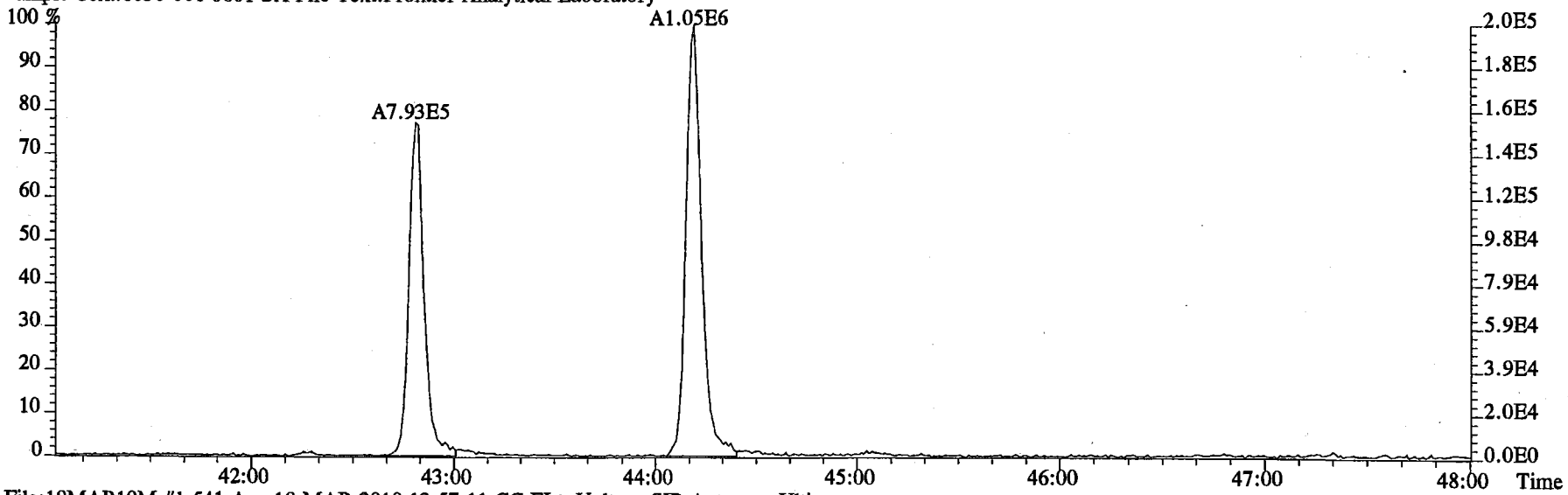
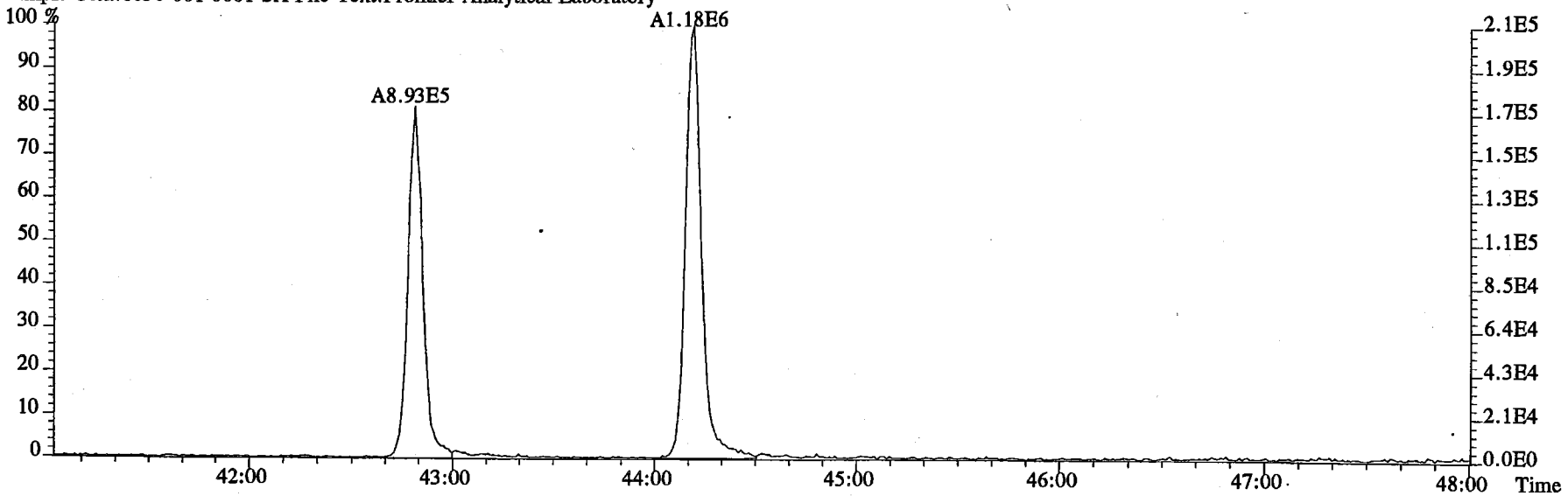
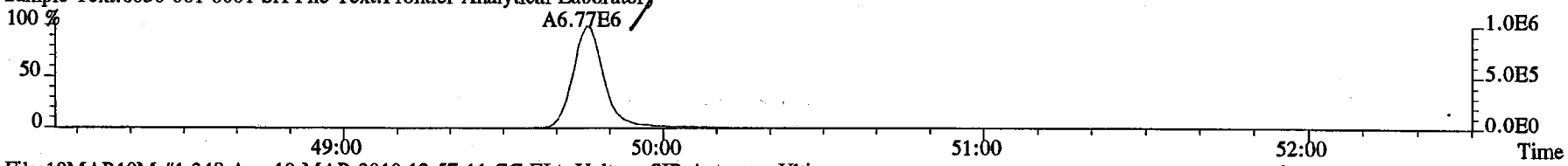
File:19MAR10M #1-541 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



