	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.71	1.32-1.78	y	99.2	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	101	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	106	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	107	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	102	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	94.4	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	92.5	77.0 - 129
13C-OCDF	M+2/M+4	1.02	0.76-1.02	y	214	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.49	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 9/1/10

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: 31AUG10M Sam:1 Analysis Date: 31-AUG-10 Time: 14:34:42

DB-5 IS Data Filename: 31AUG10M Sam:1 Analysis Date: 31-AUG-10 Time: 14:34:42

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)	24:21	1,3,6,8-TCDF (F)	23:01
1,2,8,9-TCDD (L)	28:17	1,2,8,9-TCDF (L)	28:30
1,2,4,7,9-PeCDD (F)	30:12	1,3,4,6,8-PeCDF (F)	28:22
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)	35:12
1,2,3,7,8,9-HxCDD (L)	39:09	1,2,3,7,8,9-HxCDF (L)	39:43
1,2,3,4,6,7,9-HpCDD (F)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:15
1,2,3,4,6,7,8-HpCDD (L)	44:09	1,2,3,4,7,8,9-HpCDF (L)	45:04

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

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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

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

Analyst: [signature] Date: 9/1/10

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: 31-AUG-10 14:34:42 CS3 or VER Data Filename: 31AUG10M 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	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
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: 9/1/10

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: 31-AUG-10 14:34:42 CS3 or VER Data Filename: 31AUG10M 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	1.000	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	1.000	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	1.000	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	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		1.128	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		1.152	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: 9/1/10

FAL ID: ST083110M1 Filename: 31AUG10M Sam:1 Acquired: 31-AUG-10 14:34:42 ICal: PCDDFAL3-8-23-10
Client ID: 1613 CS3 100511J ConCal: ST083110M1 EndCal: ST083110M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 104
WHO 1998 Tox: 130 WHO 2005 Tox: 119

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.39e+06	0.76 y	27:21	1.11	11.1		2.50	-	-	*
1,2,3,7,8-PeCDD	1.04e+07	1.50 y	33:11	1.10	53.5		2.50	-	-	*
1,2,3,4,7,8-HxCDD	9.08e+06	1.35 y	38:33	1.37	48.5		2.50	-	-	*
1,2,3,6,7,8-HxCDD	9.38e+06	1.36 y	38:42	1.37	49.6		2.50	-	-	*
1,2,3,7,8,9-HxCDD	9.76e+06	1.34 y	39:09	1.36	52.3		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	8.48e+06	0.93 y	44:09	1.45	49.9		2.50	-	-	*
OCDD	1.12e+07	1.00 y	49:43	1.43	98.3		2.50	-	-	*
2,3,7,8-TCDF	4.70e+06	0.67 y	26:36	1.50	9.82		2.50	-	-	*
1,2,3,7,8-PeCDF	1.33e+07	1.60 y	31:26	0.94	52.2		2.50	-	-	*
2,3,4,7,8-PeCDF	1.31e+07	1.63 y	32:46	0.94	52.3		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.13e+07	1.25 y	37:09	0.93	48.6		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.44e+07	1.25 y	37:21	0.82	48.7		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.27e+07	1.25 y	38:17	0.92	48.2		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.38e+07	1.23 y	39:43	1.00	50.0		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.00e+07	1.06 y	42:15	1.39	51.4		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	6.84e+06	1.06 y	45:04	1.36	50.7		2.50	-	-	*
OCDF	1.16e+07	0.86 y	50:05	0.79	95.2		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	1.94e+07	0.84 y	27:20	1.02	97.9					97.9
13C-1,2,3,7,8-PeCDD	1.77e+07	1.76 y	33:09	0.84	108					108
13C-1,2,3,4,7,8-HxCDD	1.36e+07	1.29 y	38:31	1.07	94.8					94.8
13C-1,2,3,6,7,8-HxCDD	1.38e+07	1.22 y	38:41	1.01	102					102
13C-1,2,3,4,6,7,8-HpCDD	1.17e+07	0.92 y	44:08	0.86	102					102
13C-OCDD	1.58e+07	0.96 y	49:41	0.55	216					108
13C-2,3,7,8-TCDF	3.19e+07	0.86 y	26:35	0.99	96.4					96.4
13C-1,2,3,7,8-PeCDF	2.71e+07	1.72 y	31:25	0.84	97.3					97.3
13C-2,3,4,7,8-PeCDF	2.68e+07	1.71 y	32:44	0.81	99.2					99.2
13C-1,2,3,4,7,8-HxCDF	2.50e+07	0.50 y	37:08	1.85	101					101
13C-1,2,3,6,7,8-HxCDF	3.60e+07	0.50 y	37:19	2.54	106					106
13C-2,3,4,6,7,8-HxCDF	2.87e+07	0.50 y	38:16	2.01	107					107
13C-1,2,3,7,8,9-HxCDF	2.78e+07	0.51 y	39:43	2.03	102					102
13C-1,2,3,4,6,7,8-HpCDF	1.40e+07	0.44 y	42:13	1.11	94.4					94.4
13C-1,2,3,4,7,8,9-HpCDF	9.95e+06	0.42 y	45:04	0.80	92.5					92.5
13C-OCDF	3.10e+07	1.02 y	50:04	1.08	214					107
37Cl-2,3,7,8-TCDD	1.26e+06		27:21	0.69	9.49					94.9
13C-1,2,3,4-TCDD	1.94e+07	0.86 y	26:46	-	43.2					
13C-1,2,3,4-TCDF	3.33e+07	0.88 y	25:29	-	46.0					
13C-1,2,3,7,8,9-HxCDD	1.34e+07	1.25 y	39:08	-	48.5					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.19e+07		22:49	1.11	55.0	2.50	-	-	*		26
Total Penta-Dioxins	2.24e+07		30:12	1.10	115	2.50	-	-	*		11
Total Hexa-Dioxins	3.27e+07		36:04	1.37	174	2.50	-	-	*		21
Total Hepta-Dioxins	1.86e+07		41:18	1.45	110	2.50	-	-	*		33
Total Tetra-Furans	1.94e+07		23:01	1.50	40.6	2.50	-	-	*		21
1st Fn. Tot Penta-Furans	1.40e+07		28:22	0.94	55.2	2.50	-	-	*	PeCDF	5
Total Penta-Furans	3.84e+07		30:10	0.94	152	2.50	-	-	*	207	12
Total Hexa-Furans	6.09e+07		35:12	0.91	228	2.50	-	-	*		17
Total Hepta-Furans	1.77e+07		41:30	1.38	107	2.50	-	-	*		33

Analyst: _____ Date: 9/1/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:31AUG10M Instrument: FAL3 GC: DB5 Experiment:PCDD

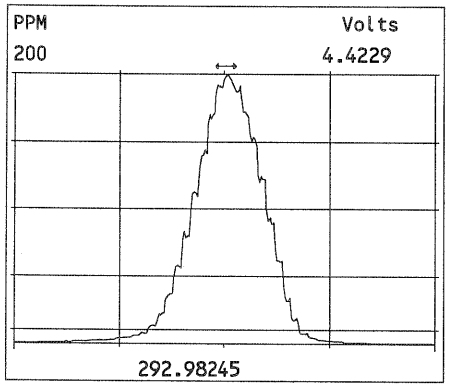
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
31AUG10M	1	ST083110M1	1613 CS3 100511J	31-AUG-10 14:34:42	ST083110M1	ST083110M2	BS
31AUG10M	2	2096-001-0001-OPR	OPR	31-AUG-10 15:31:30	ST083110M1	ST083110M2	BS
31AUG10M	3	2096-001-0001-MB	Method Blank	31-AUG-10 16:26:55	ST083110M1	ST083110M2	BS
31AUG10M	4	6311-001-0001-SA	MW-02-081110	31-AUG-10 17:22:18	ST083110M1	ST083110M2	BS
31AUG10M	5	6311-002-0001-SA	MW-03-081110	31-AUG-10 18:17:40	ST083110M1	ST083110M2	BS
31AUG10M	6	6311-003-0001-SA	MW-03-081110-D	31-AUG-10 19:13:02	ST083110M1	ST083110M2	BS
31AUG10M	7	6311-004-0001-SA	MW-04-081110	31-AUG-10 20:08:25	ST083110M1	ST083110M2	BS
31AUG10M	8	6311-005-0001-SA	MW-14-081110	31-AUG-10 21:03:48	ST083110M1	ST083110M2	BS
31AUG10M	9	6311-006-0001-SA	MW-12-081210	31-AUG-10 21:59:11	ST083110M1	ST083110M2	BS
31AUG10M	10	6311-007-0001-SA	MW-13-081210	31-AUG-10 22:54:35	ST083110M1	ST083110M2	BS
31AUG10M	11	6311-008-0001-SA	MW-10-081210	31-AUG-10 23:49:57	ST083110M1	ST083110M2	BS
31AUG10M	12	6311-009-0001-SA	MW-11-081210	1-SEP-10 00:45:15	ST083110M1	ST083110M2	BS
31AUG10M	13	SB083110M1	Solvent Blank	1-SEP-10 01:40:34	ST083110M1	ST083110M2	BS
31AUG10M	14	ST083110M2	1613 CS3 100511J	1-SEP-10 02:35:57	ST083110M1	ST083110M2	BS

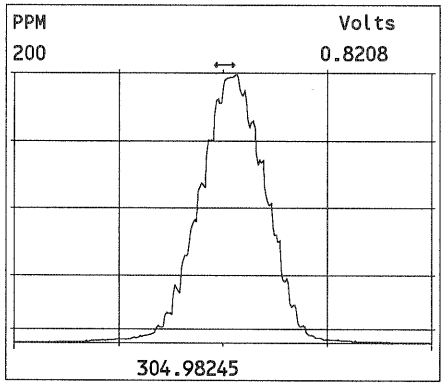
9/1/10

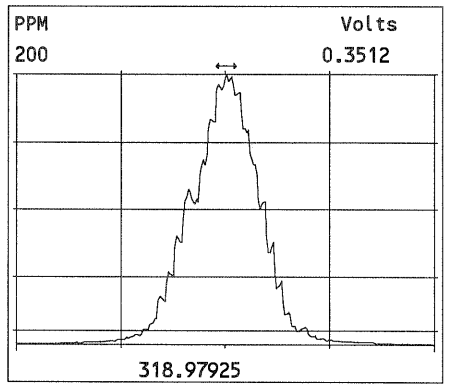
Data Backed Up:_____

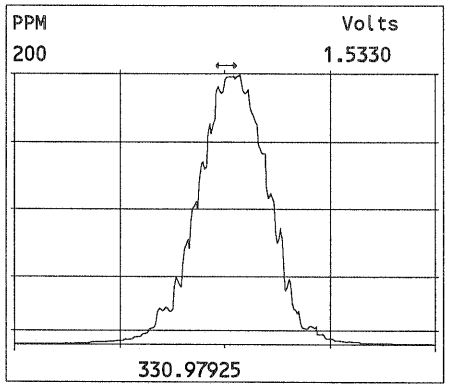
Date:_____

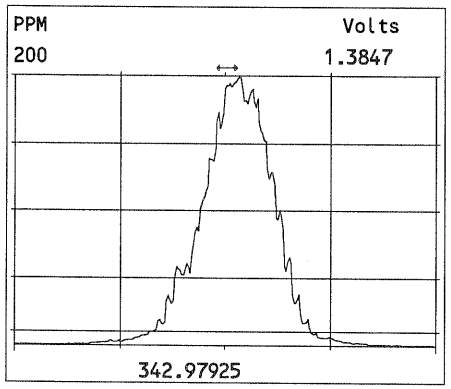
Peak Locate Examination:31-AUG-2010:14:32 File:31AUG10M
Experiment:PCDD Function:1 Reference:PFK

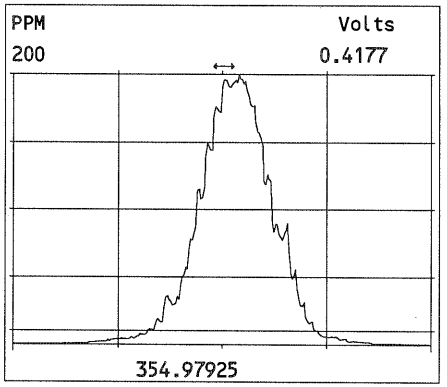


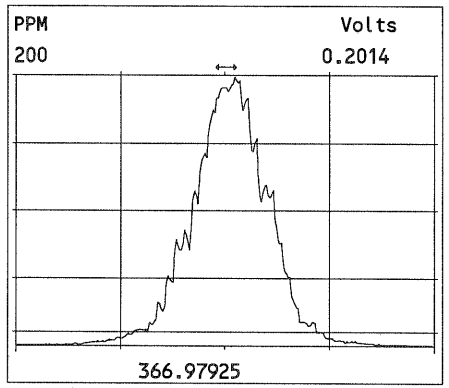


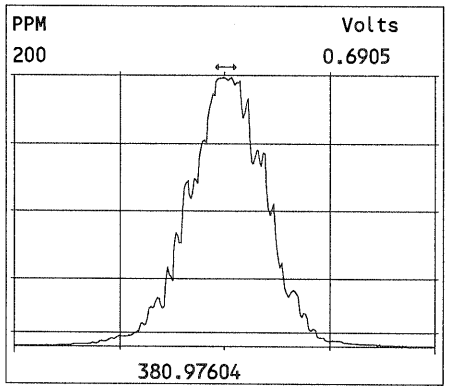


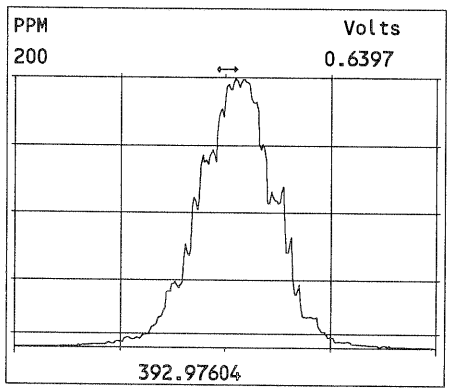


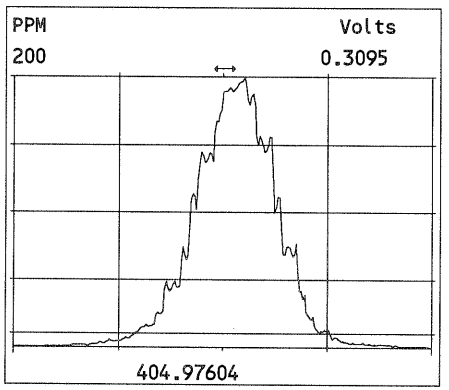


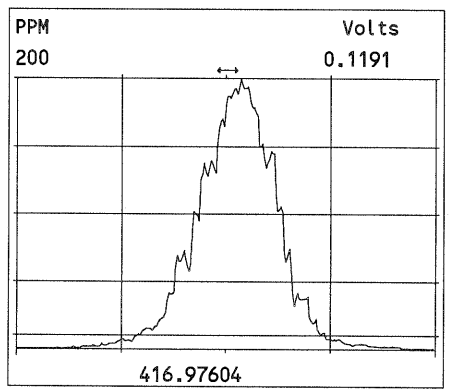




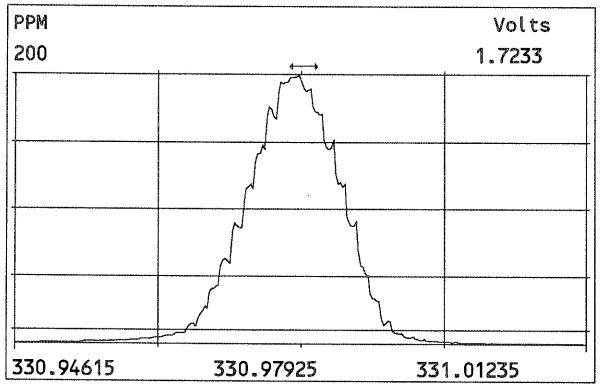


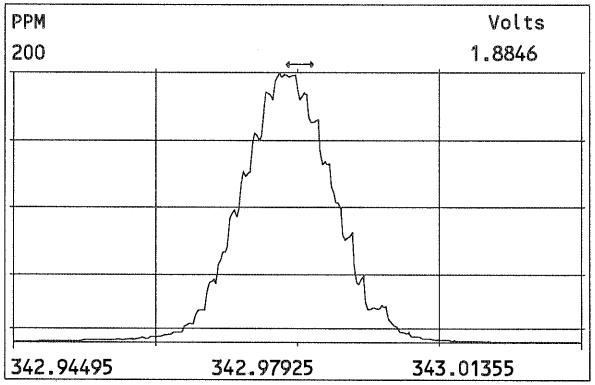


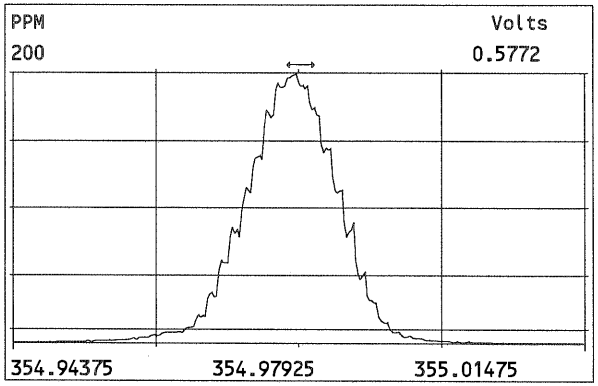


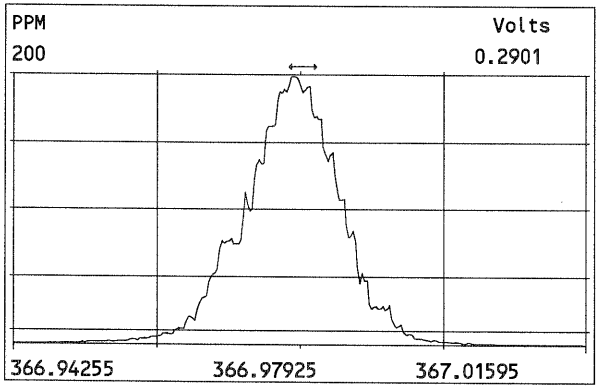


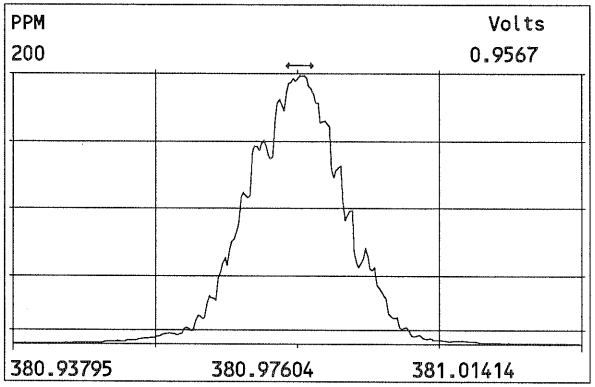
Peak Locate Examination:31-AUG-2010:14:33 File:31AUG10M
Experiment:PCDD Function:2 Reference:PFK

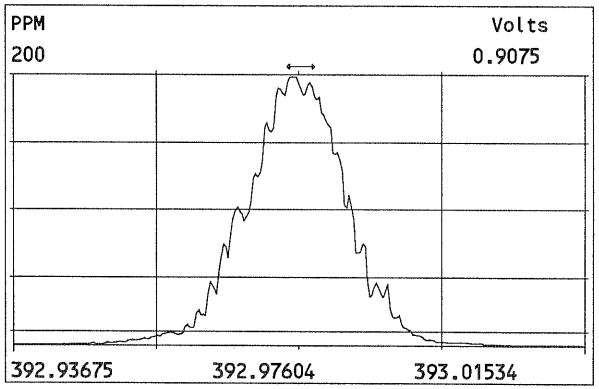


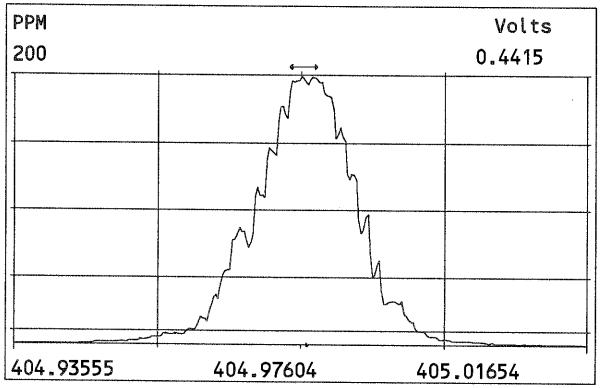


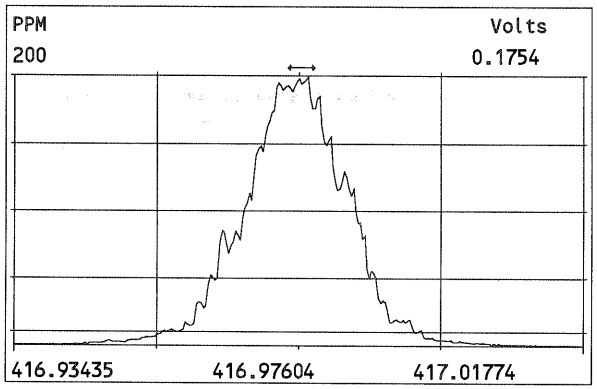




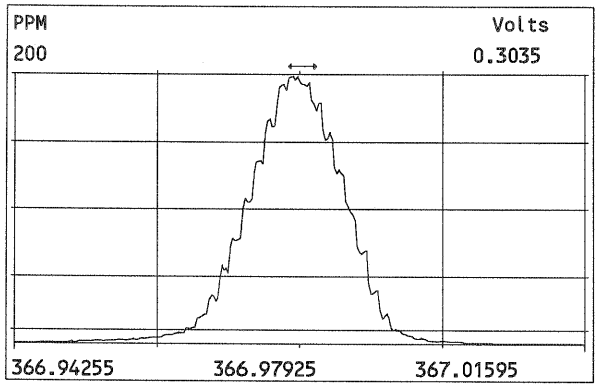


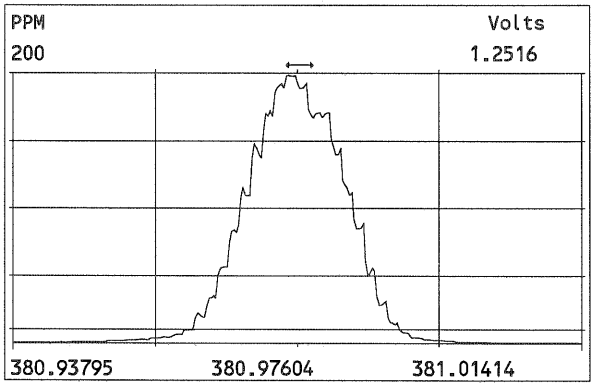


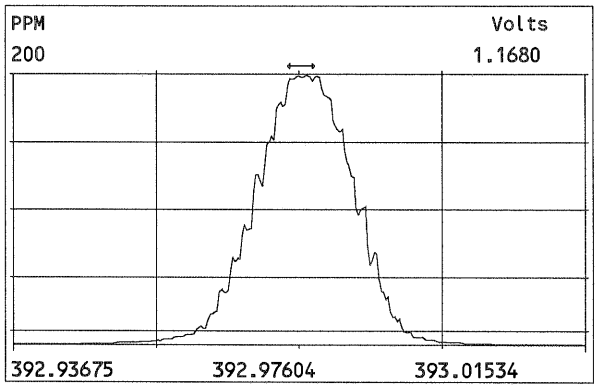


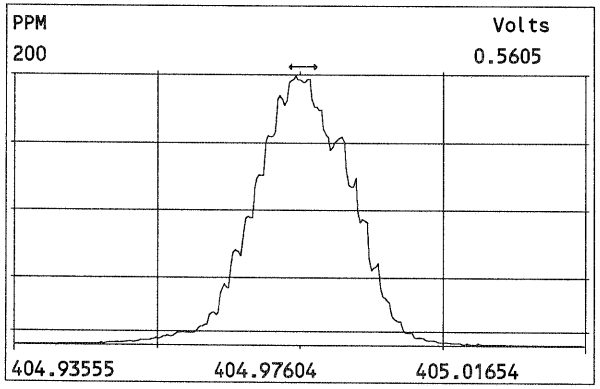


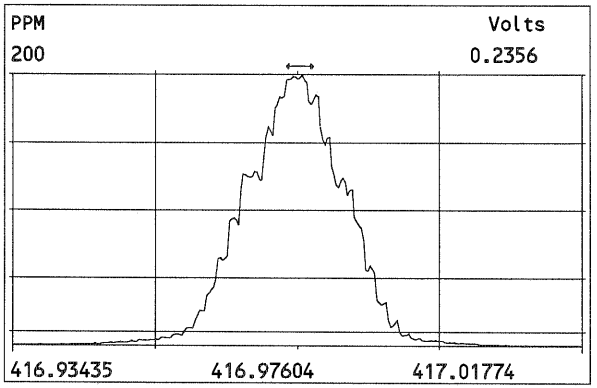
Peak Locate Examination:31-AUG-2010:14:33 File:31AUG10M
Experiment:PCDD Function:3 Reference:PFK

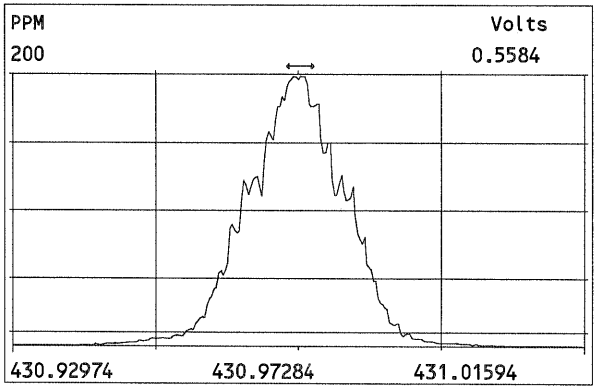


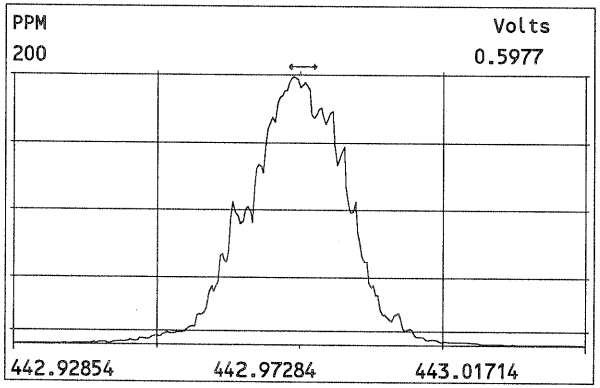


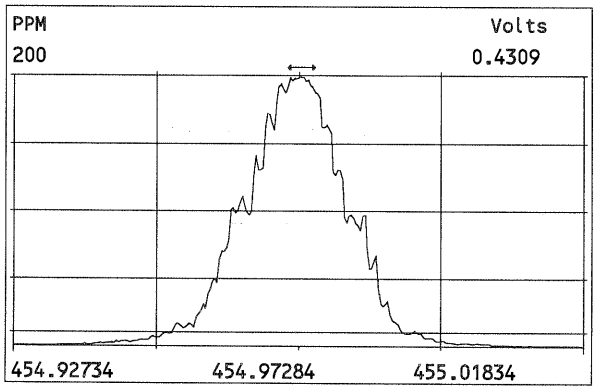






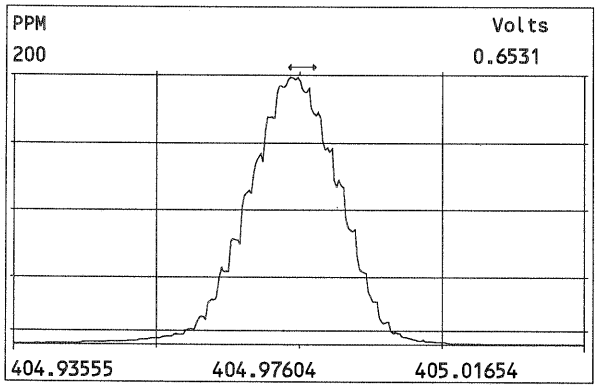


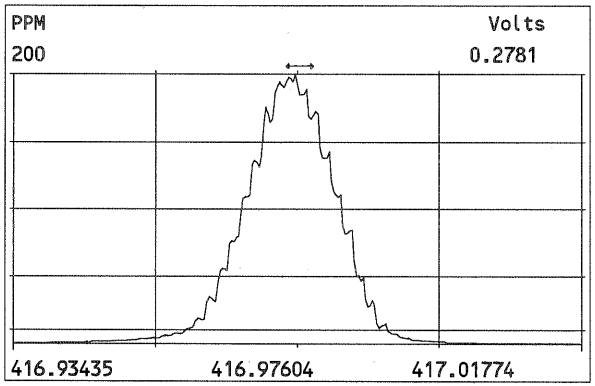


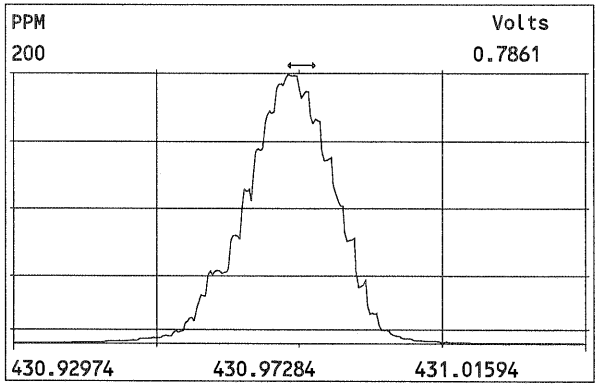


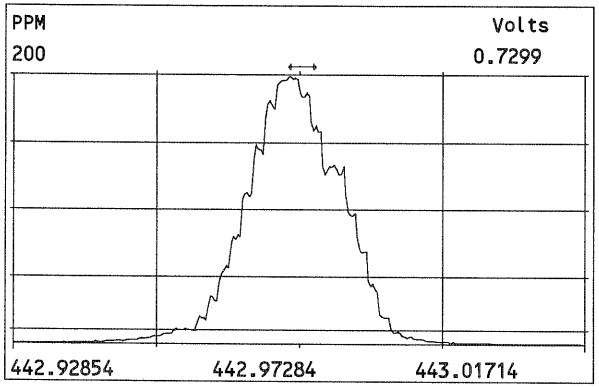
Peak Locate Examination:31-AUG-2010:14:33 File:31AUG10M

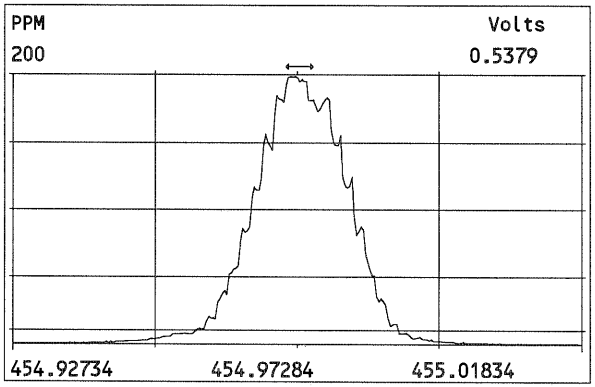
Experiment:PCDD Function:4 Reference:PFK

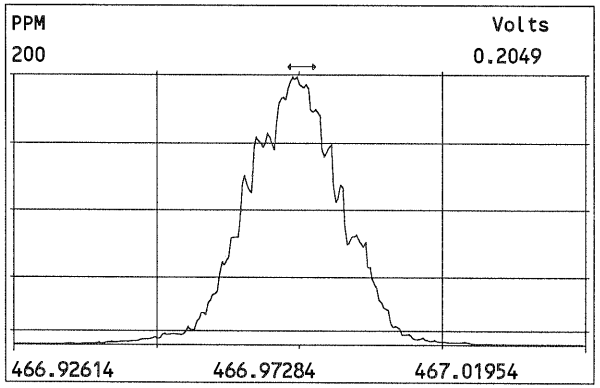


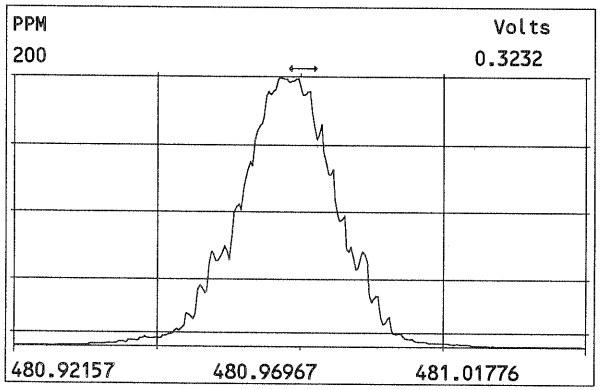






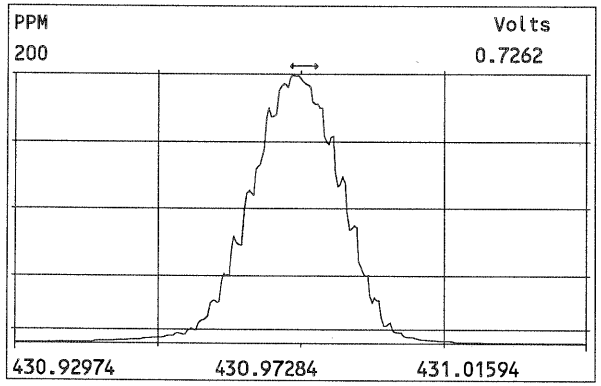


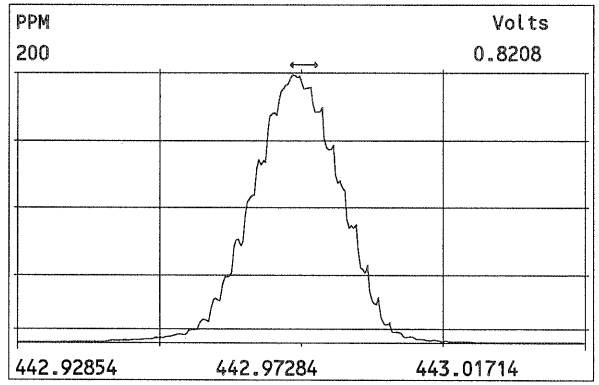


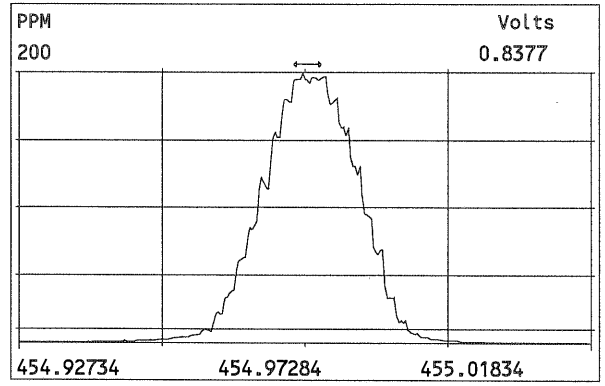


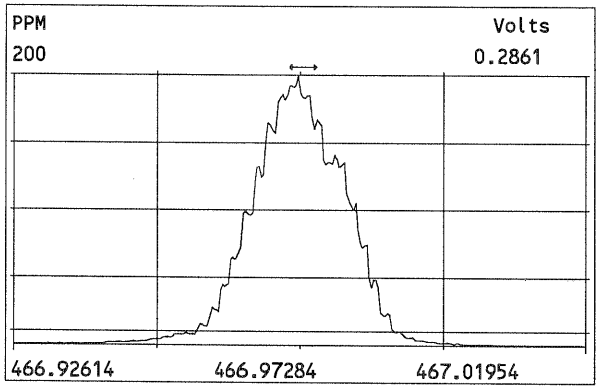
Peak Locate Examination:31-AUG-2010:14:34 File:31AUG10M

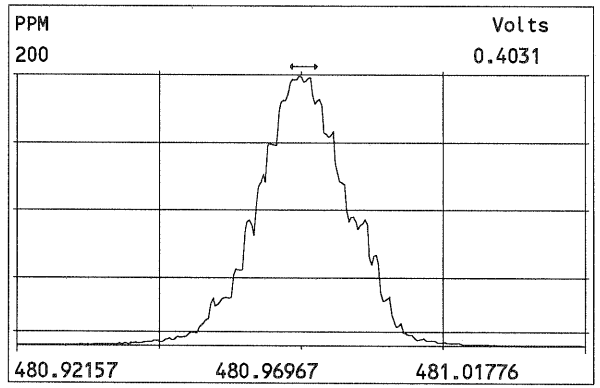
Experiment:PCDD Function:5 Reference:PFK

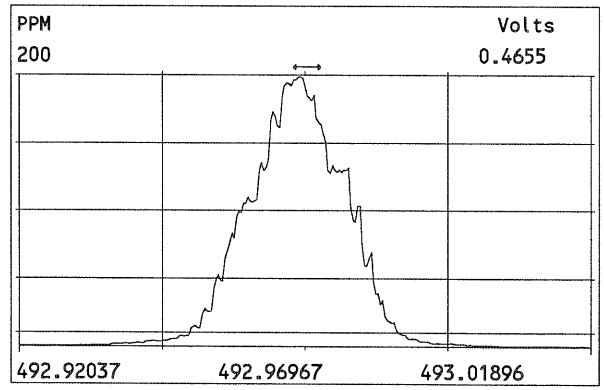


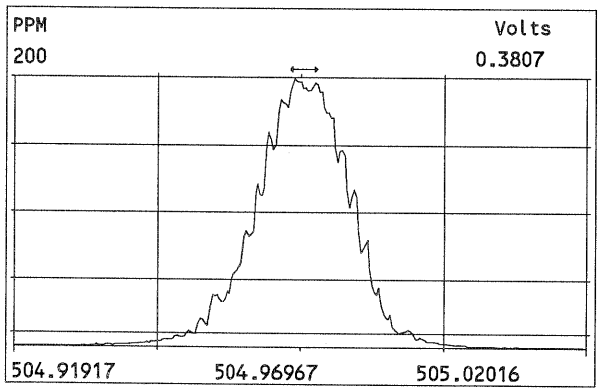


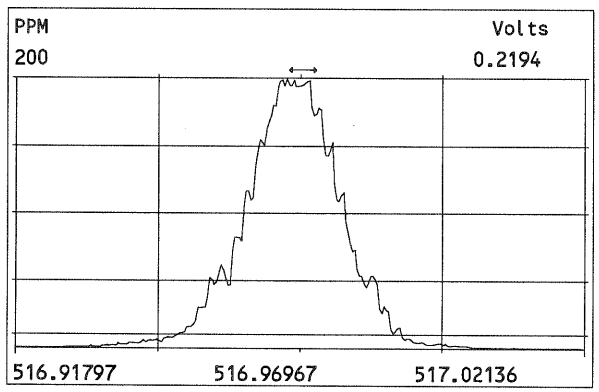




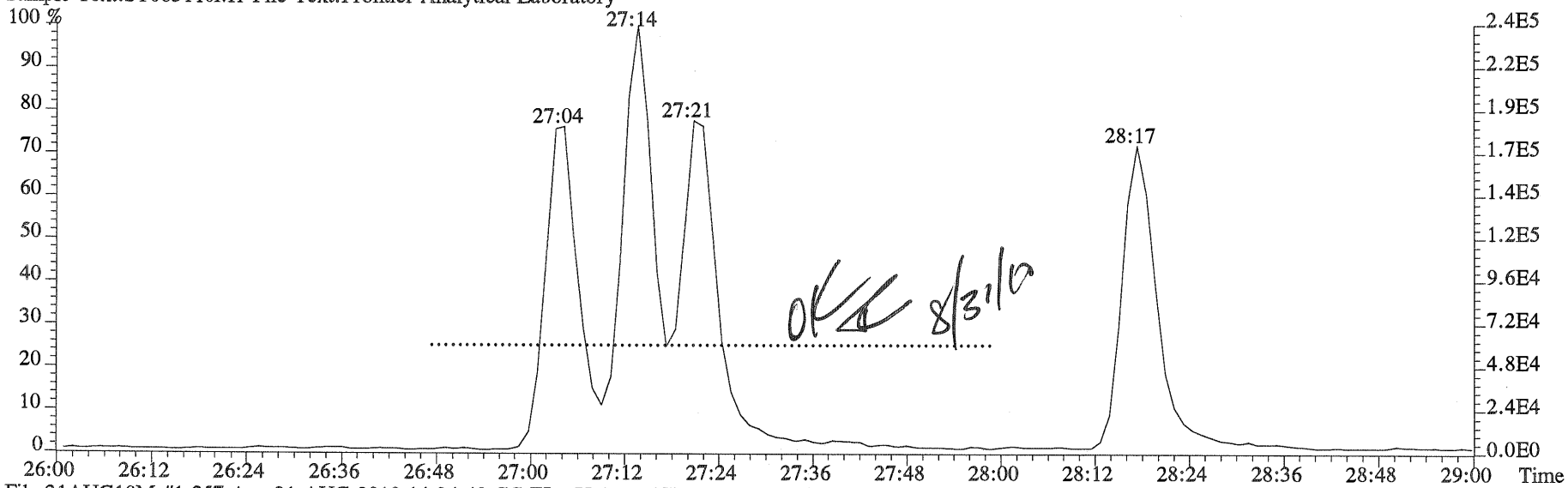




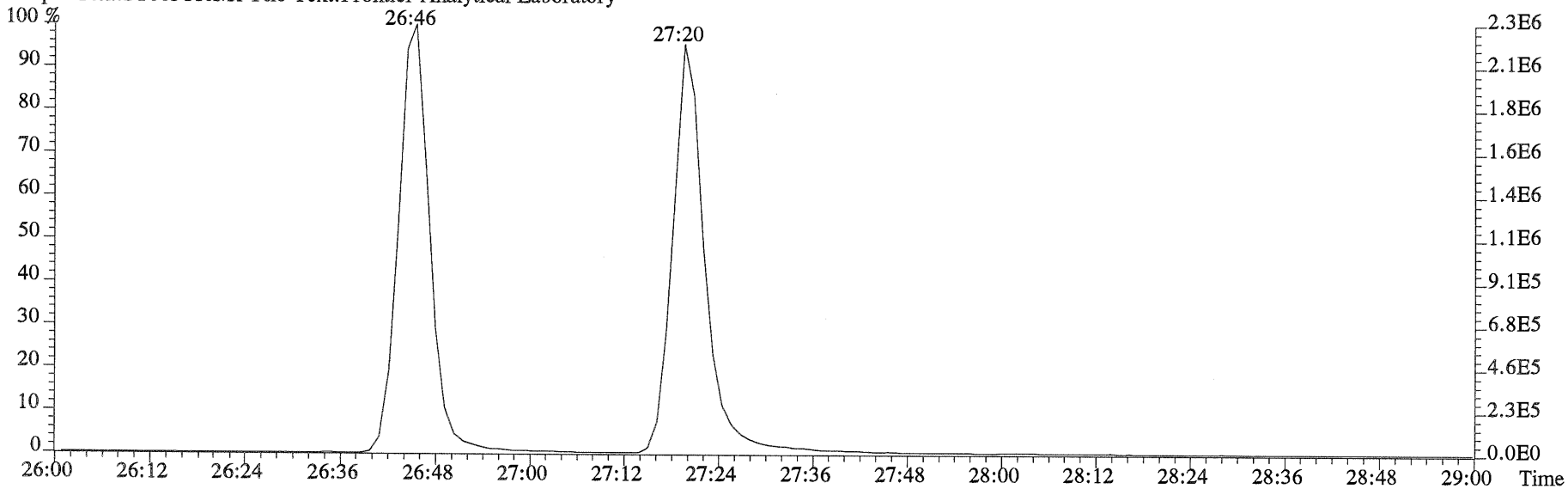




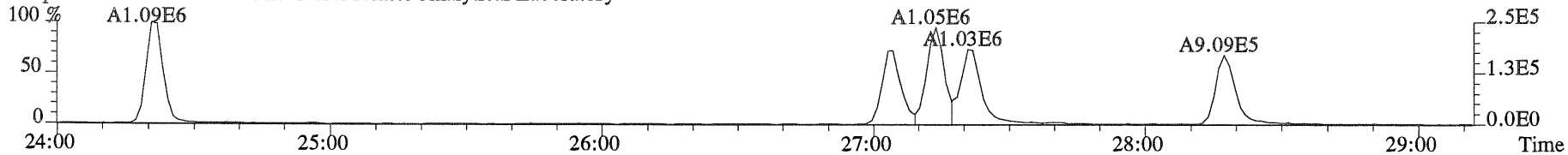
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



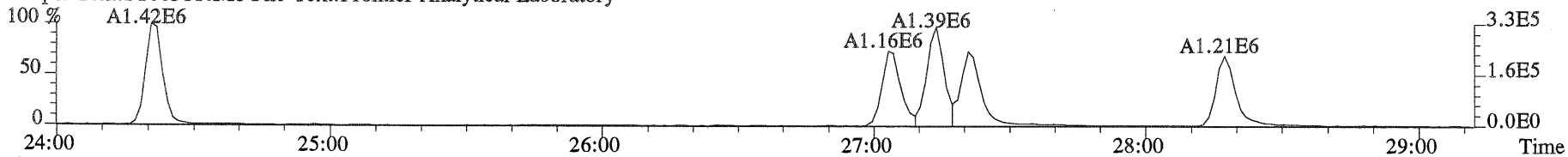
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



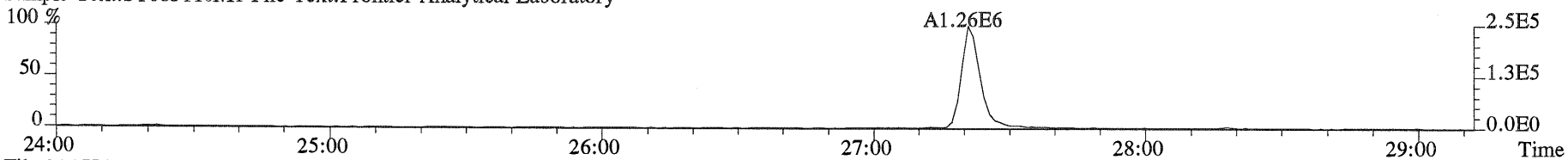
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



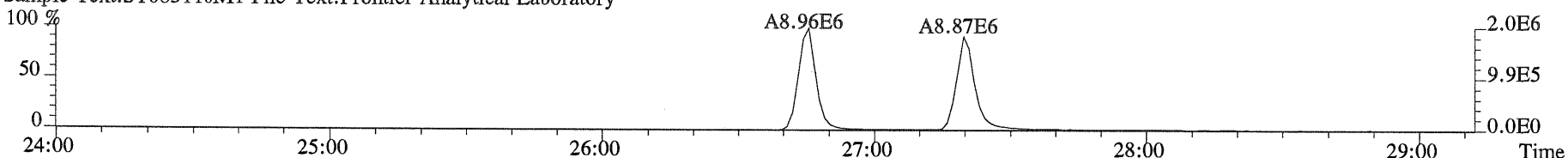
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



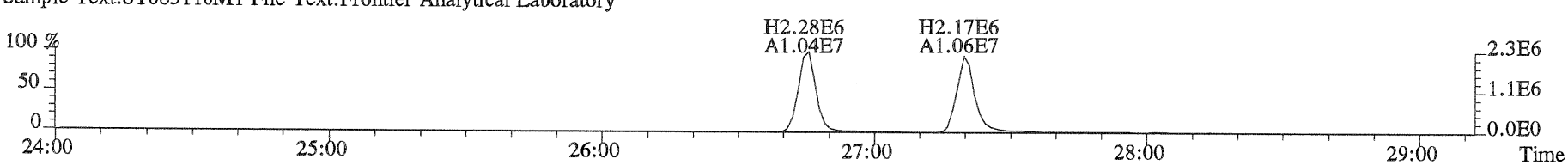
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



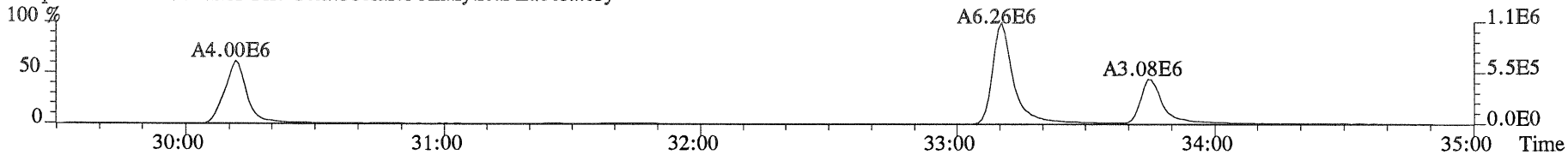
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



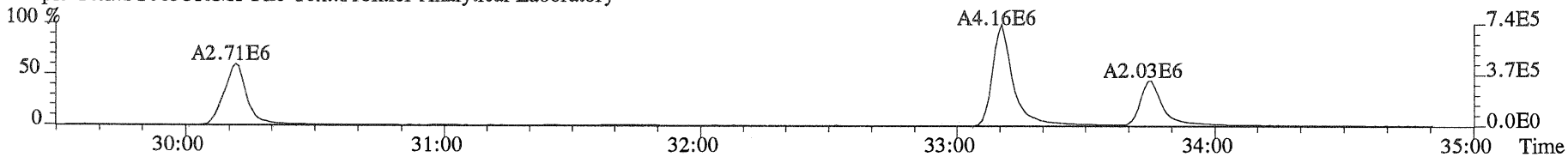
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



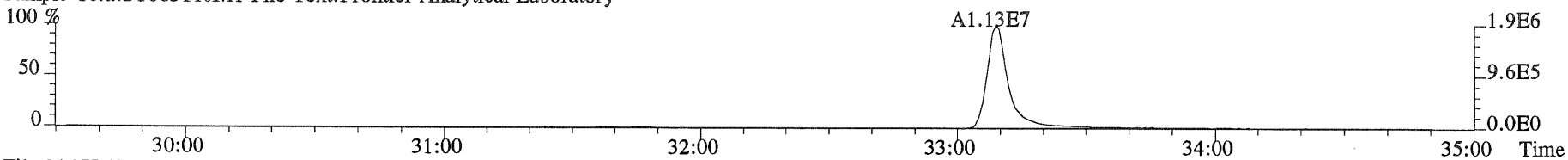
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



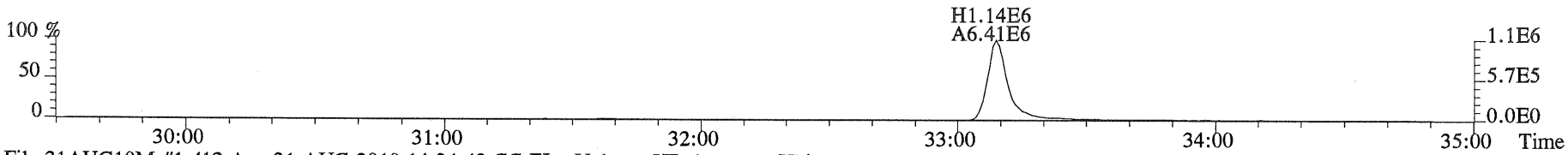
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



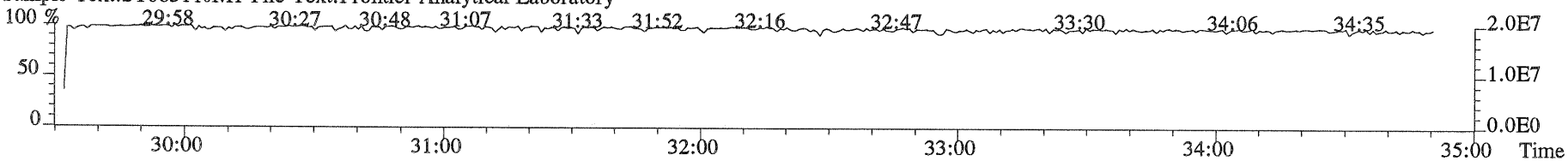
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



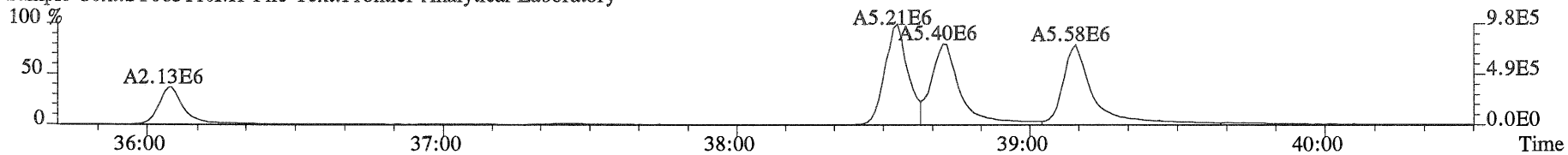
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



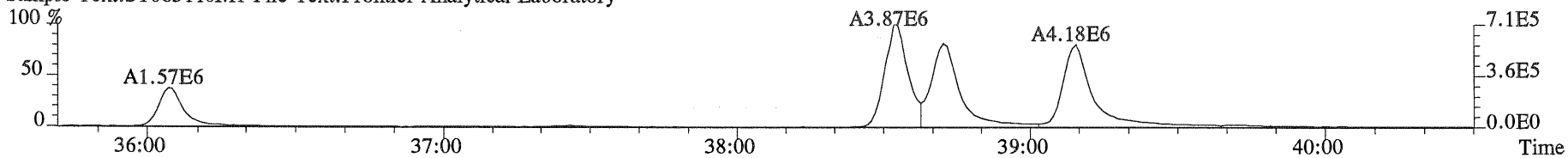
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