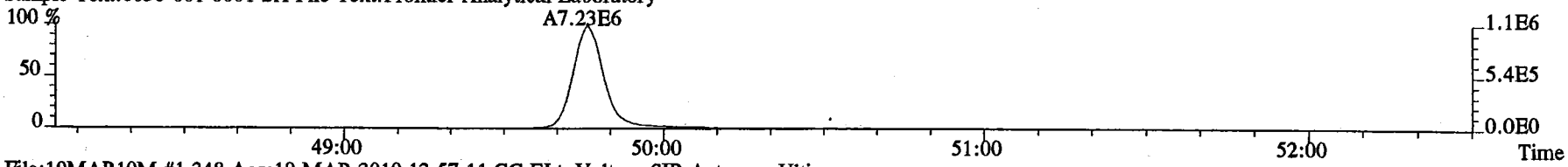
File:19MAR10M #1-541 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



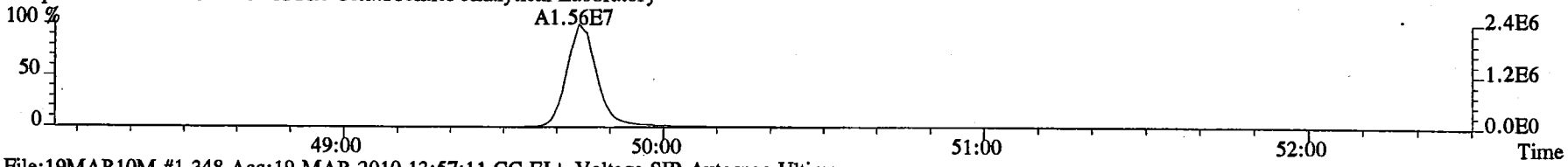
File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



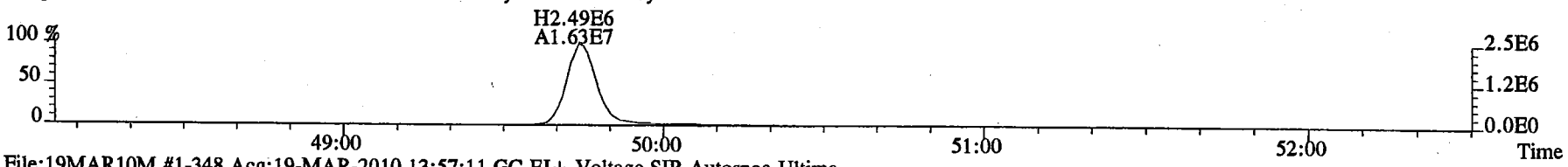
File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