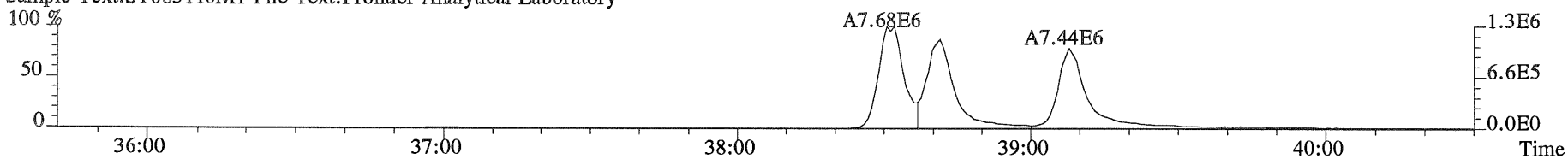
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



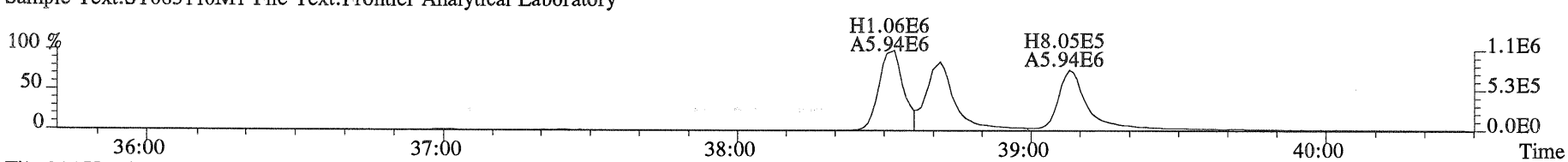
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



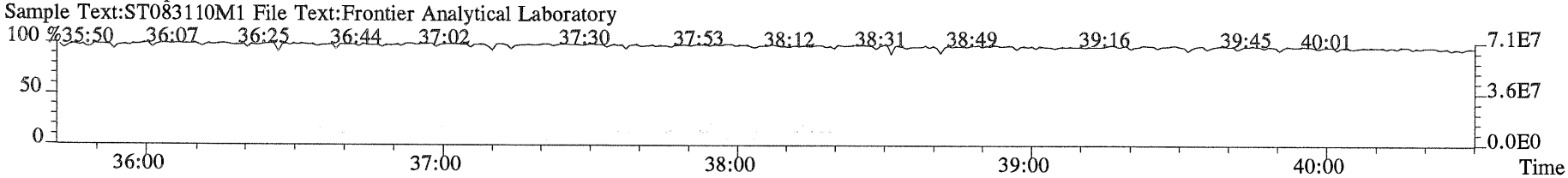
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



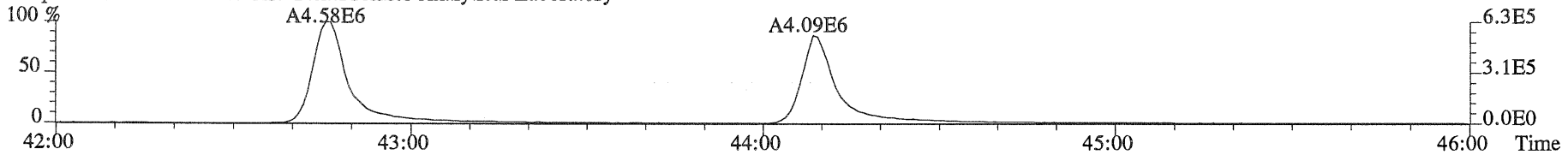
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



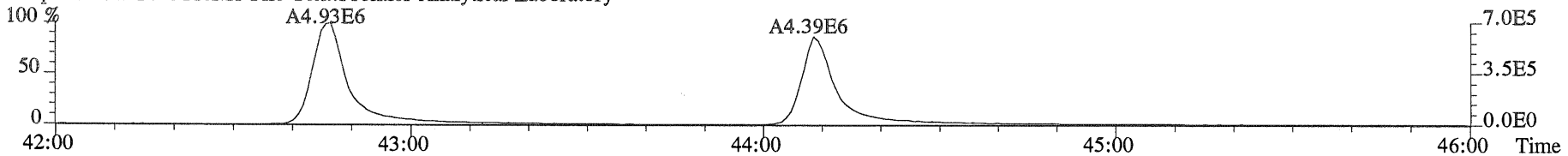
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



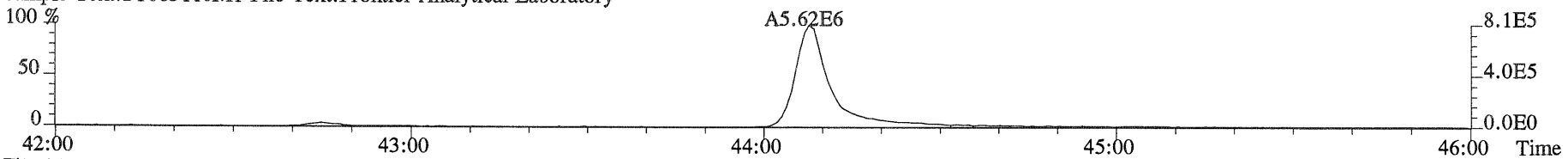
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



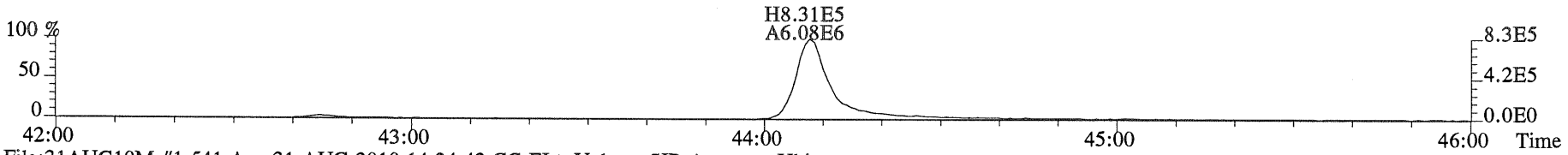
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



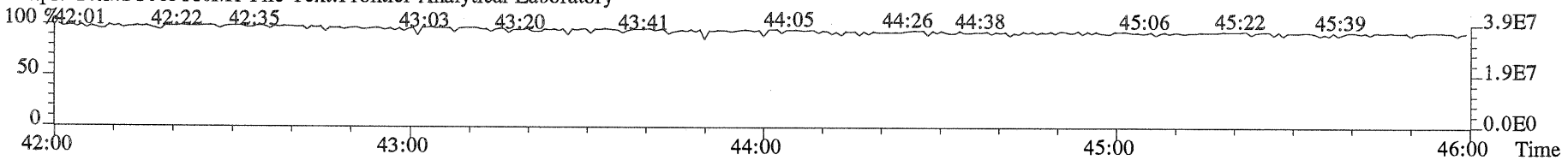
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



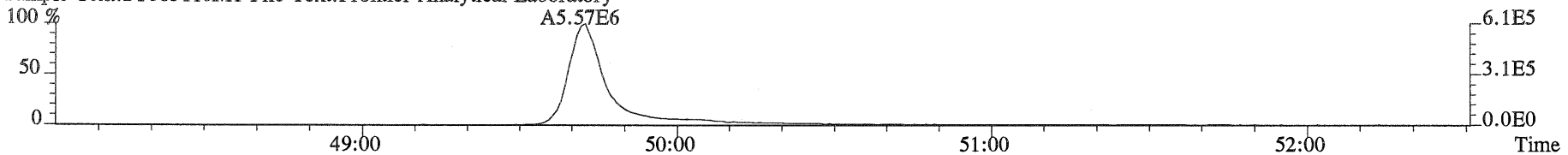
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



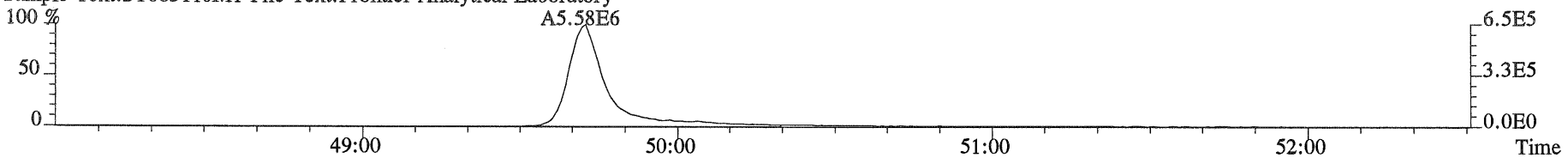
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



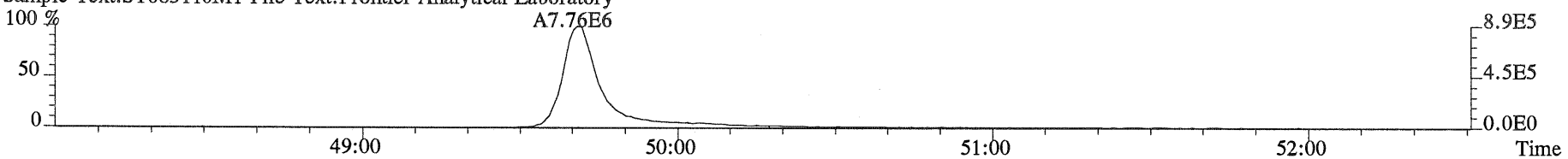
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



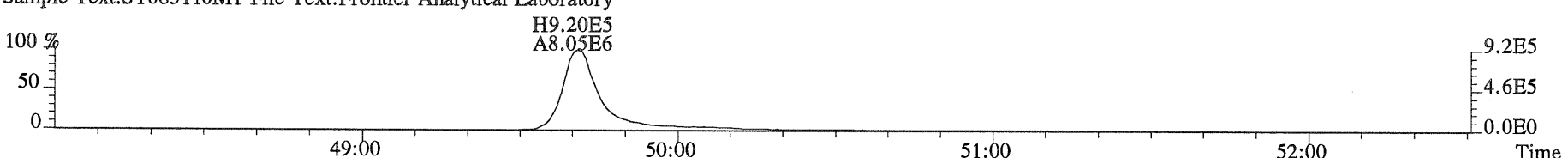
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



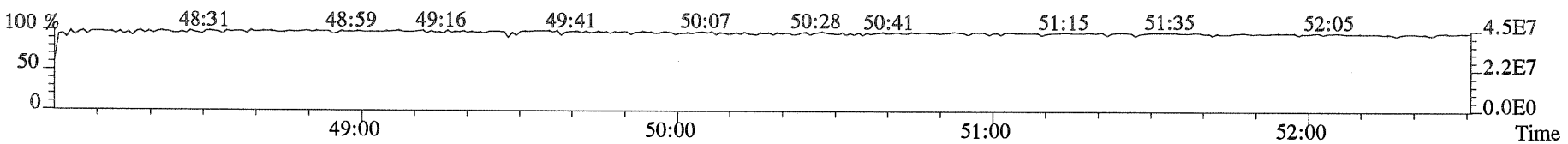
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



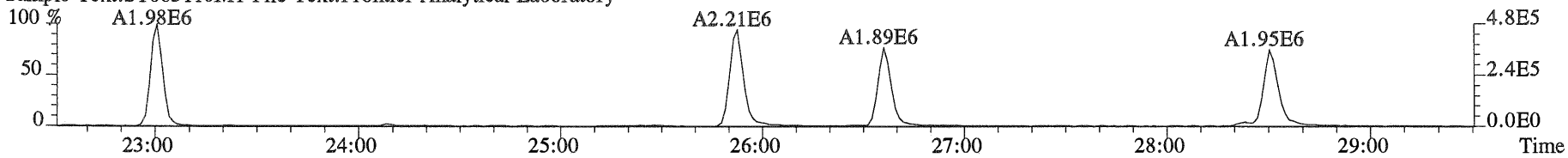
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



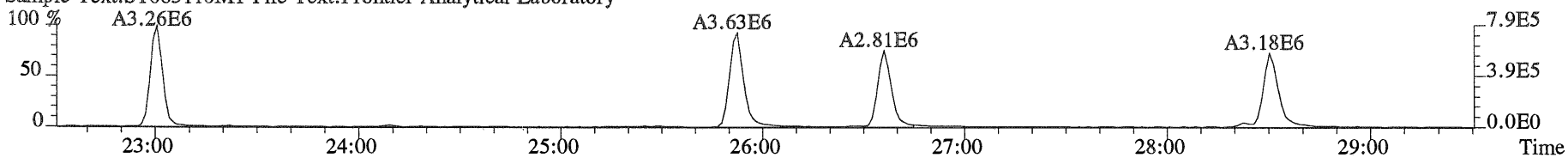
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



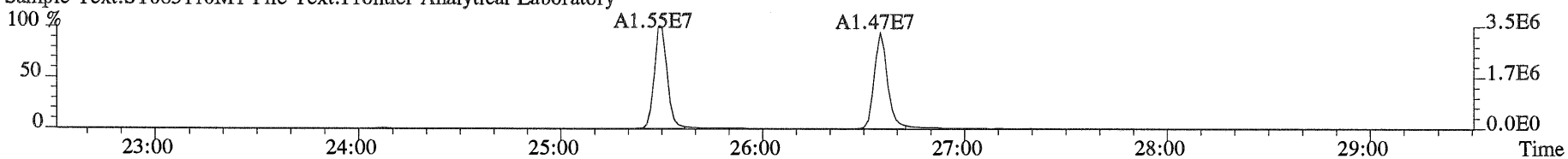
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



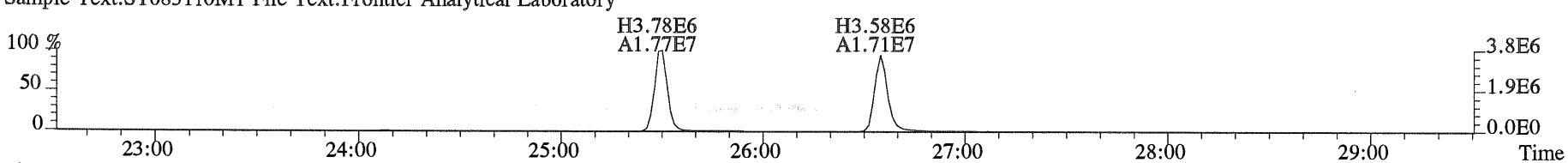
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



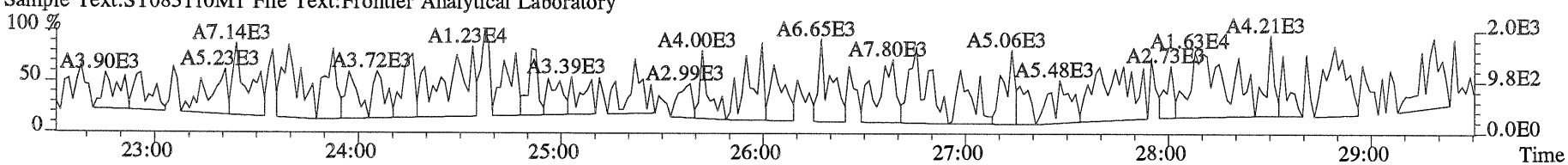
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



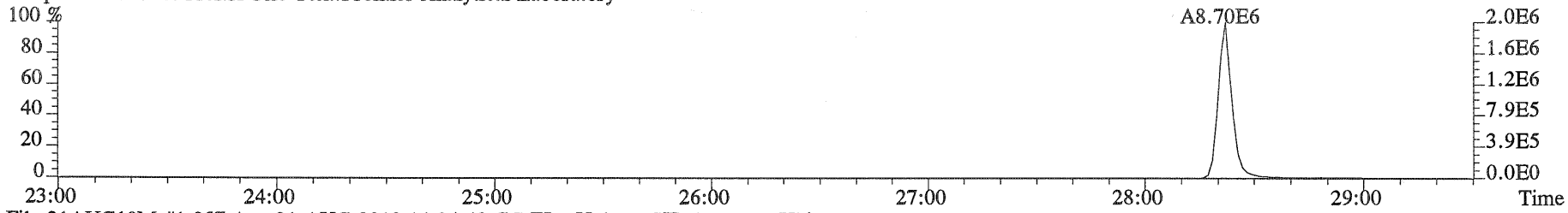
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



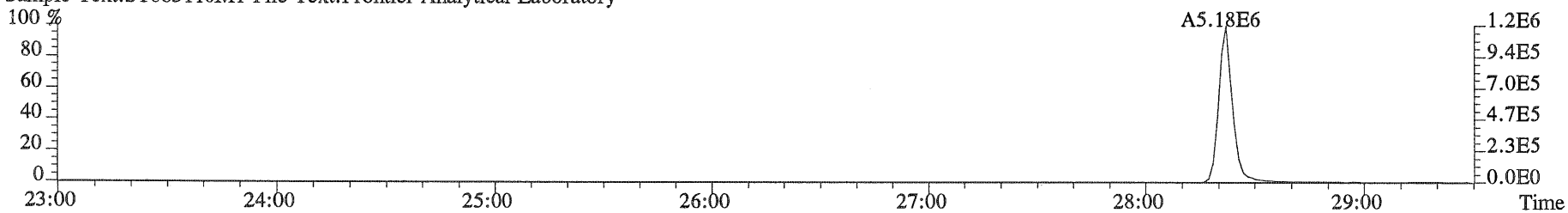
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



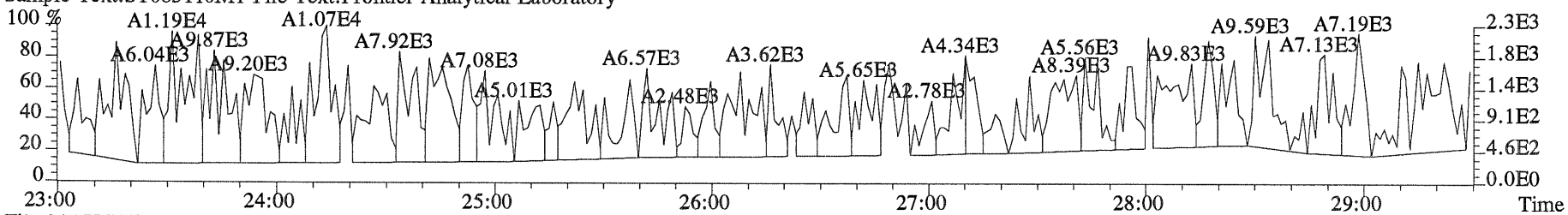
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



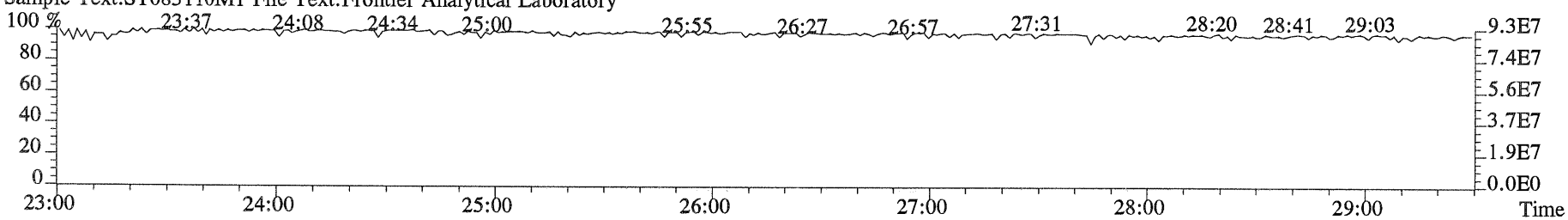
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



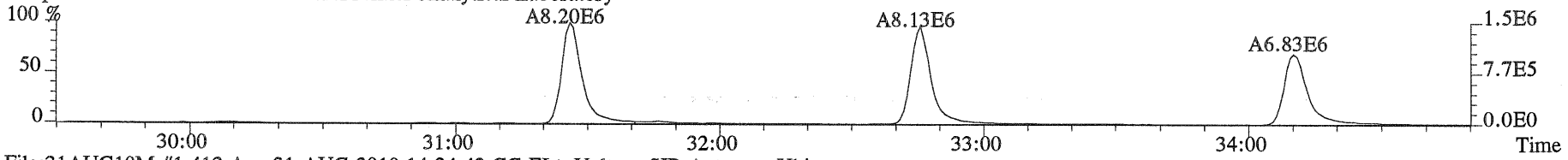
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



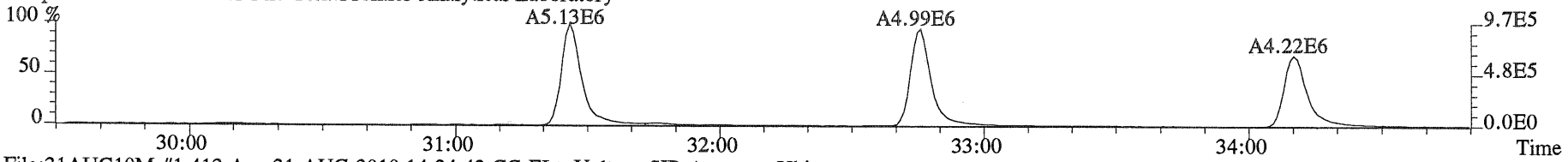
File:31AUG10M #1-357 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



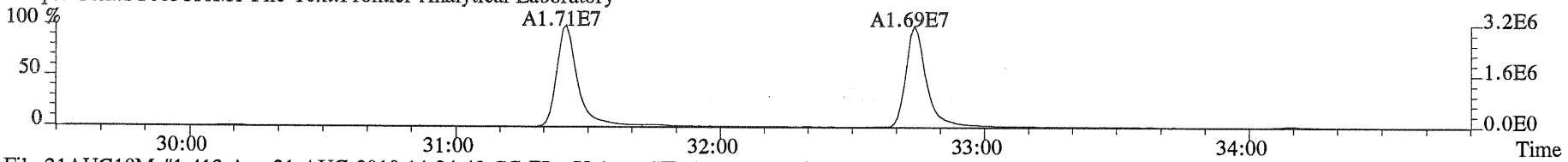
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



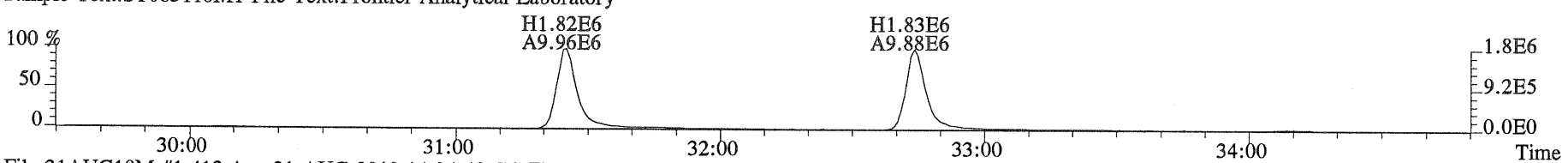
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



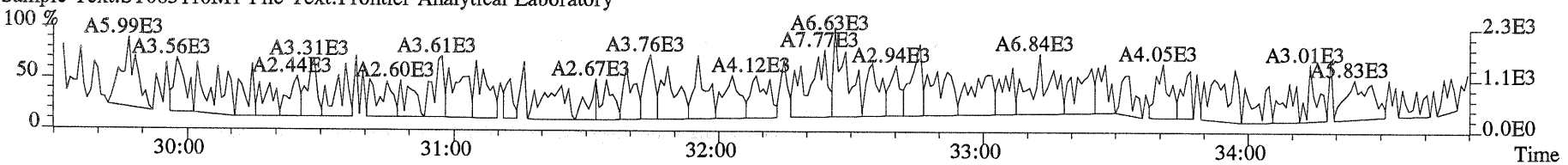
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



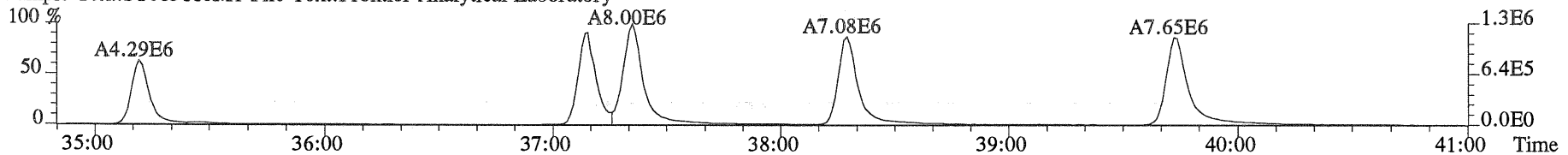
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



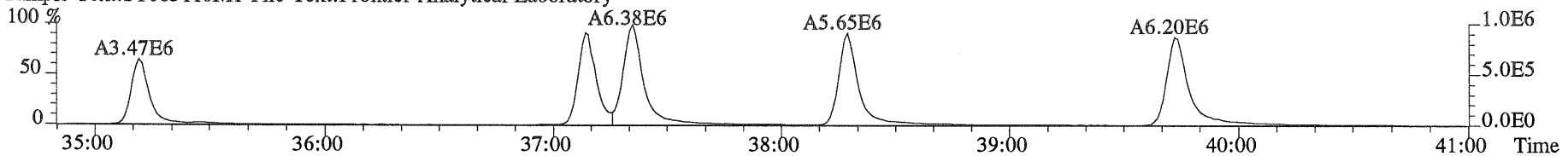
File:31AUG10M #1-412 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



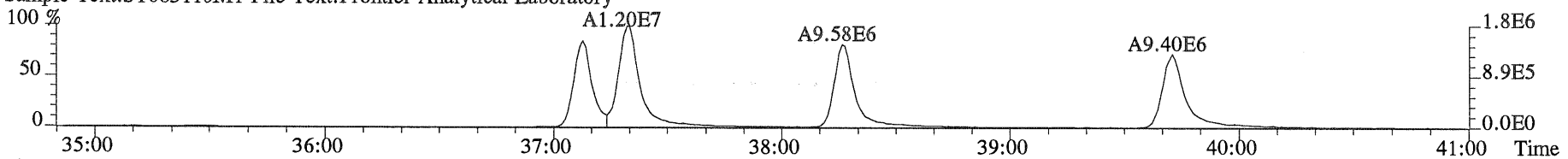
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



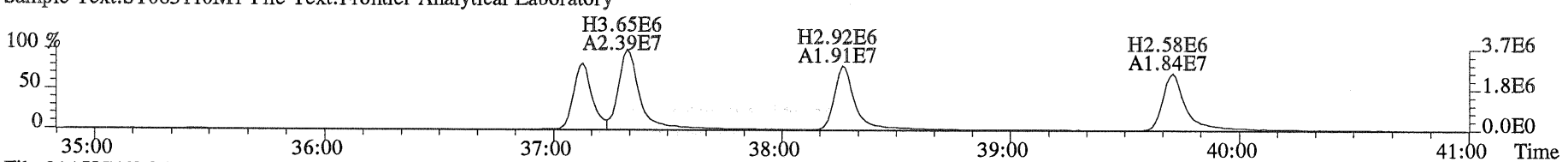
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



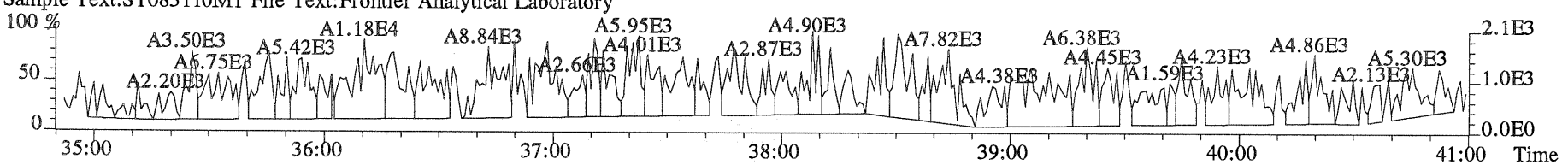
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



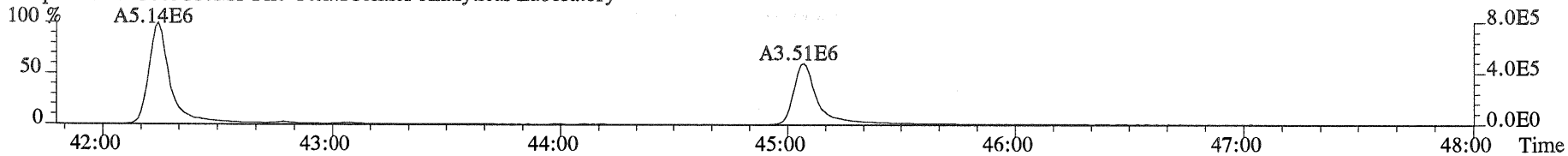
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



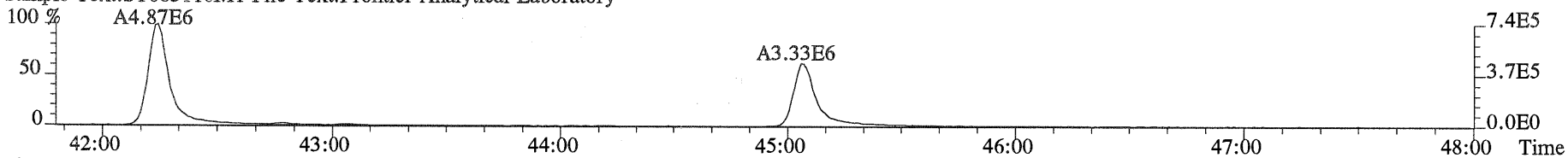
File:31AUG10M #1-476 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



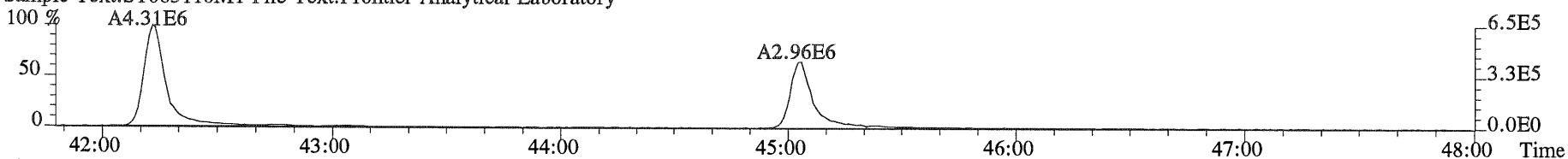
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



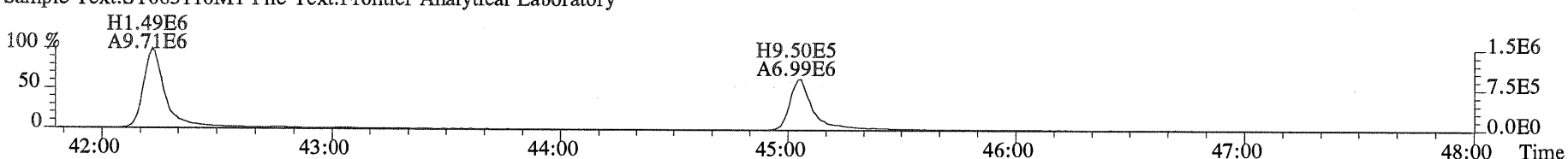
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



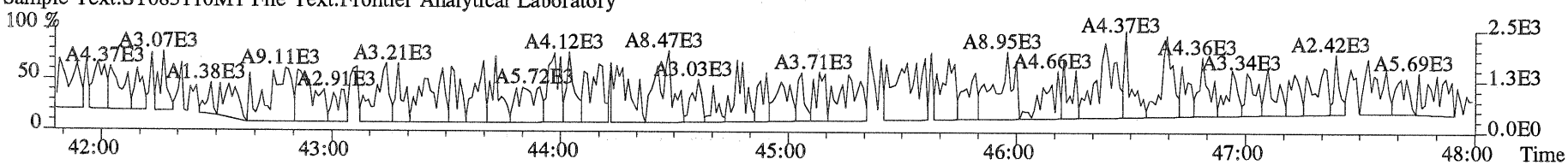
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



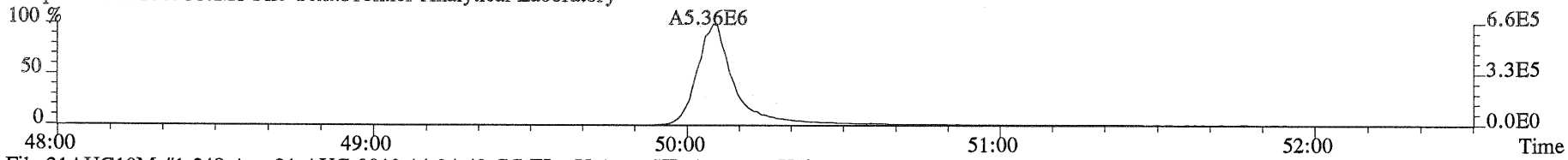
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



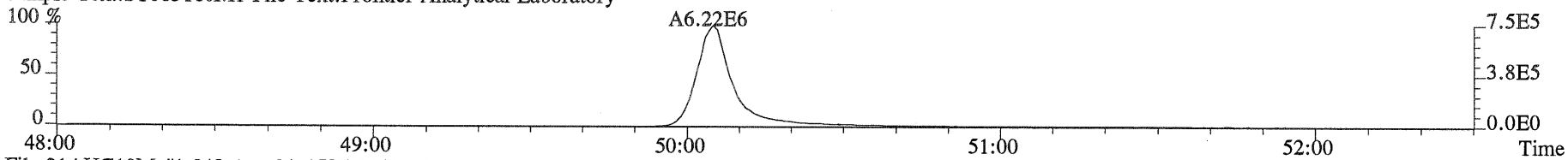
File:31AUG10M #1-541 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



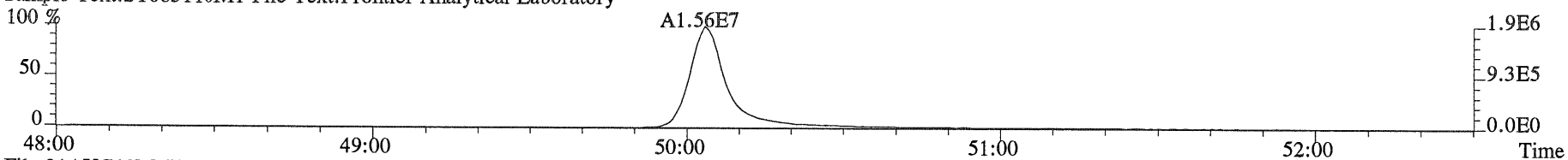
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



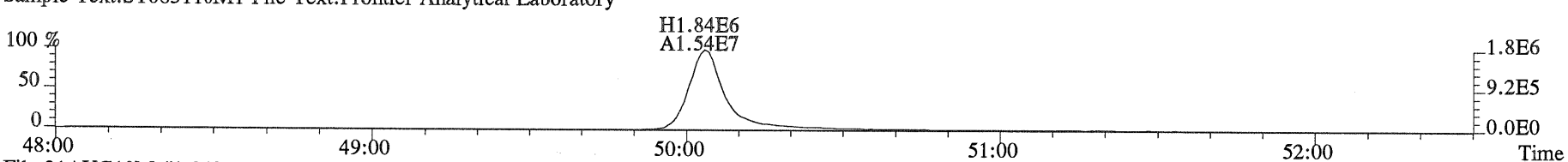
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



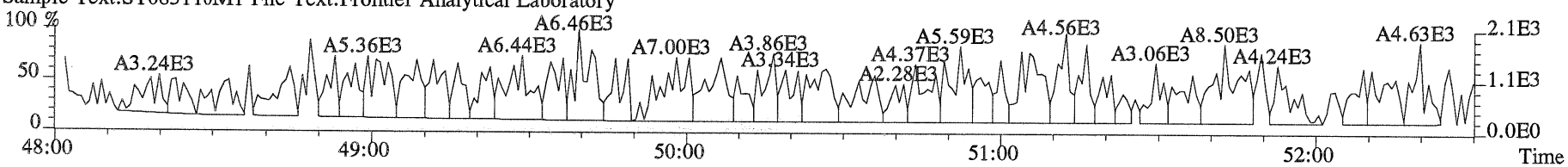
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory



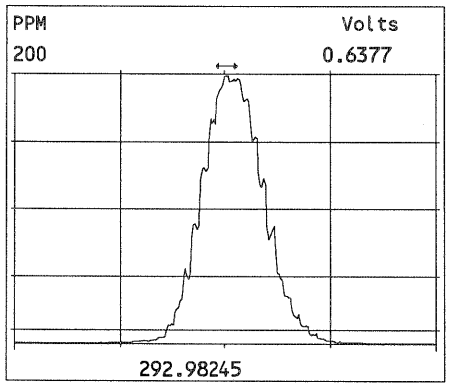
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory

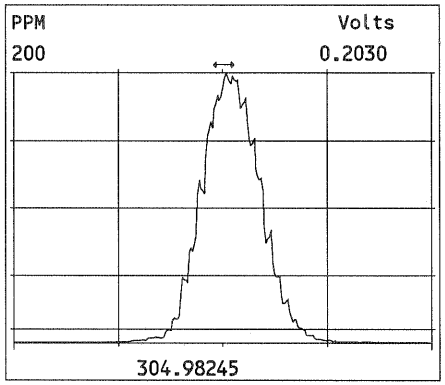


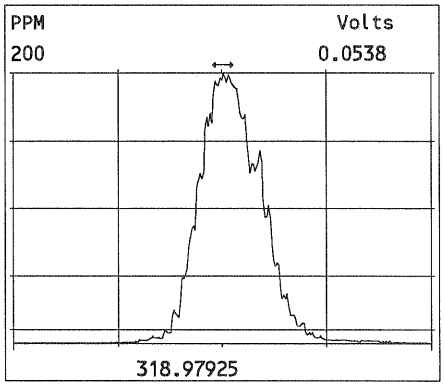
File:31AUG10M #1-348 Acq:31-AUG-2010 14:34:42 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M1 File Text:Frontier Analytical Laboratory

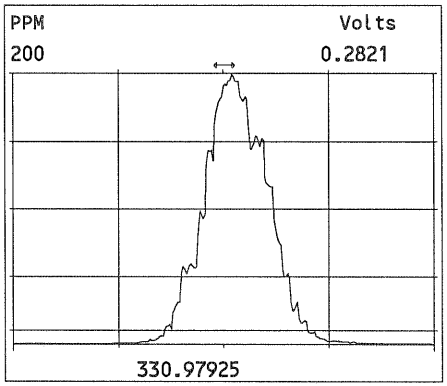


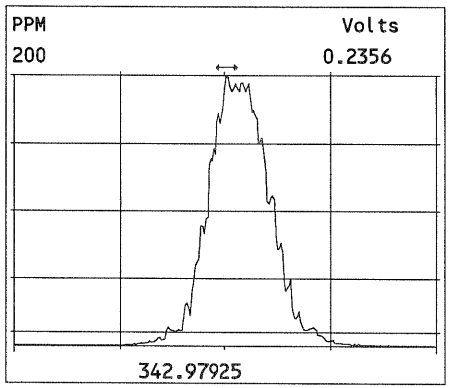
Peak Locate Examination: 1-SEP-2010:03:33 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

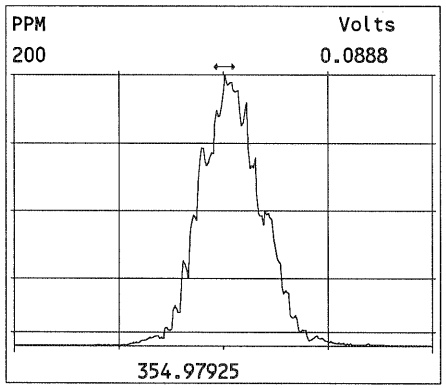


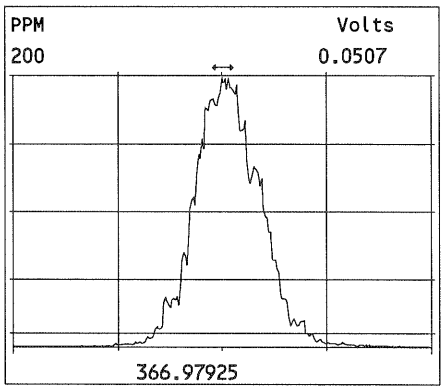


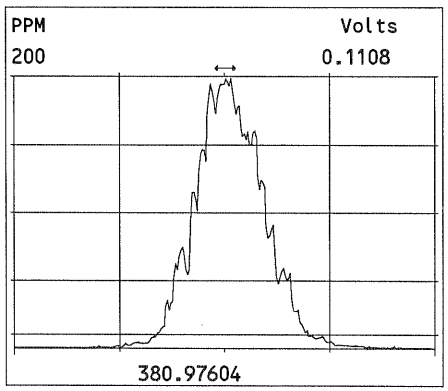


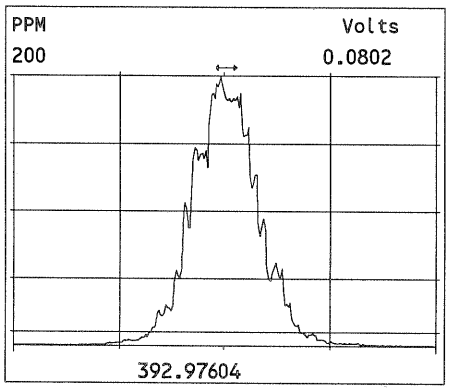


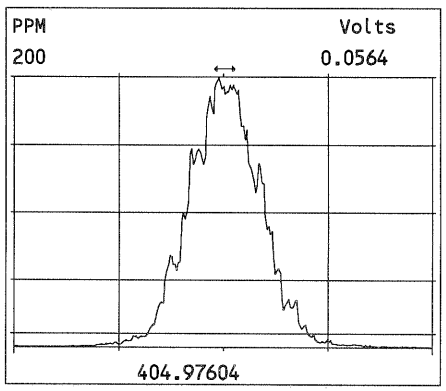


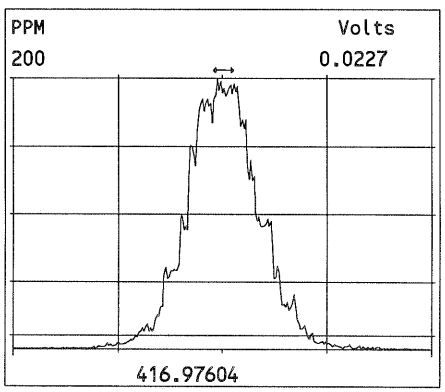




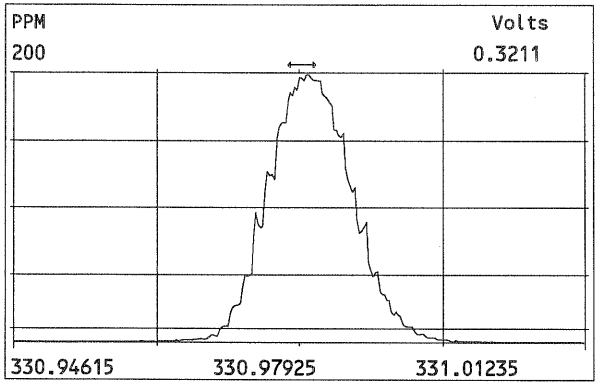


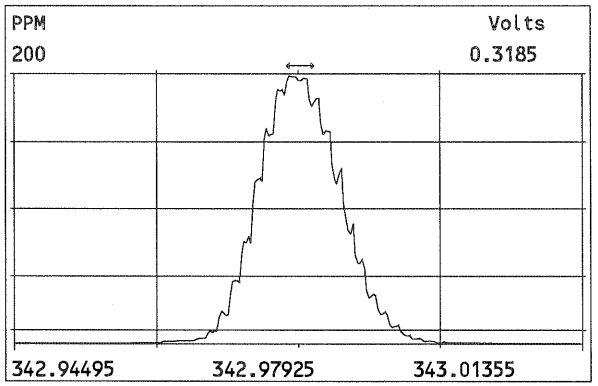


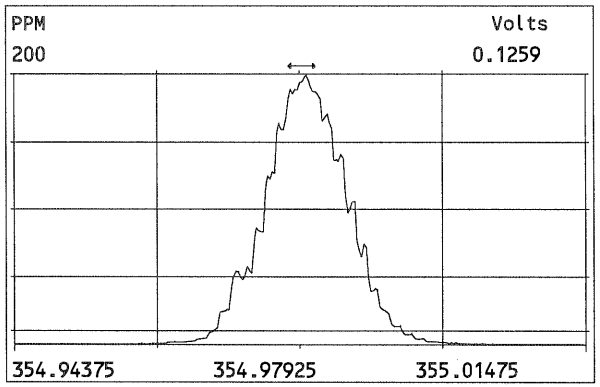


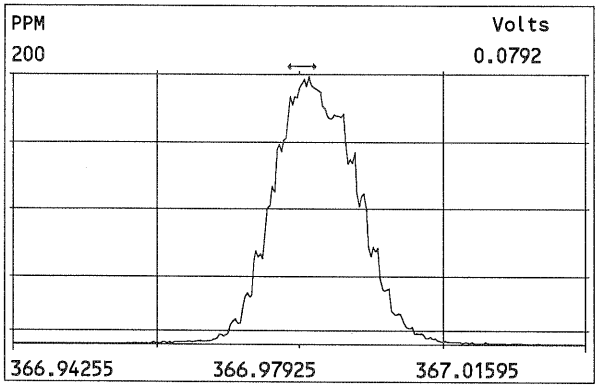


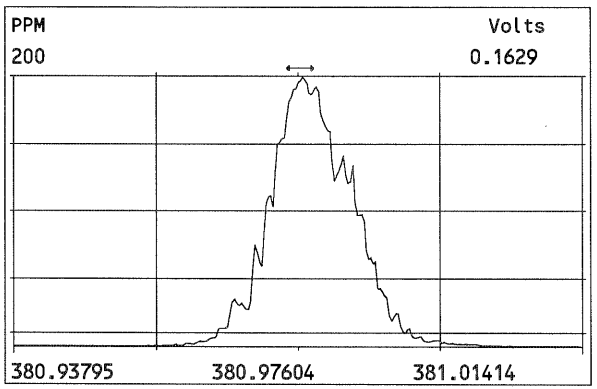
Peak Locate Examination: 1-SEP-2010:03:35 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

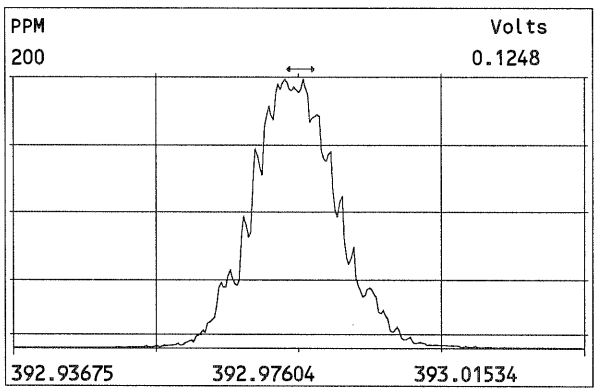


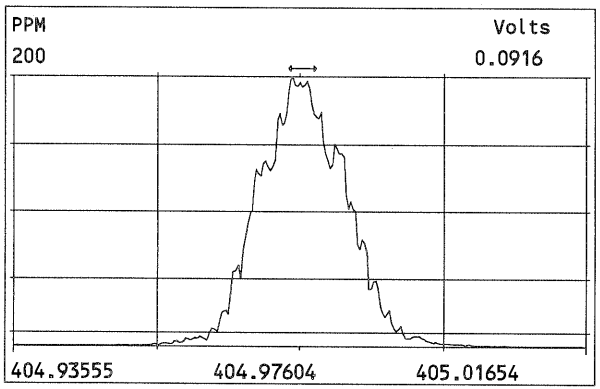


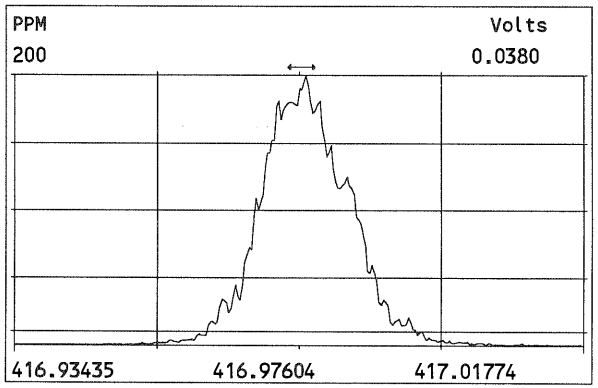




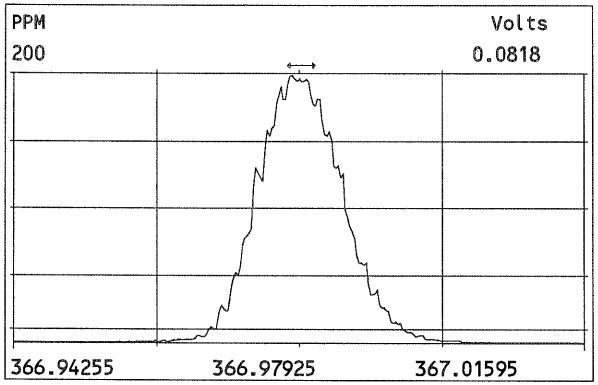


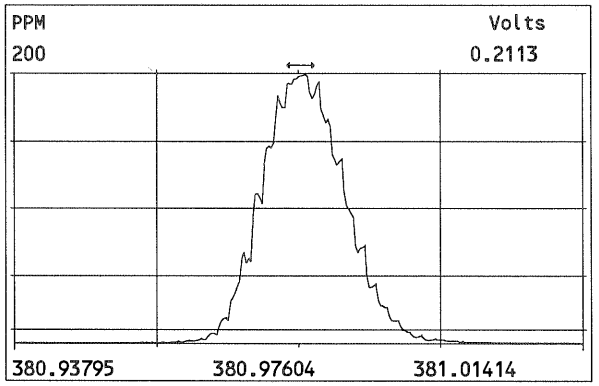


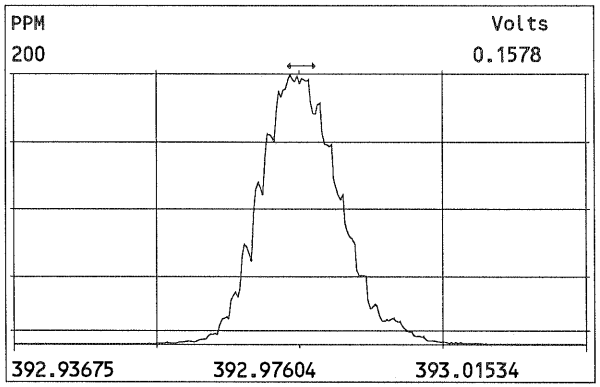


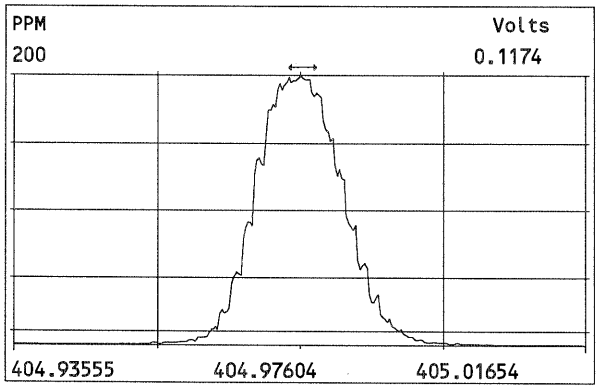


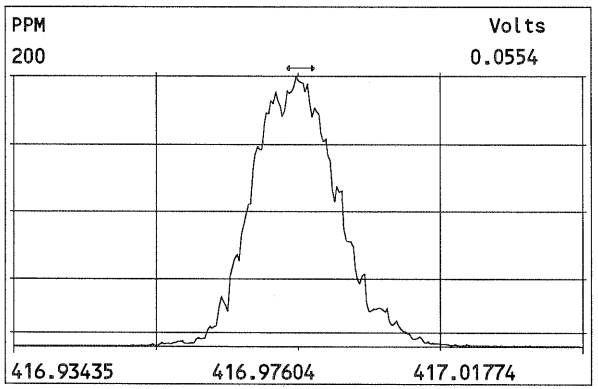
Peak Locate Examination: 1-SEP-2010:03:37 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

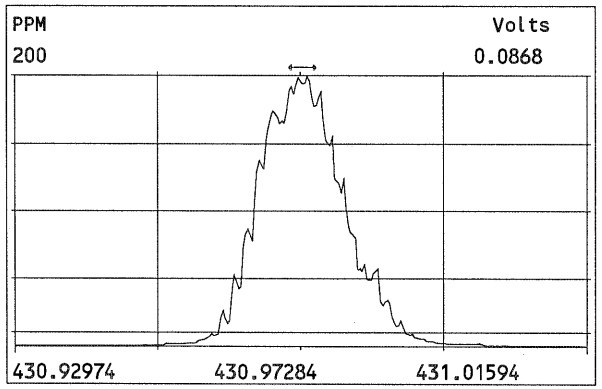


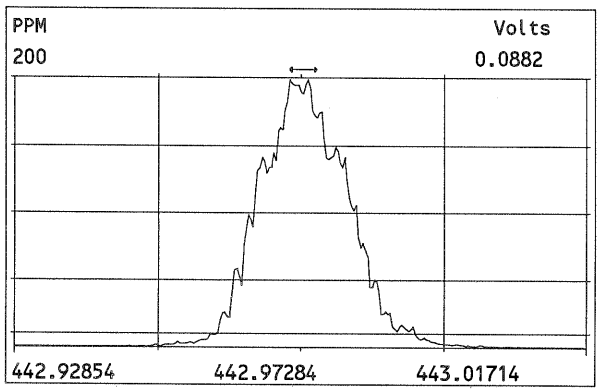


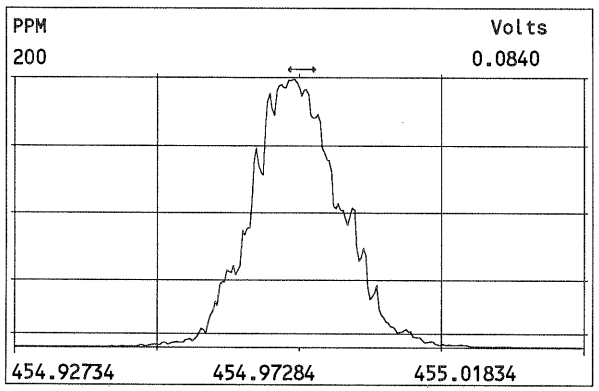




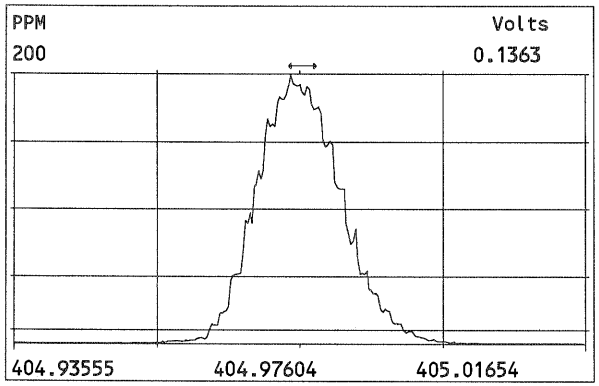


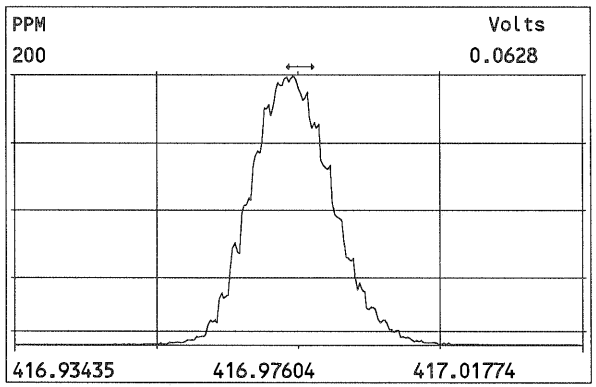


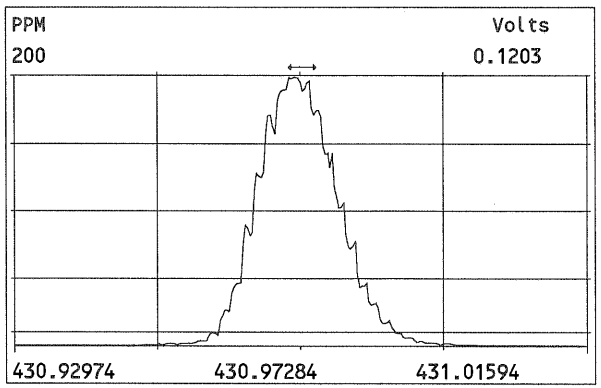


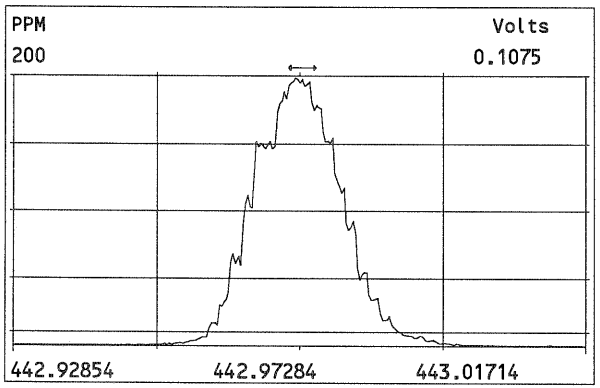


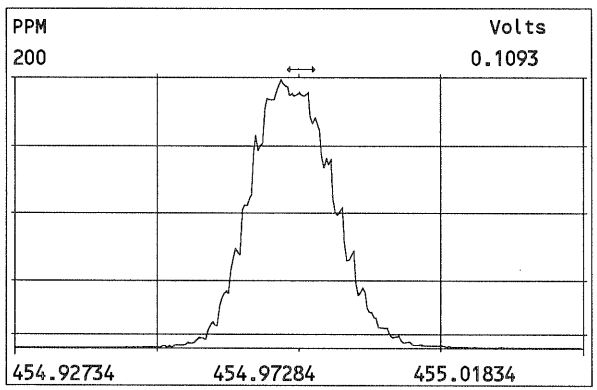
Peak Locate Examination: 1-SEP-2010:03:39 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

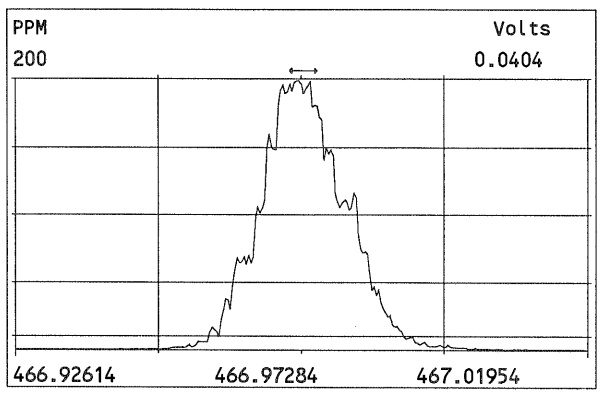


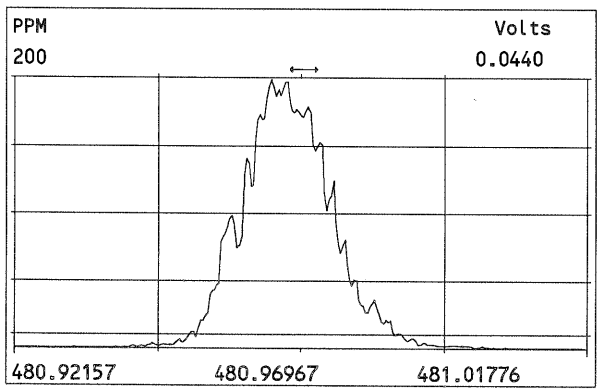




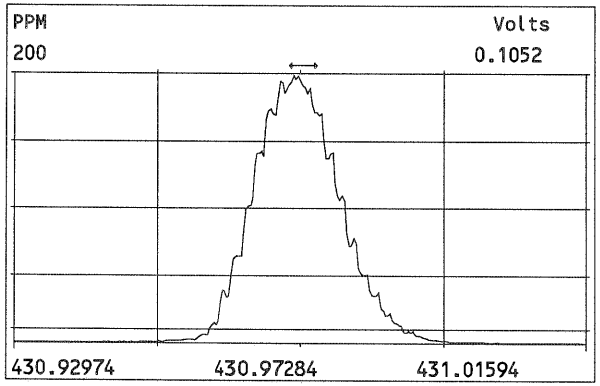


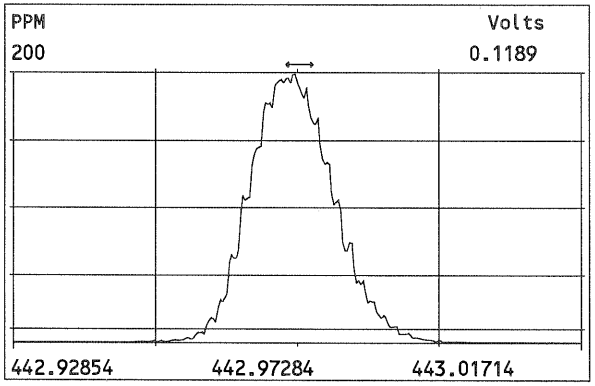


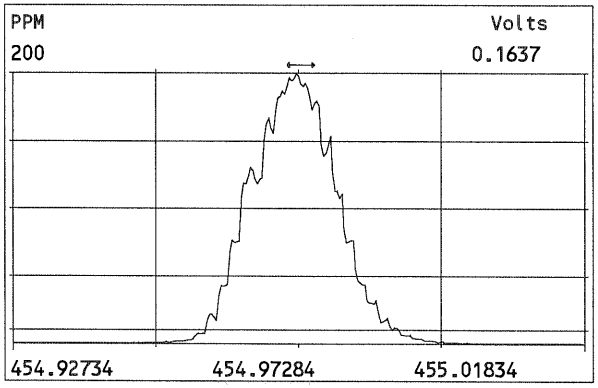


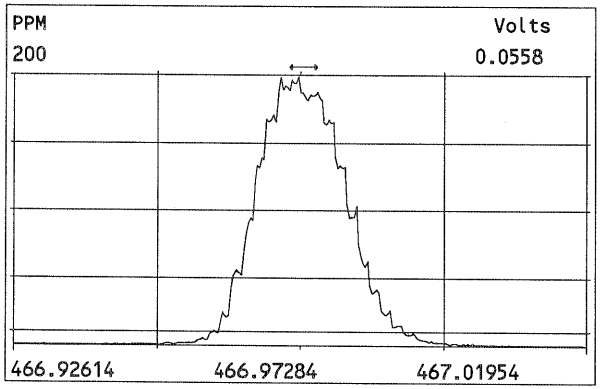


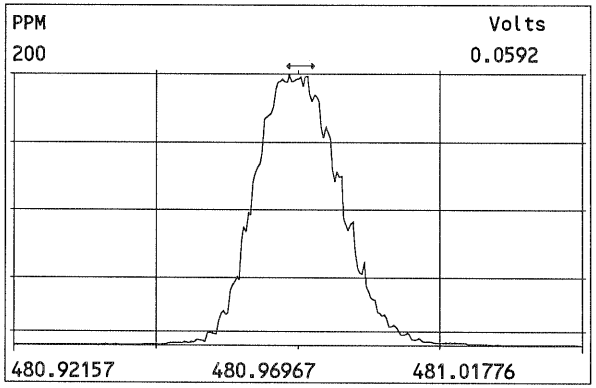
Peak Locate Examination: 1-SEP-2010:03:41 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

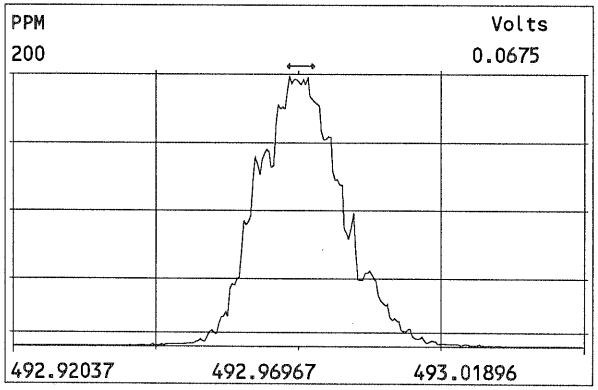


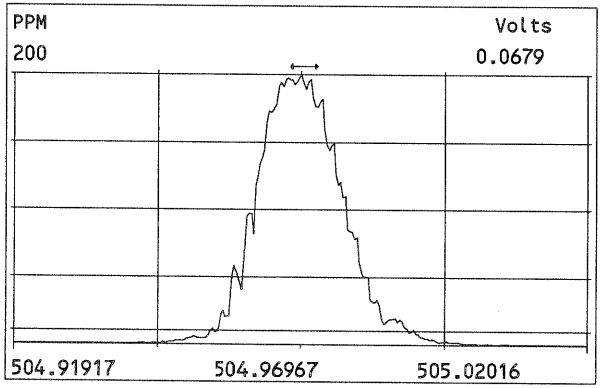


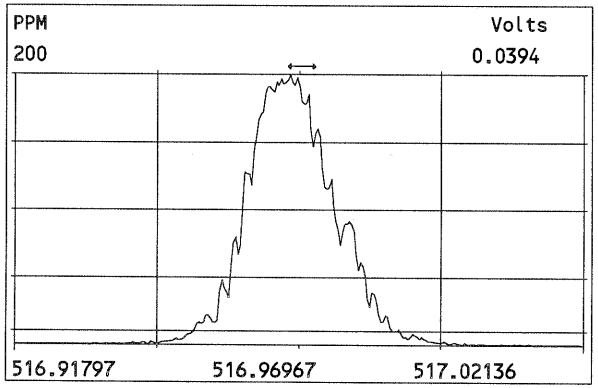












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 8/23/10

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 31AUG10M Sam:14 Analysis Date: 1-SEP-10 02:35:57

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	10.3	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	51.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.35	1.05-1.43	y	49.7	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.35	1.05-1.43	y	49.4	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.36	1.05-1.43	y	52.0	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.93	0.88-1.20	y	49.0	43.0 - 58.0
OCDD	M+2/M+4	0.97	0.76-1.02	y	97.9	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.65	0.65-0.89	y	9.90	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	52.2	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	51.4	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.8	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.6	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	48.2	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.9	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.06	0.88-1.20	y	48.9	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	0.88-1.20	y	44.2	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	96.4	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: _____ Date: 9/1/10

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: 31AUG10M Sam:14 Analysis Date: 1-SEP-10 02:35:57

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.87	0.65-0.89	y	93.5	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.76	1.32-1.78	y	100	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	98.0	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	99.6	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.91	0.88-1.20	y	74.5	72.0 - 138
13C-OCDD	M+2/M+4	0.95	0.76-1.02	y	150	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.87	0.65-0.89	y	99.0	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.73	1.32-1.78	y	98.6	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.76	1.32-1.78	y	96.1	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	111	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	113	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	110	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	109	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	82.3	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37-0.51	y	80.3	77.0 - 129
13C-OCDF	M+2/M+4	1.02	0.76-1.02	y	149	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.10	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 9/1/10

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: 31AUG10M Sam:14 Analysis Date: 1-SEP-10 Time: 02:35:57

DB-5 IS Data Filename: 31AUG10M Sam:14 Analysis Date: 1-SEP-10 Time: 02:35:57

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)	24:23	1,3,6,8-TCDF (F)	23:02
1,2,8,9-TCDD (L)	28:19	1,2,8,9-TCDF (L)	28:32
1,2,4,7,9-PeCDD (F)	30:13	1,3,4,6,8-PeCDF (F)	28:23
1,2,3,8,9-PeCDD (L)	33:46	1,2,3,8,9-PeCDF (L)	34:12
1,2,4,6,7,9-HxCDD (F)	36:07	1,2,3,4,6,8-HxCDF (F)	35:14
1,2,3,7,8,9-HxCDD (L)	39:11	1,2,3,7,8,9-HxCDF (L)	39:46
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)	44:11	1,2,3,4,7,8,9-HpCDF (L)	45:07

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

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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

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

Analyst:  Date: 9/1/10

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: 1-SEP-10 02:35:57 CS3 or VER Data Filename: 31AUG10M Sam:14

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	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: 9/1/10

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: 1-SEP-10 02:35:57 CS3 or VER Data Filename: 31AUG10M Sam:14

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	1.001	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	1.000	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		1.127	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		1.270	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: 9/1/10

FAL ID: ST083110M2 Filename: 31AUG10M Sam:14 Acquired: 1-SEP-10 02:35:57 ICal: PCDDFAL3-8-23-10
Client ID: 1613 CS3 100511J ConCal: ST083110M1 EndCal: ST083110M2
Results: 6311 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 101
WHO 1998 Tox: 127 WHO 2005 Tox: 115

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.08e+06	0.75 y	27:23	1.11	10.3		2.50	-	-	*
1,2,3,7,8-PeCDD	9.10e+06	1.56 y	33:12	1.10	51.3		2.50	-	-	*
1,2,3,4,7,8-HxCDD	7.58e+06	1.35 y	38:35	1.37	49.7		2.50	-	-	*
1,2,3,6,7,8-HxCDD	7.20e+06	1.35 y	38:44	1.37	49.4		2.50	-	-	*
1,2,3,7,8,9-HxCDD	7.69e+06	1.36 y	39:11	1.36	52.0		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	4.78e+06	0.93 y	44:11	1.45	49.0		2.50	-	-	*
OCDD	6.05e+06	0.97 y	49:46	1.43	97.9		2.50	-	-	*
2,3,7,8-TCDF	4.62e+06	0.65 y	26:37	1.50	9.90		2.50	-	-	*
1,2,3,7,8-PeCDF	1.28e+07	1.62 y	31:28	0.94	52.2		2.50	-	-	*
2,3,4,7,8-PeCDF	1.19e+07	1.61 y	32:47	0.94	51.4		2.50	-	-	*
1,2,3,4,7,8-HxCDF	9.62e+06	1.23 y	37:10	0.93	47.8		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.18e+07	1.23 y	37:23	0.82	47.6		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.03e+07	1.23 y	38:19	0.92	48.2		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.11e+07	1.27 y	39:46	1.00	47.9		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	6.55e+06	1.06 y	42:17	1.39	48.9		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	4.08e+06	1.07 y	45:07	1.36	44.2		2.50	-	-	*
OCDF	6.44e+06	0.90 y	50:08	0.79	96.4		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	1.83e+07	0.87 y	27:21	1.02	93.5					93.5
13C-1,2,3,7,8-PeCDD	1.61e+07	1.76 y	33:11	0.84	100					100
13C-1,2,3,4,7,8-HxCDD	1.11e+07	1.24 y	38:34	1.07	98.0					98.0
13C-1,2,3,6,7,8-HxCDD	1.06e+07	1.25 y	38:44	1.01	99.6					99.6
13C-1,2,3,4,6,7,8-HpCDD	6.72e+06	0.91 y	44:09	0.86	74.5					74.5
13C-OCDD	8.62e+06	0.95 y	49:44	0.55	150					74.8
13C-2,3,7,8-TCDF	3.11e+07	0.87 y	26:36	0.99	99.0					99.0
13C-1,2,3,7,8-PeCDF	2.61e+07	1.73 y	31:27	0.84	98.6					98.6
13C-2,3,4,7,8-PeCDF	2.46e+07	1.76 y	32:46	0.81	96.1					96.1
13C-1,2,3,4,7,8-HxCDF	2.17e+07	0.49 y	37:09	1.85	111					111
13C-1,2,3,6,7,8-HxCDF	3.02e+07	0.49 y	37:21	2.54	113					113
13C-2,3,4,6,7,8-HxCDF	2.33e+07	0.50 y	38:17	2.01	110					110
13C-1,2,3,7,8,9-HxCDF	2.33e+07	0.51 y	39:44	2.03	109					109
13C-1,2,3,4,6,7,8-HpCDF	9.63e+06	0.45 y	42:15	1.11	82.3					82.3
13C-1,2,3,4,7,8,9-HpCDF	6.81e+06	0.47 y	45:05	0.80	80.3					80.3
13C-OCDF	1.70e+07	1.02 y	50:07	1.08	149					74.5
37Cl-2,3,7,8-TCDD	1.19e+06		27:22	0.69	9.10					91.0
13C-1,2,3,4-TCDD	1.91e+07	0.86 y	26:47	-	42.5					
13C-1,2,3,4-TCDF	3.16e+07	0.86 y	25:32	-	43.6					
13C-1,2,3,7,8,9-HxCDD	1.05e+07	1.20 y	39:10	-	38.2					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.08e+07		23:50	1.11	53.2	2.50	-	-	*		27
Total Penta-Dioxins	2.02e+07		30:13	1.10	114	2.50	-	-	*		14
Total Hexa-Dioxins	2.61e+07		36:07	1.37	175	2.50	-	-	*		24
Total Hepta-Dioxins	1.15e+07		41:17	1.45	117	2.50	-	-	*		44
Total Tetra-Furans	1.89e+07		23:02	1.50	40.5	2.50	-	-	*		13
1st Fn. Tot Penta-Furans	1.32e+07		28:23	0.94	55.5	2.50	-	-	*	PeCDF	3
Total Penta-Furans	3.59e+07		30:09	0.94	151	2.50	-	-	*	206	20
Total Hexa-Furans	5.03e+07		35:14	0.91	225	2.50	-	-	*		22
Total Hepta-Furans	1.13e+07		41:15	1.38	98.7	2.50	-	-	*		28

Analyst: _____ Date: 9/1/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:31AUG10M Instrument: FAL3 GC: DB5 Experiment:PCDD

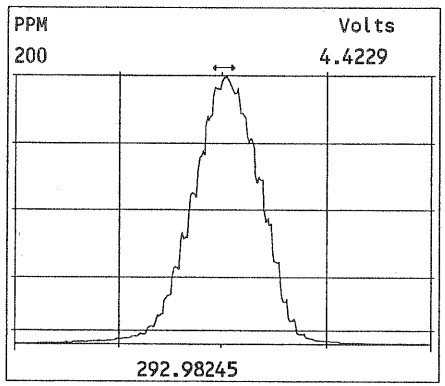
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
31AUG10M	1	ST083110M1	1613 CS3 100511J	31-AUG-10 14:34:42	ST083110M1	ST083110M2	BS
31AUG10M	2	2096-001-0001-OPR	OPR	31-AUG-10 15:31:30	ST083110M1	ST083110M2	BS
31AUG10M	3	2096-001-0001-MB	Method Blank	31-AUG-10 16:26:55	ST083110M1	ST083110M2	BS
31AUG10M	4	6311-001-0001-SA	MW-02-081110	31-AUG-10 17:22:18	ST083110M1	ST083110M2	BS
31AUG10M	5	6311-002-0001-SA	MW-03-081110	31-AUG-10 18:17:40	ST083110M1	ST083110M2	BS
31AUG10M	6	6311-003-0001-SA	MW-03-081110-D	31-AUG-10 19:13:02	ST083110M1	ST083110M2	BS
31AUG10M	7	6311-004-0001-SA	MW-04-081110	31-AUG-10 20:08:25	ST083110M1	ST083110M2	BS
31AUG10M	8	6311-005-0001-SA	MW-14-081110	31-AUG-10 21:03:48	ST083110M1	ST083110M2	BS
31AUG10M	9	6311-006-0001-SA	MW-12-081210	31-AUG-10 21:59:11	ST083110M1	ST083110M2	BS
31AUG10M	10	6311-007-0001-SA	MW-13-081210	31-AUG-10 22:54:35	ST083110M1	ST083110M2	BS
31AUG10M	11	6311-008-0001-SA	MW-10-081210	31-AUG-10 23:49:57	ST083110M1	ST083110M2	BS
31AUG10M	12	6311-009-0001-SA	MW-11-081210	1-SEP-10 00:45:15	ST083110M1	ST083110M2	BS
31AUG10M	13	SB083110M1	Solvent Blank	1-SEP-10 01:40:34	ST083110M1	ST083110M2	BS
31AUG10M	14	ST083110M2	1613 CS3 100511J	1-SEP-10 02:35:57	ST083110M1	ST083110M2	BS

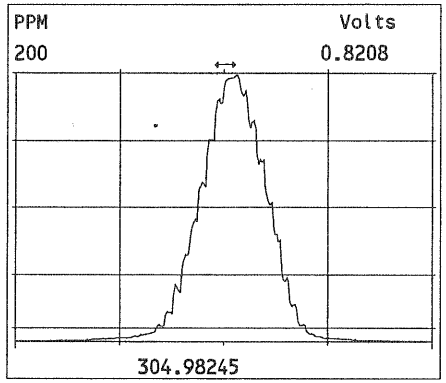
9/1/10

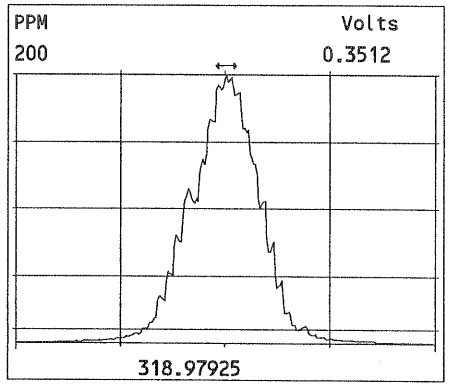
Data Backed Up:_____

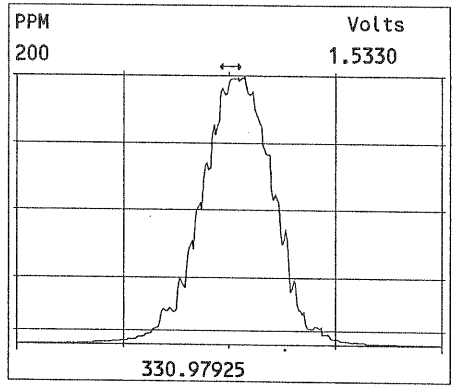
Date:_____

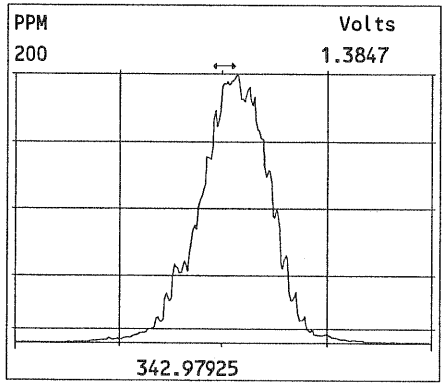
Peak Locate Examination:31-AUG-2010:14:32 File:31AUG10M
Experiment:PCDD Function:1 Reference:PFK

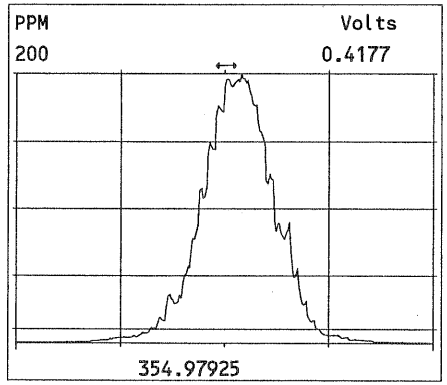


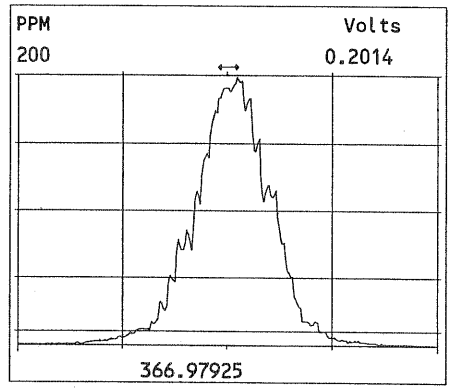


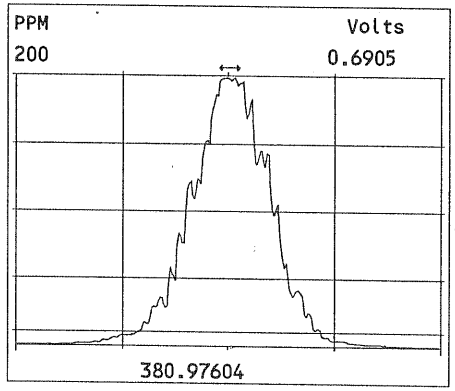


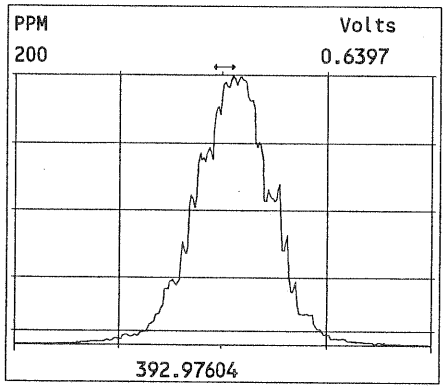


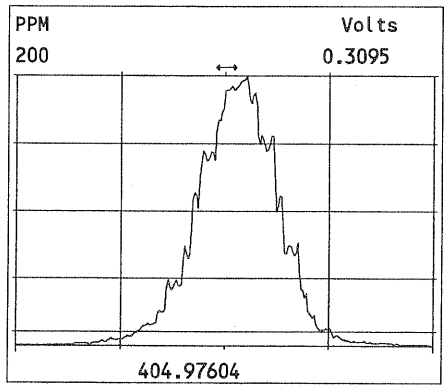


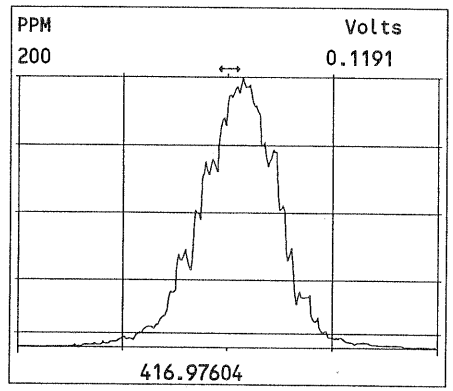




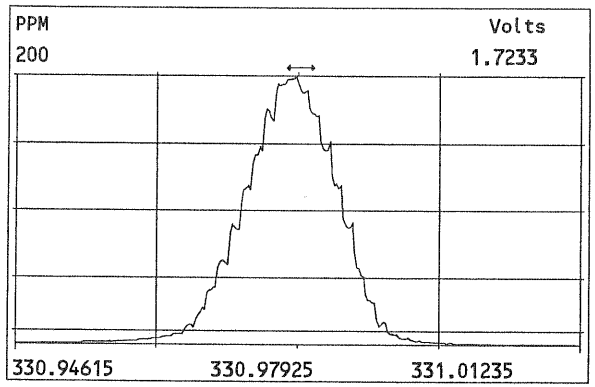


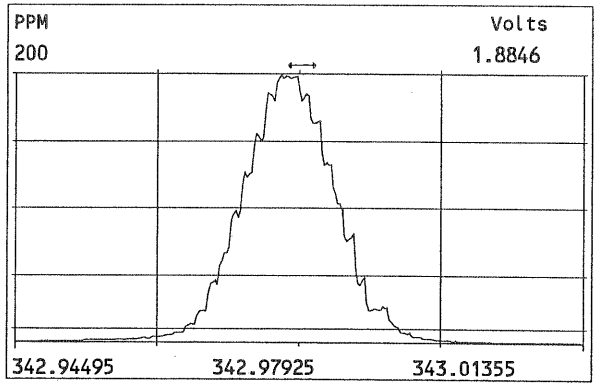


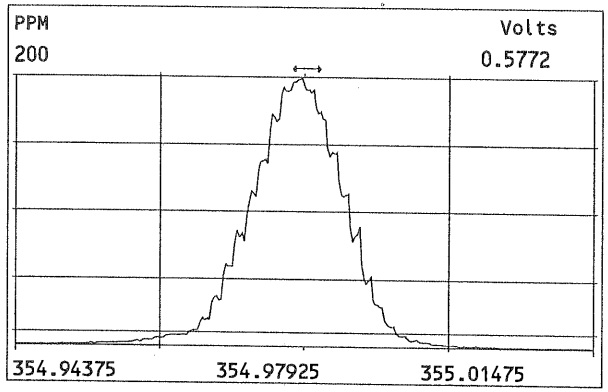


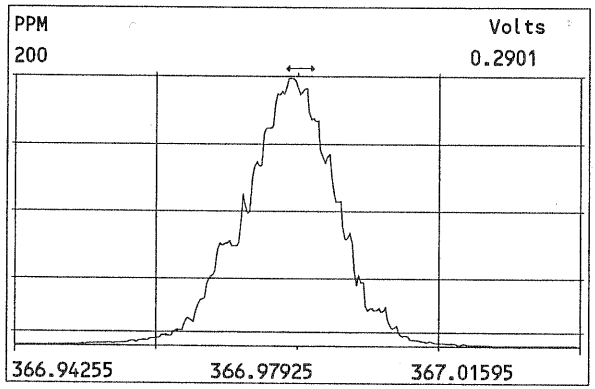


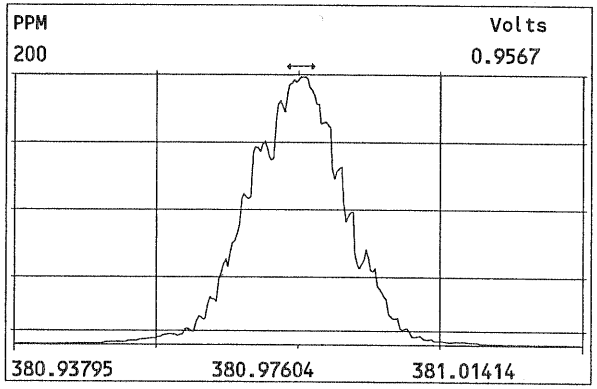
Peak Locate Examination:31-AUG-2010:14:33 File:31AUG10M
Experiment:PCDD Function:2 Reference:PFK

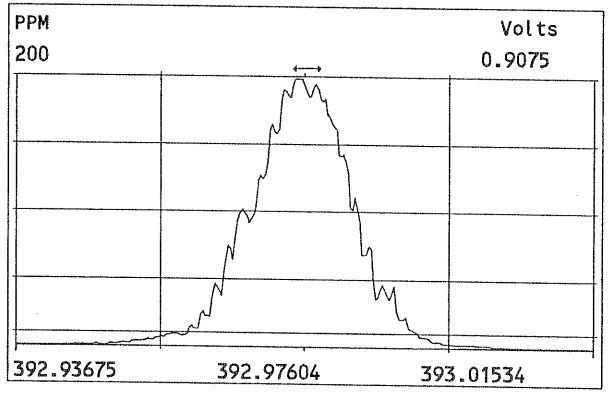


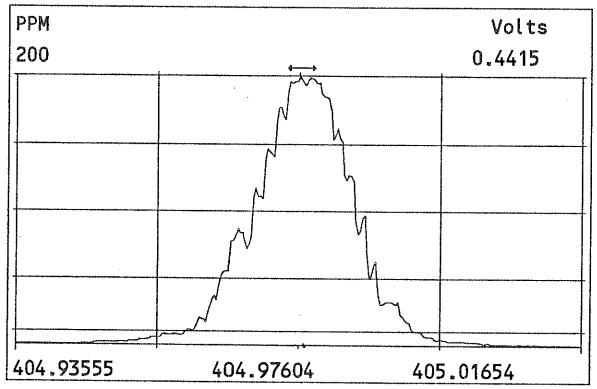


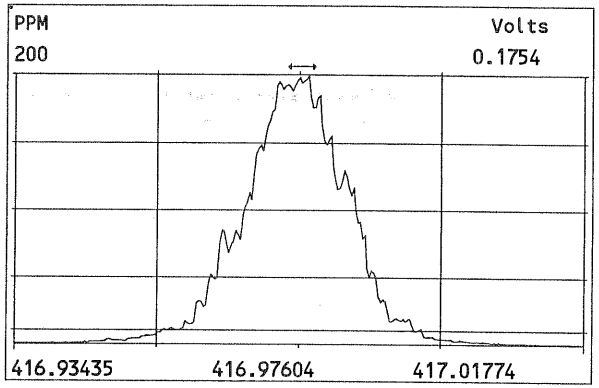




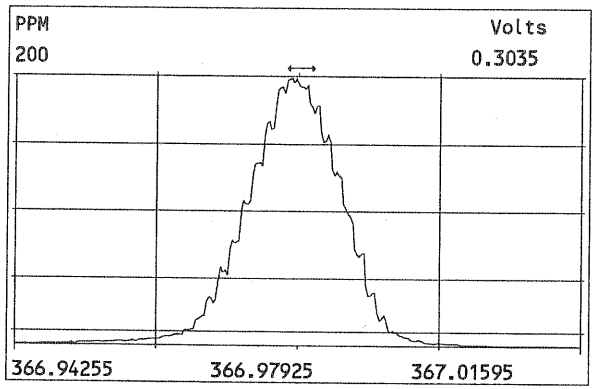


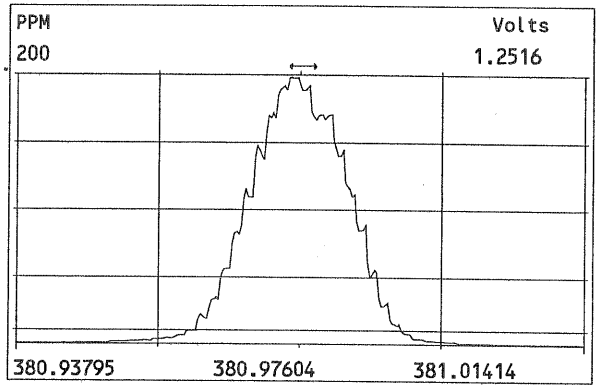


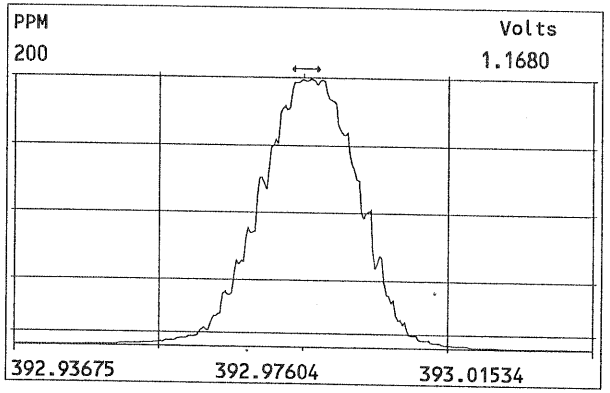


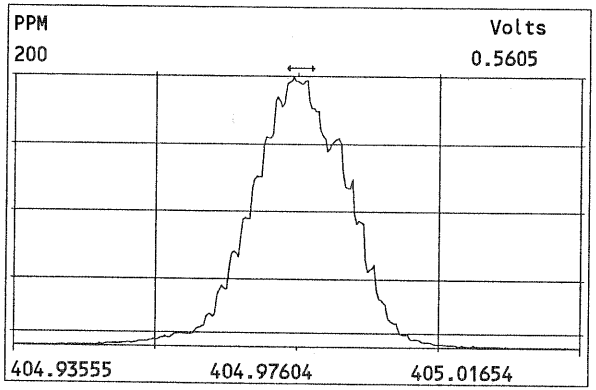


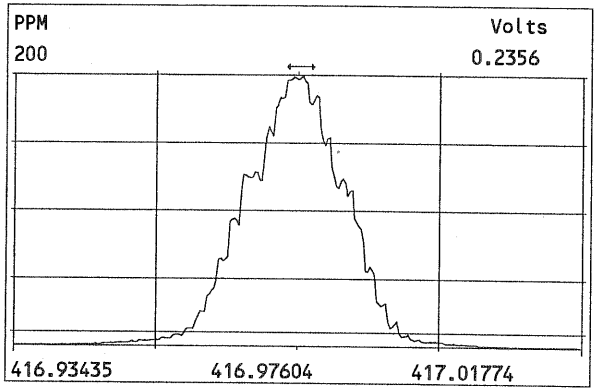
Peak Locate Examination:31-AUG-2010:14:33 File:31AUG10M
Experiment:PCDD Function:3 Reference:PFK

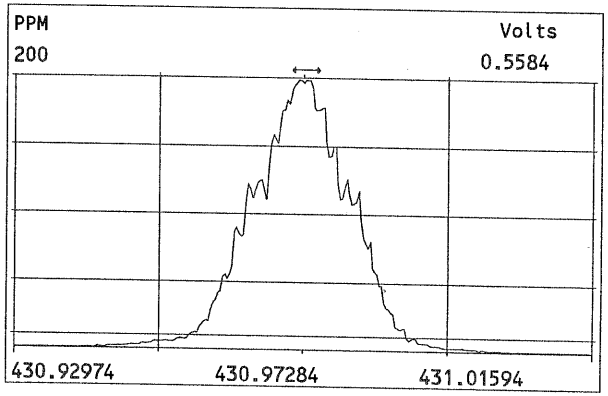


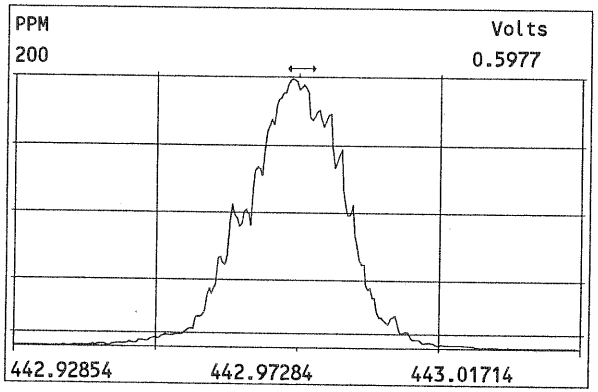


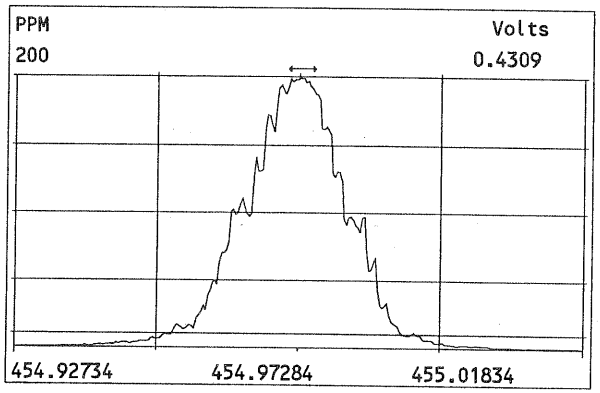






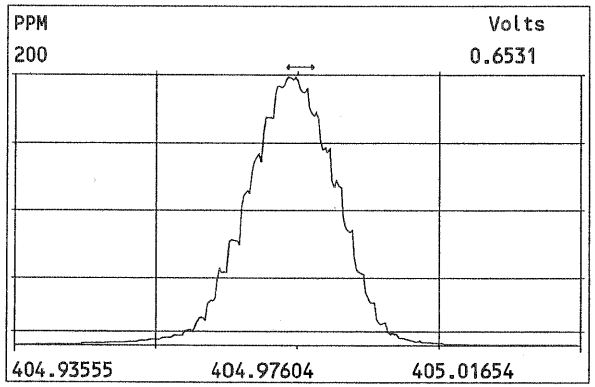


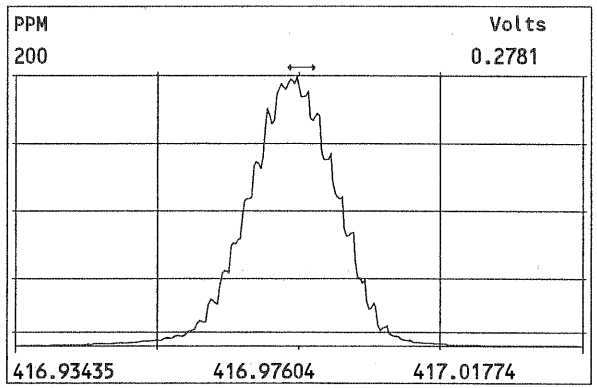


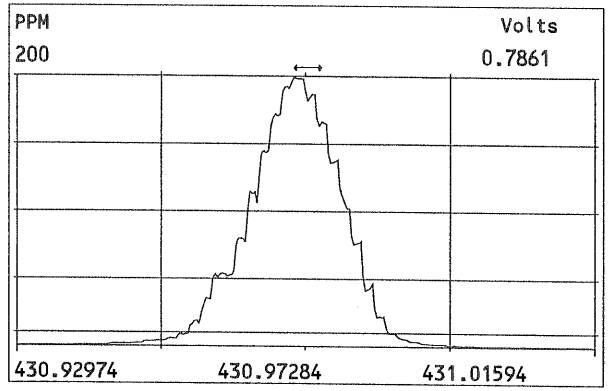


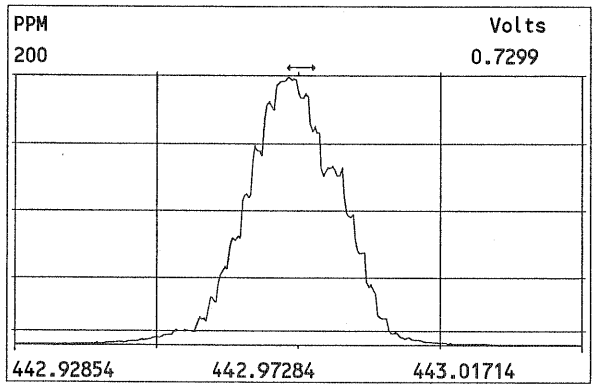
Peak Locate Examination:31-AUG-2010:14:33 File:31AUG10M

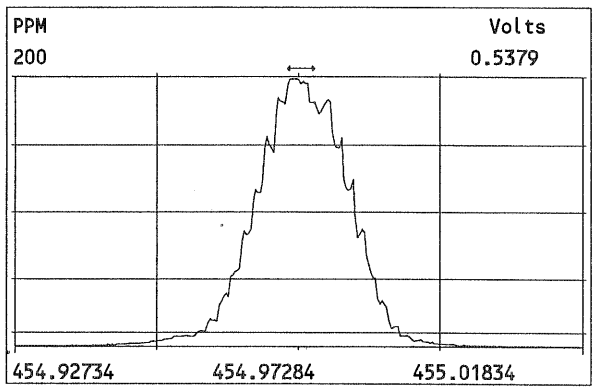
Experiment:PCDD Function:4 Reference:PFK

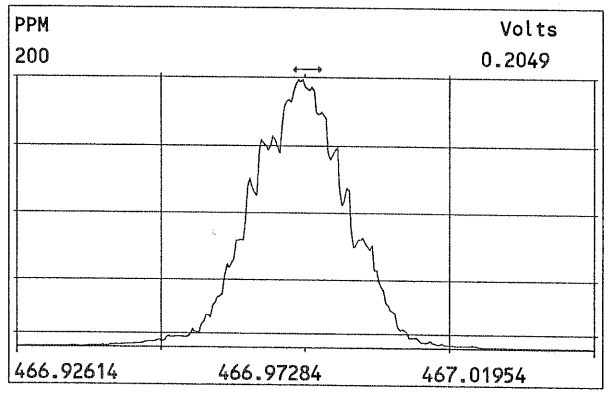


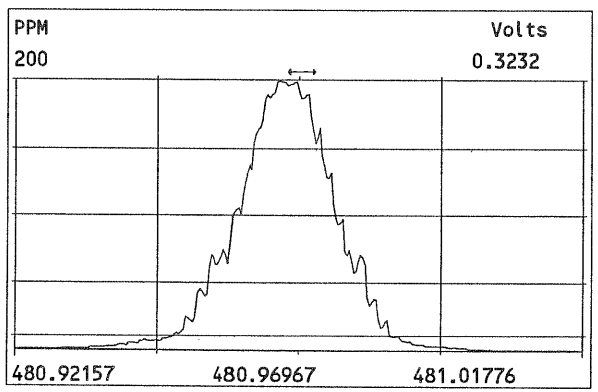




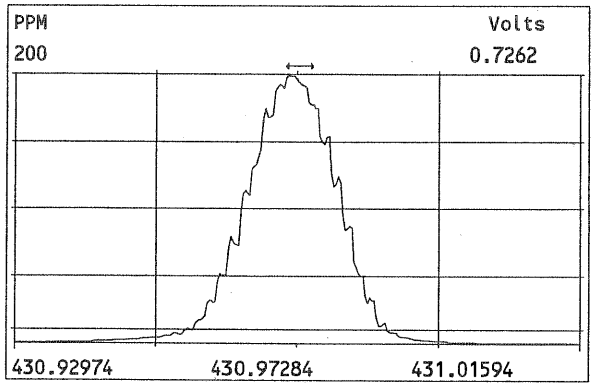


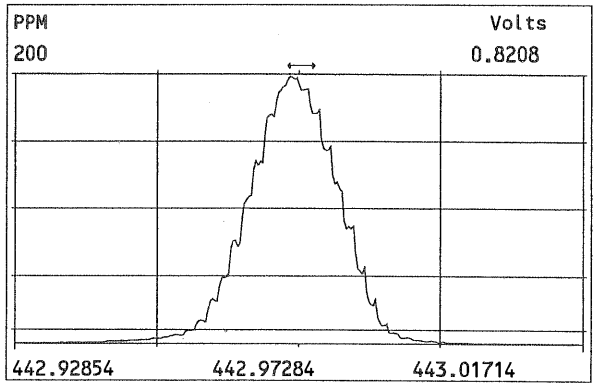


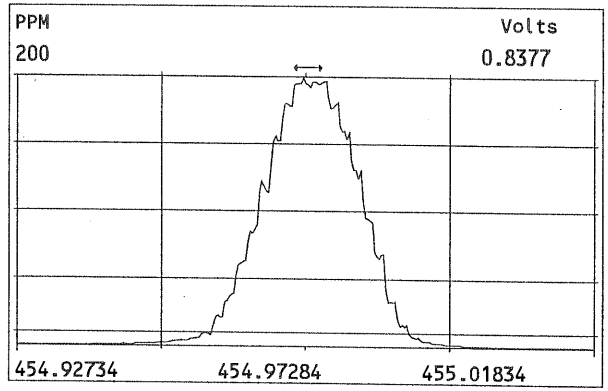


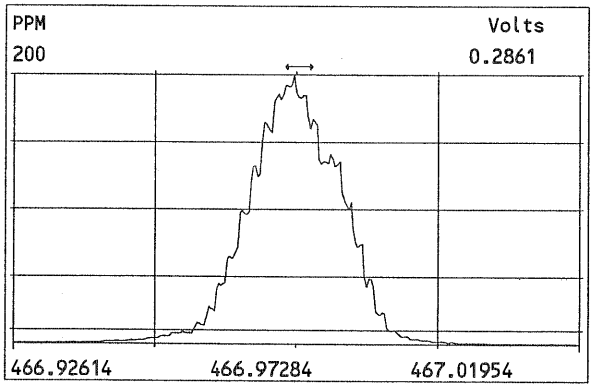


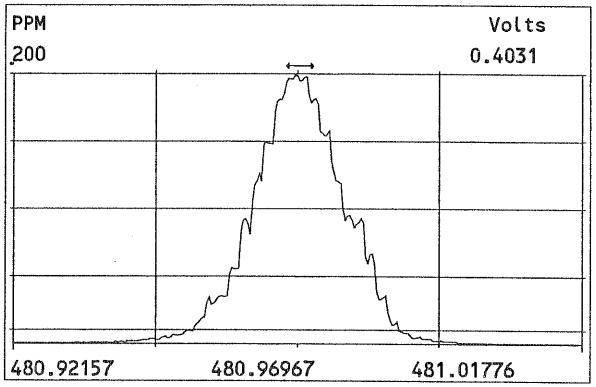
Peak Locate Examination:31-AUG-2010:14:34 File:31AUG10M
Experiment:PCDD Function:5 Reference:PFK