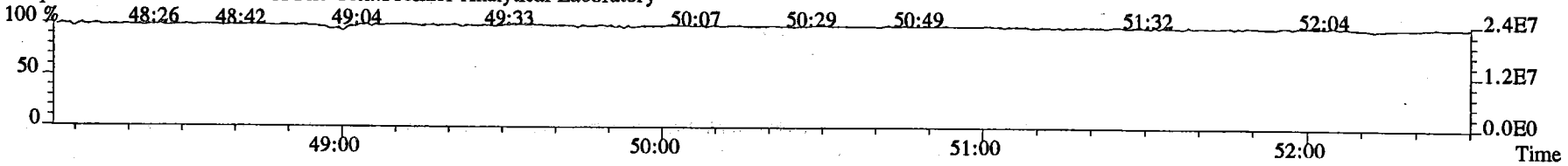
File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



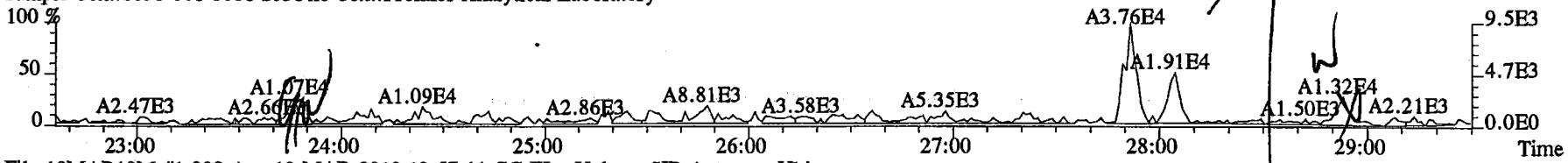
File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



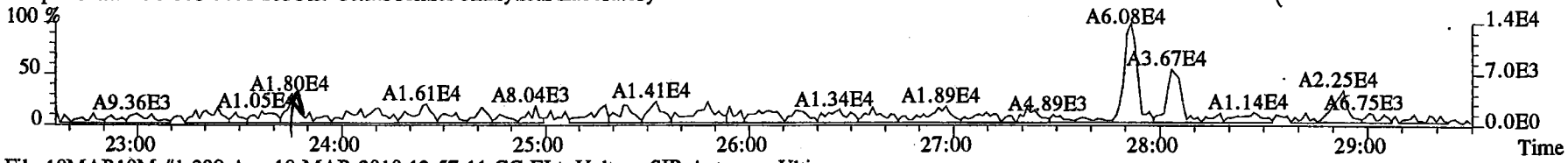
File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:7 F:5 Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



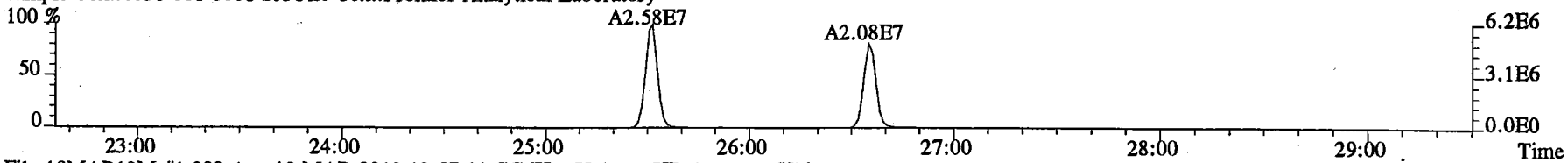
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