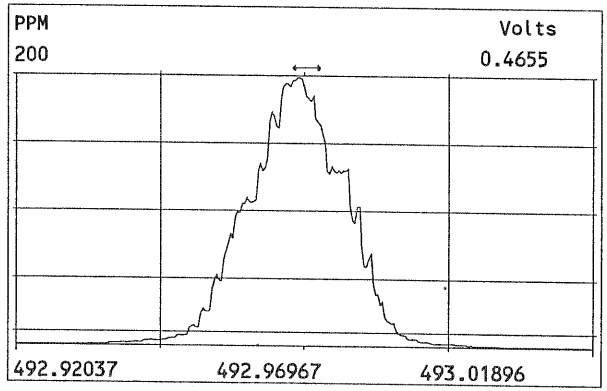


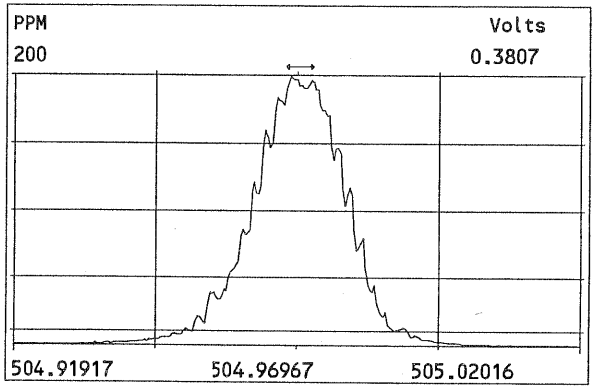


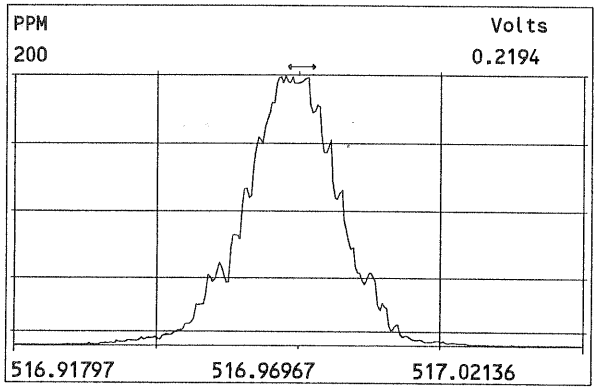




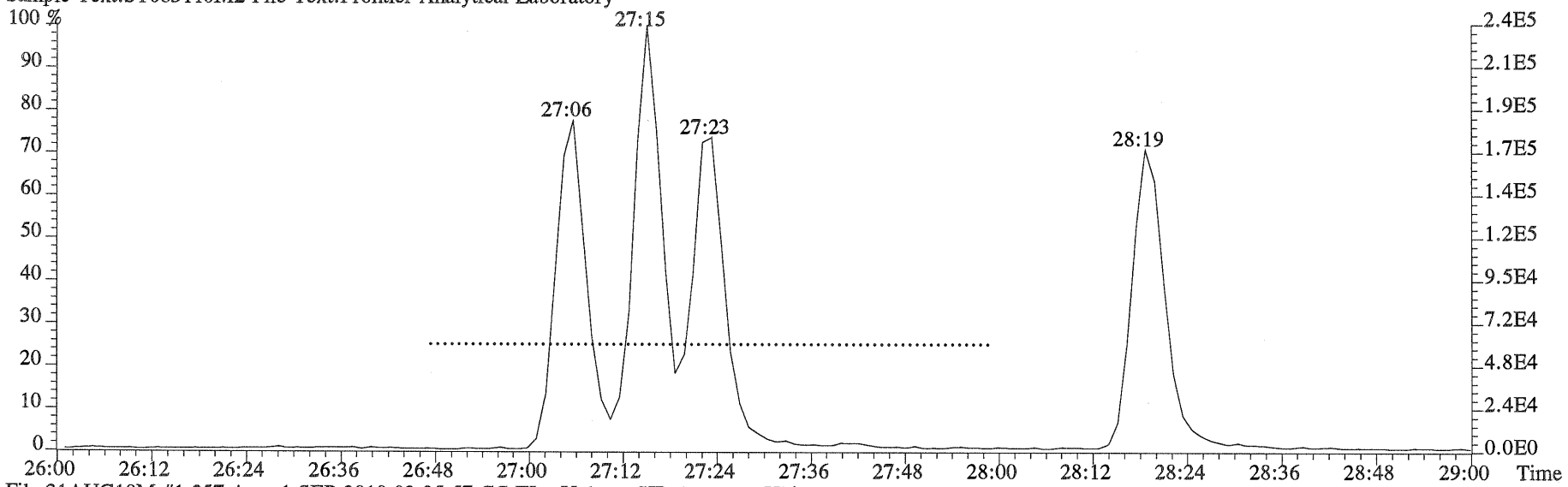




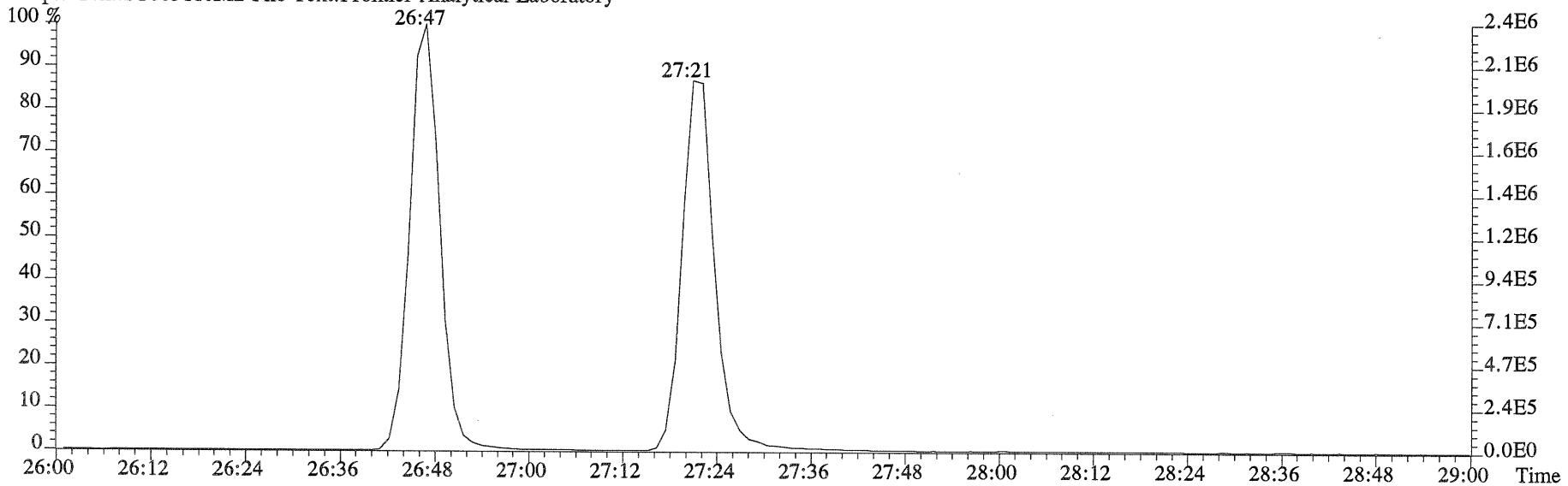




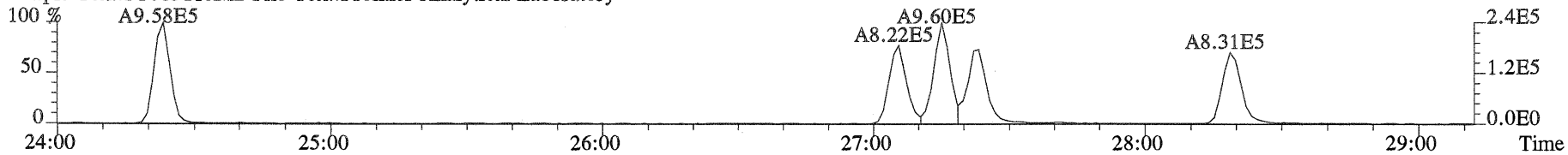
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:14 Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



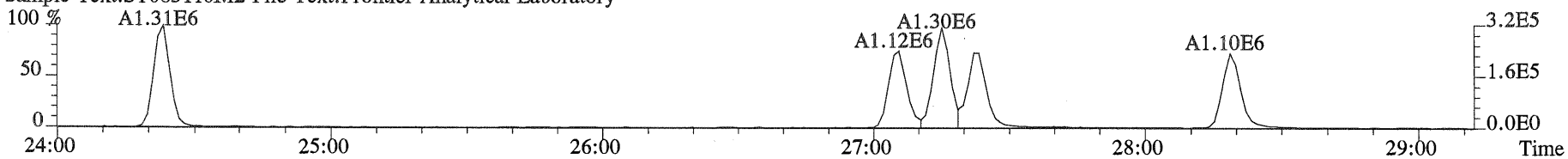
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:14 Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



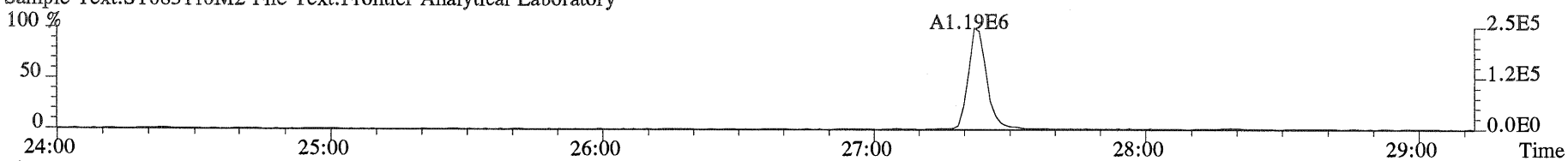
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



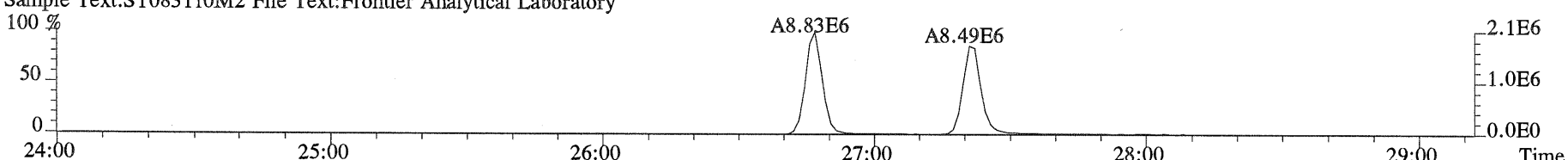
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



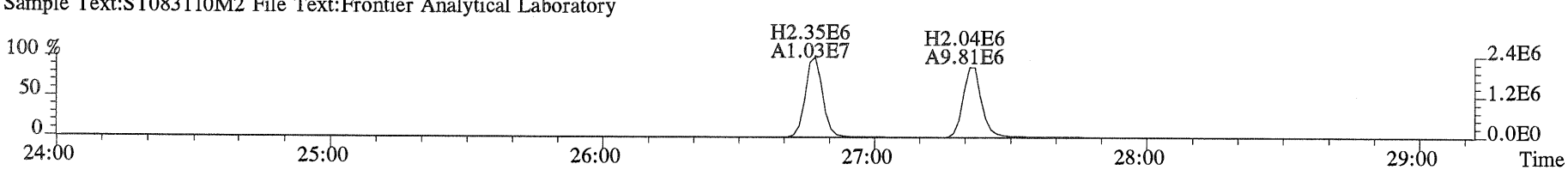
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



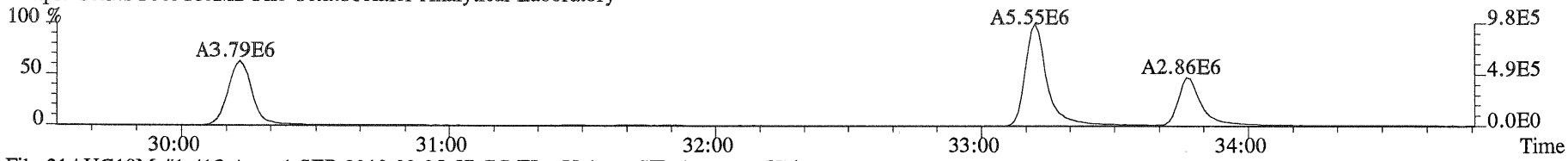
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



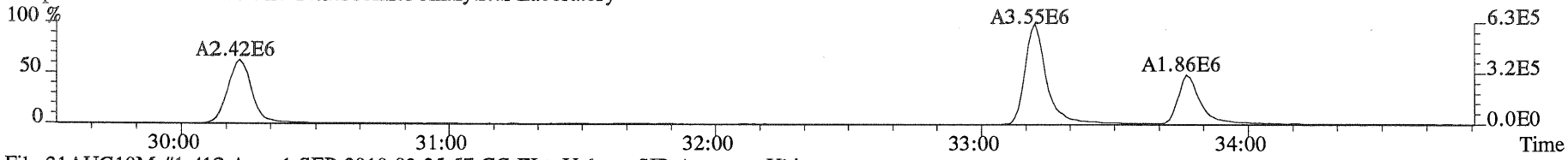
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



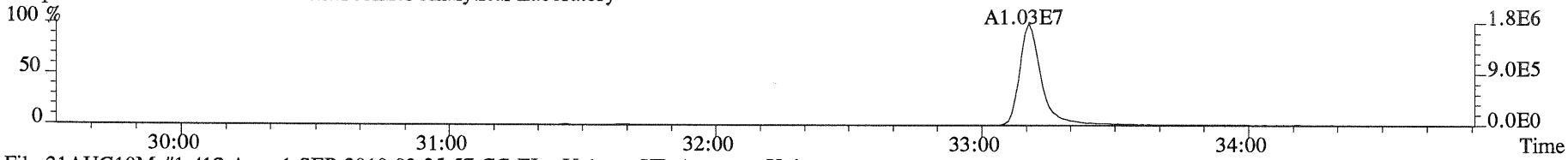
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



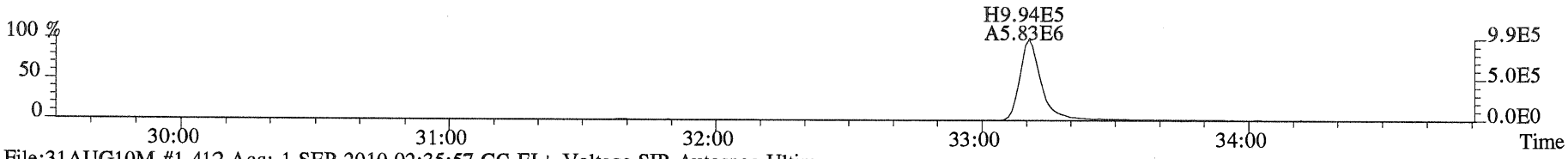
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



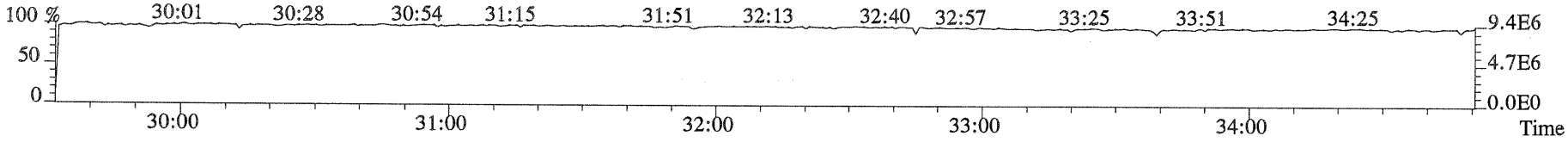
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



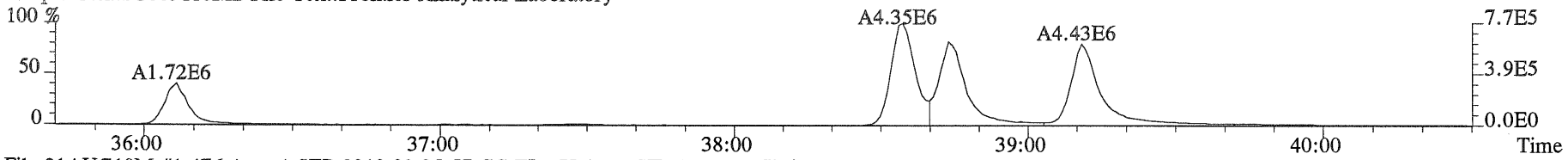
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



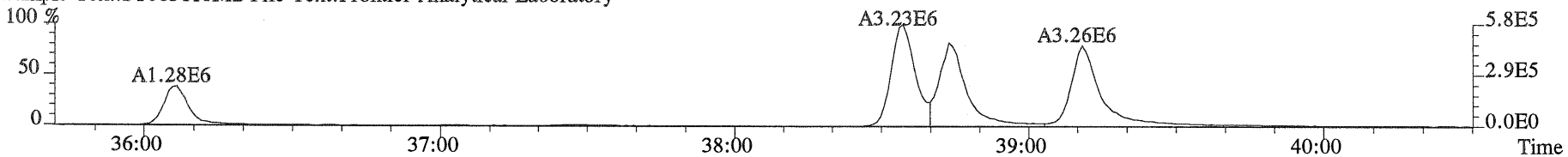
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:14 F:2 Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



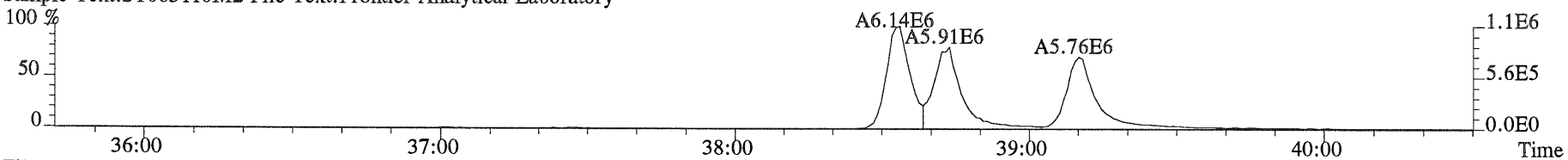
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



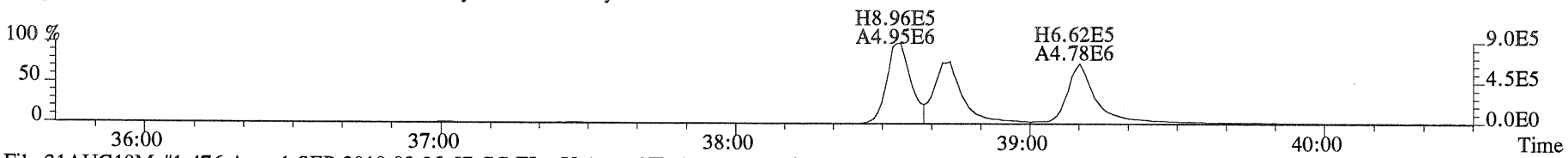
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



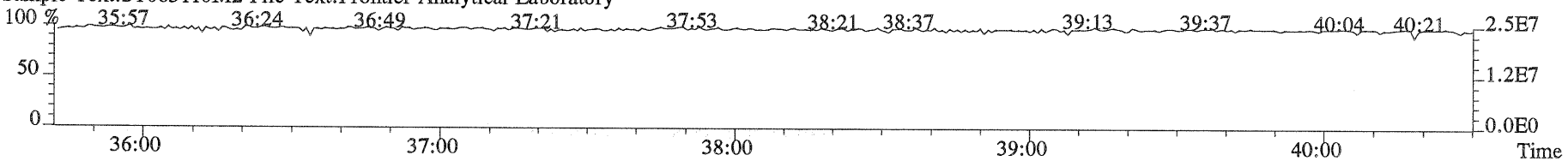
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



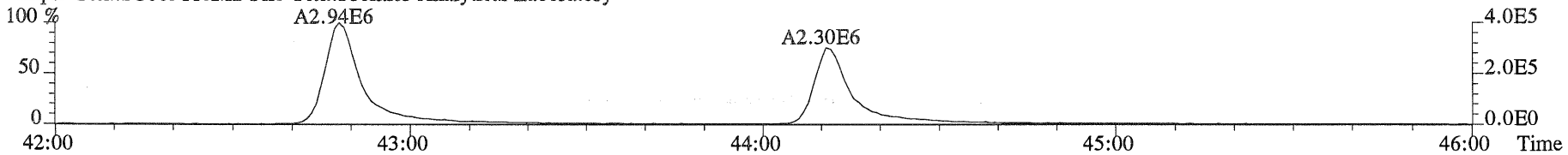
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



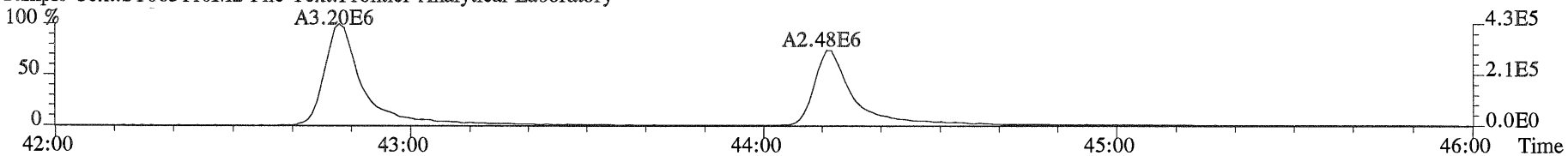
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:14 F:3 Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



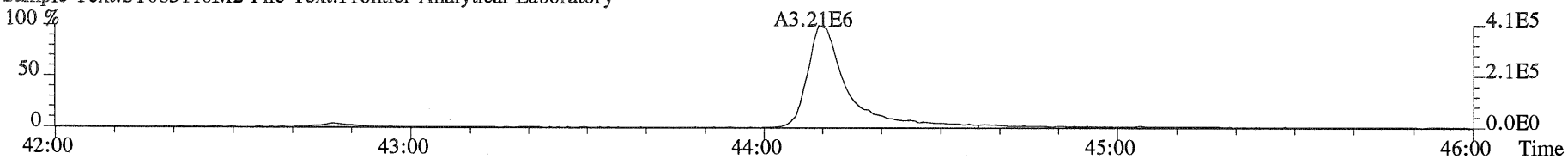
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



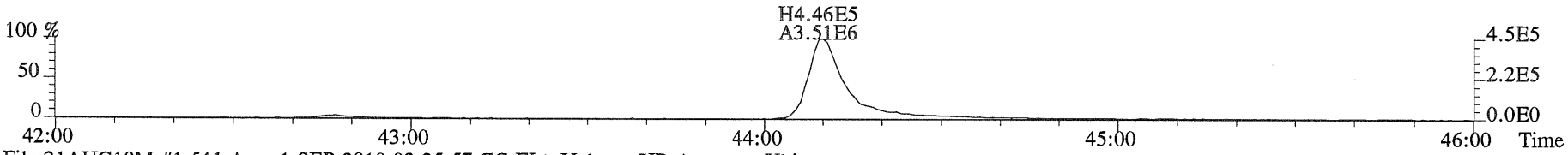
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



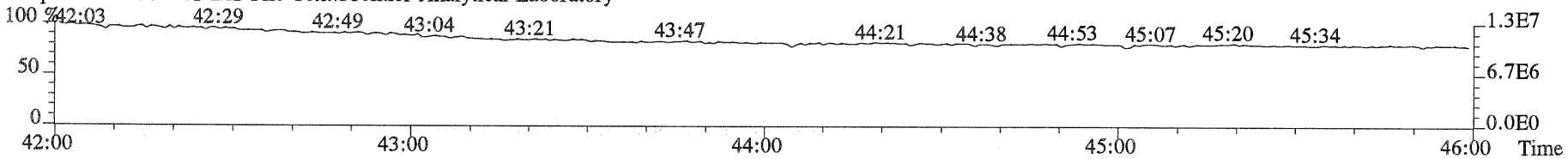
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



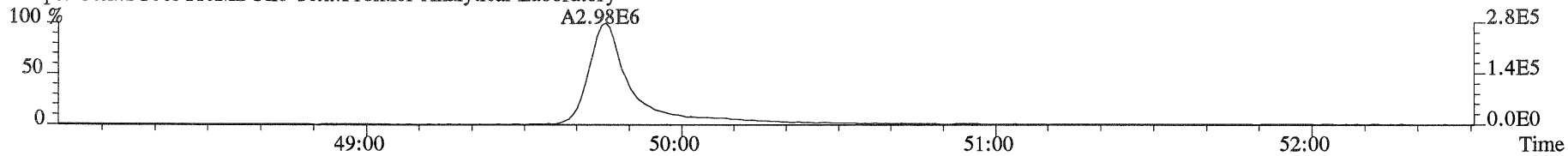
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



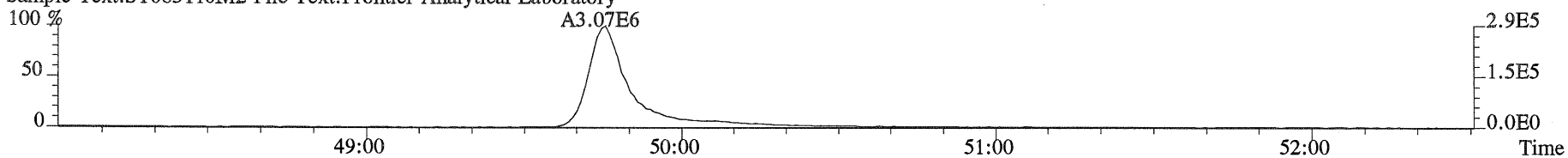
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:14 F:4 Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



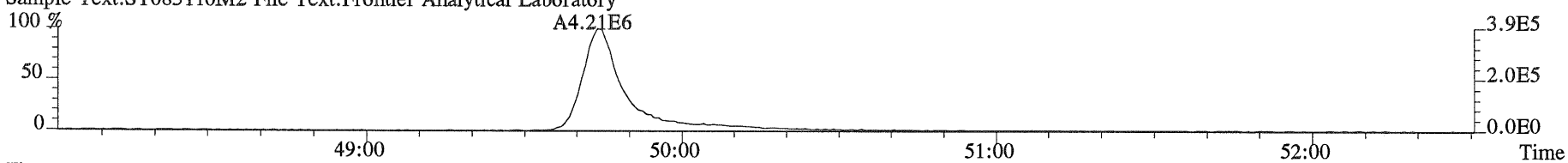
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



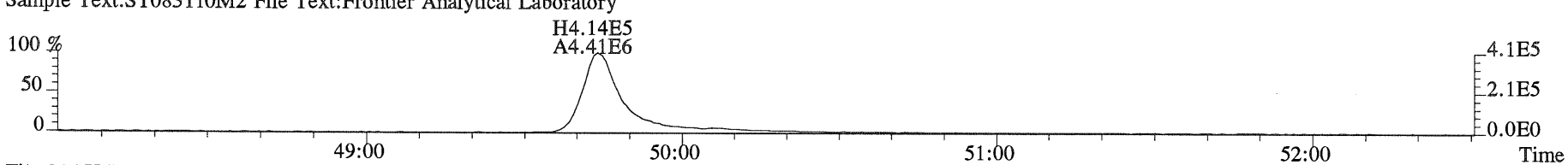
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



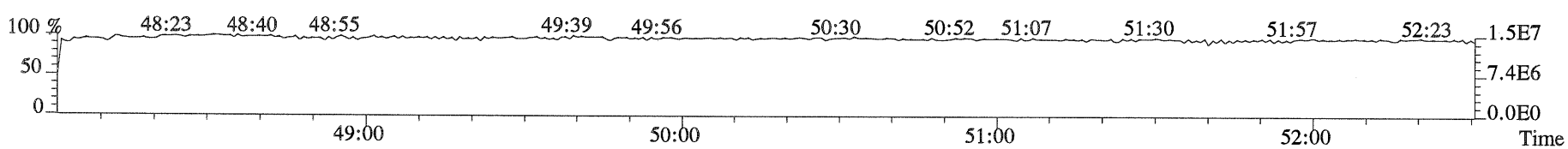
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



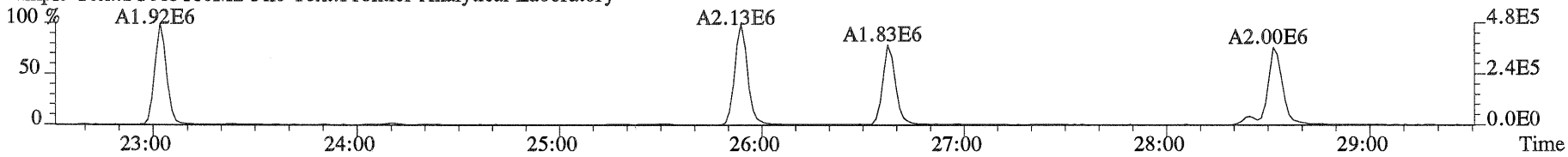
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



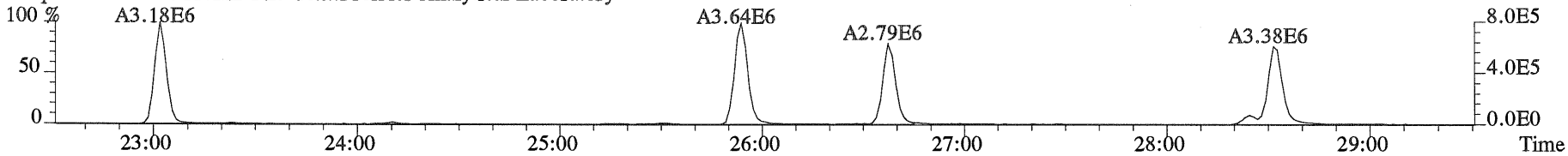
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:14 F:5 Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



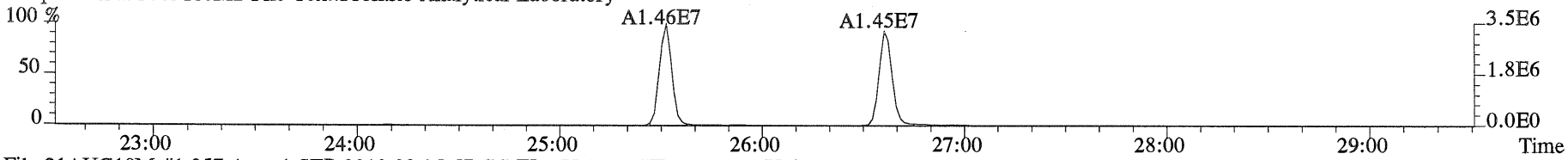
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



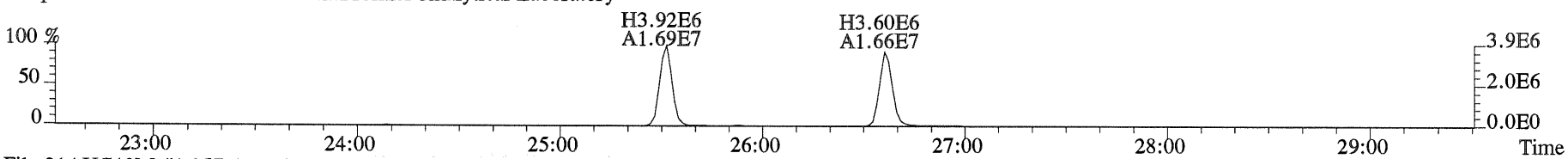
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



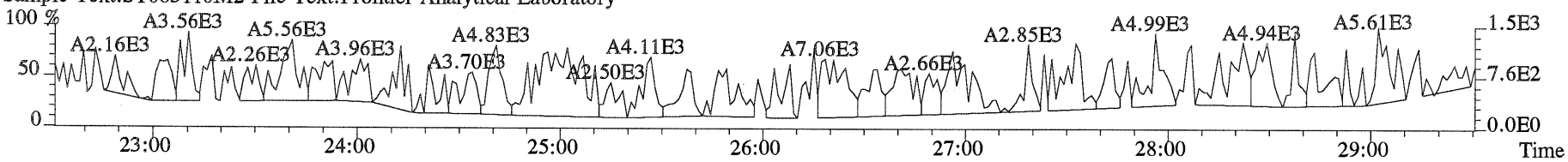
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



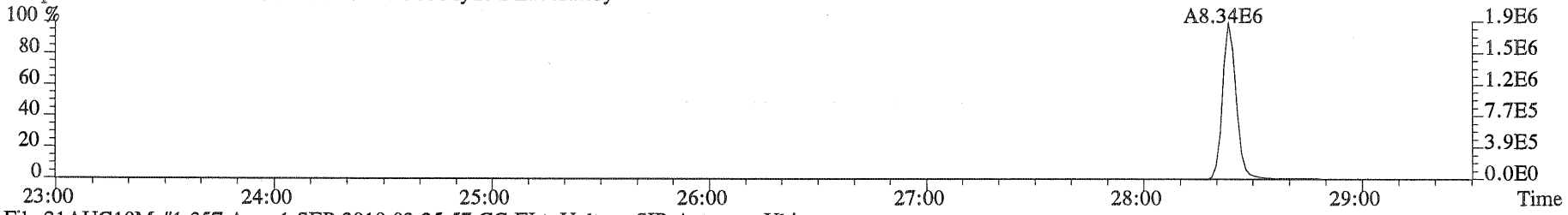
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



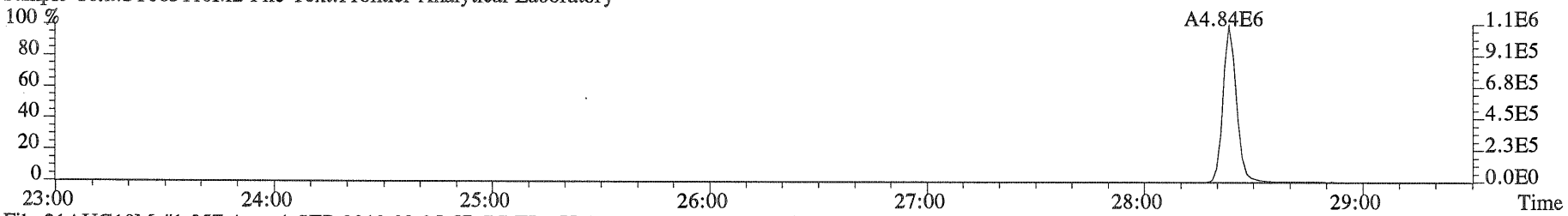
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



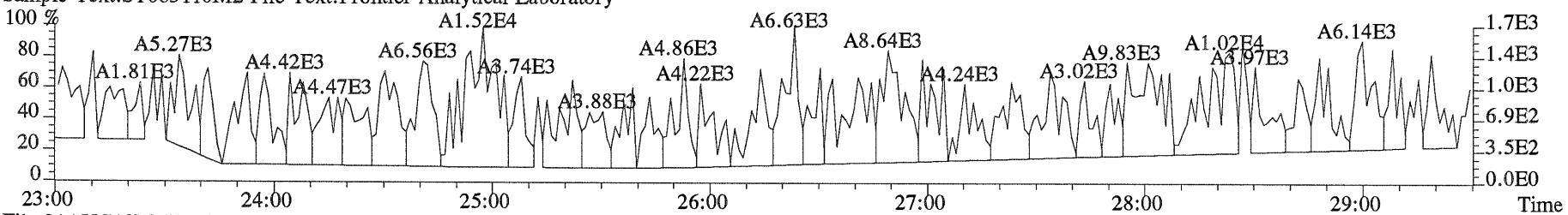
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



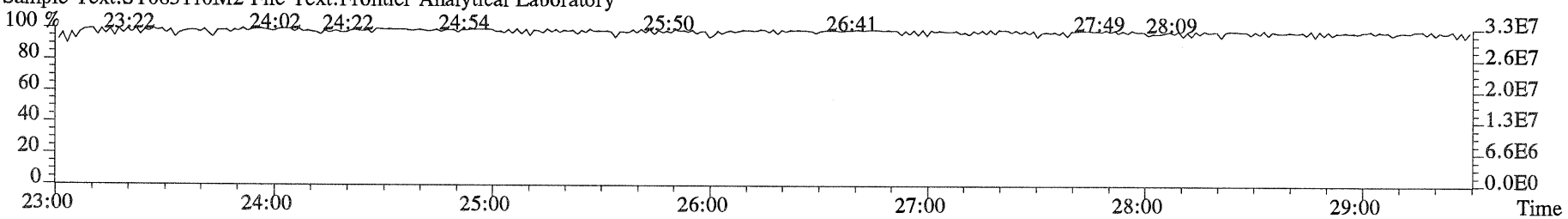
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



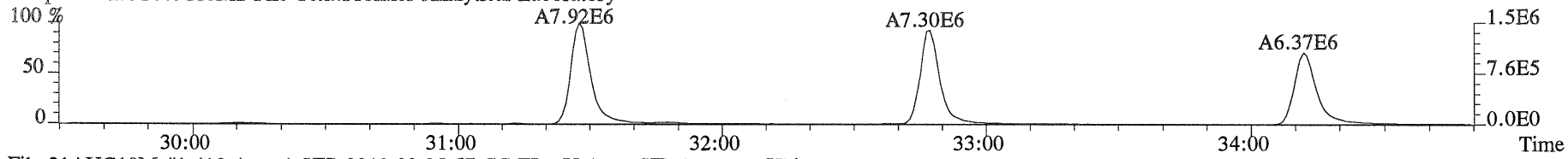
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



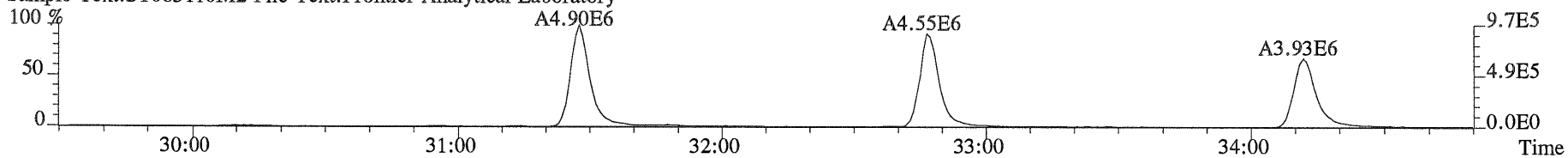
File:31AUG10M #1-357 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:14 Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



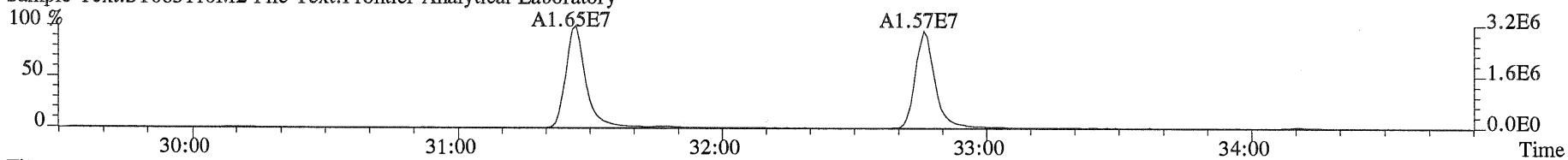
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



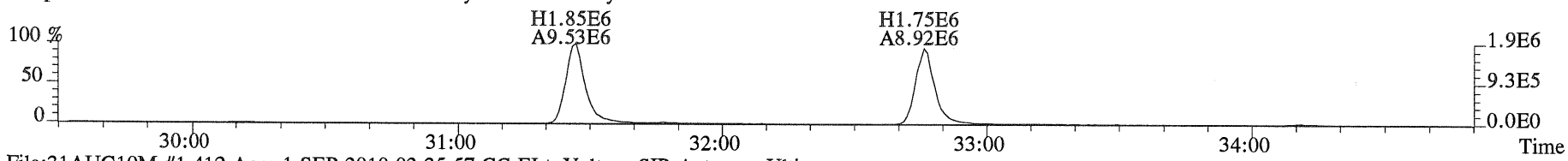
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



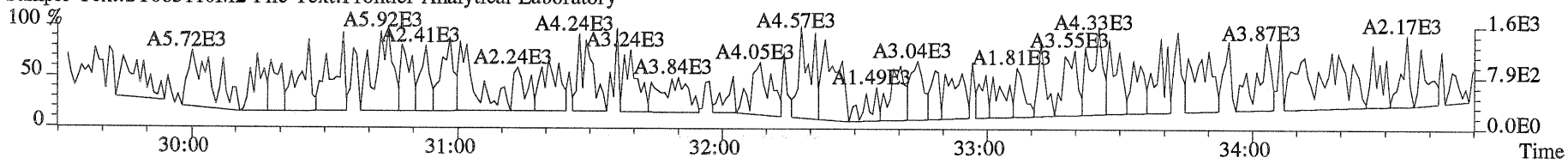
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



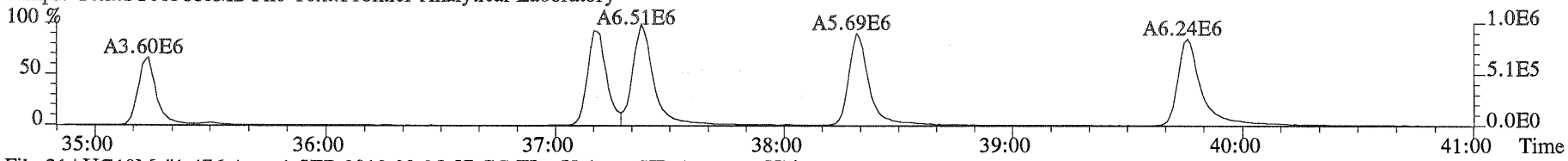
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



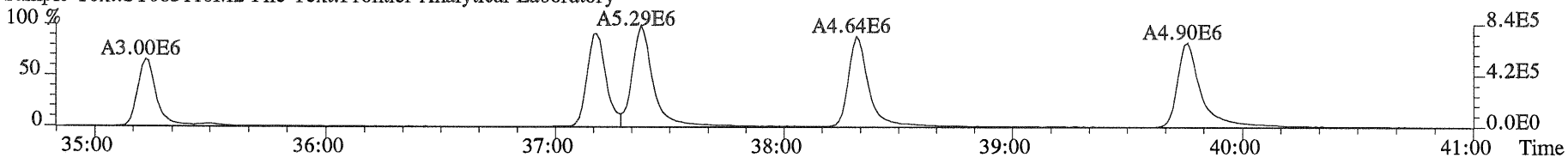
File:31AUG10M #1-412 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



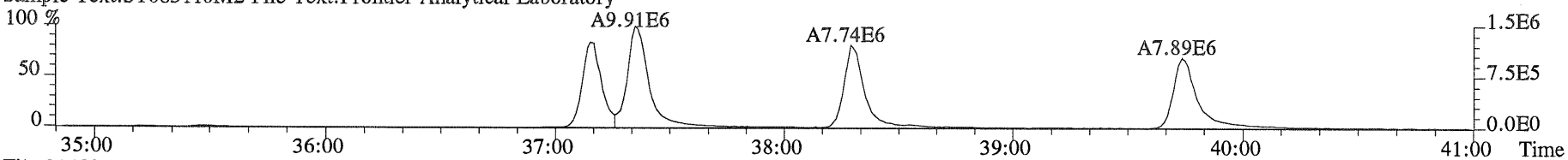
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



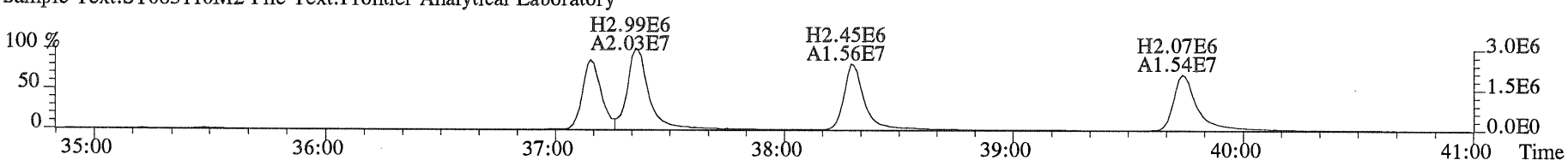
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



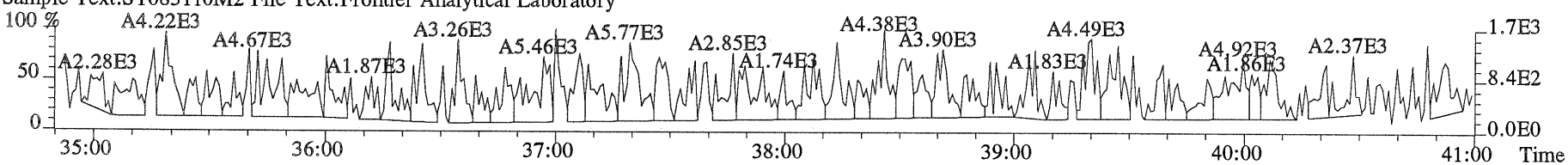
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



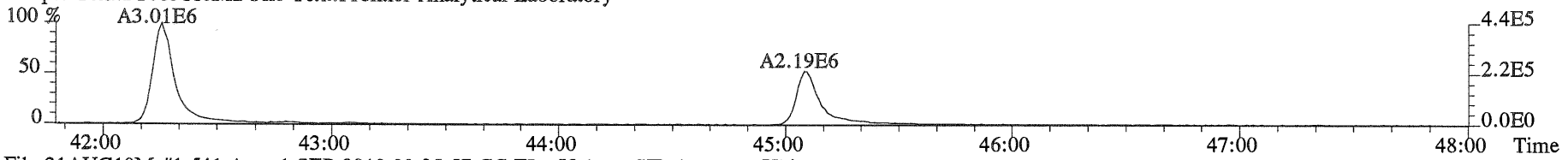
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



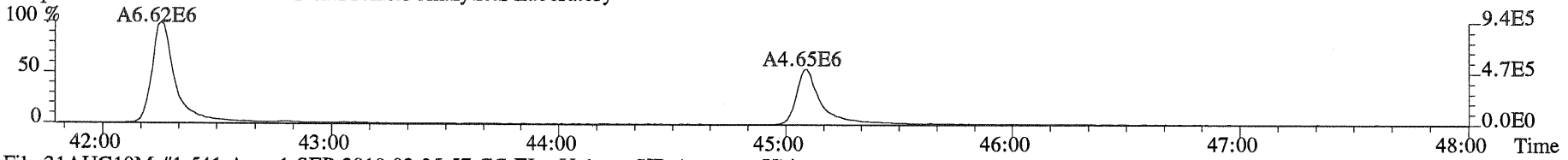
File:31AUG10M #1-476 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



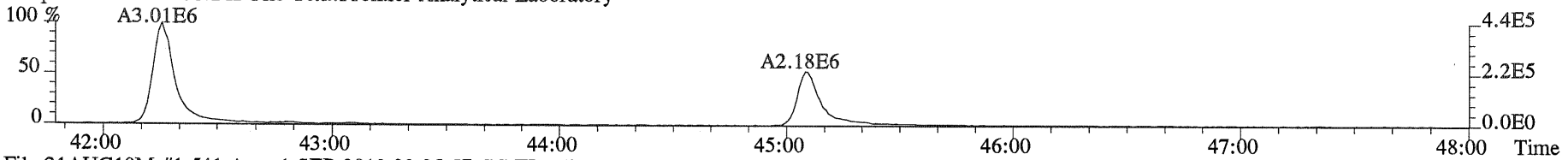
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



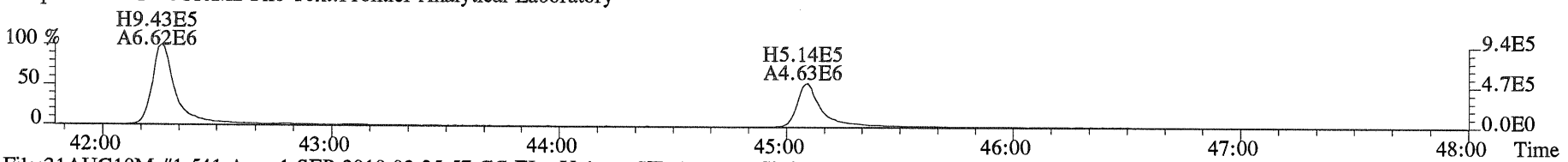
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



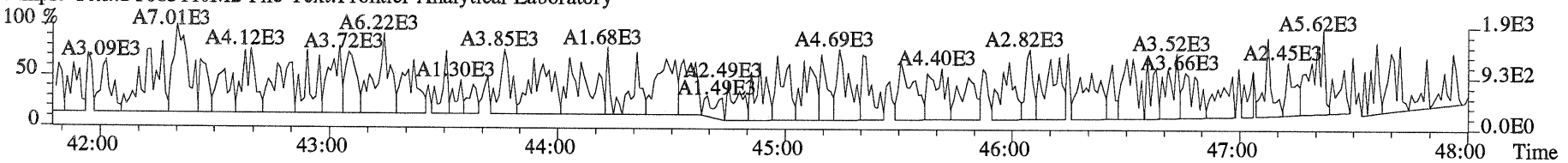
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



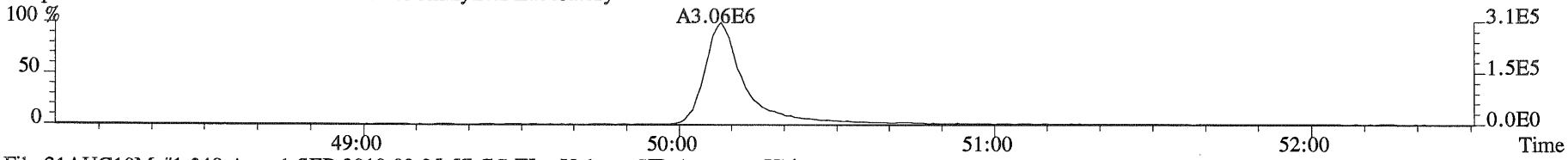
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



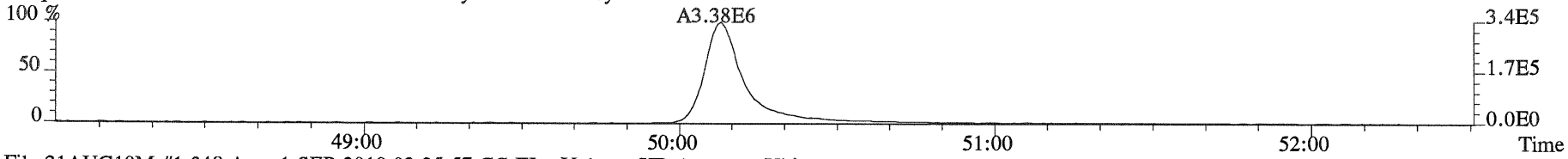
File:31AUG10M #1-541 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



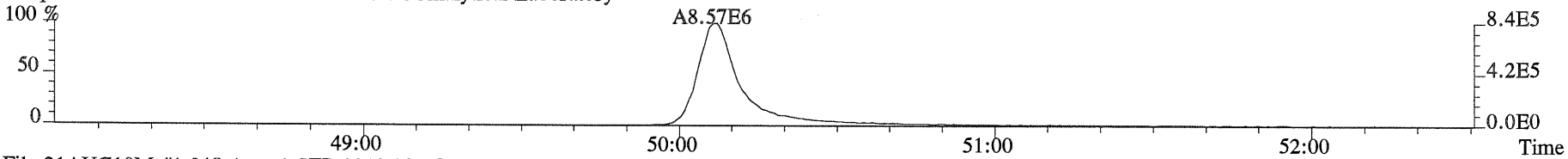
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



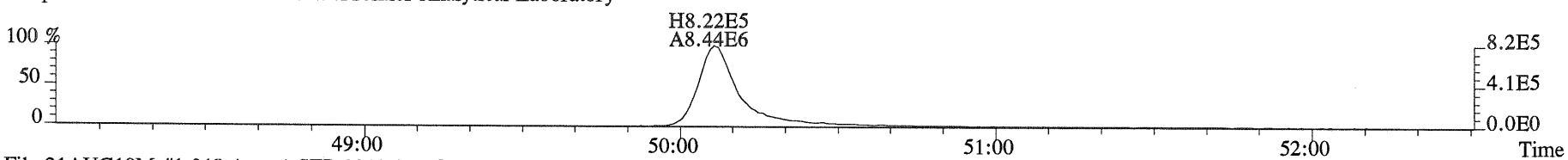
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



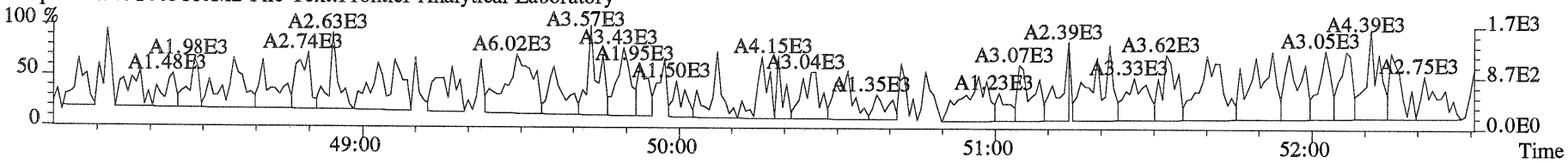
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory



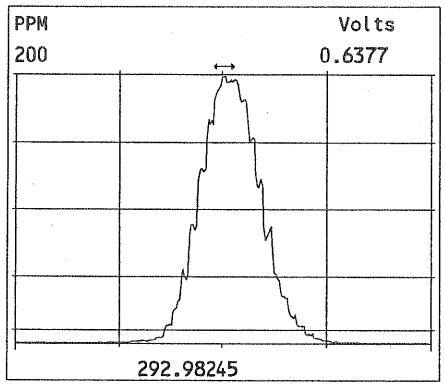
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory

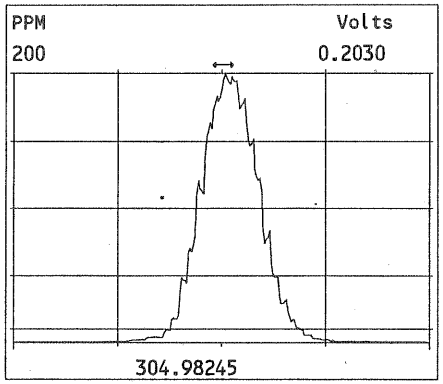


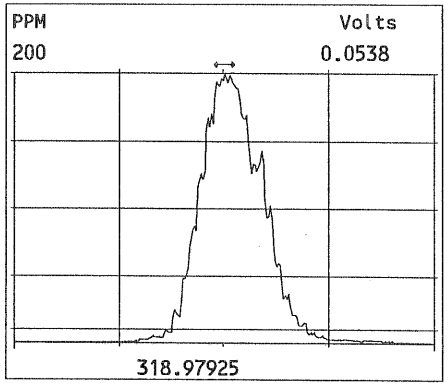
File:31AUG10M #1-348 Acq: 1-SEP-2010 02:35:57 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST083110M2 File Text:Frontier Analytical Laboratory

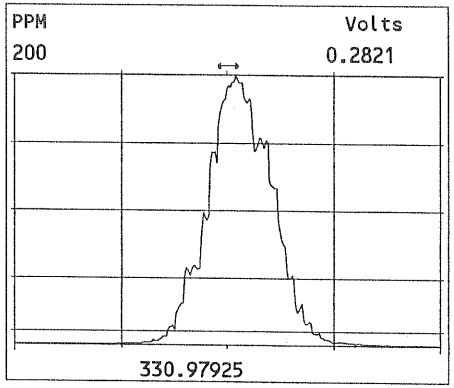


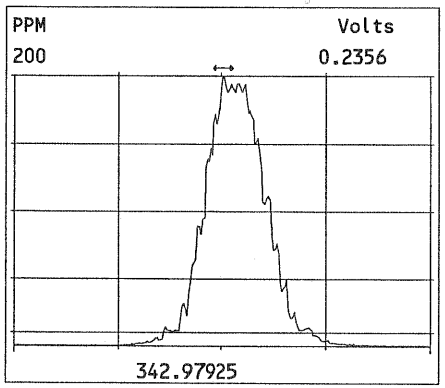
Peak Locate Examination: 1-SEP-2010:03:33 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

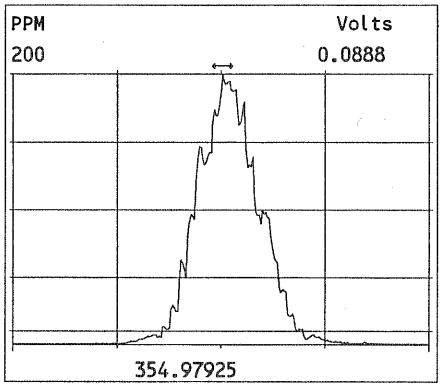


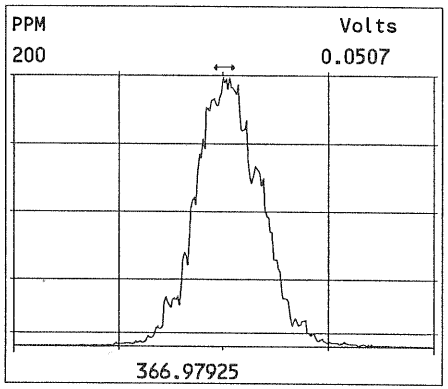


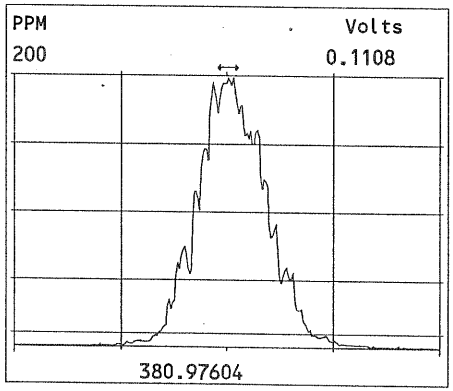


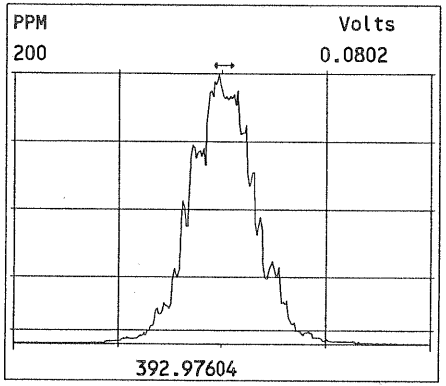


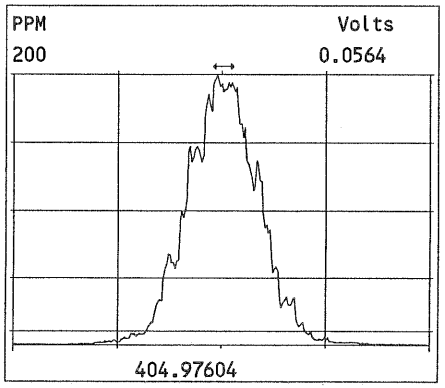


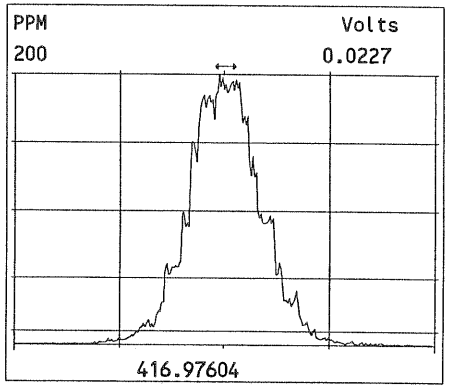




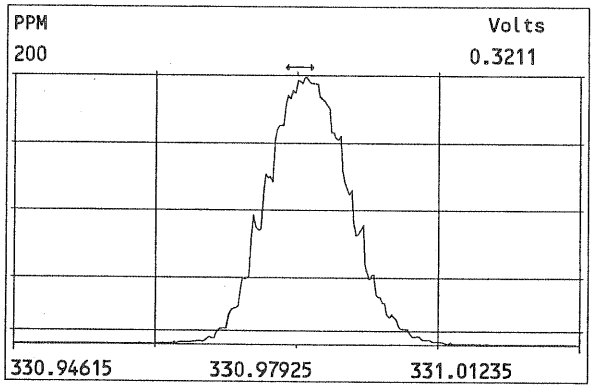


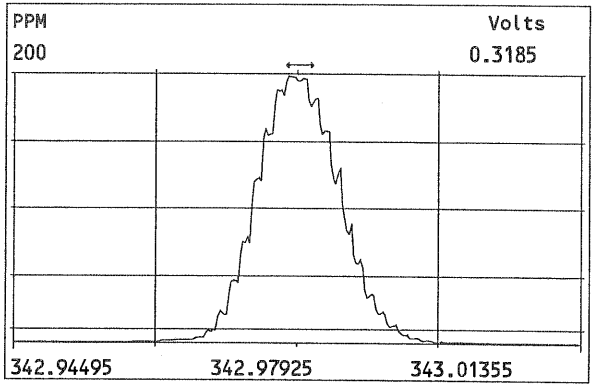


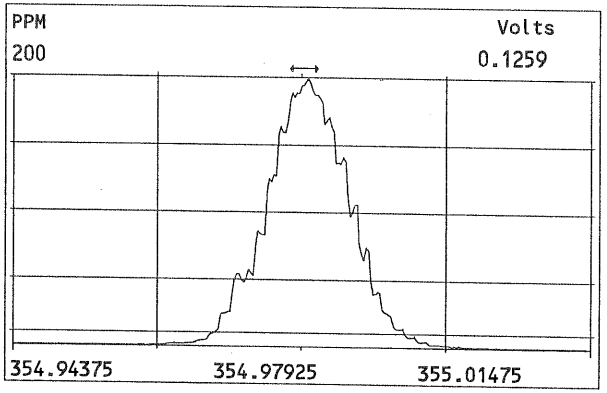


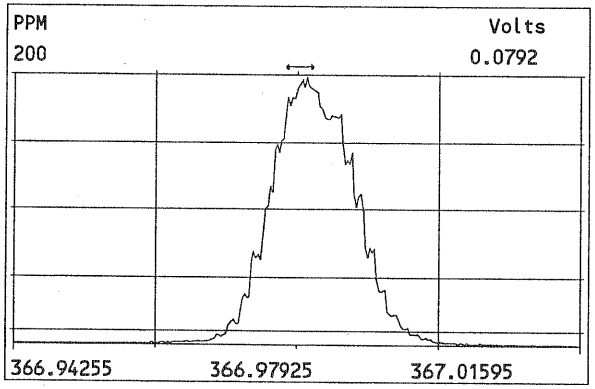


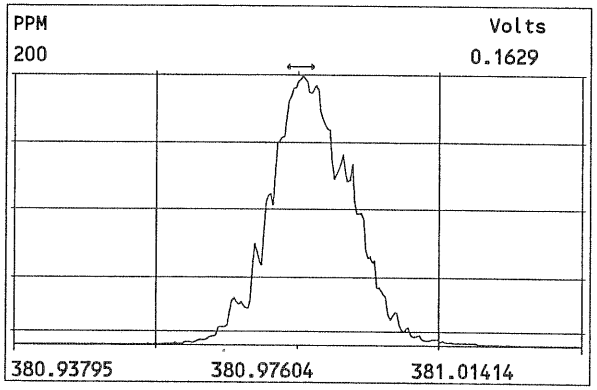
Peak Locate Examination: 1-SEP-2010:03:35 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

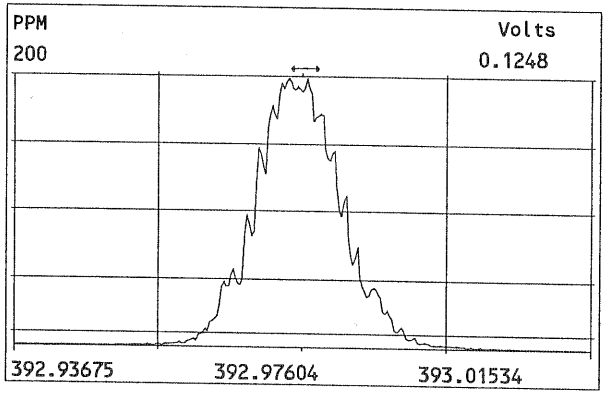


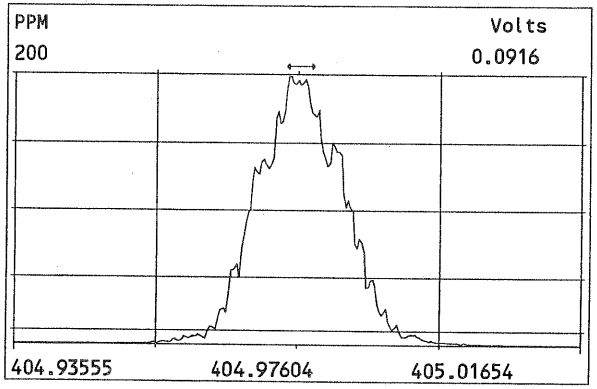


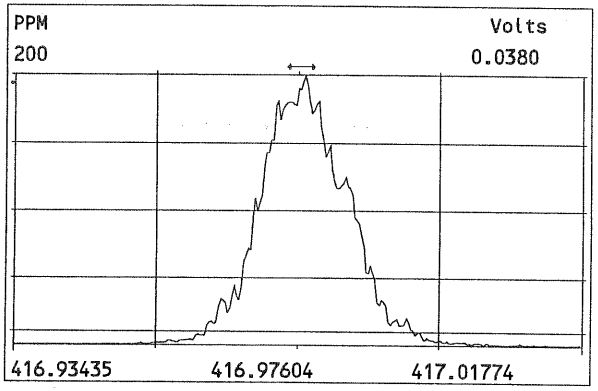




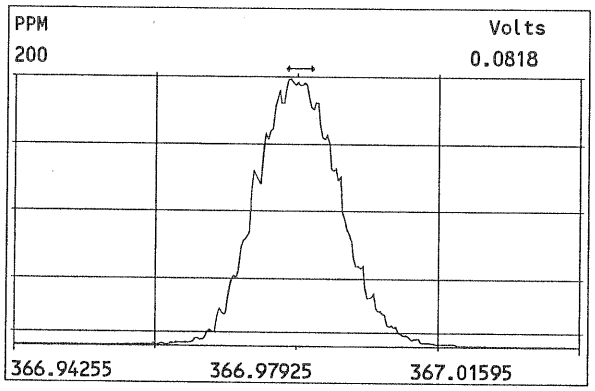


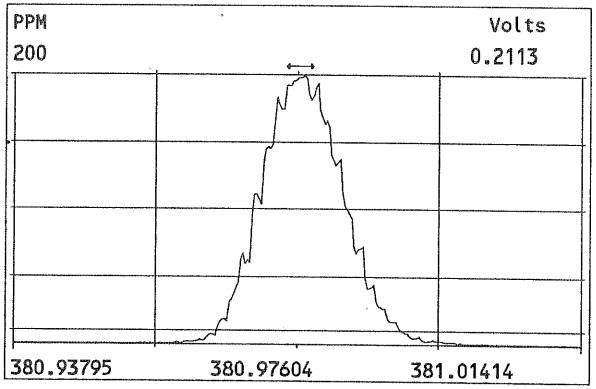


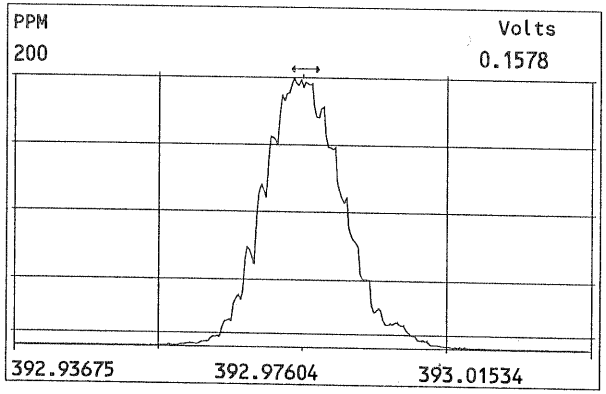


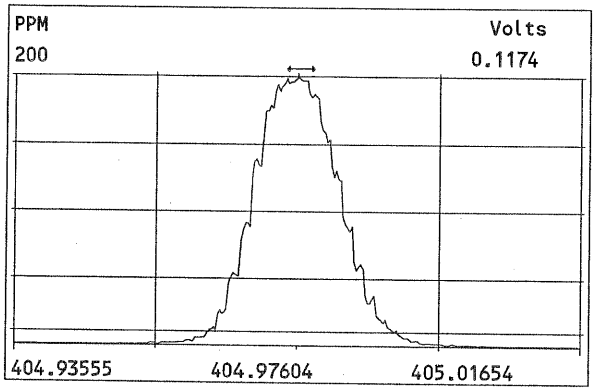


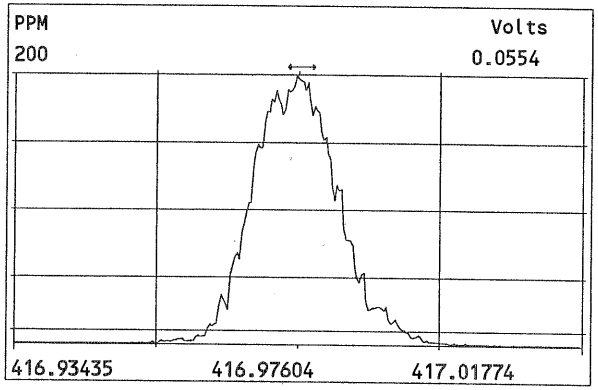
Peak Locate Examination: 1-SEP-2010:03:37 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

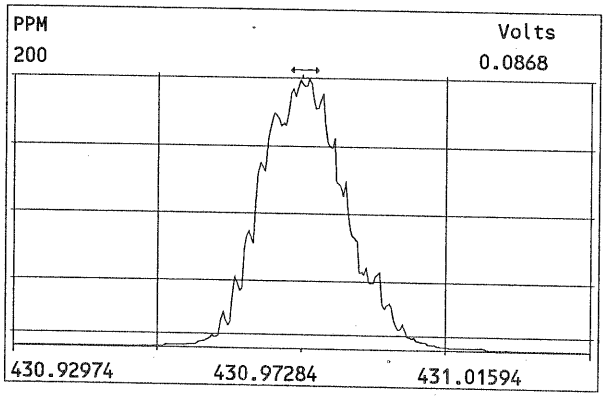


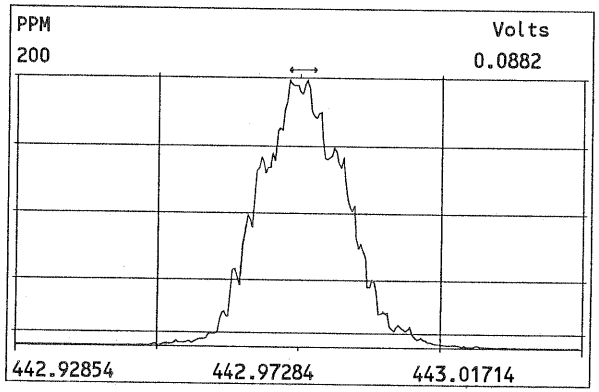


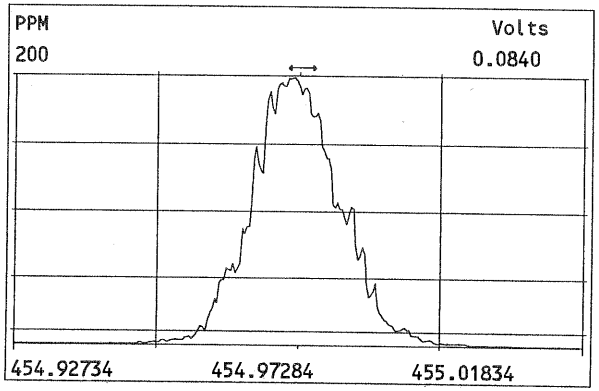




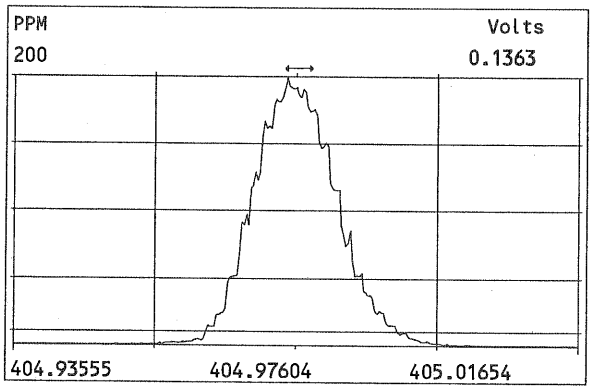


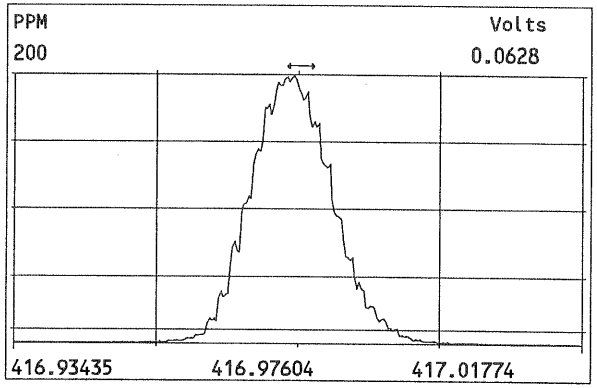


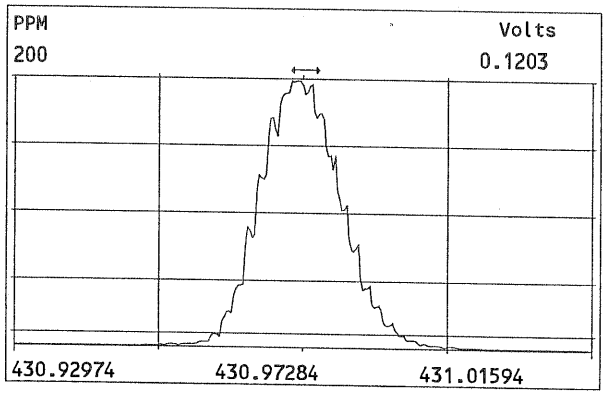


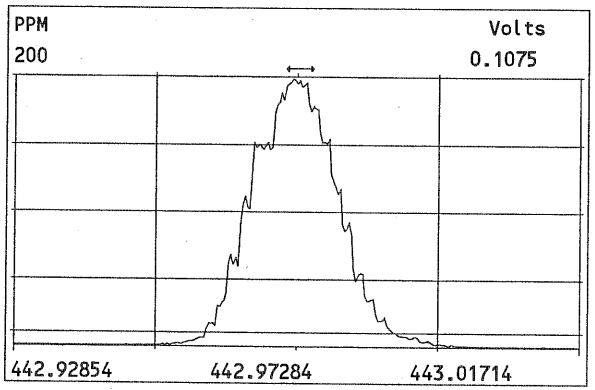


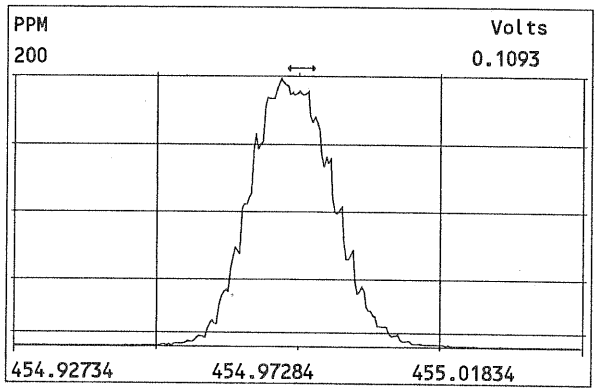
Peak Locate Examination: 1-SEP-2010:03:39 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

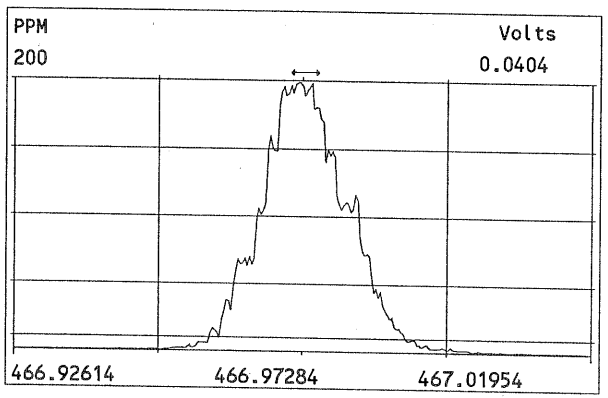


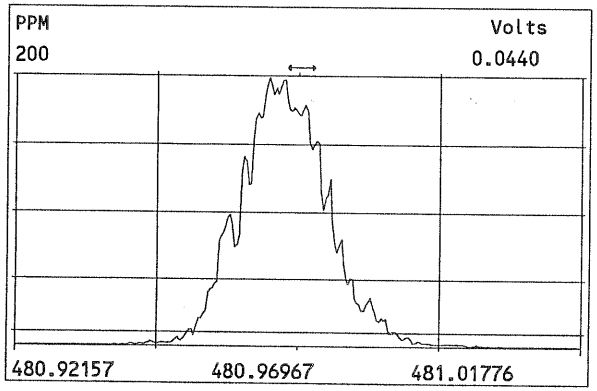




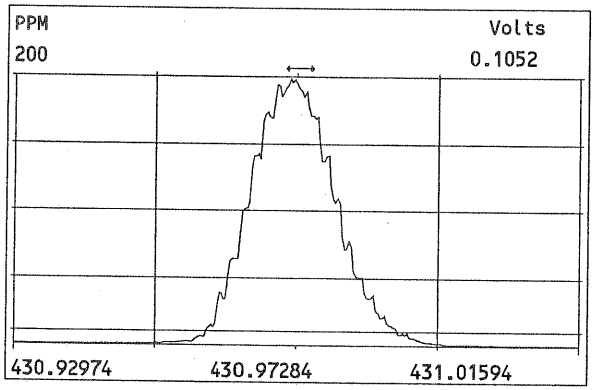


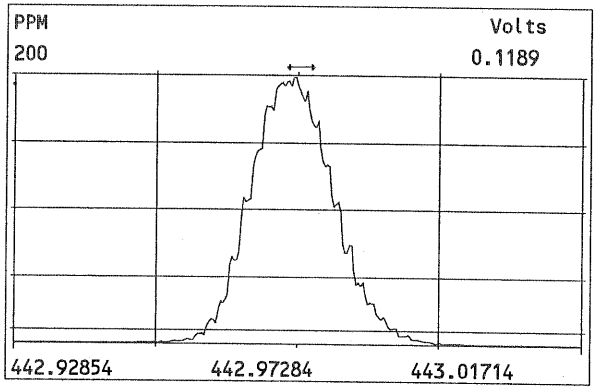


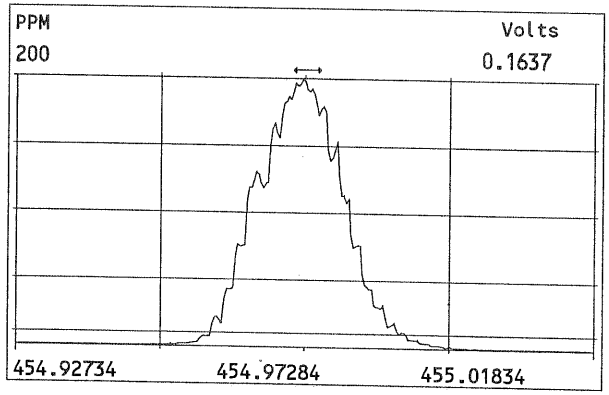


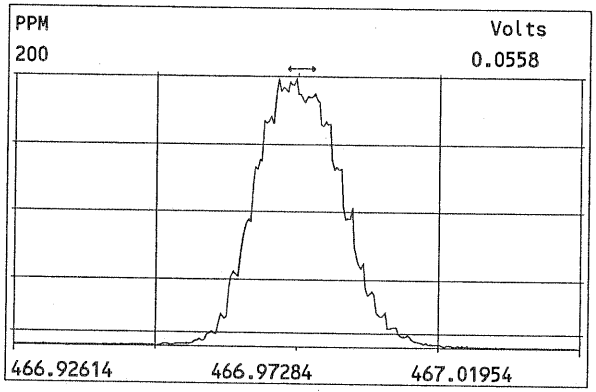


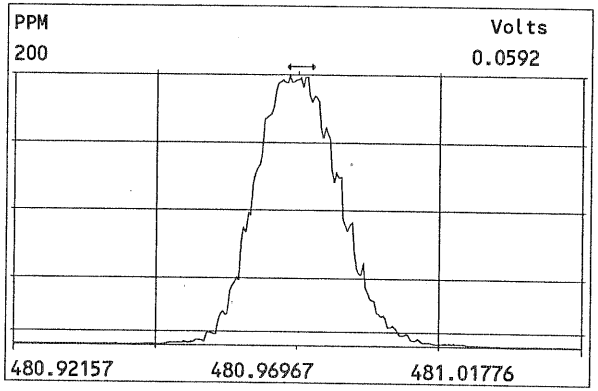
Peak Locate Examination: 1-SEP-2010:03:41 File:31AUG10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

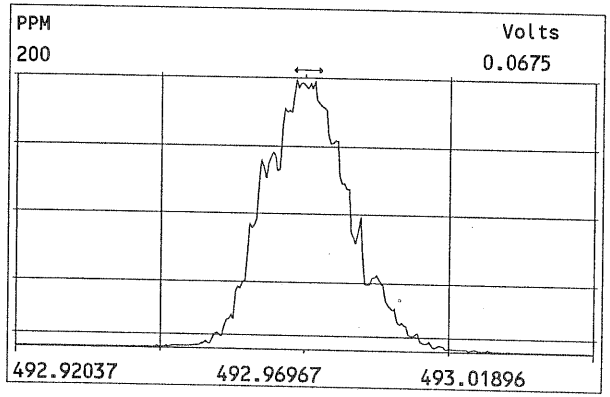


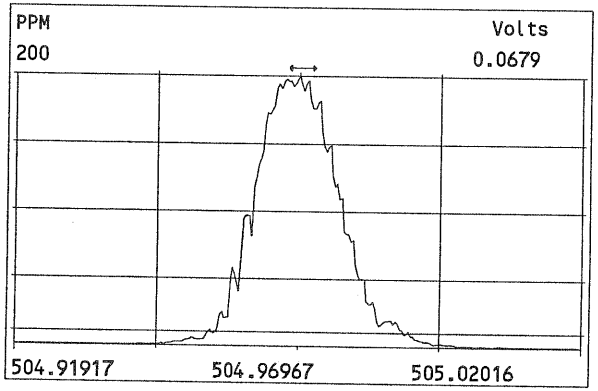


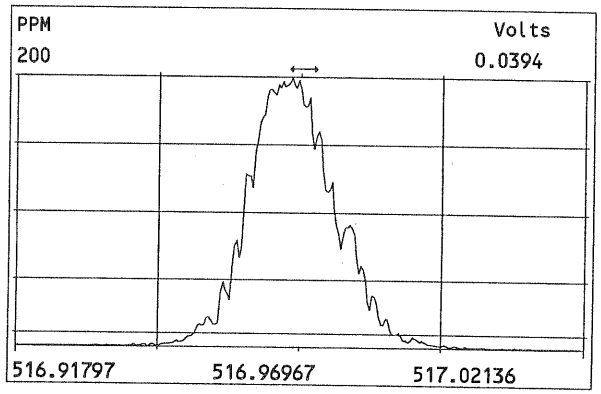












FRONTIER
ANALYTICAL LABORATORY

September 1, 2010

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

Dear Ms. Dunnihoo,

Enclosed are the results for Frontier Analytical Laboratory project **6312**. This corresponds to your **Lora Lake Apts RI** project under ARI project number **RI65**. Five aqueous samples were received on 8/18/2010 in good condition. These samples were extracted and analyzed by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and furans. As per your chain of custody request, a matrix spike (MS) and matrix spike duplicate (MSD) were performed on sample 6312-002-SA (ARI Sample ID: MW-08-081310). 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 **6312**.

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

If you have any questions regarding project **6312**, 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
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Tel (916) 934-0900 • Fax (916) 934-0999
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Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **6312**

Received on: **08/18/2010** Project Due: **09/10/2010** Storage: **R2**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
6312-001-SA	0	RI65	MW-09-081310	EPA 1613 D/F	Aqueous	08/13/2010	08:53 am	08/15/2011
6312-002-SA	0	RI65	MW-08-081310	EPA 1613 D/F	Aqueous	08/13/2010	10:00 am	08/15/2011
6312-002-MS	0	RI65	MW-08-081310	EPA 1613 D/F	Aqueous	08/13/2010	10:00 am	08/15/2011
6312-002-MSD	0	RI65	MW-08-081310	EPA 1613 D/F	Aqueous	08/13/2010	10:00 am	08/15/2011
6312-003-SA	0	RI65	MW-07-081310	EPA 1613 D/F	Aqueous	08/13/2010	11:23 am	08/15/2011
6312-004-SA	0	RI65	MW-01-081310	EPA 1613 D/F	Aqueous	08/13/2010	01:30 pm	08/15/2011
6312-005-SA	0	RI65	MW-05-081310	EPA 1613 D/F	Aqueous	08/13/2010	02:45 pm	08/15/2011

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6312-001-MB
Client ID: Method Blank
Matrix: Aqueous
Batch No: X2094

Date Extracted: 08-27-2010
Date Received: NA
Amount: 1.000 L

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

Acquired: 08-30-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.05		-	0.212				
1,2,3,7,8-PeCDD	ND	1.35		-	0.302				
1,2,3,4,7,8-HxCDD	ND	1.57		-	0.328				
1,2,3,6,7,8-HxCDD	ND	1.85		-	0.381	Total TCDD	ND	1.05	
1,2,3,7,8,9-HxCDD	ND	1.72		-	0.351	Total PeCDD	ND	1.35	
1,2,3,4,6,7,8-HpCDD	ND	2.34	*	-	0.495	Total HxCDD	ND	1.85	
OCDD	ND	4.32		-	1.02	Total HpCDD	ND	2.34	
2,3,7,8-TCDF	ND	0.547		-	0.112				
1,2,3,7,8-PeCDF	ND	1.15		-	0.219				
2,3,4,7,8-PeCDF	ND	1.17		-	0.232				
1,2,3,4,7,8-HxCDF	ND	1.32		-	0.162				
1,2,3,6,7,8-HxCDF	ND	1.26		-	0.167				
2,3,4,6,7,8-HxCDF	ND	1.36		-	0.167				
1,2,3,7,8,9-HxCDF	ND	1.38		-	0.185	Total TCDF	ND	0.547	
1,2,3,4,6,7,8-HpCDF	ND	1.62		-	0.251	Total PeCDF	ND	1.17	
1,2,3,4,7,8,9-HpCDF	ND	2.44		-	0.280	Total HxCDF	ND	1.38	
OCDF	ND	3.14		-	0.451	Total HpCDF	ND	2.44	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	92.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	100	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	90.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	91.1	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	105	23.0 - 140	
13C-OCDD	108	17.0 - 157	
13C-2,3,7,8-TCDF	93.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	89.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	91.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	97.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	95.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	96.8	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	99.2	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	98.7	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	102	26.0 - 138	
13C-OCDF	109	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	93.8	35.0 - 197

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

Analyst: _____
Date: 8/31/10

Reviewed By: _____
Date: 9/1/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6312-001-OPR
Client ID: OPR
Matrix: Aqueous
Batch No: X2094

Date Extracted: 08-27-2010
Date Received: NA
Amount: 1.000 L

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

Acquired: 08-30-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	9.66	6.70 - 15.8	
1,2,3,7,8-PeCDD	51.1	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	48.0	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	47.3	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	51.7	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	48.8	35.0 - 70.0	
OCDD	89.6	78.0 - 144	
2,3,7,8-TCDF	8.77	7.50 - 15.8	
1,2,3,7,8-PeCDF	48.4	40.0 - 67.0	
2,3,4,7,8-PeCDF	49.0	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	45.2	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	46.5	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	45.4	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	46.5	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	49.4	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	49.7	39.0 - 69.0	
OCDF	92.9	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	70.5	20.0 - 175	
13C-1,2,3,7,8-PeCDD	71.6	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	61.8	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	63.2	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	67.8	26.0 - 166	
13C-OCDD	70.6	13.0 - 198	
13C-2,3,7,8-TCDF	77.5	22.0 - 152	
13C-1,2,3,7,8-PeCDF	64.4	21.0 - 192	
13C-2,3,4,7,8-PeCDF	68.2	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	65.9	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	65.7	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	69.8	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	68.6	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	64.2	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	67.1	20.0 - 186	
13C-OCDF	71.4	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	83.8	31.0 - 191	

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

Analyst: _____
Date: 8/31/10

Reviewed By: _____
Date: 9/1/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6312-001-SA
Client ID: MW-09-081310
Matrix: Aqueous
Batch No: X2094

Date Extracted: 08-27-2010
Date Received: 08-18-2010
Amount: 1.010 L

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

Acquired: 08-30-2010
2005 WHO TEQ: 0.0818

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.40		-	0.212				
1,2,3,7,8-PeCDD	ND	2.14		-	0.302				
1,2,3,4,7,8-HxCDD	ND	2.40		-	0.328				
1,2,3,6,7,8-HxCDD	ND	3.10		-	0.381	Total TCDD	ND	1.40	
1,2,3,7,8,9-HxCDD	ND	2.76		-	0.351	Total PeCDD	ND	2.14	
1,2,3,4,6,7,8-HpCDD	7.65	-	J	* 0.0765	0.495	Total HxCDD	ND	3.10	
OCDD	17.6	-	J	0.00528	1.02	Total HpCDD	13.6	-	J
2,3,7,8-TCDF	ND	1.00		-	0.112				
1,2,3,7,8-PeCDF	ND	2.04		-	0.219				
2,3,4,7,8-PeCDF	ND	2.08		-	0.232				
1,2,3,4,7,8-HxCDF	ND	1.64		-	0.162				
1,2,3,6,7,8-HxCDF	ND	1.62		-	0.167				
2,3,4,6,7,8-HxCDF	ND	1.70		-	0.167				
1,2,3,7,8,9-HxCDF	ND	1.68		-	0.185	Total TCDF	ND	1.00	
1,2,3,4,6,7,8-HpCDF	ND	2.09		-	0.251	Total PeCDF	ND	2.08	
1,2,3,4,7,8,9-HpCDF	ND	3.00		-	0.280	Total HxCDF	2.63	-	J
OCDF	ND	5.35		-	0.451	Total HpCDF	ND	3.00	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	80.7	25.0 - 164	
13C-1,2,3,7,8-PeCDD	87.4	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	75.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	73.4	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	87.5	23.0 - 140	
13C-OCDD	89.0	17.0 - 157	
13C-2,3,7,8-TCDF	84.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	78.1	24.0 - 185	
13C-2,3,4,7,8-PeCDF	79.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	82.7	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	78.0	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	81.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	84.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	80.7	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	85.0	26.0 - 138	
13C-OCDF	88.9	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	84.5	35.0 - 197

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

Analyst: _____
Date: 8/31/10

Reviewed By: _____
Date: 9/1/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6312-002-SA
Client ID: MW-08-081310
Matrix: Aqueous
Batch No: X2094

Date Extracted: 08-27-2010
Date Received: 08-18-2010
Amount: 1.017 L

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

Acquired: 08-30-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.91		-	0.212				
1,2,3,7,8-PeCDD	ND	2.59		-	0.302				
1,2,3,4,7,8-HxCDD	ND	3.39		-	0.328				
1,2,3,6,7,8-HxCDD	ND	4.40		-	0.381	Total TCDD	ND	1.91	
1,2,3,7,8,9-HxCDD	ND	3.89		-	0.351	Total PeCDD	ND	2.59	
1,2,3,4,6,7,8-HpCDD	ND	3.53		-	0.495	Total HxCDD	ND	4.40	
OCDD	ND	8.44		-	1.02	Total HpCDD	ND	3.53	
2,3,7,8-TCDF	ND	0.869		-	0.112				
1,2,3,7,8-PeCDF	ND	1.74		-	0.219				
2,3,4,7,8-PeCDF	ND	1.74		-	0.232				
1,2,3,4,7,8-HxCDF	ND	2.18		-	0.162				
1,2,3,6,7,8-HxCDF	ND	2.12		-	0.167				
2,3,4,6,7,8-HxCDF	ND	2.24		-	0.167				
1,2,3,7,8,9-HxCDF	ND	2.20		-	0.185	Total TCDF	ND	0.869	
1,2,3,4,6,7,8-HpCDF	ND	2.37		-	0.251	Total PeCDF	ND	1.74	
1,2,3,4,7,8,9-HpCDF	ND	3.71		-	0.280	Total HxCDF	ND	2.24	
OCDF	ND	5.64		-	0.451	Total HpCDF	ND	3.71	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	90.6	25.0 - 164	
13C-1,2,3,7,8-PeCDD	95.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	89.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	80.8	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	103	23.0 - 140	
13C-OCDD	99.5	17.0 - 157	
13C-2,3,7,8-TCDF	93.6	24.0 - 169	
13C-1,2,3,7,8-PeCDF	87.5	24.0 - 185	
13C-2,3,4,7,8-PeCDF	89.0	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	95.5	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	91.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	95.2	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	99.3	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	95.4	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	100	26.0 - 138	
13C-OCDF	103	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	95.6	35.0 - 197

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

Analyst: _____
Date: 8/31/10

Reviewed By: _____
Date: 9/1/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6312-002-MS/MSD
Client ID: MW-08-081310
Matrix: Aqueous

Date Extracted: 08-27-2010
Date Received: 08-18-2010
Sample Amount: 1.017 L
MS Amount: 0.499 L
MSD Amount: 0.501 L

ICal: PCDDFAL3-8-23-10
Batch No: X2094
Units: pg/L

MS Acquired: 2010-08-30
MSD Acquired: 2010-08-30
GC Column: DB5

Compound	Amount Spiked (pg)	Sample Amount	MS Amount	MSD Amount	% RSD	Qual
2,3,7,8-TCDD	200	-	386	391	1.54	
1,2,3,7,8-PeCDD	1000	-	2080	2160	3.77	
1,2,3,4,7,8-HxCDD	1000	-	1940	2070	7.17	
1,2,3,6,7,8-HxCDD	1000	-	2040	2080	1.94	
1,2,3,7,8,9-HxCDD	1000	-	2170	2240	3.64	
1,2,3,4,6,7,8-HpCDD	1000	-	1950	2030	4.72	
OCDD	2000	-	3750	3860	3.16	
2,3,7,8-TCDF	200	-	364	380	4.30	
1,2,3,7,8-PeCDF	1000	-	1960	2030	4.20	
2,3,4,7,8-PeCDF	1000	-	1970	2040	3.69	
1,2,3,4,7,8-HxCDF	1000	-	1840	1910	4.16	
1,2,3,6,7,8-HxCDF	1000	-	1860	1960	5.65	
2,3,4,6,7,8-HxCDF	1000	-	1880	1950	4.07	
1,2,3,7,8,9-HxCDF	1000	-	1880	1950	4.07	
1,2,3,4,6,7,8-HpCDF	1000	-	2030	2080	2.93	
1,2,3,4,7,8,9-HpCDF	1000	-	1990	2080	4.62	
OCDF	2000	-	3690	3870	5.29	

Internal Standards		% Rec	% Rec	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	2000	90.6	84.7	90.1	25.0 - 164	
13C-1,2,3,7,8-PeCDD	2000	95.2	92.7	99.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	2000	89.1	83.4	92.3	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	2000	80.8	77.6	87.0	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	2000	103	97.2	110	23.0 - 140	
13C-OCDD	4000	99.5	93.7	111	17.0 - 157	
13C-2,3,7,8-TCDF	2000	93.6	91.6	97.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	2000	87.5	85.1	91.9	24.0 - 185	
13C-2,3,4,7,8-PeCDF	2000	89.0	86.6	91.3	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	2000	95.5	92.7	103	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	2000	91.3	86.4	94.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	2000	95.2	90.3	97.9	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	2000	99.3	95.3	106	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	2000	95.4	89.2	101	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	2000	100	95.0	103	26.0 - 138	
13C-OCDF	4000	103	97.3	112	17.0 - 157	

Cleanup Surrogate					
37Cl-2,3,7,8-TCDD	800	95.6	94.6	97.3	35.0 - 197

Analyst: _____
Date: 8/31/10

Reviewed By: _____
Date: 9/1/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6312-003-SA
Client ID: MW-07-081310
Matrix: Aqueous
Batch No: X2094

Date Extracted: 08-27-2010
Date Received: 08-18-2010
Amount: 1.018 L

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

Acquired: 08-30-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.63		-	0.212				
1,2,3,7,8-PeCDD	ND	2.30		-	0.302				
1,2,3,4,7,8-HxCDD	ND	1.71		-	0.328				
1,2,3,6,7,8-HxCDD	ND	2.21		-	0.381	Total TCDD	ND	1.63	
1,2,3,7,8,9-HxCDD	ND	1.96		-	0.351	Total PeCDD	ND	2.30	
1,2,3,4,6,7,8-HpCDD	ND	2.77		-	0.495	Total HxCDD	ND	2.21	
OCDD	ND	4.68		-	1.02	Total HpCDD	ND	2.77	
2,3,7,8-TCDF	ND	0.839		-	0.112				
1,2,3,7,8-PeCDF	ND	1.50		-	0.219				
2,3,4,7,8-PeCDF	ND	1.55		-	0.232				
1,2,3,4,7,8-HxCDF	ND	1.46		-	0.162				
1,2,3,6,7,8-HxCDF	ND	1.44		-	0.167				
2,3,4,6,7,8-HxCDF	ND	1.45		-	0.167				
1,2,3,7,8,9-HxCDF	ND	1.46		-	0.185	Total TCDF	ND	0.839	
1,2,3,4,6,7,8-HpCDF	ND	2.30		-	0.251	Total PeCDF	ND	1.55	
1,2,3,4,7,8,9-HpCDF	ND	3.54		-	0.280	Total HxCDF	ND	1.46	
OCDF	ND	5.48		-	0.451	Total HpCDF	ND	3.54	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.6	25.0 - 164	
13C-1,2,3,7,8-PeCDD	95.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	85.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	79.1	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	94.6	23.0 - 140	
13C-OCDD	96.3	17.0 - 157	
13C-2,3,7,8-TCDF	90.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	84.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	85.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	88.8	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	85.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	88.3	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	91.2	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	89.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	91.4	26.0 - 138	
13C-OCDF	95.3	17.0 - 157	

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

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

Analyst: _____
Date: 8/31/10

Reviewed By: _____
Date: 9/1/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6312-004-SA
Client ID: MW-01-081310
Matrix: Aqueous
Batch No: X2094

Date Extracted: 08-27-2010
Date Received: 08-18-2010
Amount: 1.021 L

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

Acquired: 08-30-2010
2005 WHO TEQ: 16.1

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.53		-	0.212				
1,2,3,7,8-PeCDD	ND	2.41		-	0.302				
1,2,3,4,7,8-HxCDD	4.50	-	J	0.450	0.328				
1,2,3,6,7,8-HxCDD	15.9	-	J	1.59	0.381	Total TCDD	6.06	-	
1,2,3,7,8,9-HxCDD	7.59	-	J	0.759	0.351	Total PeCDD	107	-	
1;2,3,4,6,7,8-HpCDD	708	-		7.08	0.495	Total HxCDD	341	-	
OCDD	11700	-		3.51	1.02	Total HpCDD	1680	-	
2,3,7,8-TCDF	ND	0.924		-	0.112				
1,2,3,7,8-PeCDF	ND	2.99		-	0.219				
2,3,4,7,8-PeCDF	ND	3.15		-	0.232				
1,2,3,4,7,8-HxCDF	2.98	-	J	0.298	0.162				
1,2,3,6,7,8-HxCDF	4.72	-	J	0.472	0.167				
2,3,4,6,7,8-HxCDF	11.1	-	J	1.11	0.167				
1,2,3,7,8,9-HxCDF	ND	2.57		-	0.185	Total TCDF	531	-	D,M
1,2,3,4,6,7,8-HpCDF	71.6	-		0.716	0.251	Total PeCDF	1460	-	D,M
1,2,3,4,7,8,9-HpCDF	6.50	-	J	0.0650	0.280	Total HxCDF	133	-	D,M
OCDF	281	-		0.0843	0.451	Total HpCDF	266	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	82.8	25.0 - 164	
13C-1,2,3,7,8-PeCDD	87.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	79.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	76.8	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	96.1	23.0 - 140	
13C-OCDD	103	17.0 - 157	
13C-2,3,7,8-TCDF	86.3	24.0 - 169	
13C-1,2,3,7,8-PeCDF	81.6	24.0 - 185	
13C-2,3,4,7,8-PeCDF	81.9	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	86.5	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	81.6	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	84.0	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	90.0	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	87.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	93.2	26.0 - 138	
13C-OCDF	98.2	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	87.6	35.0 - 197

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

Analyst: _____
Date: 8/31/10

Reviewed By: _____
Date: 9/1/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6312-005-SA
Client ID: MW-05-081310
Matrix: Aqueous
Batch No: X2094

Date Extracted: 08-27-2010
Date Received: 08-18-2010
Amount: 1.000 L

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

Acquired: 08-30-2010
2005 WHO TEQ: 0.507

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.82		-	0.212				
1,2,3,7,8-PeCDD	ND	2.71		-	0.302				
1,2,3,4,7,8-HxCDD	ND	2.22		-	0.328				
1,2,3,6,7,8-HxCDD	ND	2.79		-	0.381	Total TCDD	ND	1.82	
1,2,3,7,8,9-HxCDD	ND	2.50		-	0.351	Total PeCDD	ND	2.71	
1,2,3,4,6,7,8-HpCDD	42.0	*-		0.420	0.495	Total HxCDD	16.5	-	J
OCDD	289	-		0.0867	1.02	Total HpCDD	93.4	-	
2,3,7,8-TCDF	ND	0.790		-	0.112				
1,2,3,7,8-PeCDF	ND	1.25		-	0.219				
2,3,4,7,8-PeCDF	ND	1.26		-	0.232				
1,2,3,4,7,8-HxCDF	ND	1.44		-	0.162				
1,2,3,6,7,8-HxCDF	ND	1.45		-	0.167				
2,3,4,6,7,8-HxCDF	ND	1.55		-	0.167				
1,2,3,7,8,9-HxCDF	ND	1.50		-	0.185	Total TCDF	9.47	-	
1,2,3,4,6,7,8-HpCDF	ND	3.63		-	0.251	Total PeCDF	10.4	-	J
1,2,3,4,7,8,9-HpCDF	ND	2.27		-	0.280	Total HxCDF	2.80	-	J
OCDF	ND	6.64		-	0.451	Total HpCDF	6.24	-	J

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	84.7	25.0 - 164	
13C-1,2,3,7,8-PeCDD	89.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	84.5	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	77.5	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	94.9	23.0 - 140	
13C-OCDD	95.7	17.0 - 157	
13C-2,3,7,8-TCDF	88.4	24.0 - 169	
13C-1,2,3,7,8-PeCDF	81.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	83.6	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	91.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	84.8	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	87.0	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	92.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	88.8	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	94.0	26.0 - 138	
13C-OCDF	95.9	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	87.4	35.0 - 197

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

Analyst: _____
Date: 8/31/10

Reviewed By: _____
Date: 9/1/10

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SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/16/10

ANALYTICAL RESOURCES INCORPORATED

6312/08

ARI Project: RI65

Laboratory: Frontier Analytical Laboratory
Lab Contact: BRAD SILVERBUSH
Lab Address: 5172 Hillsdale Circle
El Dorado Hills, CA 95762
Phone: 916-934-0900
Fax: 916-934-0999

ARI Client: Floyd-Snider
Project ID: Lora Lake Apts RI
ARI PM: Sue Dunnihoo
Phone: 206-695-6207
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **05/30/08**
Email Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
10-19847-RI65A	MW-09-081310	08/13/10 08:53	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-19848-RI65B	MW-08-081310	08/13/10 10:00	Water	2*	Dioxin/Furans 1613(Sub)
Special Instructions: None MS/MSD					
10-19849-RI65C	MW-07-081310	08/13/10 11:23	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-19850-RI65D	MW-01-081310	08/13/10 13:30	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-19851-RI65E	MW-05-081310	08/13/10 14:45	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					

*only one bottle available for ms/msd purposes. DN 8/27/10

L4 & EDD

Carrier UPS	Airbill 1Z 832 695 01 5198 2048		Date 8-16-10
Relinquished by	Company Jen ARI	Date 8/16/10	Time 1540
Received by Mary	Company FAL	Date 8/18/10	Time 930

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **6312**

Client:	Analytical Resources Inc. Sue Dunnihoo
Client Project ID:	RI65
Date Received:	08/18/2010
Time Received:	09:30 am
Received By:	GN
Logged In By:	KZ
# of Samples Received:	5
Duplicates:	0
Storage Location:	R2

Method of Delivery:	UPS
Tracking Number:	1Z8326950349289857
Shipping Container Received Intact	Yes
Custody seals(s) present?	Yes
Custody seals(s) intact?	Yes
Sample Arrival Temperature (C)	0
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test for residual Chlorine	Yes
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	08/15/2011
Adequate Sample Volume	Yes

Anomalies or additional comments:

L4 DATA PACKAGE & EDD

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Frontier Analytical Laboratory

PROJECT REQUEST SHEET

Project #:	6312	Sample #:	1 - 5	Client Manager:	BS
Client:	Analytical Resources Inc. Sue Dunnihoo			Hold Time:	08/15/2011
Matrix:	Aqueous	Extraction Batch:	2094	Due Date:	09/10/2010
Method:	EPA 1613 D/F			Storage:	R2
SOP:	SOPs: EP2A Rev.7 IP2A Rev.8				

COMMENTS/INSTRUCTIONS:

- NO cap -

Sample	Full Weight (g)	Empty Weight (g)
6312-001-0001-SA	1564.87g	495.00g
6312-002-0001-SA	1511.27g	494.46g
6312-002-0002-MS	994.45g	495.55g
6312-002-0002-MSD	995.45g	494.14g
6312-003-0001-SA	1513.87g	495.64g
6312-004-0001-SA	1515.37g	494.81g
6312-005-0001-SA	1494.78g	495.17g

Results: 6312

Extract/s located in box: "Hope-ium"

Standards: STDS + QC = 6310

Instrument:
DB5 Tcl3
DB225 ____
DB1 ____
Other ____

L4 + EDD

Frontier Analytical Laboratory
Percent Solids

FAL Project: 6312

	Sample ID	Chemist	Date	Wet Sample Weight (g)	Dry Sample Weight (g)	% Solids	10g Equiv
1.29	6312-001-0001-SA	DN	8.27.10	15.48	0.00	0%	—
1.29	6312-002-0001-SA	↓	↓	15.61	0.00	0%	—
1.29	6312-002-0002-MS			13.13	0.00	0%	—
1.29	6312-002-0002-MSD			10.71	0.00	0%	—
1.29	6312-003-0001-SA			14.54	0.00	0%	—
1.29	6312-004-0001-SA			16.29	0.00	0%	—
1.29	6312-005-0001-SA			15.06	0.00	0%	—

% Solids Summary:

Non-Filtered Determination

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

Filtered Determination

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

% Solids calculation

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

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

EXTRACTION SHEET

Project #: 6312 Extraction Date: 2010-08-27 Extraction Chemist: DV

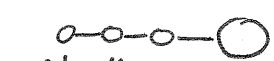
Method/Analysis: EPA 1613 D/F

Procedure: SPE/SOX Solvent: Toluene

Sample ID	Wet wt. (g/L)	Dry wt. (g/L)	IS Amt: 10.0uL ID: 100511A Vial: 1 Chemist/Witness/Date	NS Amt: 10.0uL ID: 100511B Vial: 1 Chemist/Witness/Date	CSS Amt: 10.0uL ID: 100511C Vial: 1 Chemist/Witness/Date
2094-001-0001-MB	(1.000L)	N/A	DN MP 8.27.10	N/A	DN MP 8.30.10
2094-001-0001-OPR	(1.000L)			DN MP 8.27.10	
6312-001-0001-SA	1.010L			N/A	
6312-002-0001-SA	1.017L			↓	
6312-002-0002-MS	0.499L			DN MP 8.27.10	
6312-002-0002-MSD	0.501L			↓	
6312-003-0001-SA	1.018L			N/A	
6312-004-0001-SA	1.021L			↓	
6312-005-0001-SA	1.000L	↓	↓	↓	↓

AX-21 Charcoal Cleaned	031210	Acetone	50180	Acid Alumina	08623DJ	Hexane	50125
Hydrochloric Acid	B08505	Methanol	102708	Methylene Chloride (DCM)	50133	Silica Gel	TA1593034
Sodium Hydroxide	9265	Sodium Sulfate	49009905	Sulfuric Acid	101570	Tetradecane	081394
Toluene	101346	Water	102740	C-18 Empore Discs	320505	Cyclohexane	48151

Comments:



12-1 dil MB
12-3 12-2MS 12-2
12-5 12-2MSD 12-4
10-2 RX

CLEANUP SHEET

Project #: 6312

Method/Analysis: EPA 1613 D/F

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

Sample ID	Cleanup 1 MSG·AA Chemist/Date	Cleanup 2 N/A Chemist/Date	Cleanup 3 N/A Chemist/Date	RS Amt: 10.0uL ID: 100511D Vial: 1 Chemist/Witness/Date
2094-001-0001-MB	DN 8.30.10	N/A	N/A	DN MP 8.30.10
2094-001-0001-OPR	↓	↓	↓	↓
6312-001-0001-SA	↓	↓	↓	↓
6312-002-0001-SA	↓	↓	↓	↓
6312-002-0002-MS	↓	↓	↓	↓
6312-002-0002-MSD	↓	↓	↓	↓
6312-003-0001-SA	↓	↓	↓	↓
6312-004-0001-SA	↓	↓	↓	↓
6312-005-0001-SA	↓	↓	↓	↓

Comments:

FAL ID: 2094-001-0001-MB Filename: 30AUG10M Sam:3 Acquired: 30-AUG-10 16:20:13 ICal: PCDDFAL3-8-23-10
Client ID: Method Blank ConCal: ST083010M1 EndCal: ST083010M2
Results: 6310X GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 0.00
WHO 1998 Tox: 0.00 WHO 2005 Tox: 0.00

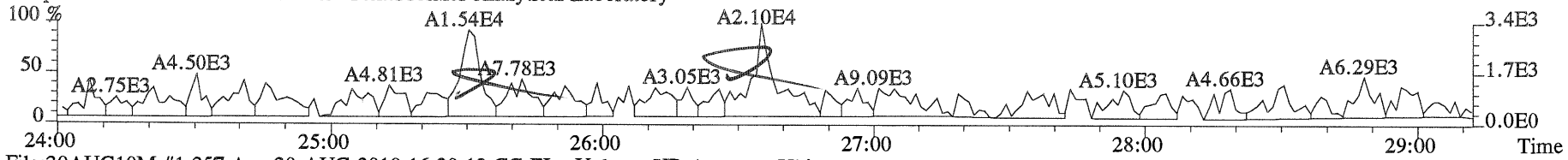
Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.11	*		2.50	440	563	1.05
1,2,3,7,8-PeCDD	*	*	n	NotFnd	1.10	*		2.50	531	460	1.35
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	634	532	1.57
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	634	532	1.85
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.36	*		2.50	634	532	1.72
1,2,3,4,6,7,8-HpCDD	*	*	n	NotFnd	1.45	*		2.50	711	676	2.34
OCDD	*	*	n	NotFnd	1.43	*		2.50	662	674	4.32
2,3,7,8-TCDF	*	*	n	NotFnd	1.50	*		2.50	549	615	0.547
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.94	*		2.50	580	588	1.15
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.94	*		2.50	580	588	1.17
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	0.93	*		2.50	617	592	1.32
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.82	*		2.50	617	592	1.26
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	617	592	1.36
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.00	*		2.50	617	592	1.38
1,2,3,4,6,7,8-HpCDF	*	*	n	NotFnd	1.39	*		2.50	593	564	1.62
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.36	*		2.50	593	564	2.44
OCDF	*	*	n	NotFnd	0.79	*		2.50	502	540	3.14

							Rec
13C-2,3,7,8-TCDD	2.00e+07	0.82	y	27:21	1.02	1840	92.0
13C-1,2,3,7,8-PeCDD	1.78e+07	1.74	y	33:10	0.84	2000	100
13C-1,2,3,4,7,8-HxCDD	1.43e+07	1.22	y	38:32	1.07	1820	90.9
13C-1,2,3,6,7,8-HxCDD	1.35e+07	1.30	y	38:42	1.01	1820	91.1
13C-1,2,3,4,6,7,8-HpCDD	1.32e+07	1.02	y	44:09	0.86	2110	105
13C-OCDD	1.73e+07	1.00	y	49:43	0.55	4320	108
13C-2,3,7,8-TCDF	3.38e+07	0.86	y	26:35	0.99	1860	93.0
13C-1,2,3,7,8-PeCDF	2.75e+07	1.75	y	31:25	0.84	1800	89.8
13C-2,3,4,7,8-PeCDF	2.72e+07	1.74	y	32:45	0.81	1830	91.5
13C-1,2,3,4,7,8-HxCDF	2.65e+07	0.47	y	37:09	1.85	1950	97.4
13C-1,2,3,6,7,8-HxCDF	3.55e+07	0.48	y	37:20	2.54	1910	95.4
13C-2,3,4,6,7,8-HxCDF	2.86e+07	0.48	y	38:17	2.01	1940	96.8
13C-1,2,3,7,8,9-HxCDF	2.96e+07	0.47	y	39:44	2.03	1980	99.2
13C-1,2,3,4,6,7,8-HpCDF	1.61e+07	0.45	y	42:15	1.11	1970	98.7
13C-1,2,3,4,7,8,9-HpCDF	1.21e+07	0.45	y	45:04	0.80	2040	102
13C-OCDF	3.46e+07	1.00	y	50:05	1.08	4350	109
37Cl-2,3,7,8-TCDD	5.45e+06			27:22	0.69	751	93.8
13C-1,2,3,4-TCDD	2.12e+07	0.83	y	26:46	-	47.2	
13C-1,2,3,4-TCDF	3.66e+07	0.88	y	25:30	-	50.6	
13C-1,2,3,7,8,9-HxCDD	1.47e+07	1.24	y	39:09	-	53.2	

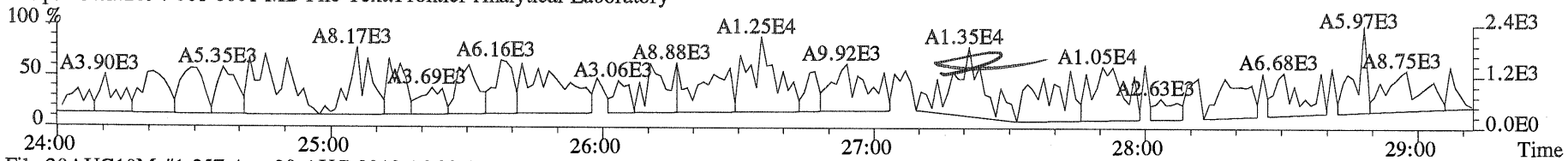
			Fac	Noise-1	Noise-2	DL			#Hom
Total Tetra-Dioxins	*	NotFnd	1.11	*	2.50	440	563	1.05			0
Total Penta-Dioxins	*	NotFnd	1.10	*	2.50	531	460	1.35			0
Total Hexa-Dioxins	*	NotFnd	1.37	*	2.50	634	532	1.85			0
Total Hepta-Dioxins	*	NotFnd	1.45	*	2.50	711	676	2.34			0
Total Tetra-Furans	*	NotFnd	1.50	*	2.50	549	615	0.547			0
1st Fn. Tot Penta-Furans	*	NotFnd	0.94	*	2.50	580	588	1.17	PeCDF		0
Total Penta-Furans	*	NotFnd	0.94	*	2.50	580	588	1.17	0.00		0
Total Hexa-Furans	*	NotFnd	0.91	*	2.50	617	592	1.38			0
Total Hepta-Furans	*	NotFnd	1.38	*	2.50	593	564	2.44			0

Analyst: _____ Date: 8/31/10

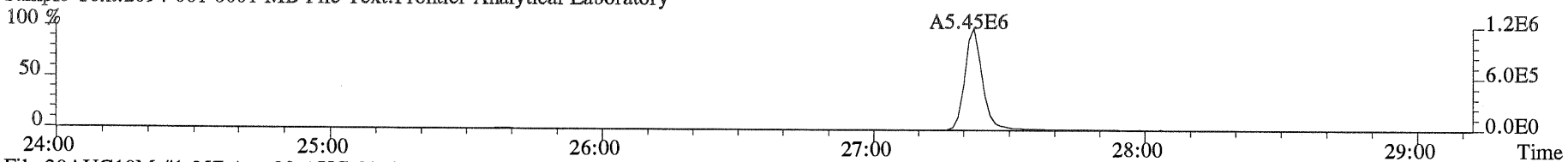
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



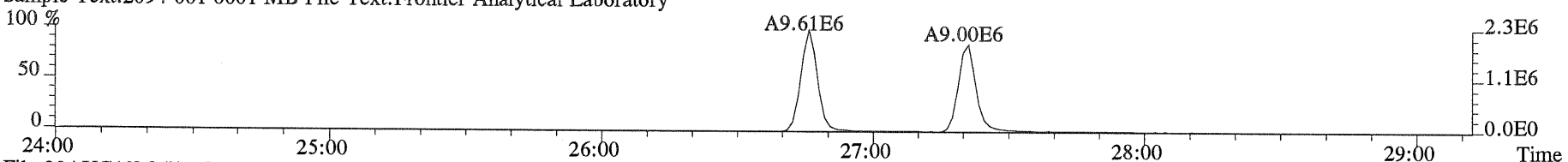
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



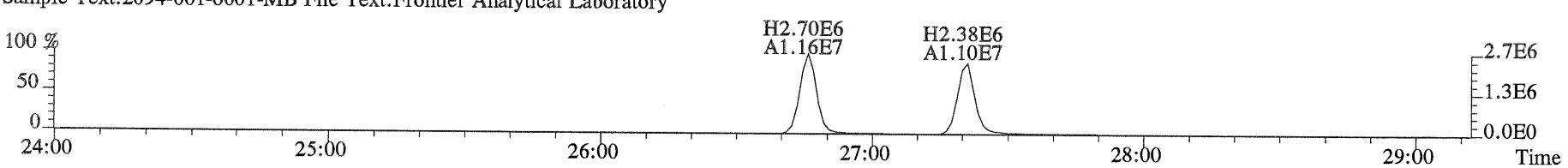
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



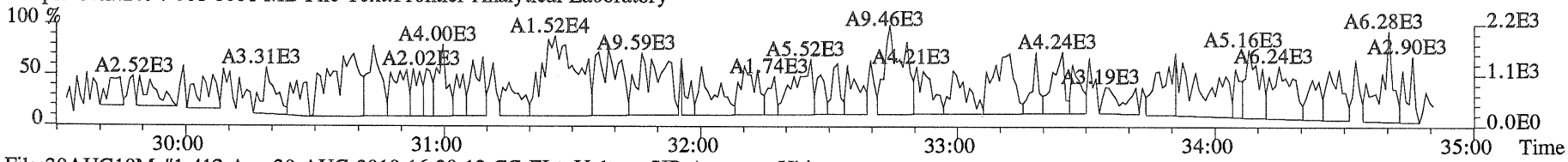
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



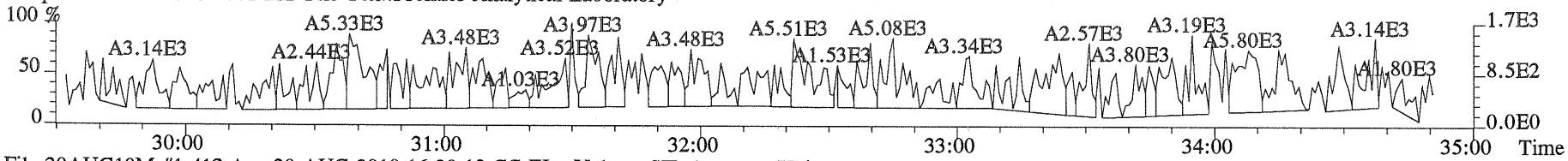
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



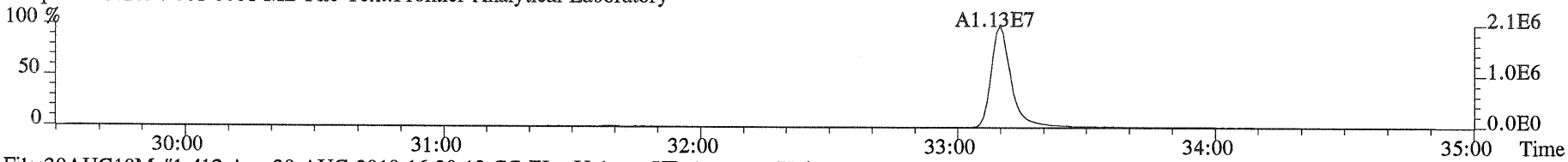
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



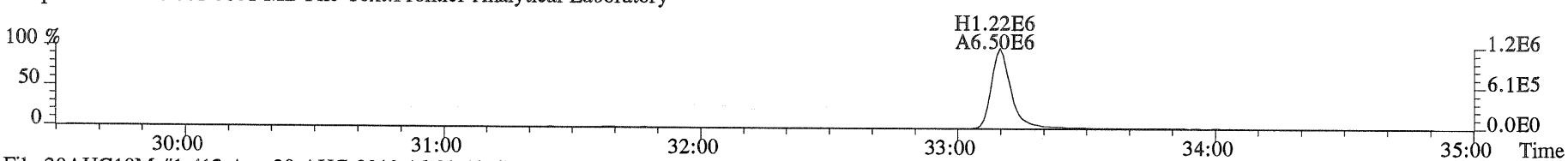
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



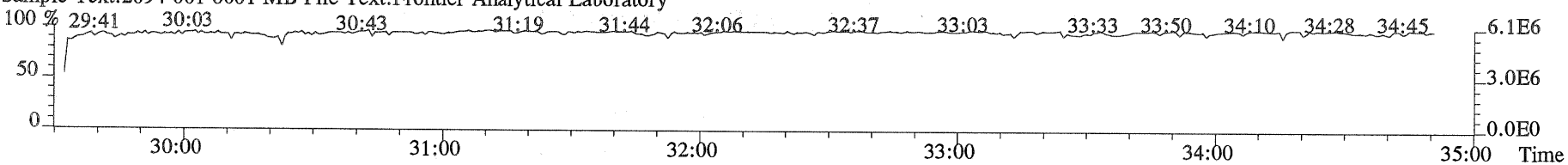
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



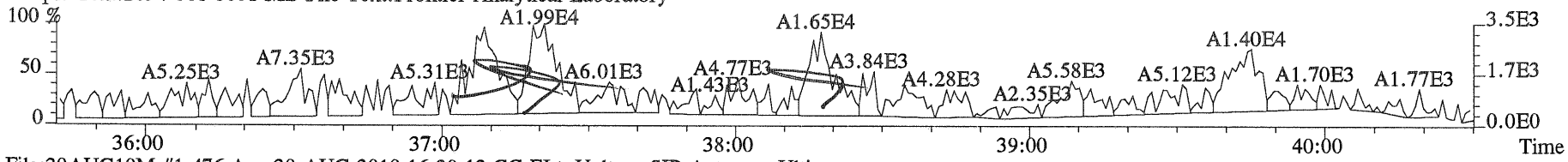
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



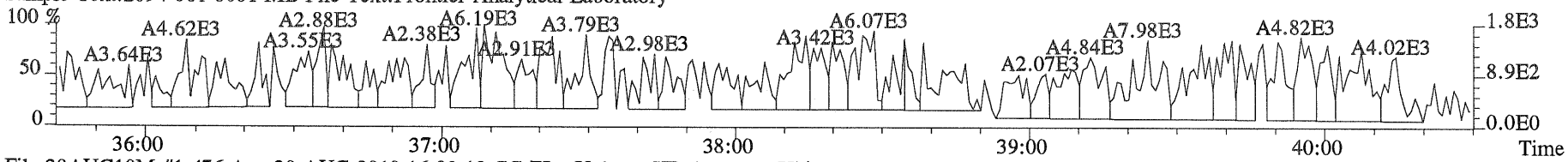
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



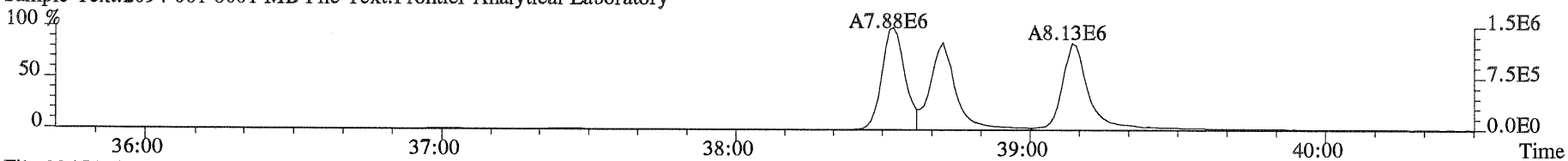
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



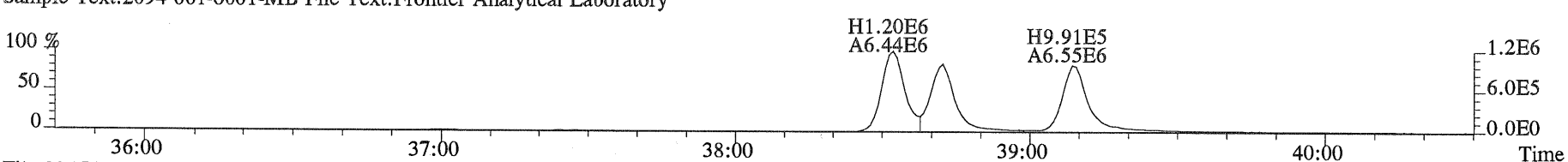
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



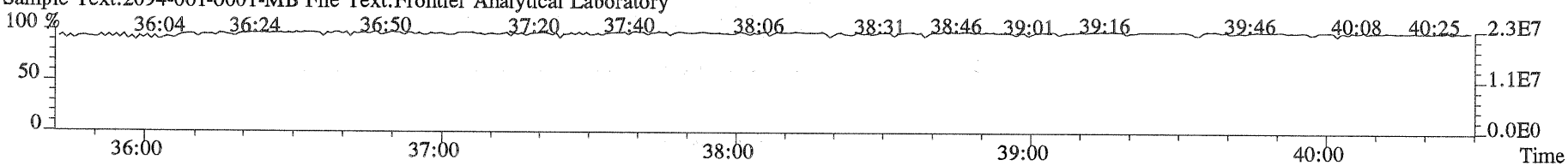
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



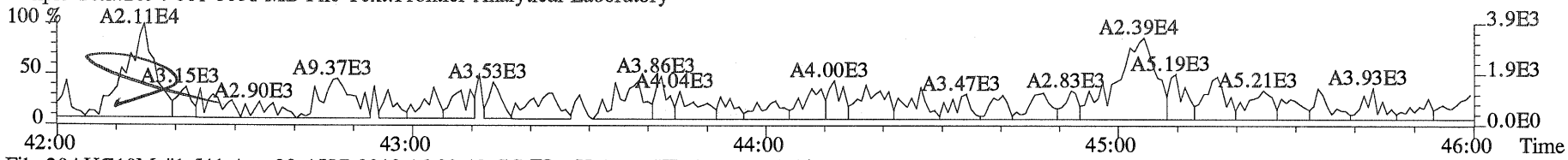
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



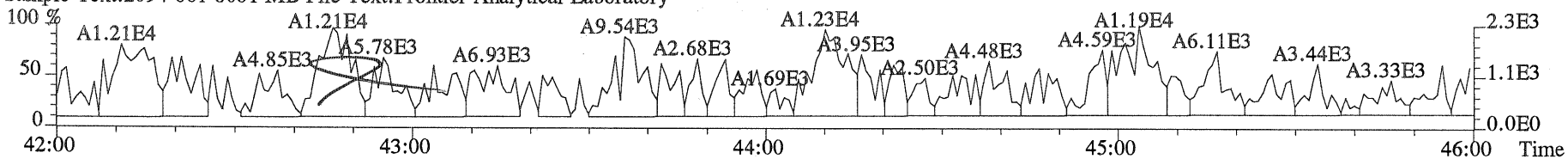
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



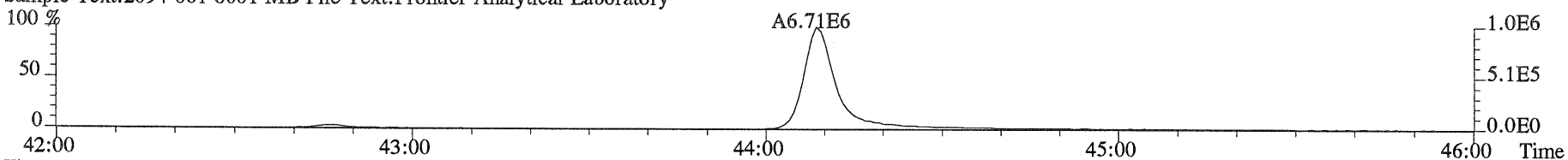
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



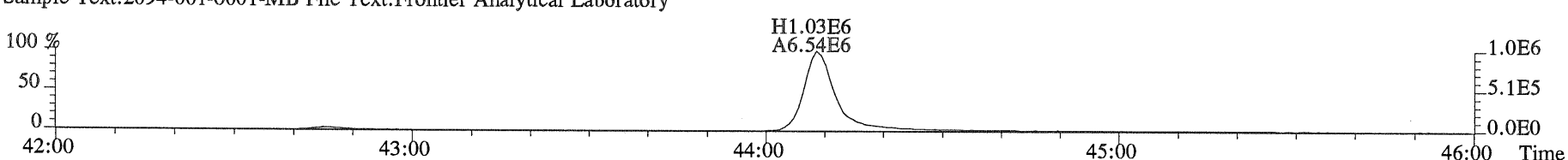
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



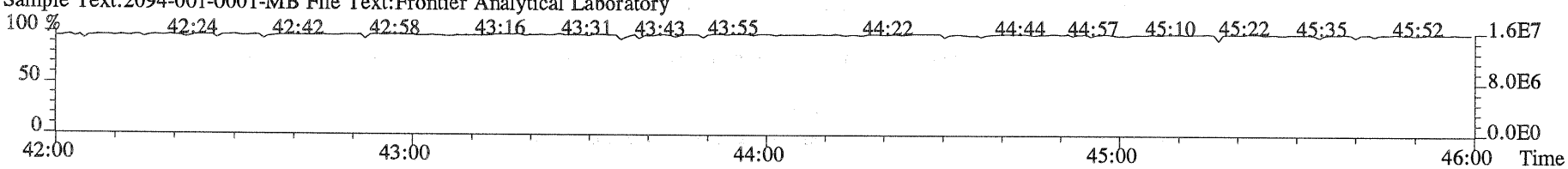
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



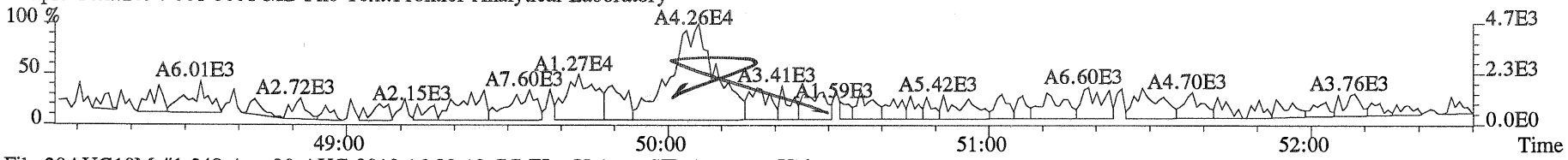
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



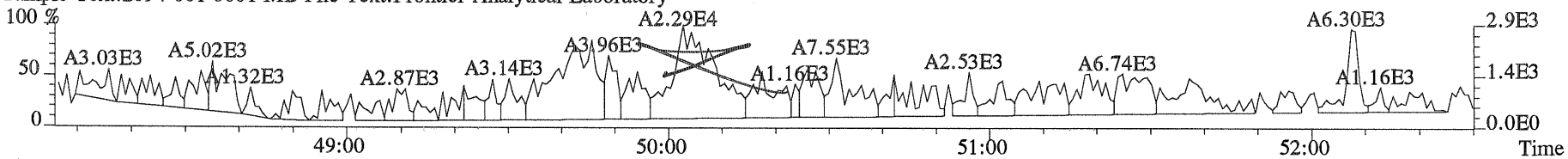
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



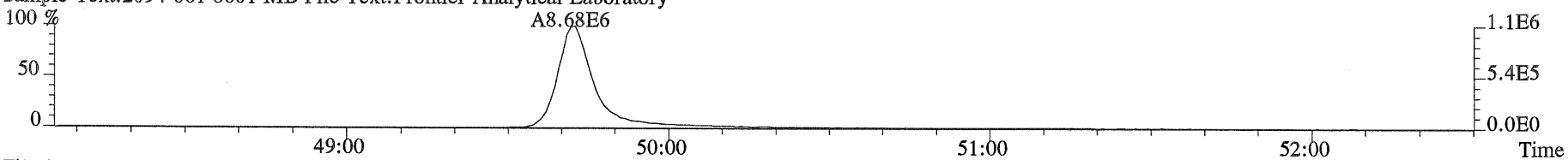
File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 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:2094-001-0001-MB File Text:Frontier Analytical Laboratory

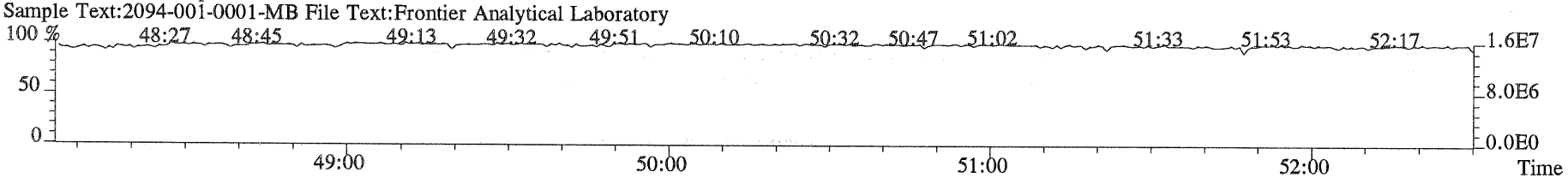


File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory

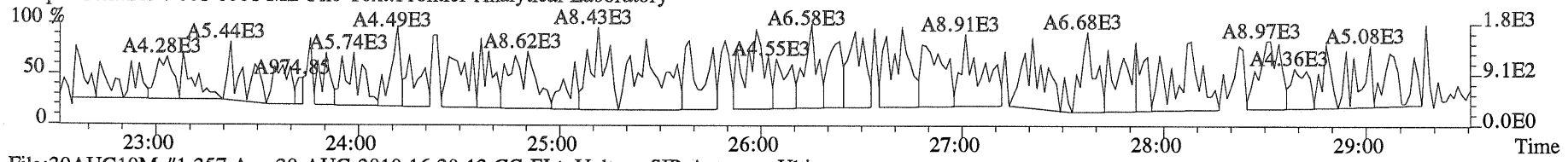


File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory

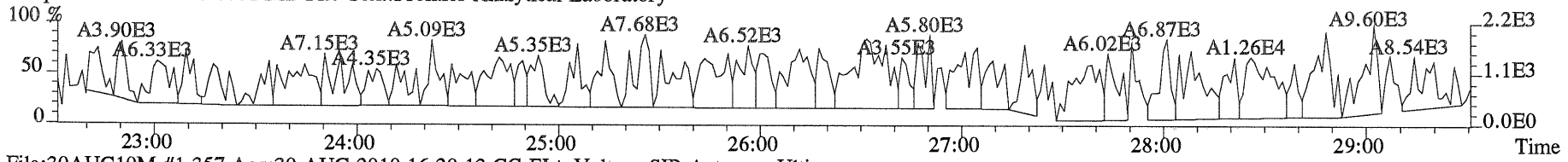
File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



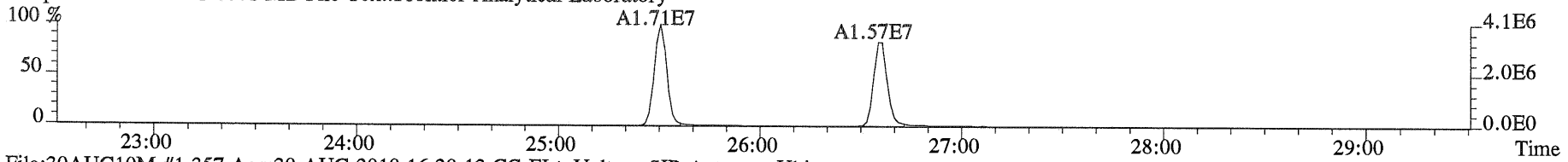
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



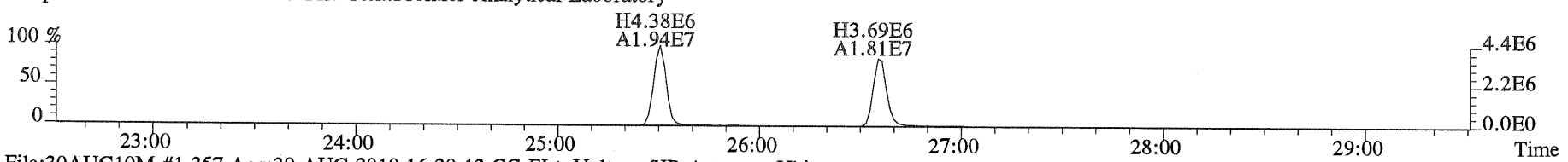
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



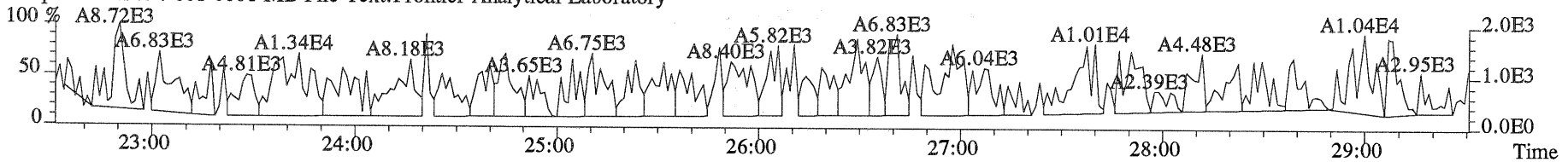
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



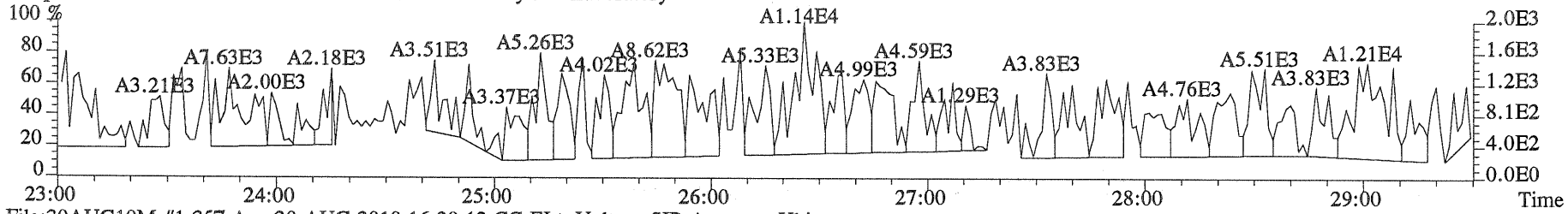
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



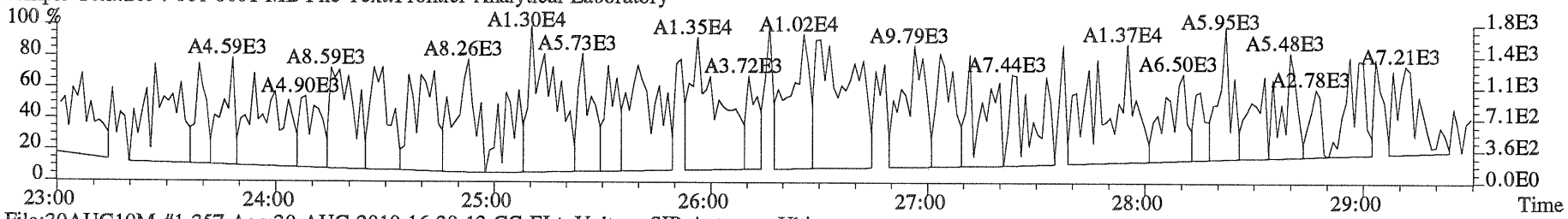
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



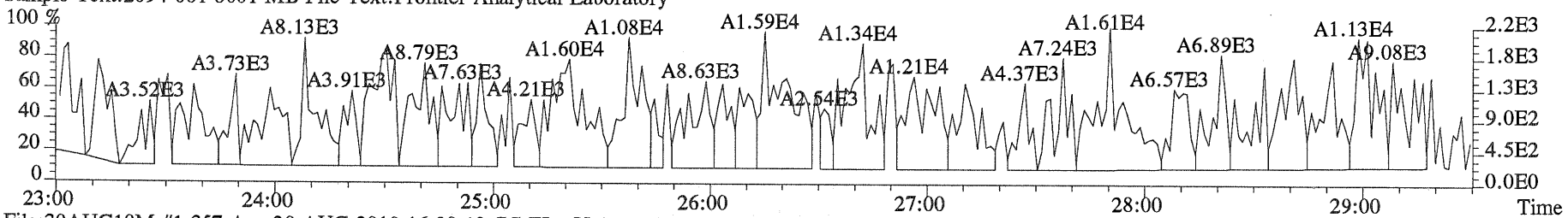
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



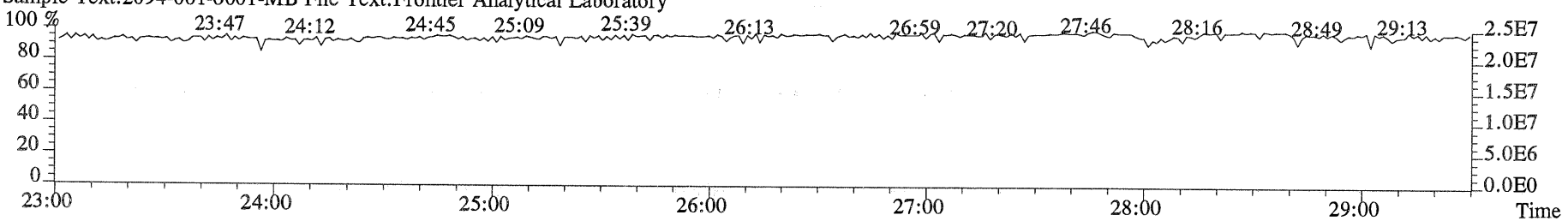
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



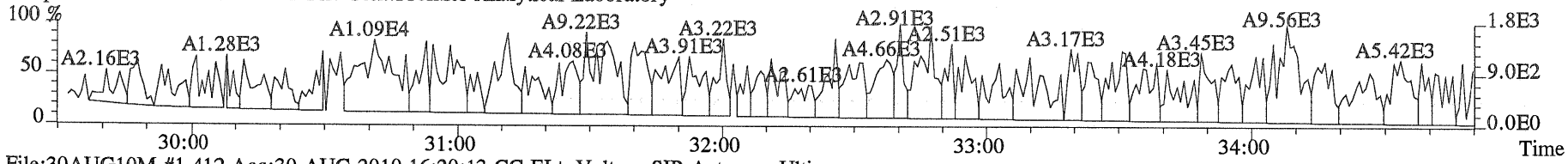
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



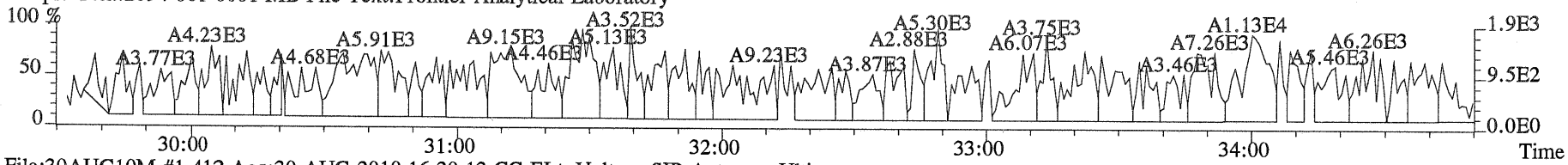
File:30AUG10M #1-357 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



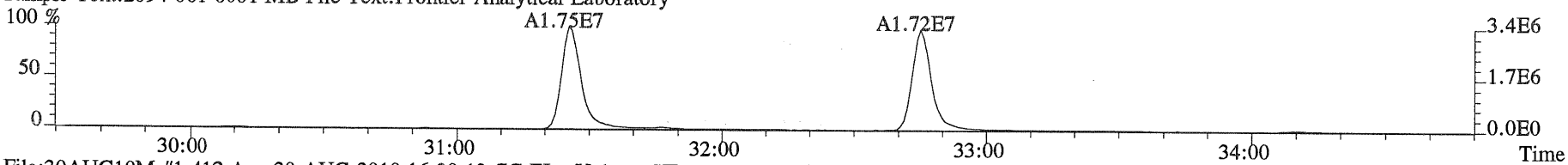
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



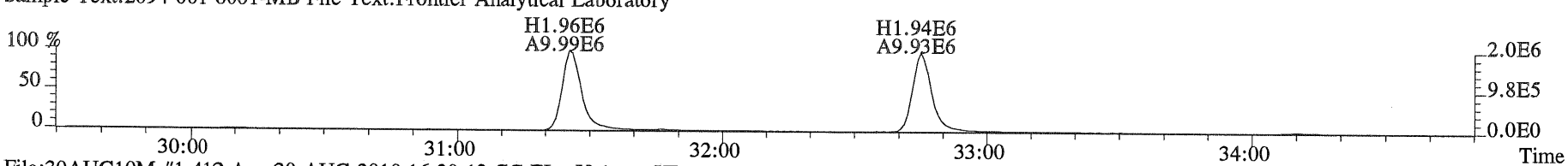
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



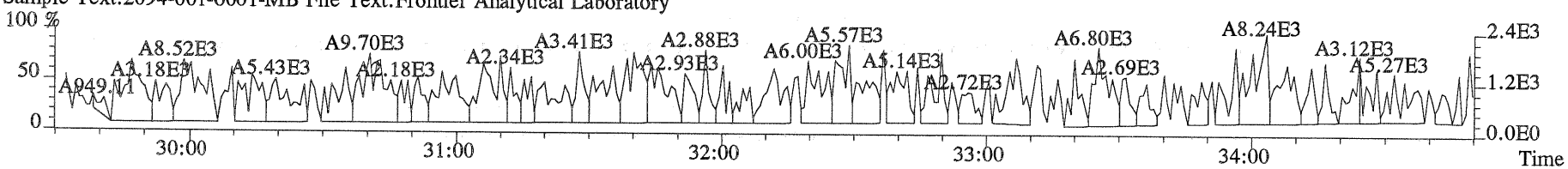
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



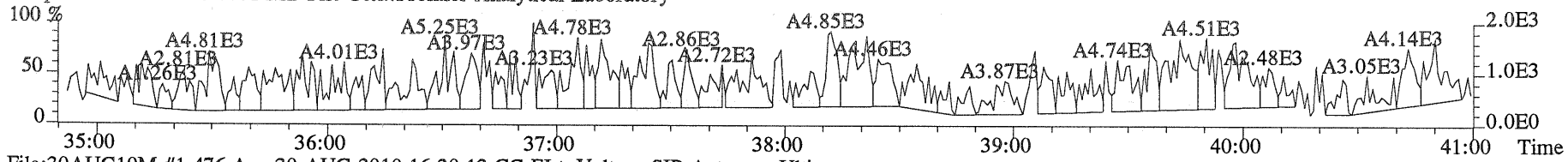
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



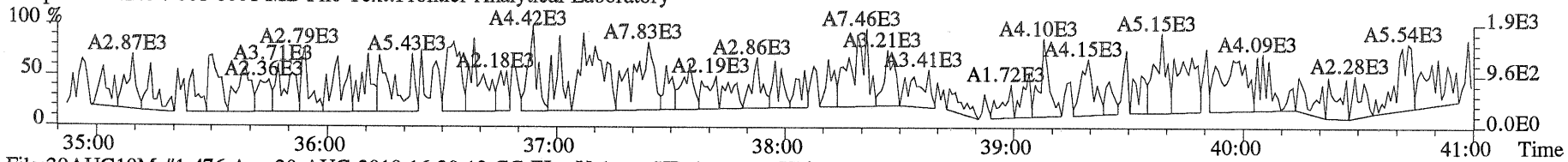
File:30AUG10M #1-412 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



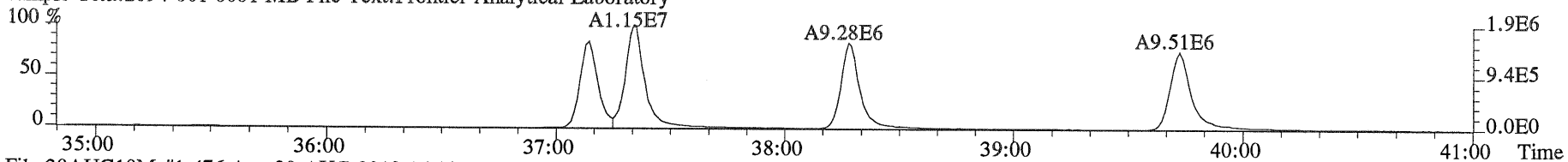
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



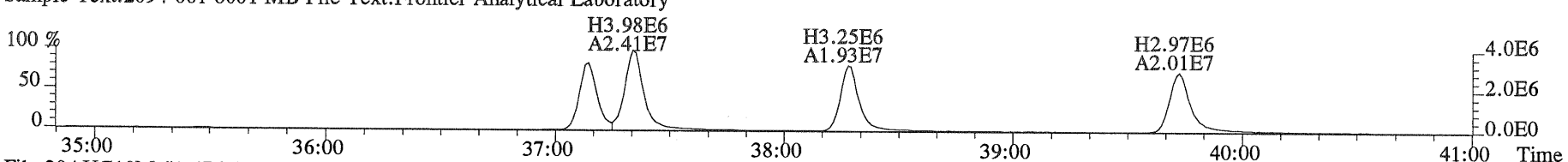
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



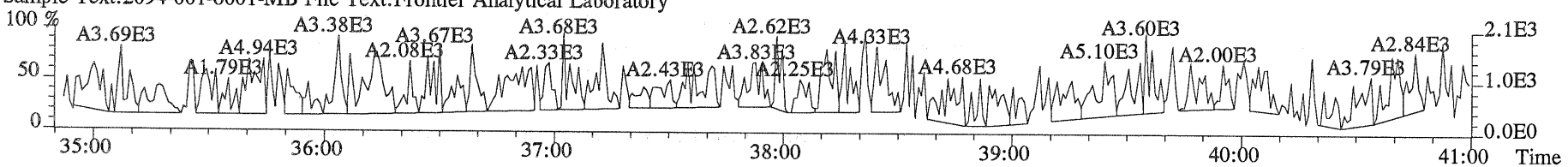
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



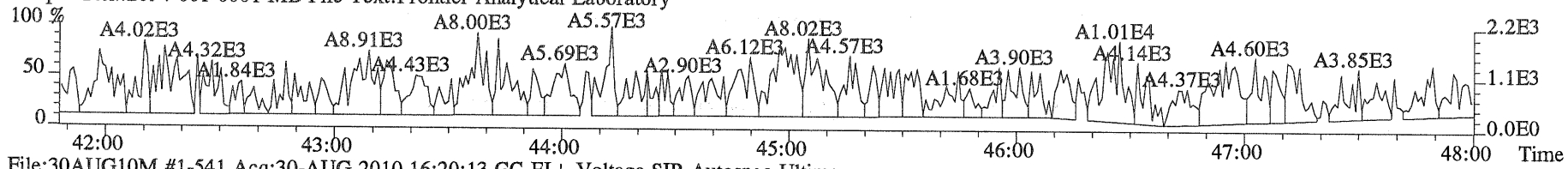
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



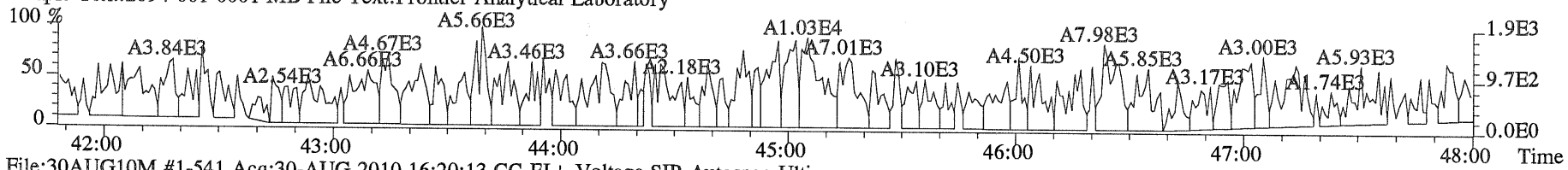
File:30AUG10M #1-476 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



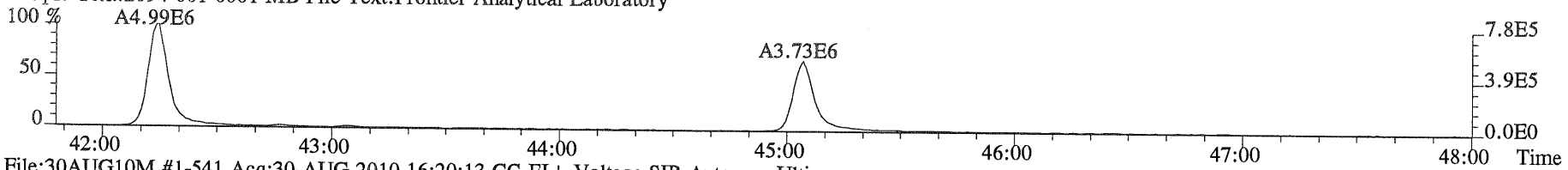
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



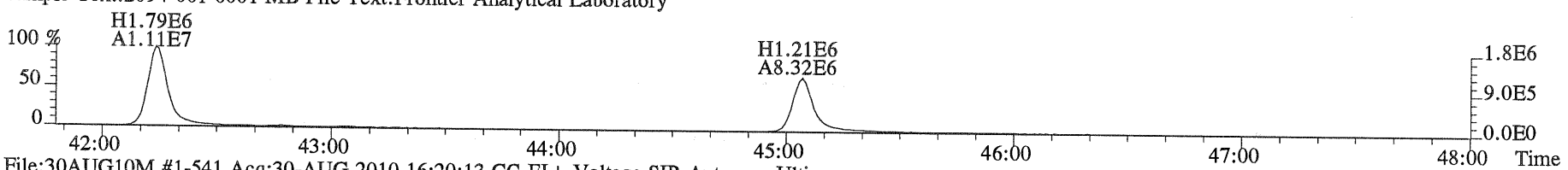
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



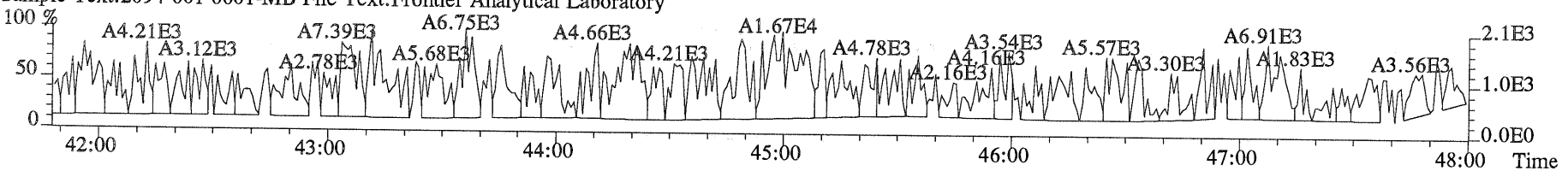
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



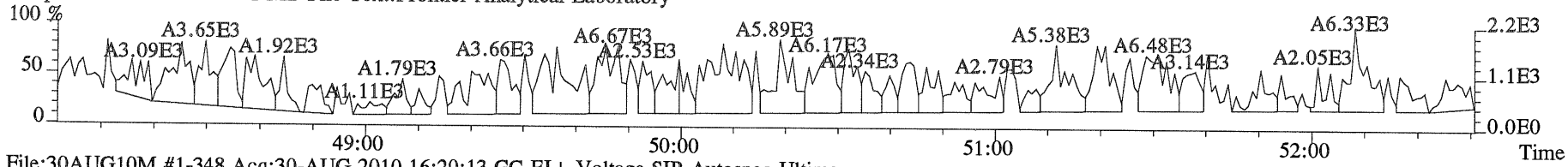
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



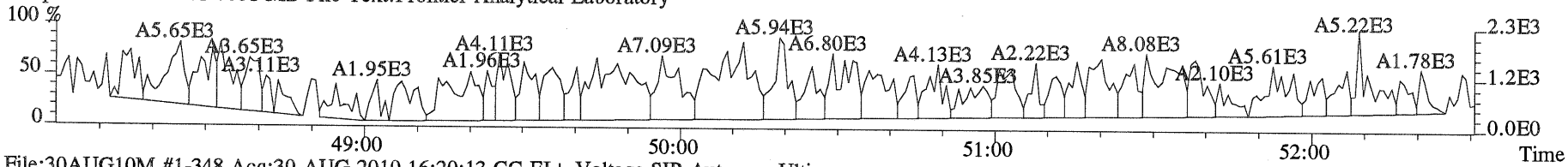
File:30AUG10M #1-541 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



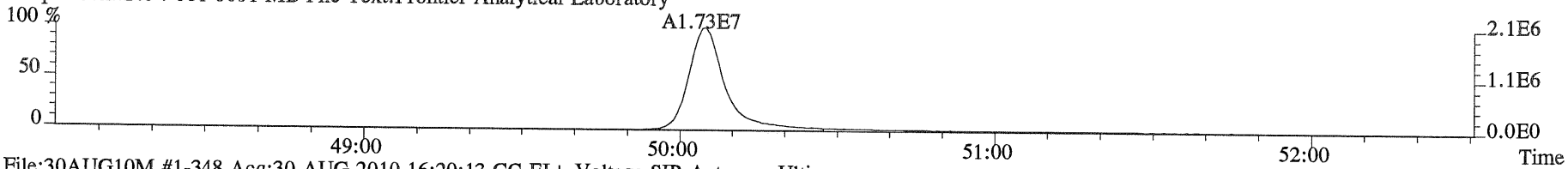
File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



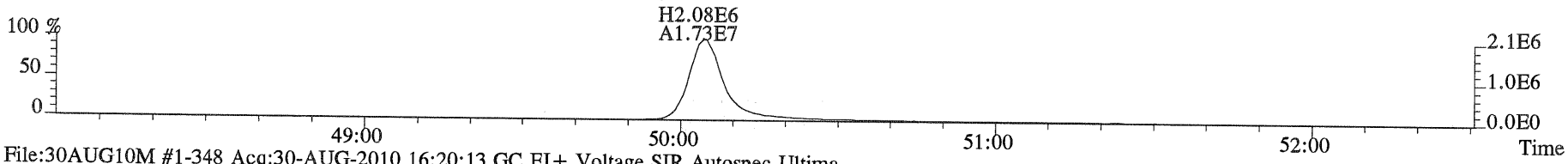
File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



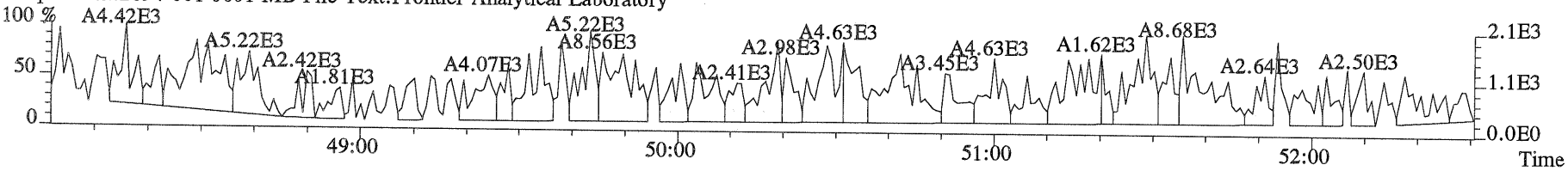
File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-MB File Text:Frontier Analytical Laboratory



File:30AUG10M #1-348 Acq:30-AUG-2010 16:20:13 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:2094-001-0001-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): Aqueous OPR Data Filename: 30AUG10M Sam:2

Ext. Date: 8/27/10 Shift: Day Analysis Date: 30-AUG-10 15:24:51

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	9.66	6.70 - 15.8
1,2,3,7,8-PeCDD	50	51.1	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	48.0	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	47.3	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	51.7	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	48.8	35.0 - 70.0
OCDD	100	89.6	78.0 - 144
2,3,7,8-TCDF	10	8.77	7.50 - 15.8
1,2,3,7,8-PeCDF	50	48.4	40.0 - 67.0
2,3,4,7,8-PeCDF	50	49.0	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	45.2	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	46.5	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	45.4	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	46.5	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	49.4	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	49.7	39.0 - 69.0
OCDF	100	92.9	63.0 - 170

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

Analyst: _____ Date: 8/31/10

USEPA - ITD

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

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Aqueous OPR Data Filename: 30AUG10M Sam:2

Ext. Date: 8/27/10 Shift: Day Analysis Date: 30-AUG-10 15:24:51

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	70.5	20.0 - 175
13C-1,2,3,7,8-PeCDD	100	71.6	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	100	61.8	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	100	63.2	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	100	67.8	26.0 - 166
13C-OCDD	200	141	26.0 - 397
13C-2,3,7,8-TCDF	100	77.5	22.0 - 152
13C-1,2,3,7,8-PeCDF	100	64.4	21.0 - 192
13C-2,3,4,7,8-PeCDF	100	68.2	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	100	65.9	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	65.7	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	100	69.8	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	68.6	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	100	64.2	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	100	67.1	20.0 - 186
13C-OCDF	200	143	26.0 - 397
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	33.5	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: 8/31/10

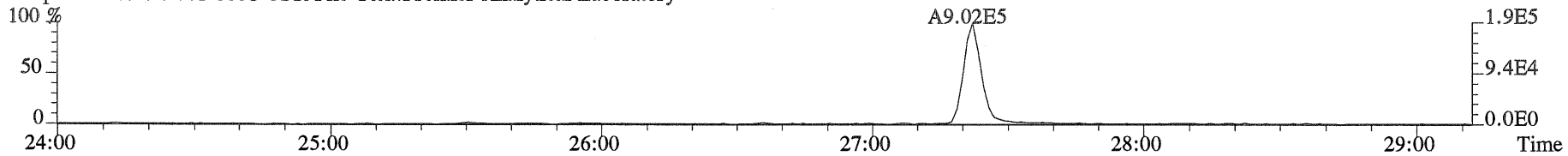
FAL ID: 2094-001-0001-OPR Filename: 30AUG10M Sam:2 Acquired: 30-AUG-10 15:24:51 ICal: PCDDFAL3-8-23-10
Client ID: OPR ConCal: ST083010M1 EndCal: ST083010M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.7
WHO 1998 Tox: 123 WHO 2005 Tox: 112

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.03e+06	0.80 y	27:22	1.11	9.66		2.50	-	-	*
1,2,3,7,8-PeCDD	8.89e+06	1.45 y	33:11	1.10	51.1		2.50	-	-	*
1,2,3,4,7,8-HxCDD	7.60e+06	1.36 y	38:33	1.37	48.0		2.50	-	-	*
1,2,3,6,7,8-HxCDD	7.21e+06	1.37 y	38:43	1.37	47.3		2.50	-	-	*
1,2,3,7,8,9-HxCDD	7.97e+06	1.35 y	39:10	1.36	51.7		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	7.14e+06	0.90 y	44:10	1.45	48.8		2.50	-	-	*
OCDD	8.61e+06	0.92 y	49:43	1.43	89.6		2.50	-	-	*
2,3,7,8-TCDF	4.49e+06	0.70 y	26:36	1.50	8.77		2.50	-	-	*
1,2,3,7,8-PeCDF	1.09e+07	1.58 y	31:27	0.94	48.4		2.50	-	-	*
2,3,4,7,8-PeCDF	1.12e+07	1.56 y	32:46	0.94	49.0		2.50	-	-	*
1,2,3,4,7,8-HxCDF	8.88e+06	1.24 y	37:09	0.93	45.2		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.10e+07	1.24 y	37:22	0.82	46.5		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.02e+07	1.20 y	38:18	0.92	45.4		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.12e+07	1.26 y	39:44	1.00	46.5		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	8.50e+06	1.04 y	42:15	1.39	49.4		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	6.32e+06	1.03 y	45:05	1.36	49.7		2.50	-	-	*
OCDF	9.80e+06	0.95 y	50:06	0.79	92.9		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	1.89e+07	0.84 y	27:21	1.02	70.5					70.5
13C-1,2,3,7,8-PeCDD	1.58e+07	1.72 y	33:10	0.84	71.6					71.6
13C-1,2,3,4,7,8-HxCDD	1.15e+07	1.25 y	38:32	1.07	61.8					61.8
13C-1,2,3,6,7,8-HxCDD	1.11e+07	1.26 y	38:42	1.01	63.2					63.2
13C-1,2,3,4,6,7,8-HpCDD	1.01e+07	0.97 y	44:09	0.86	67.8					67.8
13C-OCDD	1.34e+07	1.01 y	49:43	0.55	141					70.6
13C-2,3,7,8-TCDF	3.41e+07	0.86 y	26:35	0.99	77.5					77.5
13C-1,2,3,7,8-PeCDF	2.39e+07	1.72 y	31:25	0.84	64.4					64.4
13C-2,3,4,7,8-PeCDF	2.45e+07	1.72 y	32:45	0.81	68.2					68.2
13C-1,2,3,4,7,8-HxCDF	2.12e+07	0.46 y	37:09	1.85	65.9					65.9
13C-1,2,3,6,7,8-HxCDF	2.89e+07	0.47 y	37:20	2.54	65.7					65.7
13C-2,3,4,6,7,8-HxCDF	2.44e+07	0.46 y	38:17	2.01	69.8					69.8
13C-1,2,3,7,8,9-HxCDF	2.42e+07	0.47 y	39:44	2.03	68.6					68.6
13C-1,2,3,4,6,7,8-HpCDF	1.24e+07	0.45 y	42:14	1.11	64.2					64.2
13C-1,2,3,4,7,8,9-HpCDF	9.37e+06	0.47 y	45:04	0.80	67.1					67.1
13C-OCDF	2.69e+07	1.01 y	50:04	1.08	143					71.4
37Cl-2,3,7,8-TCDD	6.02e+06		27:22	0.69	33.5					83.8
13C-1,2,3,4-TCDD	2.62e+07	0.83 y	26:46	-	58.3					
13C-1,2,3,4-TCDF	4.42e+07	0.88 y	25:30	-	61.2					
13C-1,2,3,7,8,9-HxCDD	1.74e+07	1.30 y	39:09	-	63.0					

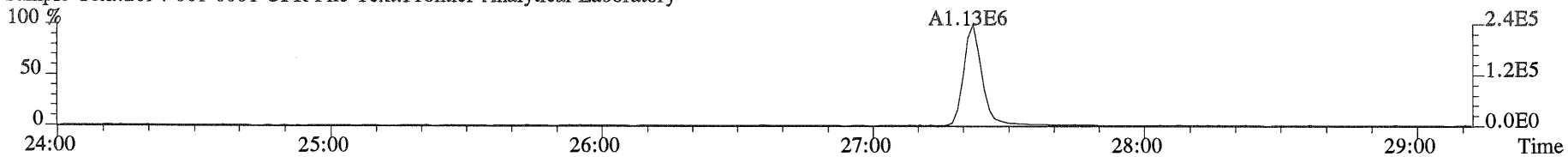
						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	2.38e+06		22:46	1.11	11.3	2.50	-	-	*		26
Total Penta-Dioxins	9.24e+06		30:27	1.10	53.1	2.50	-	-	*		26
Total Hexa-Dioxins	2.32e+07		35:26	1.37	149	2.50	-	-	*		22
Total Hepta-Dioxins	8.08e+06		41:40	1.45	55.2	2.50	-	-	*		46
Total Tetra-Furans	4.87e+06		23:21	1.50	9.50	2.50	-	-	*		19
1st Fn. Tot Penta-Furans	3.04e+05		22:59	0.94	1.34	2.50	-	-	*	PeCDF	26
Total Penta-Furans	2.30e+07		30:12	0.94	101	2.50	-	-	*	102	22
Total Hexa-Furans	4.17e+07		35:14	0.91	185	2.50	-	-	*		18
Total Hepta-Furans	1.54e+07		41:21	1.38	103	2.50	-	-	*		30

Analyst: _____ Date: 9/3/10

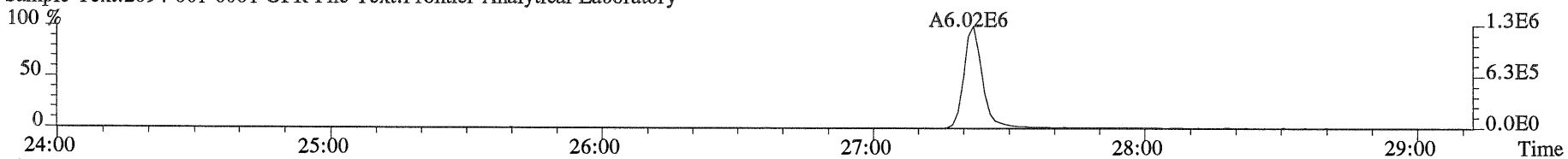
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



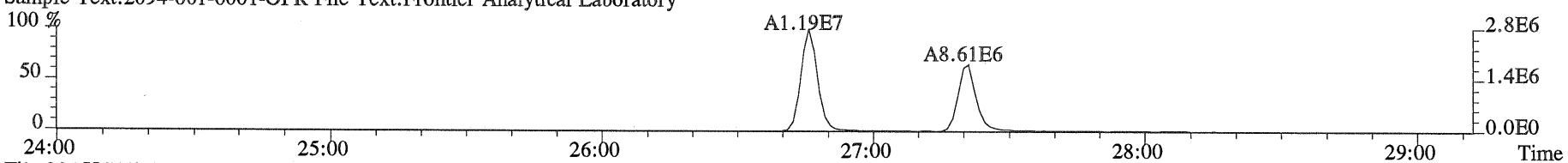
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



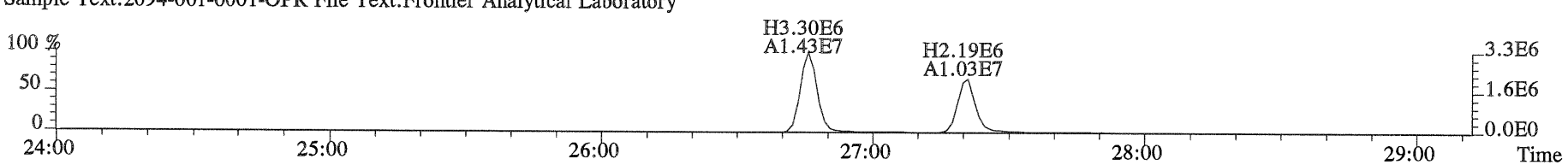
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



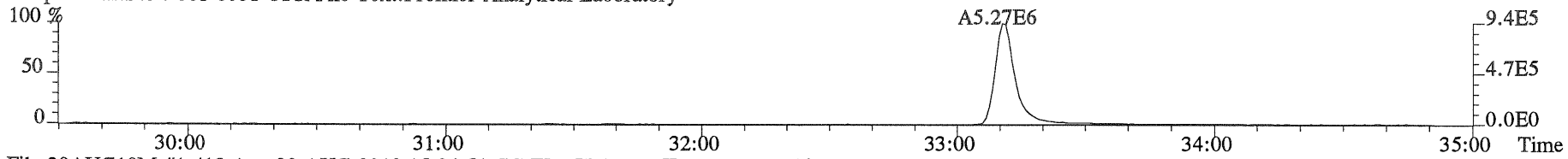
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



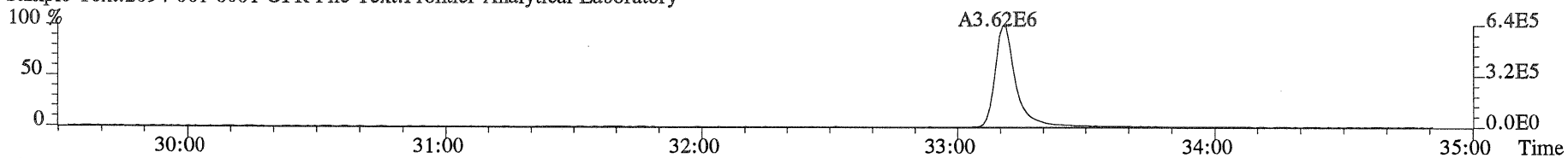
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



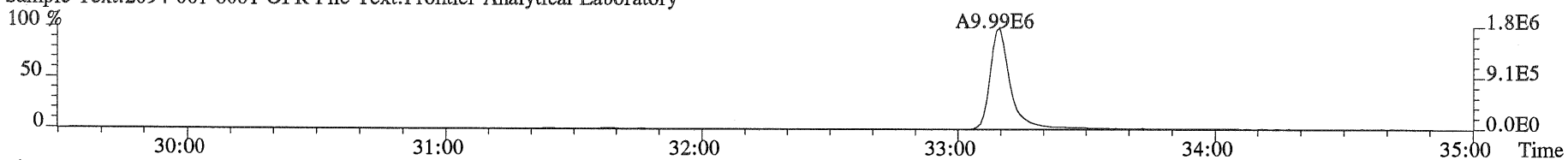
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



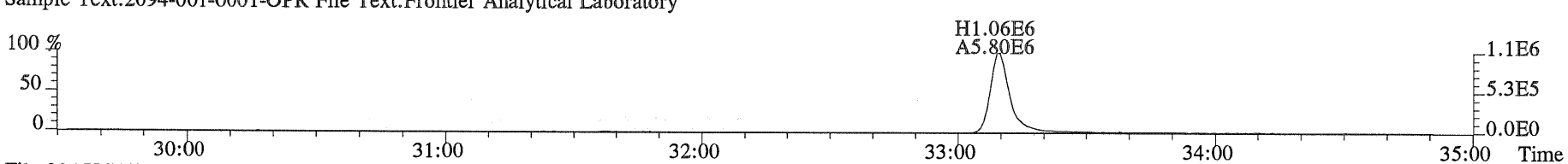
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



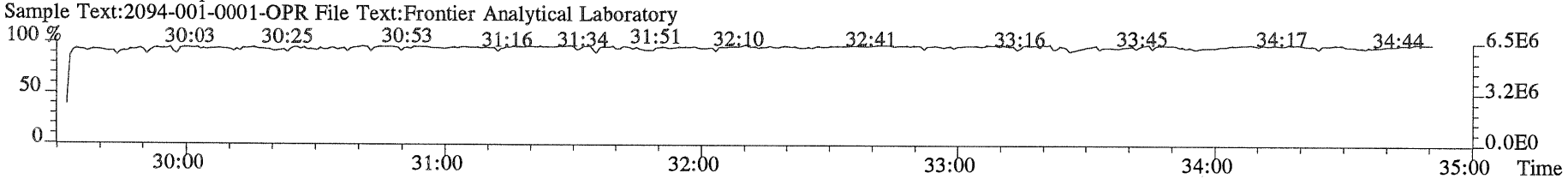
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



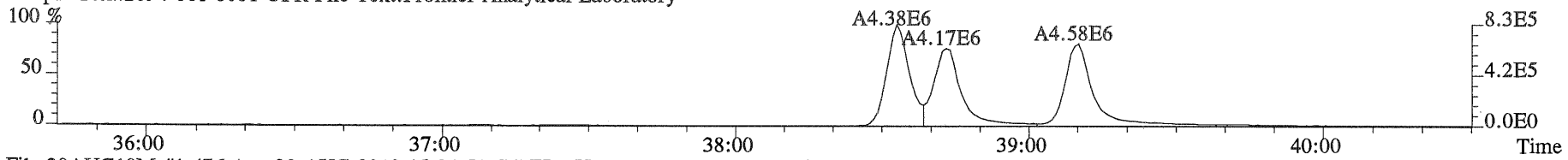
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



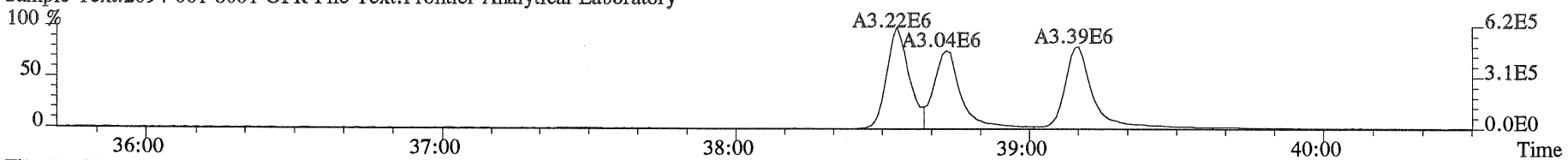
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



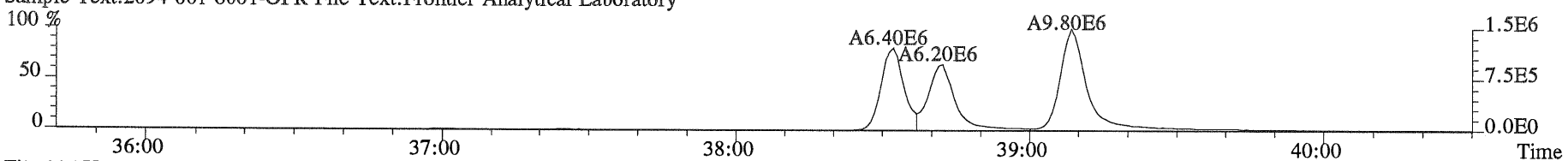
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



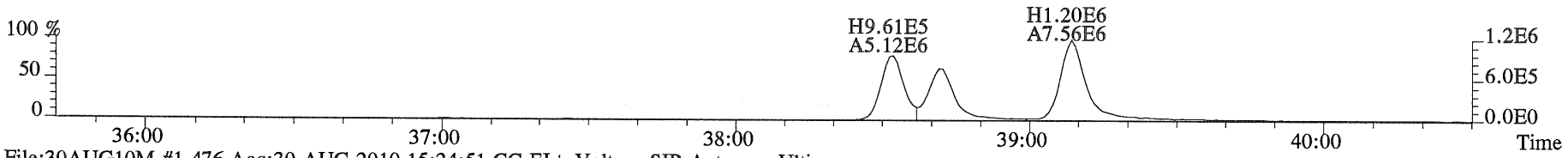
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



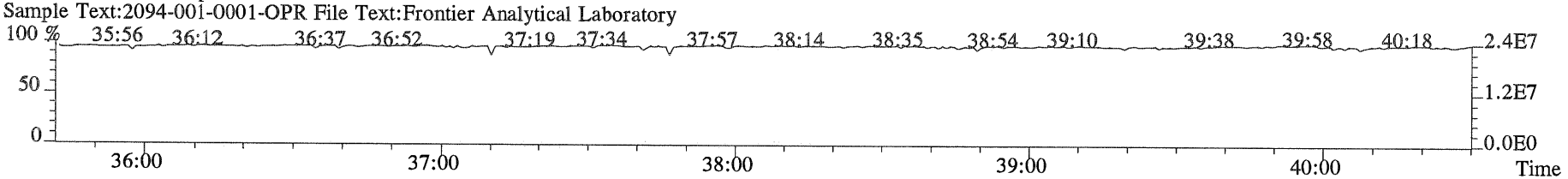
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



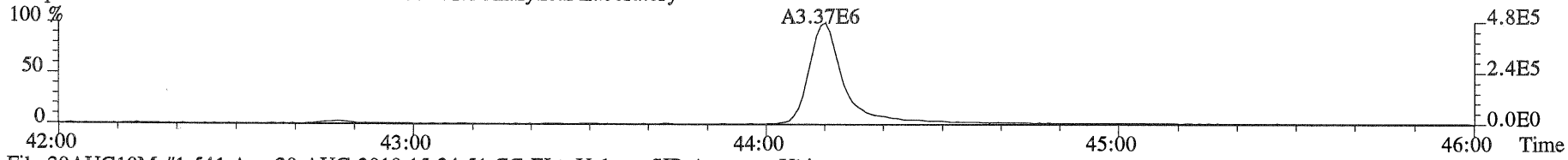
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



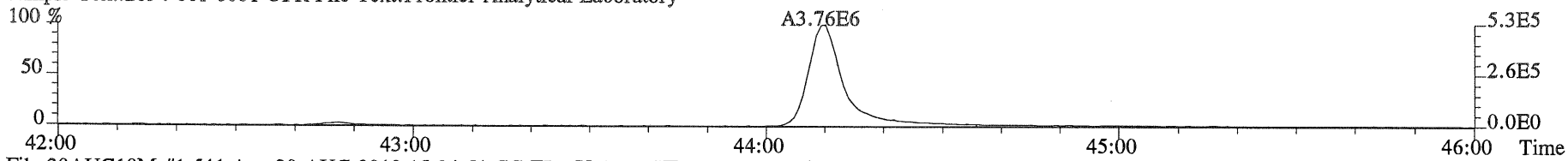
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



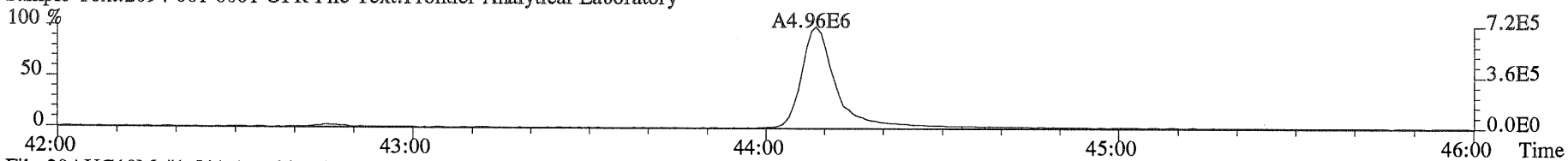
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



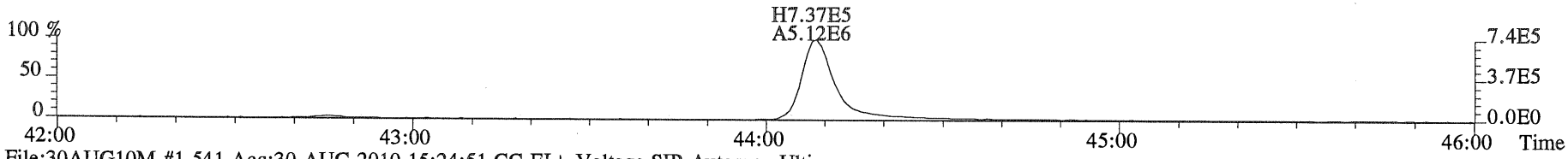
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



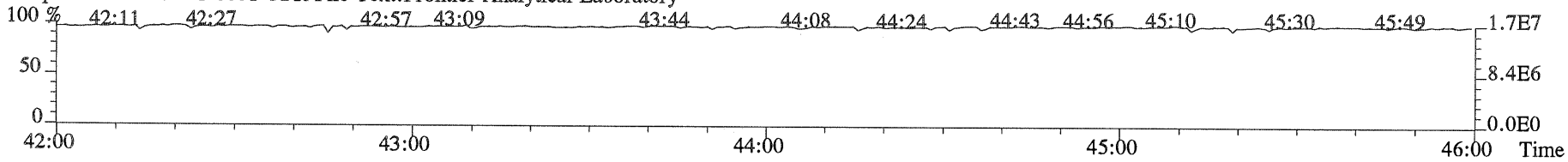
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



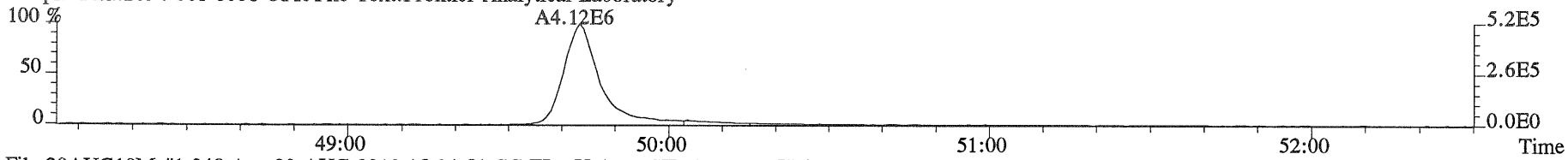
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



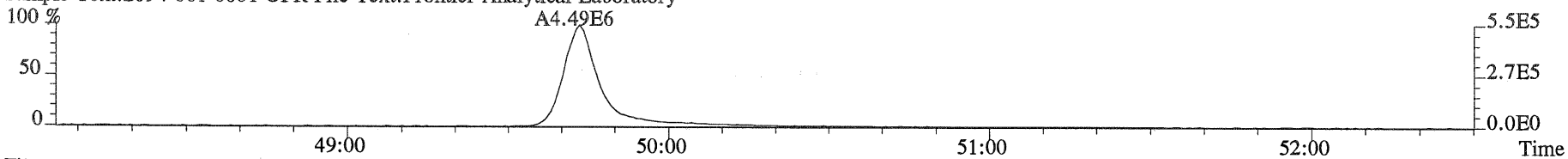
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



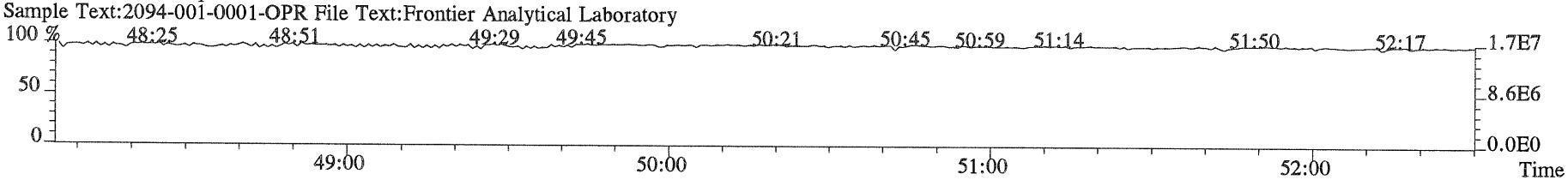
File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



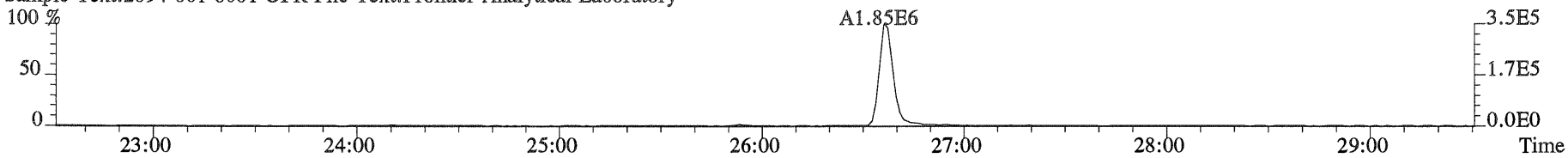
File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory

File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory

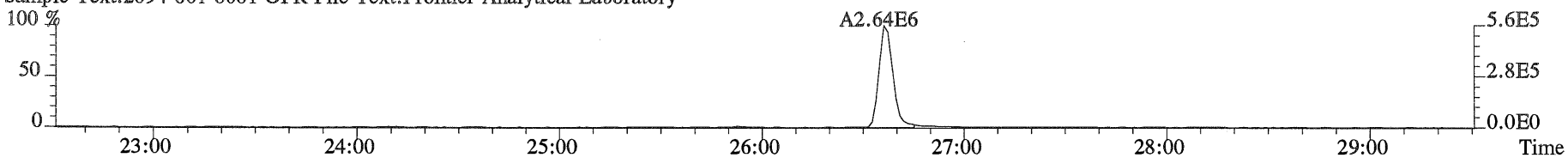
File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



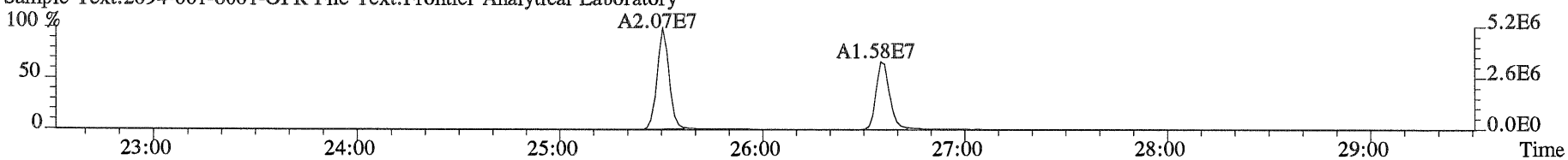
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



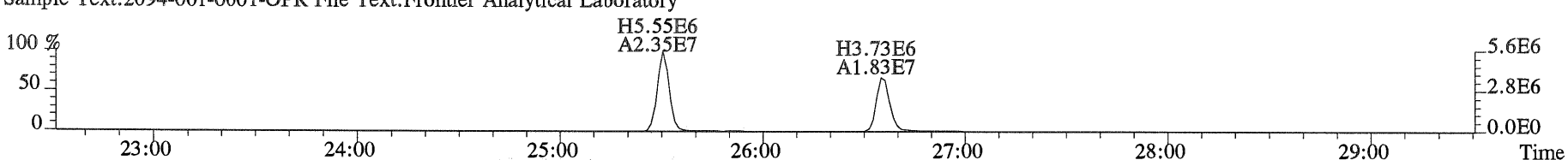
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



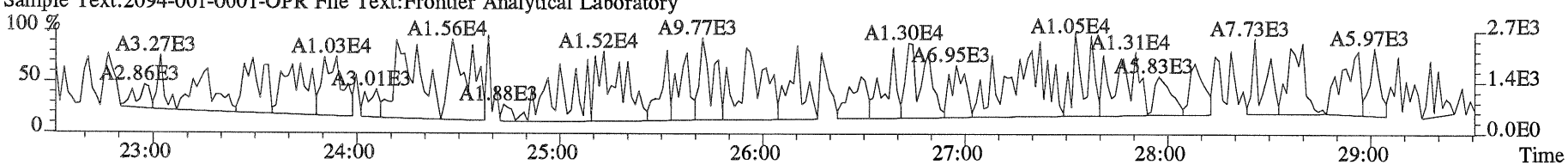
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



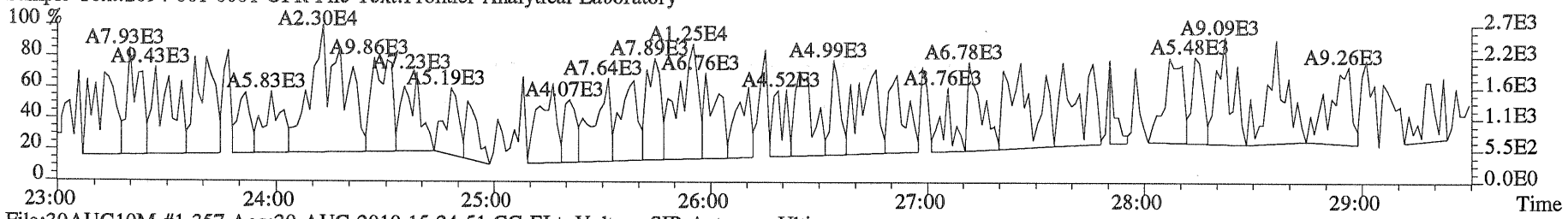
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



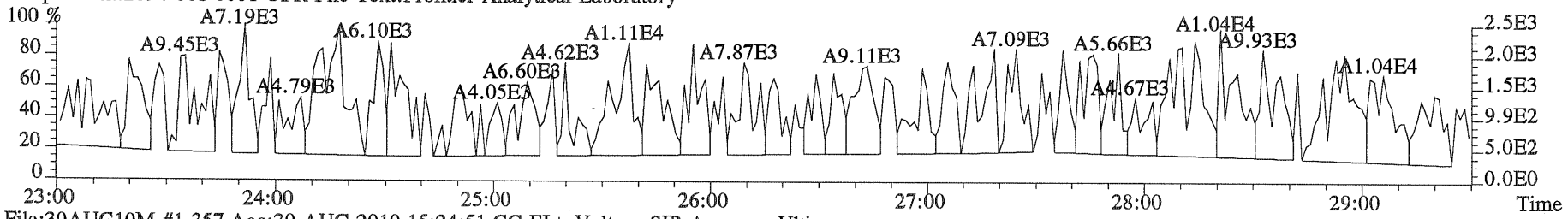
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



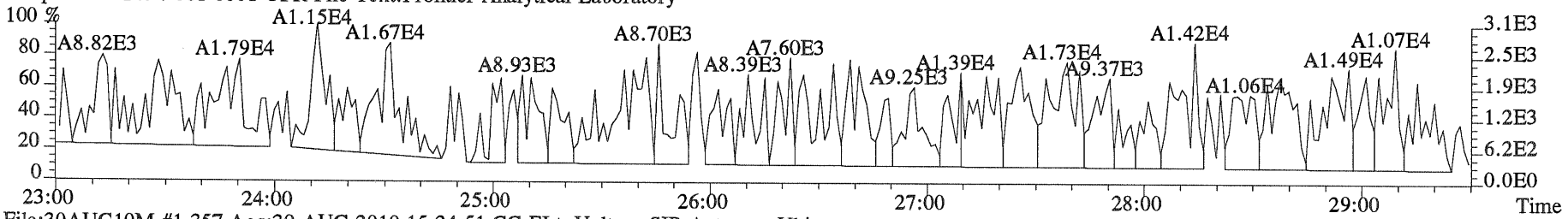
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



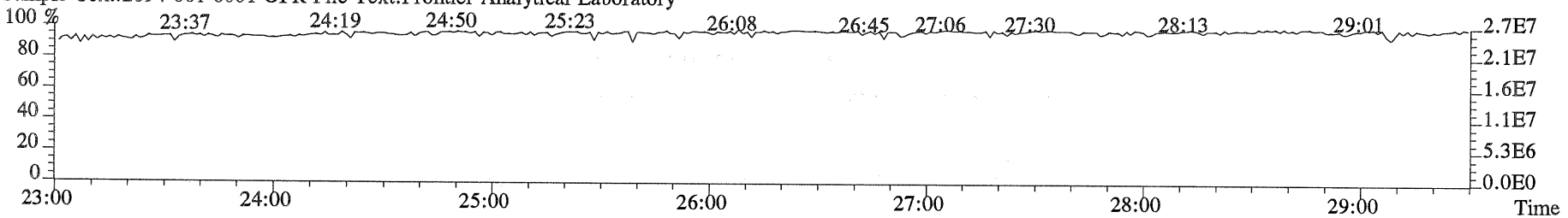
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



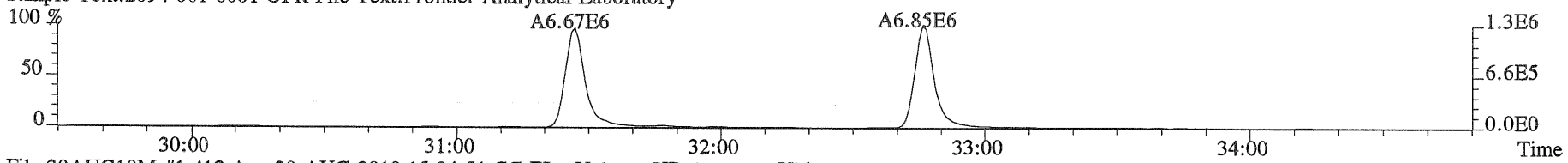
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



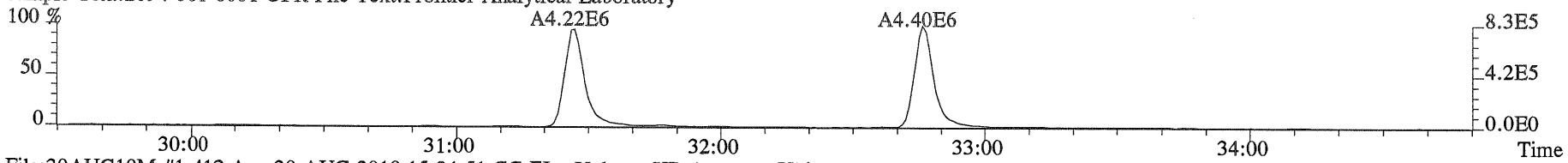
File:30AUG10M #1-357 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



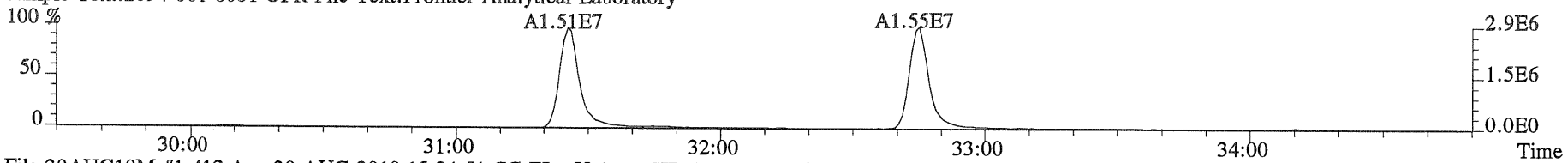
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



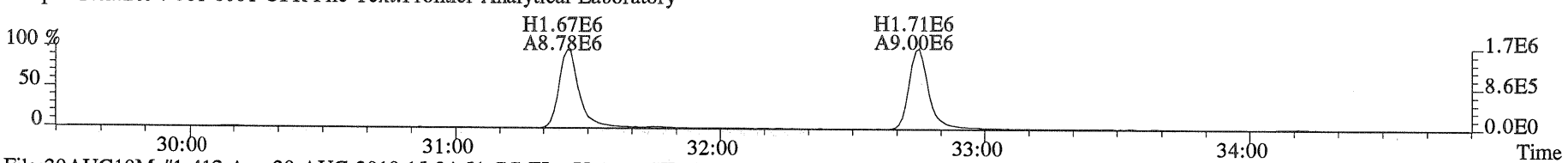
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



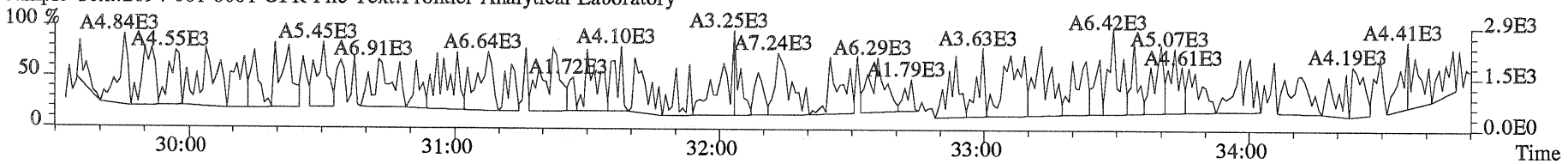
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



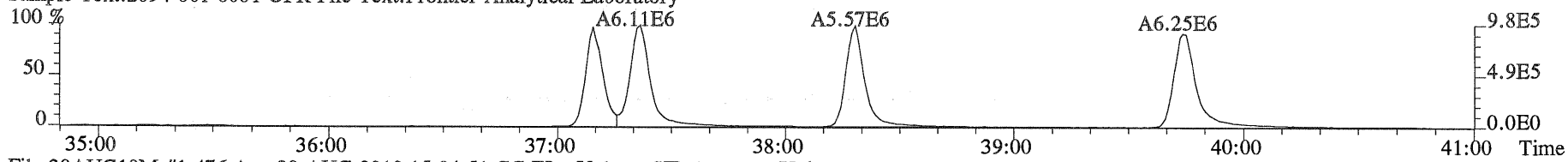
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



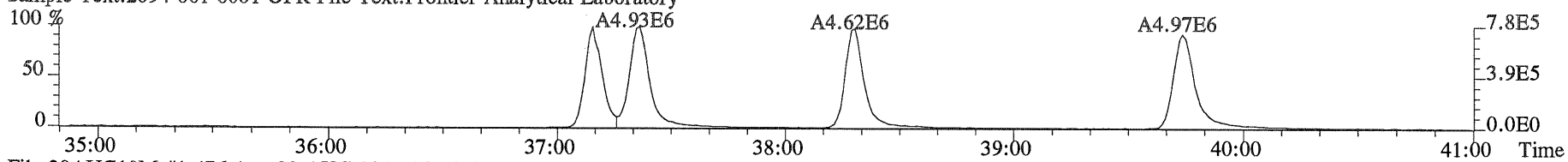
File:30AUG10M #1-412 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



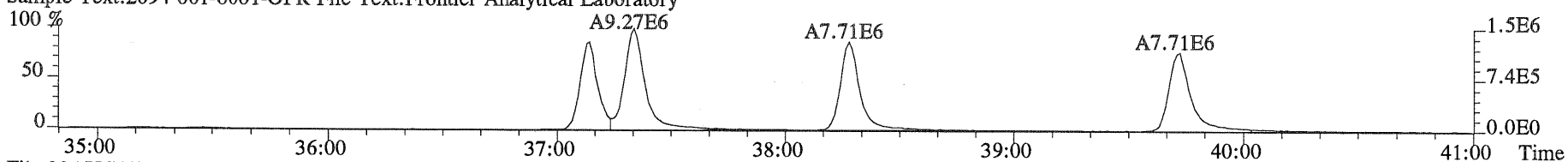
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



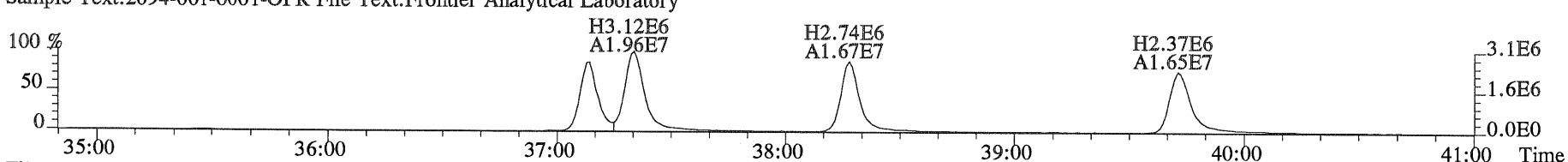
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



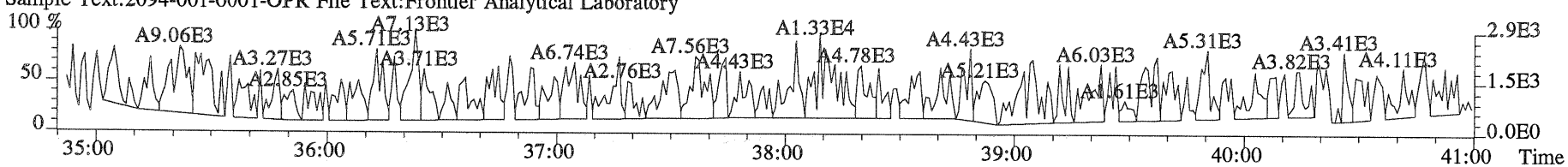
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



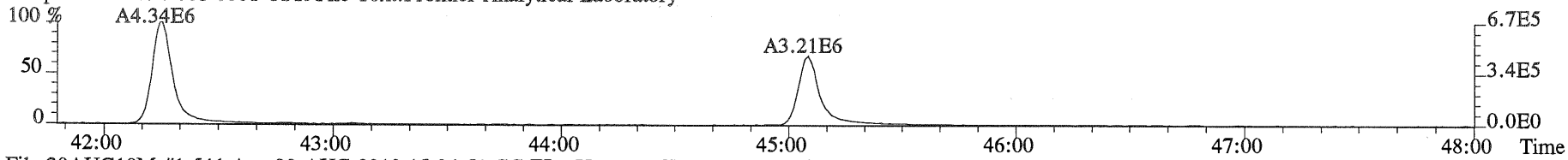
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



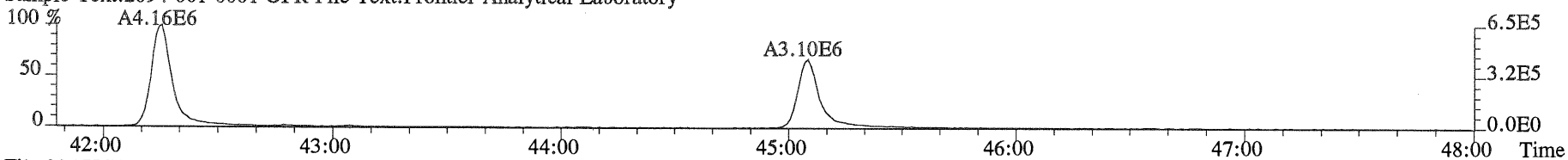
File:30AUG10M #1-476 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



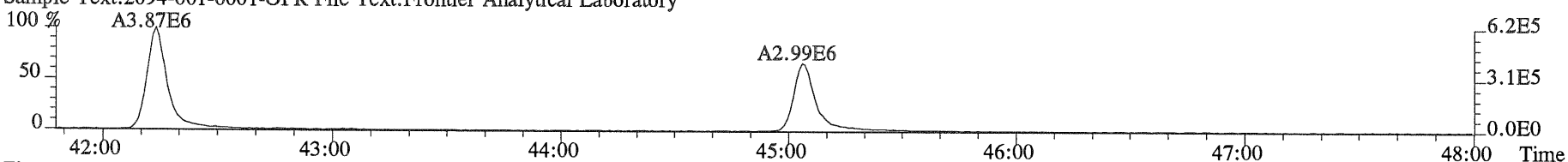
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



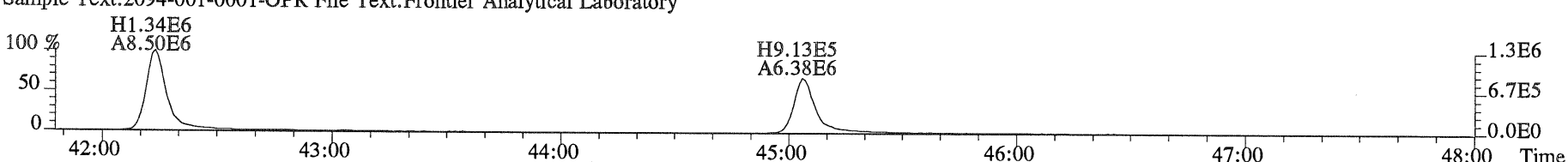
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



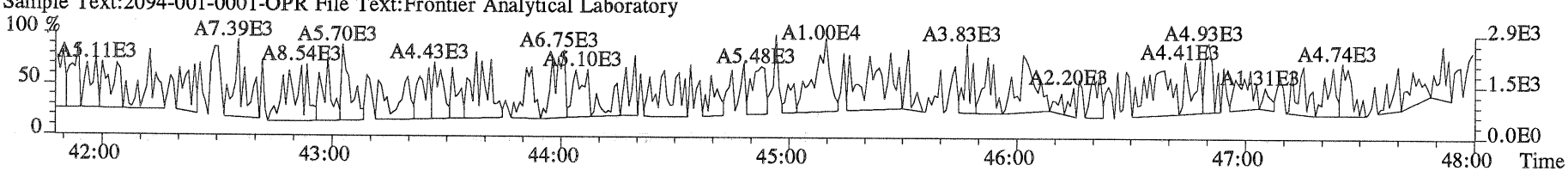
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



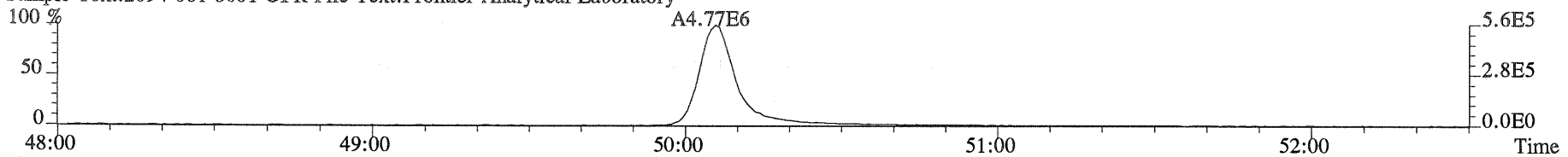
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



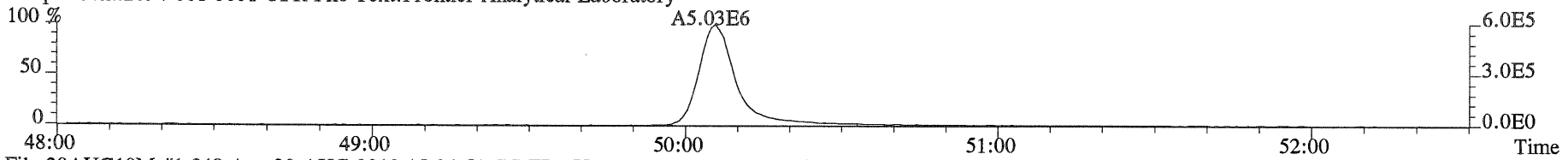
File:30AUG10M #1-541 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



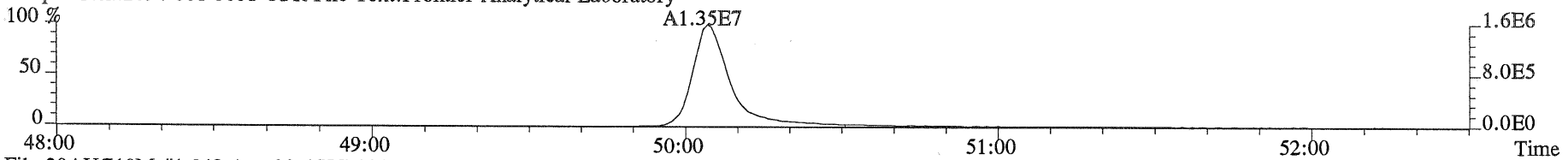
File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



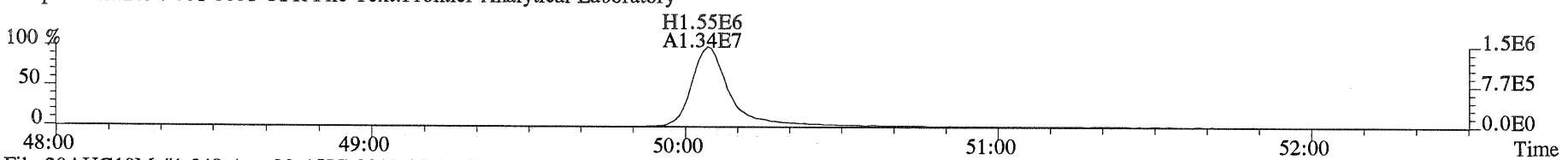
File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



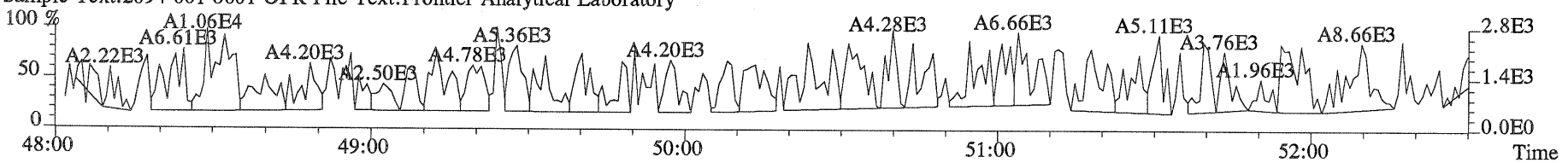
File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



File:30AUG10M #1-348 Acq:30-AUG-2010 15:24:51 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:2094-001-0001-OPR File Text:Frontier Analytical Laboratory



FAL ID: 6312-001-0001-SA Filename: 30AUG10M Sam:5 Acquired: 30-AUG-10 18:10:59 ICal: PCDDFAL3-8-23-10
Client ID: MW-09-081310 ConCal: ST083010M1 EndCal: ST083010M2
Results: 6312 GC Column: DB5 Amount: 1.010 NATO 1989 Tox: 0.0941
WHO 1998 Tox: 0.0782 WHO 2005 Tox: 0.0817

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.11	*		2.50	496	619	1.40
1,2,3,7,8-PeCDD	*	*	n	NotFnd	1.10	*		2.50	821	541	2.14
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	747	743	2.40
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	747	743	3.10
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.36	*		2.50	747	743	2.76
1,2,3,4,6,7,8-HpCDD	5.93e+04	1.16	y	44:10	1.45	7.65	J	2.50	-	-	*
OCDD	8.76e+04	1.00	y	49:43	1.43	17.6	J	2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.50	*		2.50	828	1130	1.00
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.94	*		2.50	792	955	2.04
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.94	*		2.50	792	955	2.08
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	0.93	*		2.50	592	652	1.64
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.82	*		2.50	592	652	1.62
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	592	652	1.70
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.00	*		2.50	592	652	1.68
1,2,3,4,6,7,8-HpCDF	*	*	n	NotFnd	1.39	*		2.50	618	600	2.09
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.36	*		2.50	618	600	3.00
OCDF	*	*	n	NotFnd	0.79	*		2.50	696	754	5.35
											Rec
13C-2,3,7,8-TCDD	1.67e+07	0.84	y	27:20	1.02	1600					80.7
13C-1,2,3,7,8-PeCDD	1.49e+07	1.72	y	33:10	0.84	1730					87.4
13C-1,2,3,4,7,8-HxCDD	1.14e+07	1.26	y	38:32	1.07	1480					75.0
13C-1,2,3,6,7,8-HxCDD	1.05e+07	1.26	y	38:43	1.01	1450					73.4
13C-1,2,3,4,6,7,8-HpCDD	1.06e+07	1.01	y	44:09	0.86	1730					87.5
13C-OCDD	1.37e+07	1.00	y	49:43	0.55	3530					89.0
13C-2,3,7,8-TCDF	2.90e+07	0.86	y	26:35	0.99	1670					84.5
13C-1,2,3,7,8-PeCDF	2.25e+07	1.74	y	31:26	0.84	1550					78.1
13C-2,3,4,7,8-PeCDF	2.22e+07	1.74	y	32:45	0.81	1570					79.5
13C-1,2,3,4,7,8-HxCDF	2.16e+07	0.48	y	37:09	1.85	1640					82.7
13C-1,2,3,6,7,8-HxCDF	2.79e+07	0.48	y	37:20	2.54	1540					78.0
13C-2,3,4,6,7,8-HxCDF	2.32e+07	0.48	y	38:17	2.01	1610					81.5
13C-1,2,3,7,8,9-HxCDF	2.42e+07	0.49	y	39:44	2.03	1670					84.5
13C-1,2,3,4,6,7,8-HpCDF	1.26e+07	0.44	y	42:14	1.11	1600					80.7
13C-1,2,3,4,7,8,9-HpCDF	9.65e+06	0.44	y	45:05	0.80	1680					85.0
13C-OCDF	2.72e+07	1.00	y	50:04	1.08	3520					88.9
37Cl-2,3,7,8-TCDD	4.70e+06			27:22	0.69	669					84.5
13C-1,2,3,4-TCDD	2.03e+07	0.83	y	26:46	-	44.7					
13C-1,2,3,4-TCDF	3.45e+07	0.86	y	25:31	-	47.2					
13C-1,2,3,7,8,9-HxCDD	1.41e+07	1.26	y	39:09	-	50.7					

					Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*	NotFnd	1.11	*	2.50	496	619	1.40		0
Total Penta-Dioxins	*	NotFnd	1.10	*	2.50	821	541	2.14		0
Total Hexa-Dioxins	*	NotFnd	1.37	*	2.50	747	743	3.10		0
Total Hepta-Dioxins	1.05e+05	42:47	1.45	13.6 J	2.50	-	-	*		2
Total Tetra-Furans	*	NotFnd	1.50	*	2.50	828	1130	1.00		0
1st Fn. Tot Penta-Furans	*	NotFnd	0.94	*	2.50	792	955	2.08	PeCDF	0
Total Penta-Furans	*	NotFnd	0.94	*	2.50	792	955	2.08	0.00	0
Total Hexa-Furans	2.93e+04	38:04	0.91	2.63 J	2.50	-	-	*		1
Total Hepta-Furans	*	NotFnd	1.38	*	2.50	618	600	3.00		0

Analyst: _____ Date: 8/31/10

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 12 File: 30AUG10M S: 5 I: 1 F: 4
Acquired: 30-AUG-10 18:10:59

Total Concentration: 13.6 Unnamed Concentration: 5.936

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:47	2.26e+04	2.35e+04	0.96 y	4.61e+04	5.94	
44:10	3.19e+04	2.74e+04	1.16 y	5.93e+04	7.65	1,2,3,4,6,7,8-HpCDD

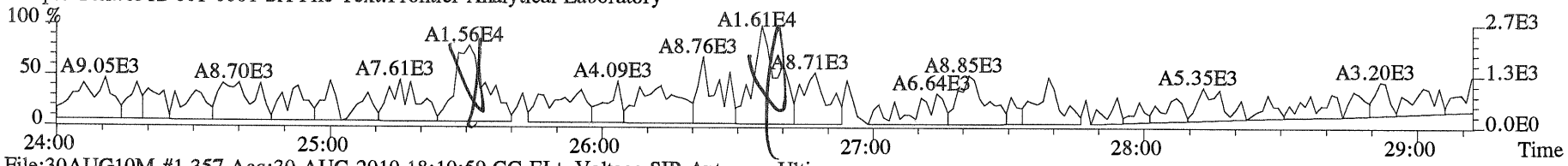
Totals class: Total Hexa-Furans Entry #: 45

Run: 12 File: 30AUG10M S: 5 I: 1 F: 3
Acquired: 30-AUG-10 18:10:59

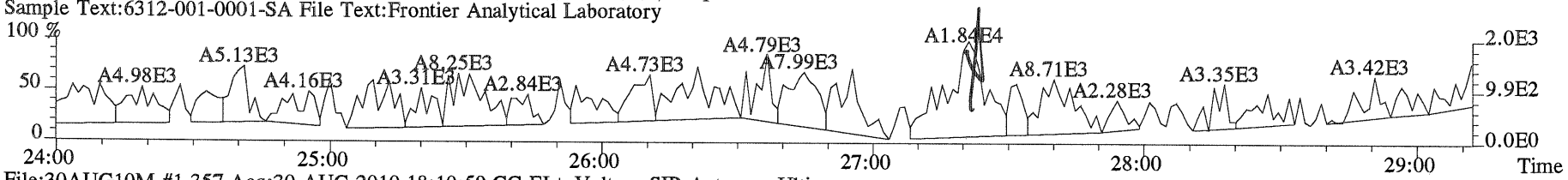
Total Concentration: 2.63 Unnamed Concentration: 2.627

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
38:04	1.65e+04	1.28e+04	1.28 y	2.93e+04	2.63	

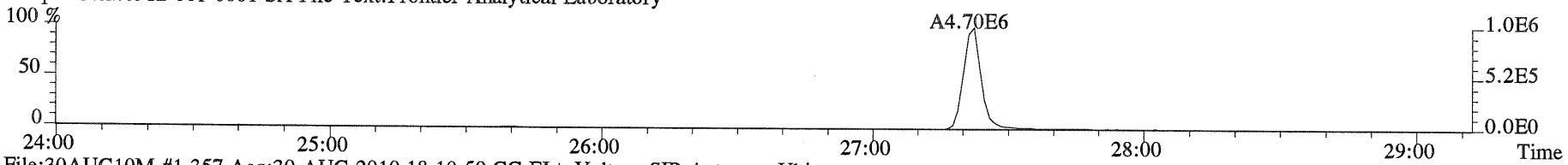
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



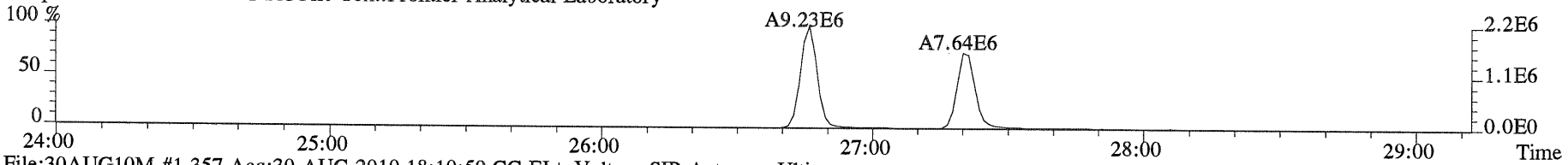
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



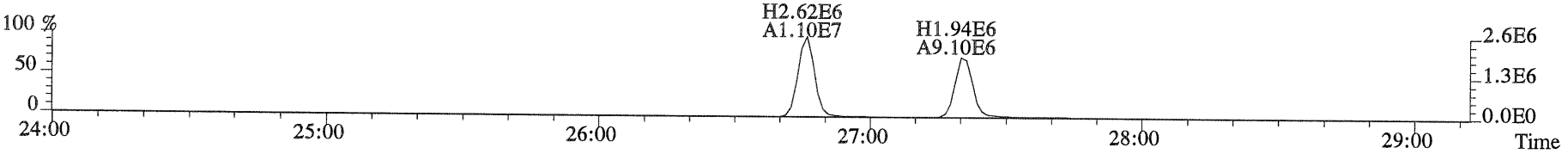
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



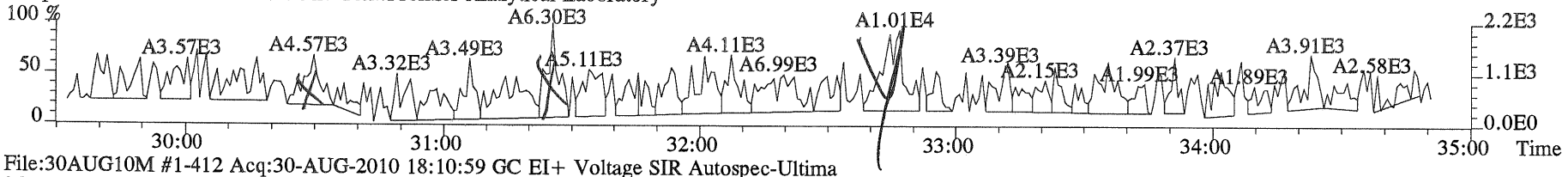
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



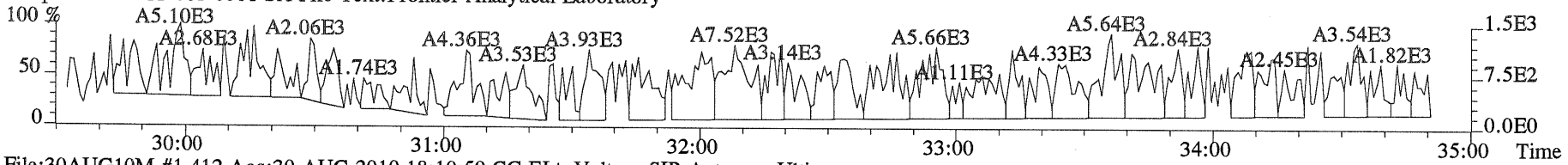
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



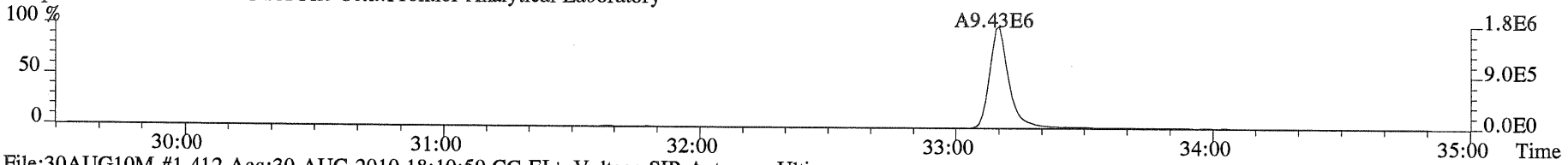
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



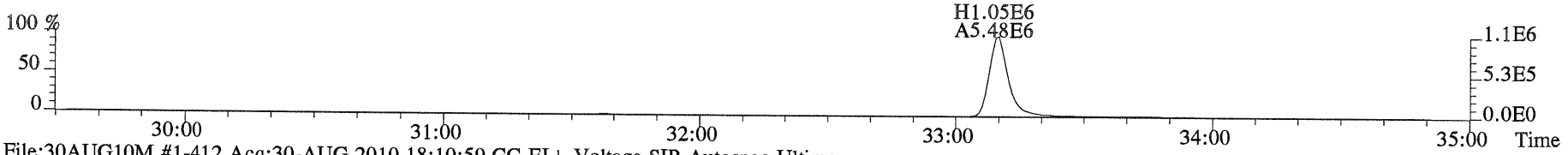
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



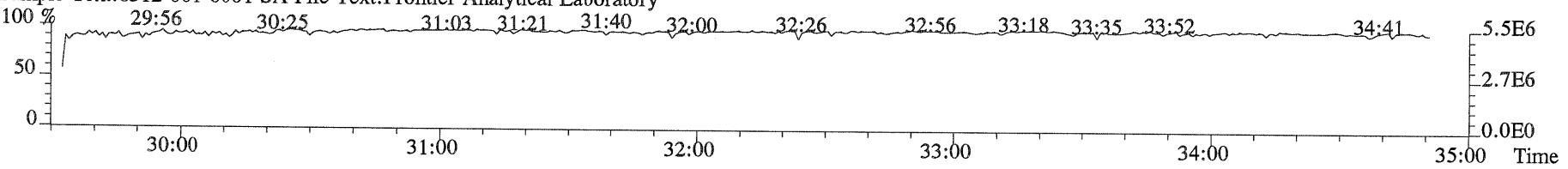
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



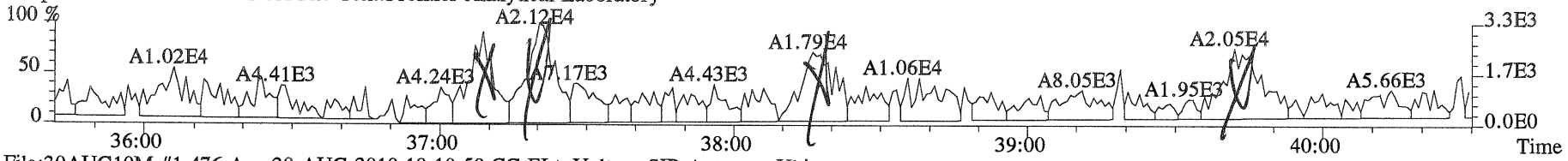
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



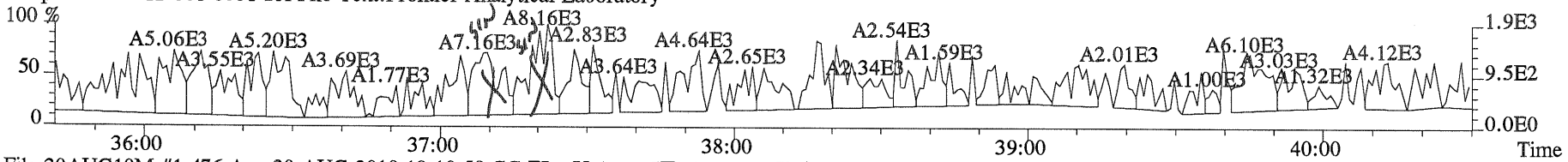
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



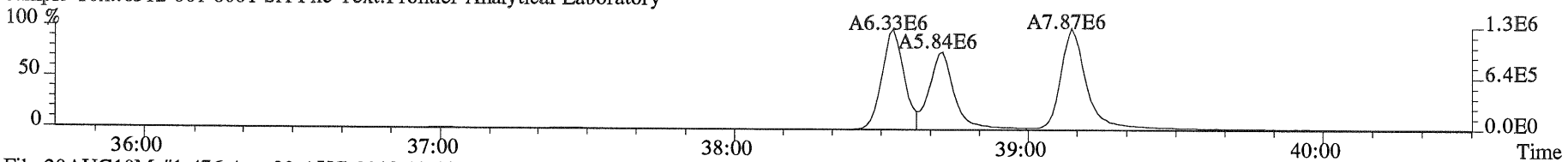
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



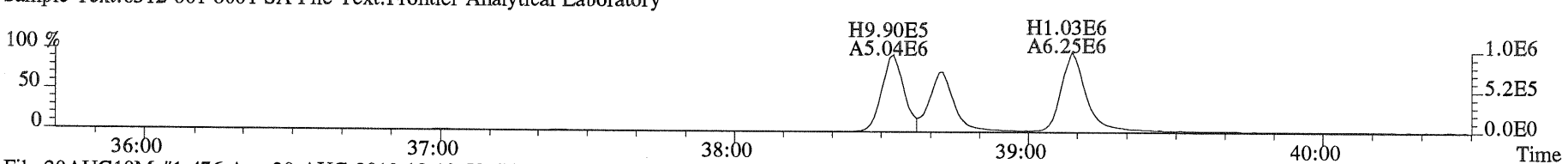
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



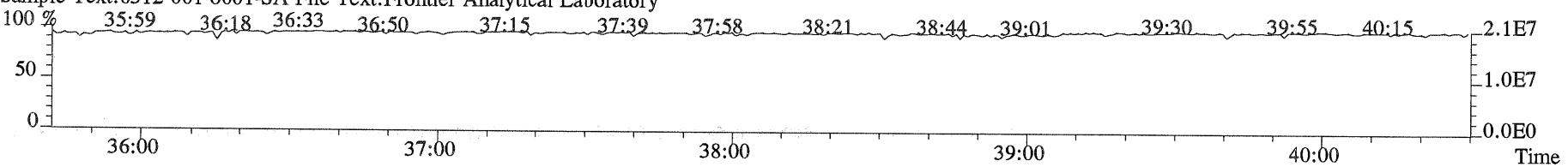
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



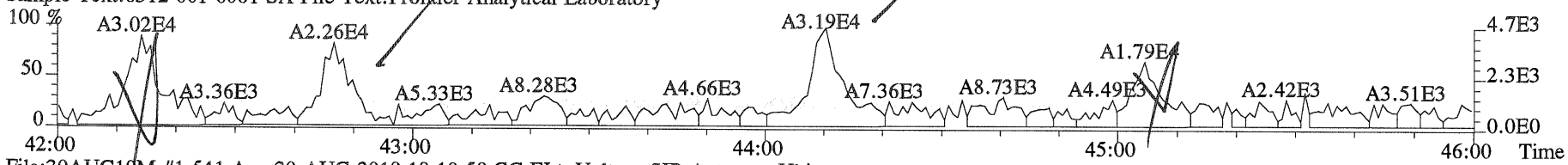
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



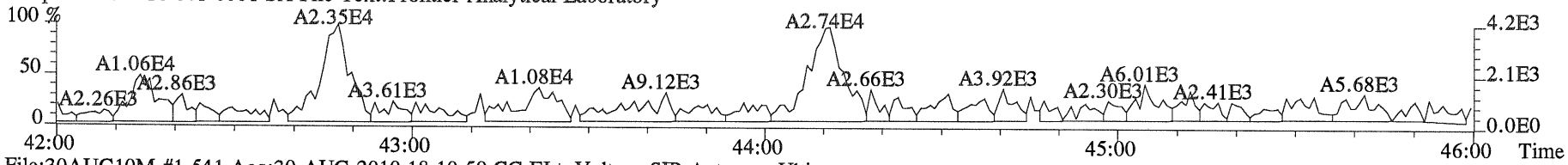
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



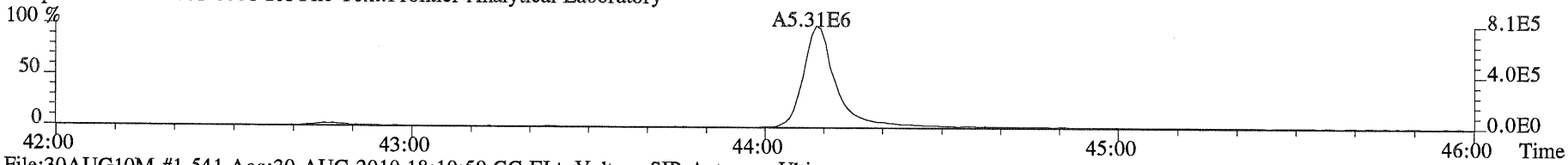
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



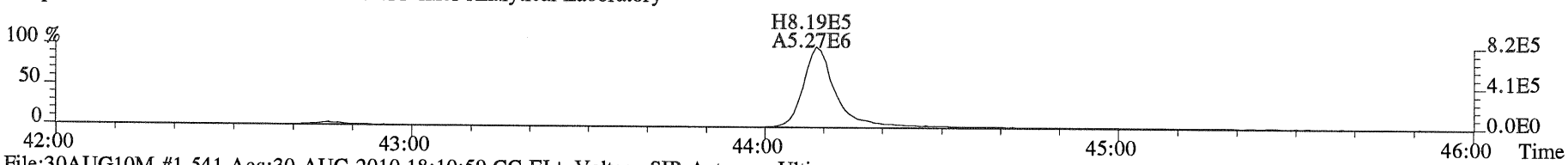
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



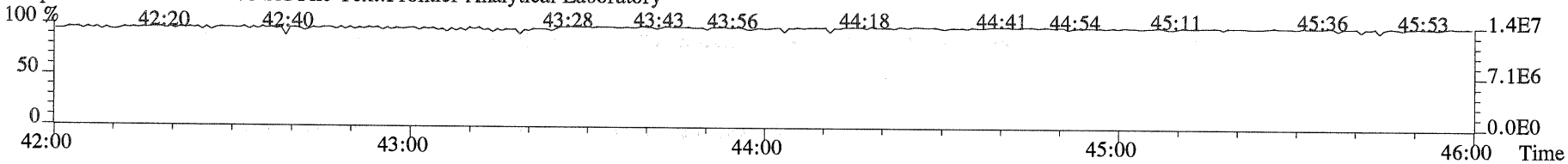
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



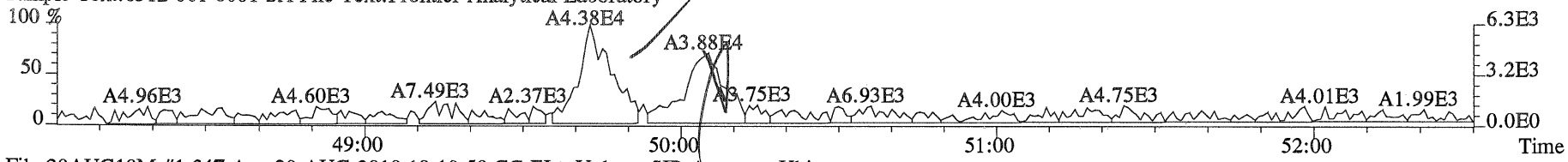
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



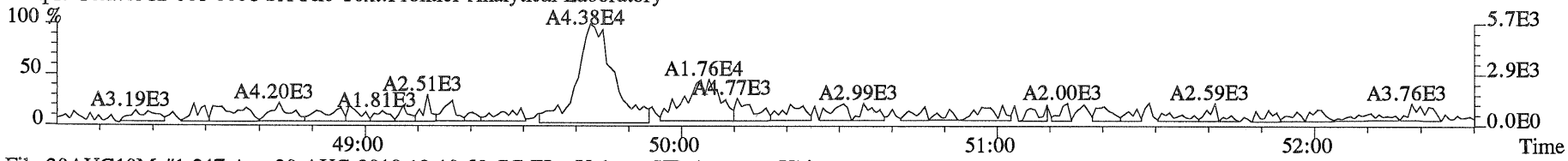
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



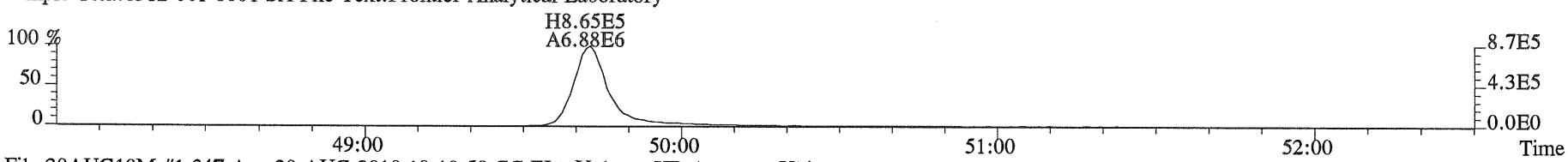
File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



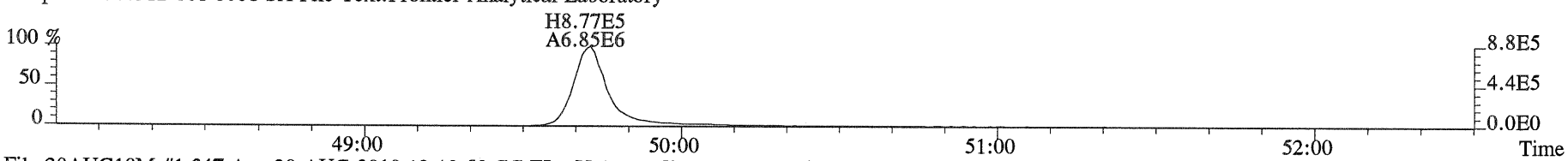
File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



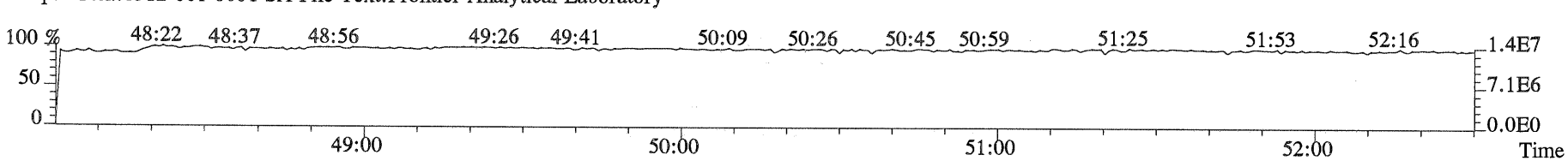
File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



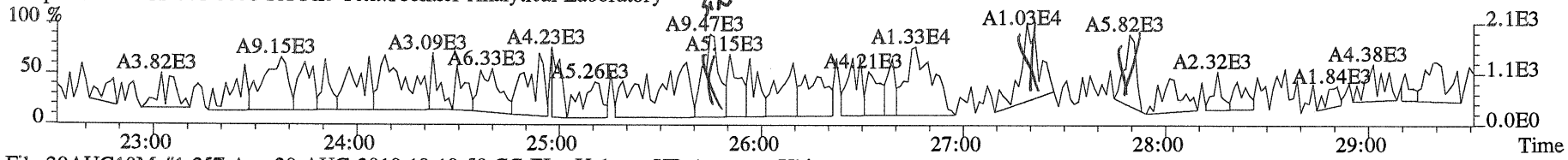
File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



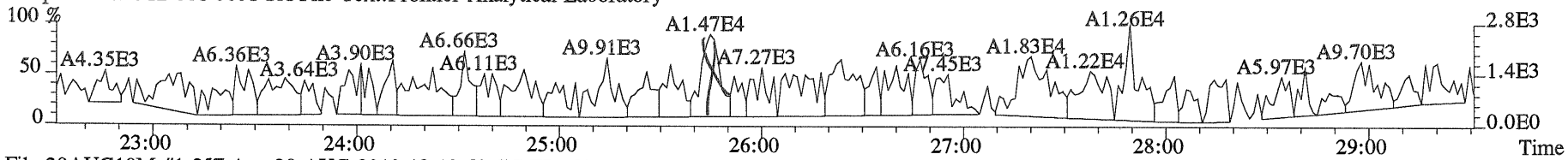
File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



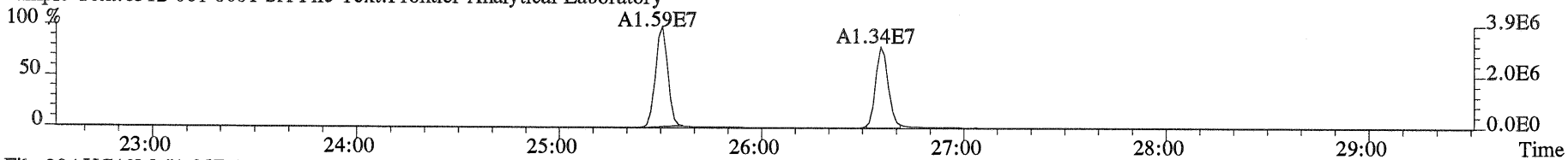
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



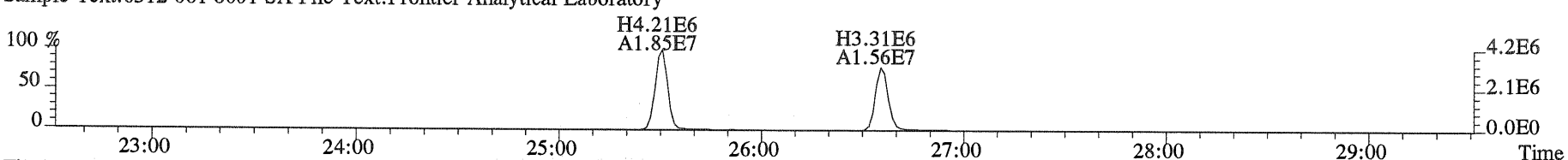
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



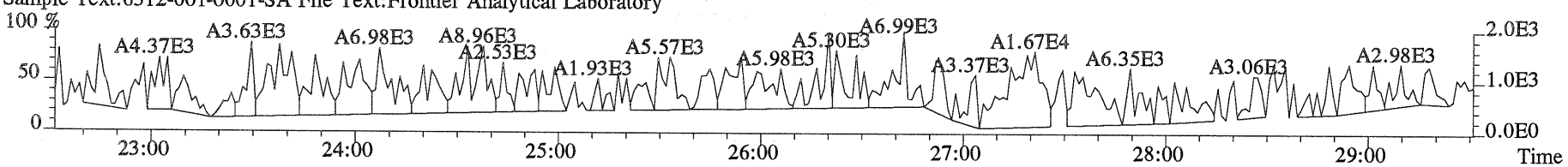
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



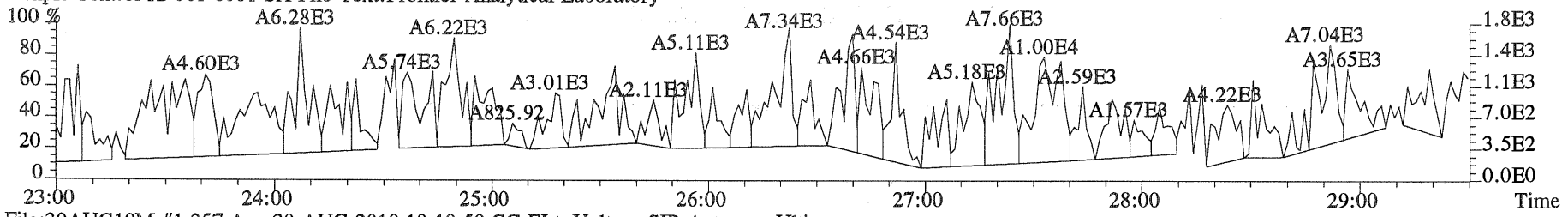
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



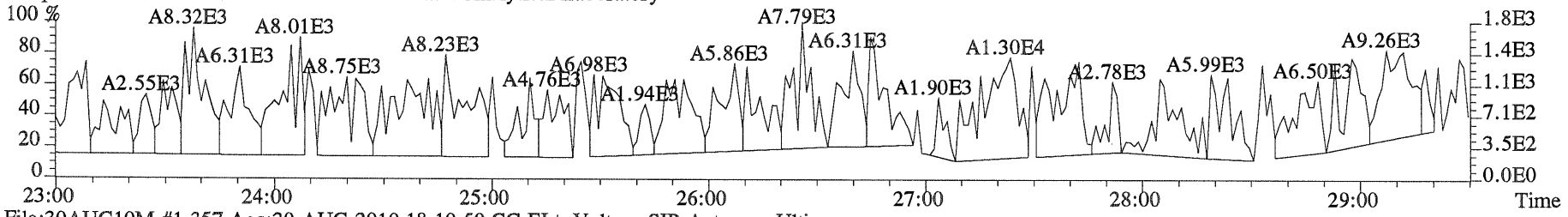
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



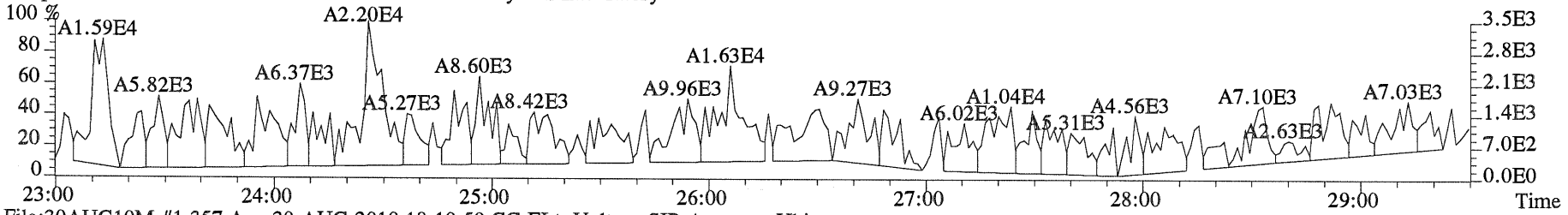
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



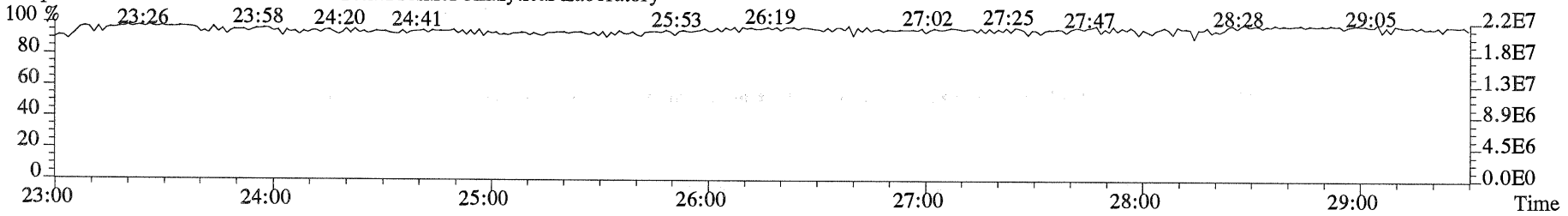
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



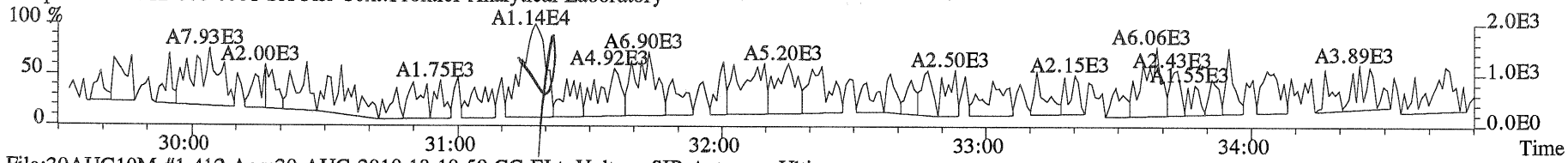
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



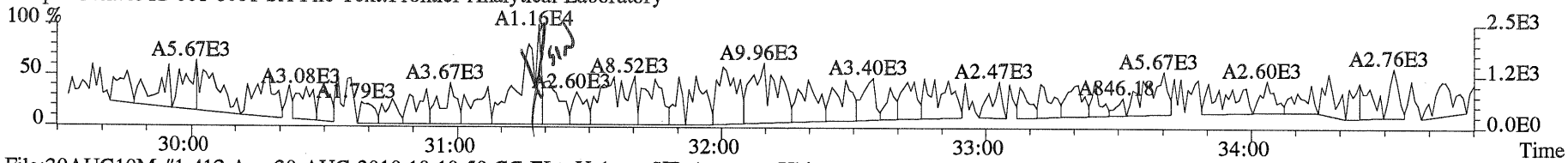
File:30AUG10M #1-357 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



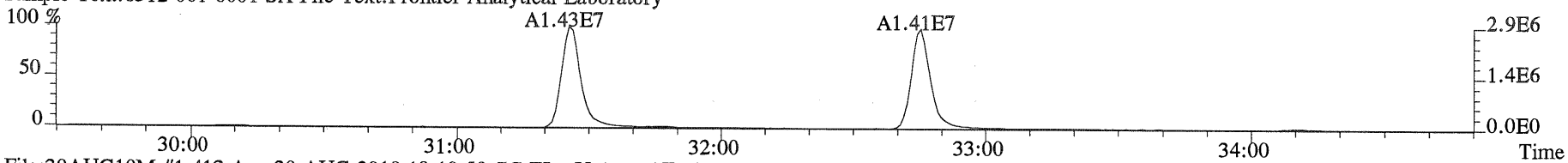
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



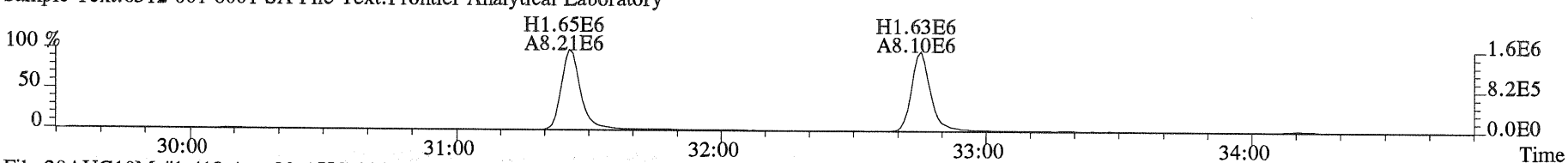
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



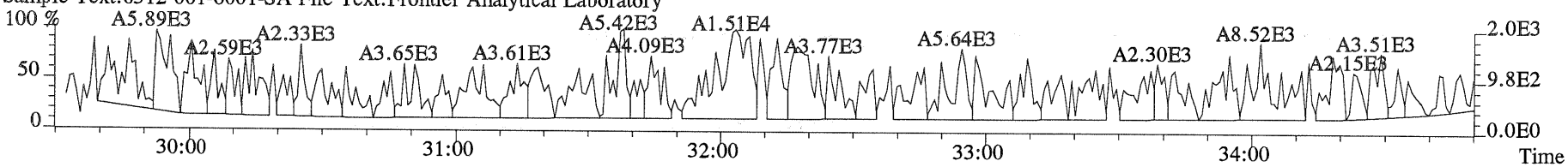
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



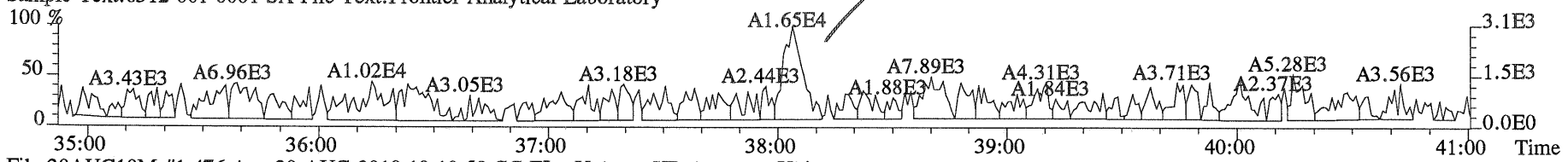
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



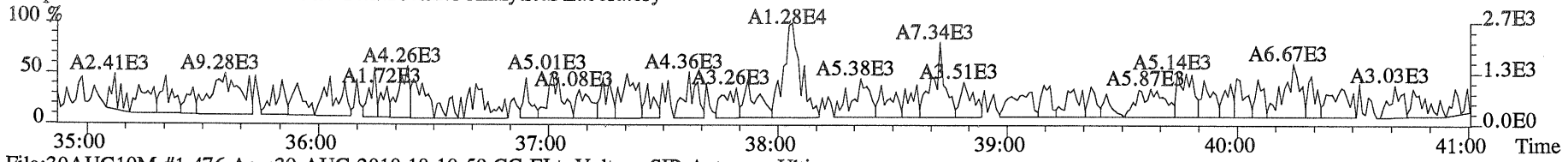
File:30AUG10M #1-412 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



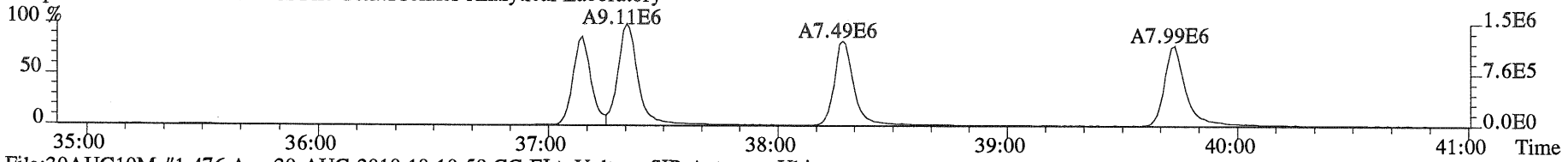
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



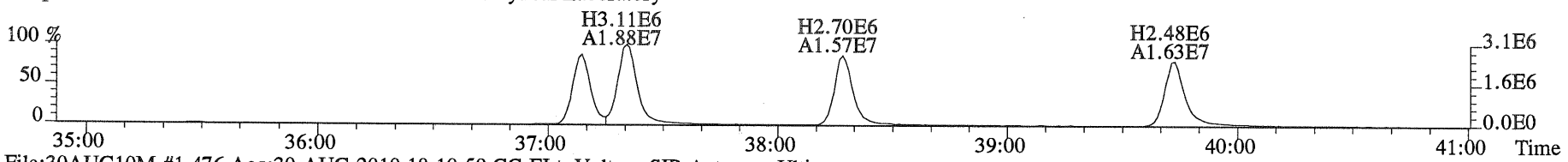
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



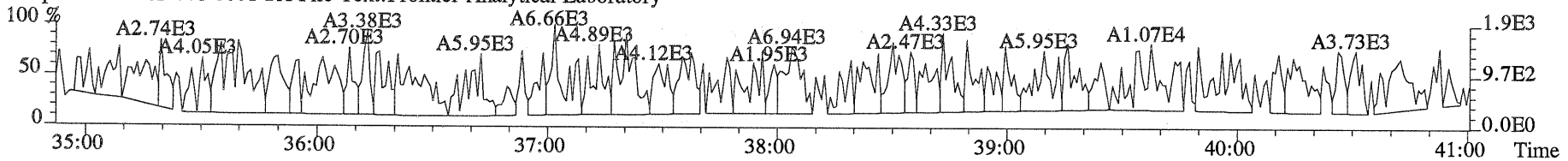
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



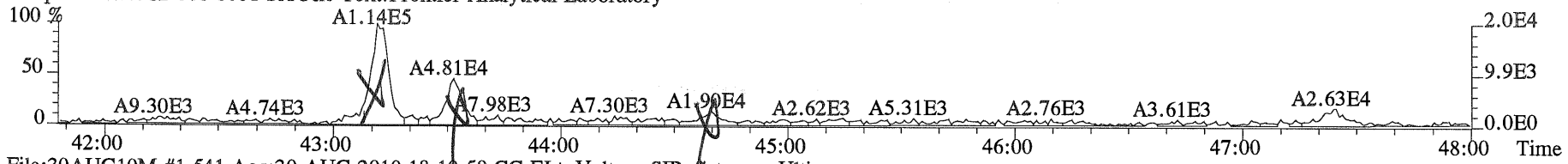
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



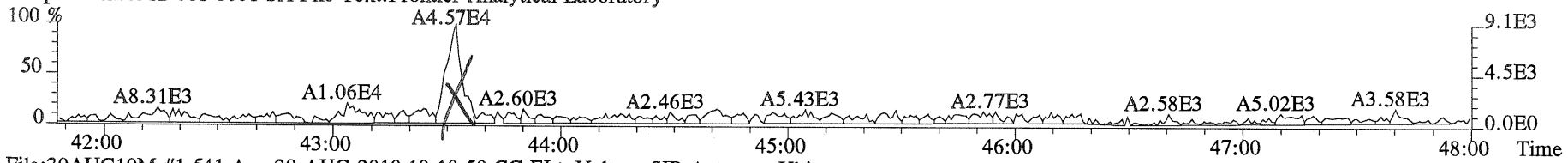
File:30AUG10M #1-476 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



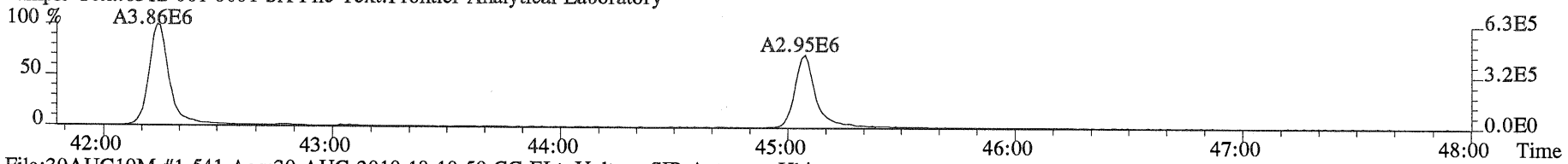
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



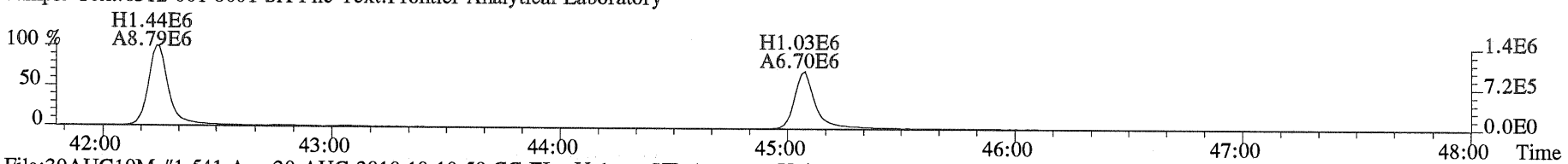
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



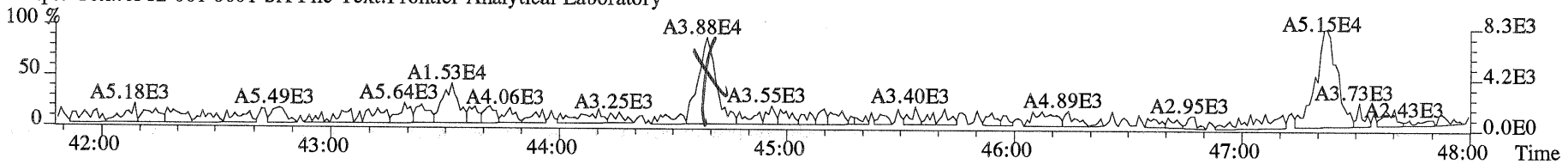
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



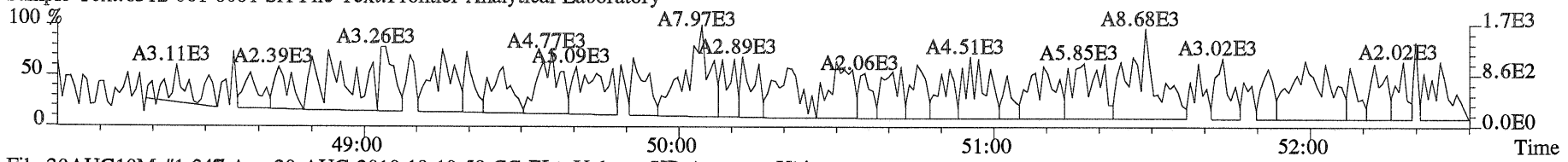
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



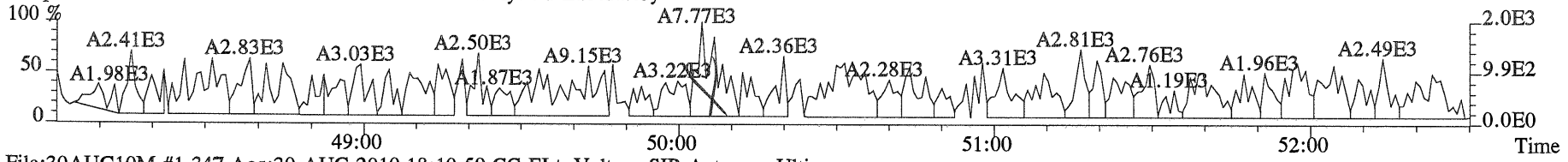
File:30AUG10M #1-541 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



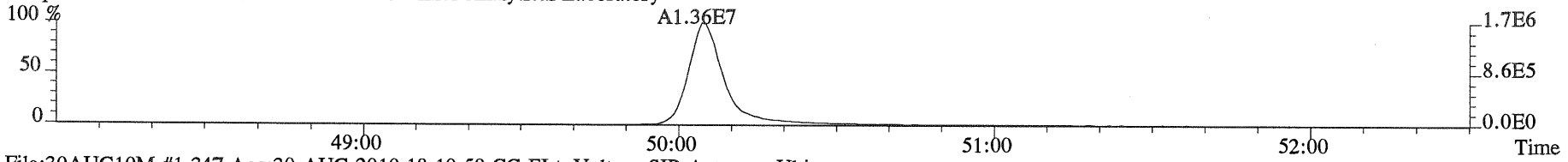
File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



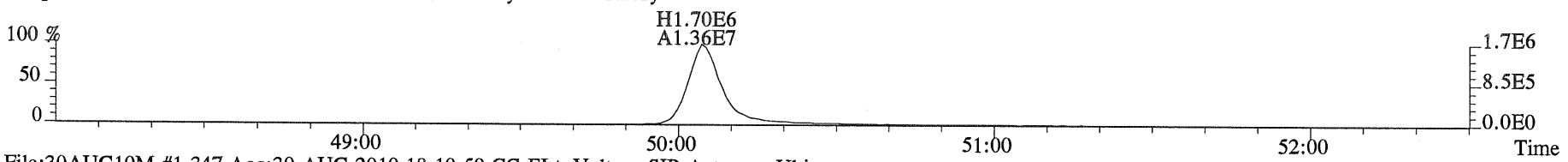
File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



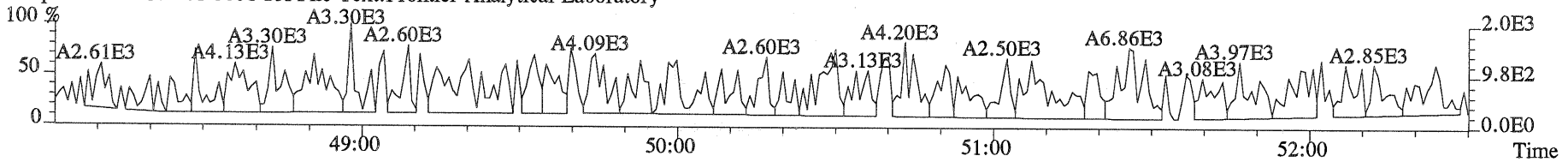
File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



File:30AUG10M #1-347 Acq:30-AUG-2010 18:10:59 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6312-001-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 6312-002-0001-SA Filename: 30AUG10M Sam:9 Acquired: 30-AUG-10 21:52:34 ICal: PCDDFAL3-8-23-10
Client ID: MW-08-081310 ConCal: ST083010M1 EndCal: ST083010M2
Results: 6312 GC Column: DB5 Amount: 1.017 NATO 1989 Tox: 0.00
WHO 1998 Tox: 0.00 WHO 2005 Tox: 0.00

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.11	*		2.50	778	687	1.91
1,2,3,7,8-PeCDD	*	*	n	NotFnd	1.10	*		2.50	870	646	2.59
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	982	813	3.39
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	982	813	4.40
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.36	*		2.50	982	813	3.89
1,2,3,4,6,7,8-HpCDD	*	*	n	NotFnd	1.45	*		2.50	772	773	3.53
OCDD	*	*	n	NotFnd	1.43	*		2.50	1040	810	8.44
2,3,7,8-TCDF	*	*	n	NotFnd	1.50	*		2.50	795	695	0.869
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.94	*		2.50	688	647	1.74
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.94	*		2.50	688	647	1.74
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	0.93	*		2.50	804	662	2.18
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.82	*		2.50	804	662	2.12
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	804	662	2.24
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.00	*		2.50	804	662	2.20
1,2,3,4,6,7,8-HpCDF	*	*	n	NotFnd	1.39	*		2.50	618	671	2.37
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.36	*		2.50	618	671	3.71
OCDF	*	*	n	NotFnd	0.79	*		2.50	633	655	5.64

							Rec
13C-2,3,7,8-TCDD	1.51e+07	0.83	y	27:22	1.02	1780	90.6
13C-1,2,3,7,8-PeCDD	1.30e+07	1.74	y	33:10	0.84	1870	95.2
13C-1,2,3,4,7,8-HxCDD	1.01e+07	1.24	y	38:33	1.07	1750	89.1
13C-1,2,3,6,7,8-HxCDD	8.62e+06	1.24	y	38:43	1.01	1590	80.8
13C-1,2,3,4,6,7,8-HpCDD	9.32e+06	0.96	y	44:10	0.86	2030	103
13C-OCDD	1.15e+07	1.02	y	49:43	0.55	3910	99.5
13C-2,3,7,8-TCDF	2.53e+07	0.84	y	26:37	0.99	1840	93.6
13C-1,2,3,7,8-PeCDF	1.99e+07	1.77	y	31:27	0.84	1720	87.5
13C-2,3,4,7,8-PeCDF	1.97e+07	1.74	y	32:46	0.81	1750	89.0
13C-1,2,3,4,7,8-HxCDF	1.87e+07	0.49	y	37:09	1.85	1880	95.5
13C-1,2,3,6,7,8-HxCDF	2.44e+07	0.51	y	37:21	2.54	1800	91.3
13C-2,3,4,6,7,8-HxCDF	2.02e+07	0.50	y	38:18	2.01	1870	95.2
13C-1,2,3,7,8,9-HxCDF	2.13e+07	0.50	y	39:44	2.03	1950	99.3
13C-1,2,3,4,6,7,8-HpCDF	1.12e+07	0.43	y	42:14	1.11	1880	95.4
13C-1,2,3,4,7,8,9-HpCDF	8.52e+06	0.44	y	45:05	0.80	1980	100
13C-OCDF	2.35e+07	1.00	y	50:06	1.08	4050	103
37Cl-2,3,7,8-TCDD	4.26e+06			27:23	0.69	752	95.6
13C-1,2,3,4-TCDD	1.62e+07	0.83	y	26:46	-	35.5	
13C-1,2,3,4-TCDF	2.72e+07	0.88	y	25:31	-	37.0	
13C-1,2,3,7,8,9-HxCDD	1.05e+07	1.24	y	39:09	-	37.6	

					Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*	NotFnd	1.11	*	2.50	778	687	1.91		0
Total Penta-Dioxins	*	NotFnd	1.10	*	2.50	870	646	2.59		0
Total Hexa-Dioxins	*	NotFnd	1.37	*	2.50	982	813	4.40		0
Total Hepta-Dioxins	*	NotFnd	1.45	*	2.50	772	773	3.53		0
Total Tetra-Furans	*	NotFnd	1.50	*	2.50	795	695	0.869		0
1st Fn. Tot Penta-Furans	*	NotFnd	0.94	*	2.50	688	647	1.74	PeCDF	0
Total Penta-Furans	*	NotFnd	0.94	*	2.50	688	647	1.74	0.00	0
Total Hexa-Furans	*	NotFnd	0.91	*	2.50	804	662	2.24		0
Total Hepta-Furans	*	NotFnd	1.38	*	2.50	618	671	3.71		0

Analyst: _____ Date: 8/31/10