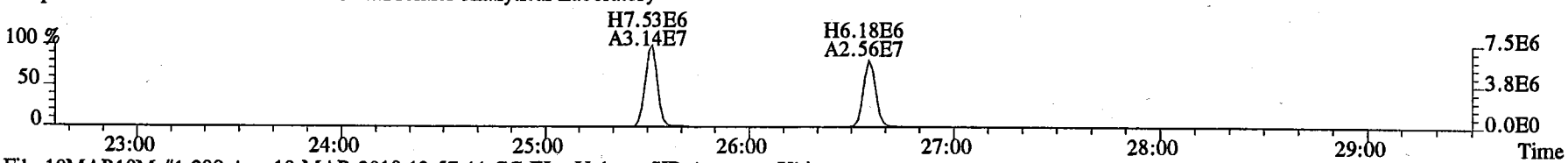
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



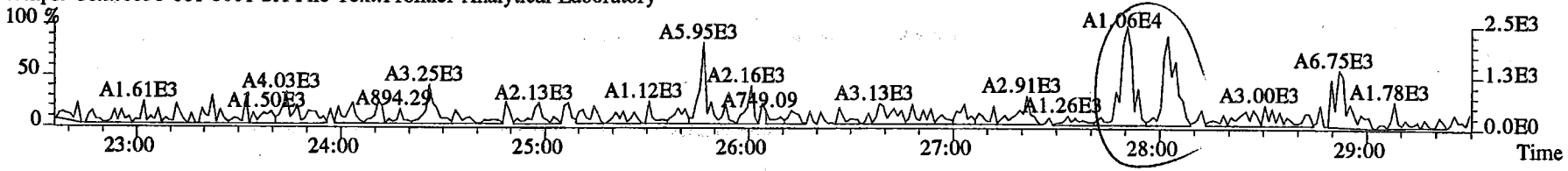
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



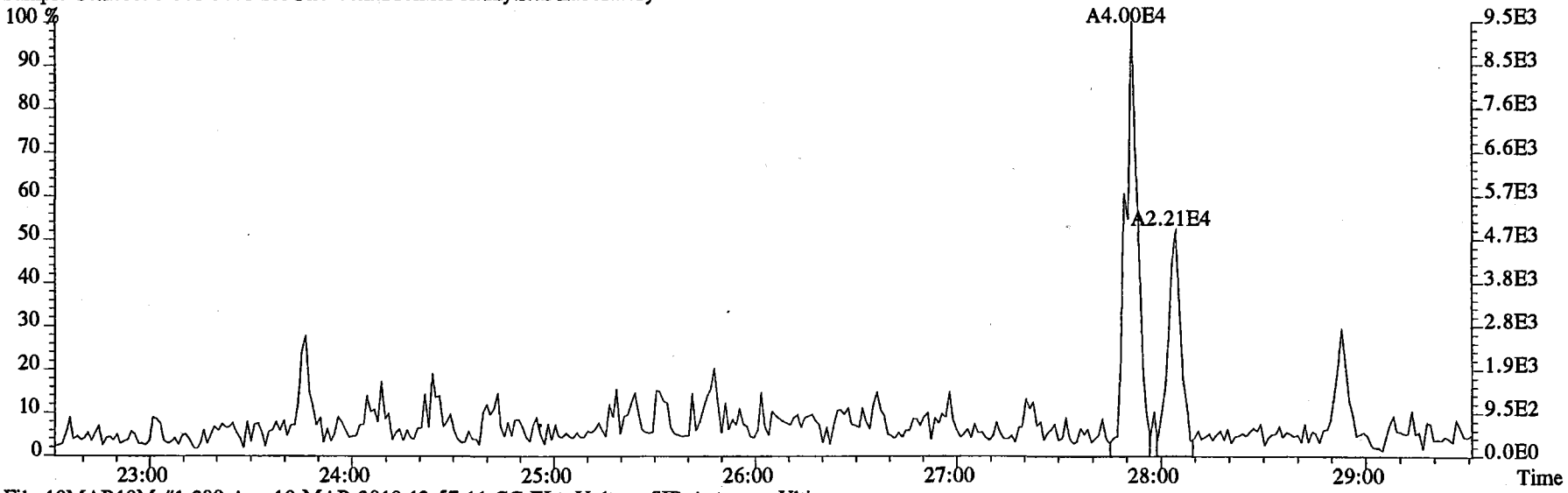
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



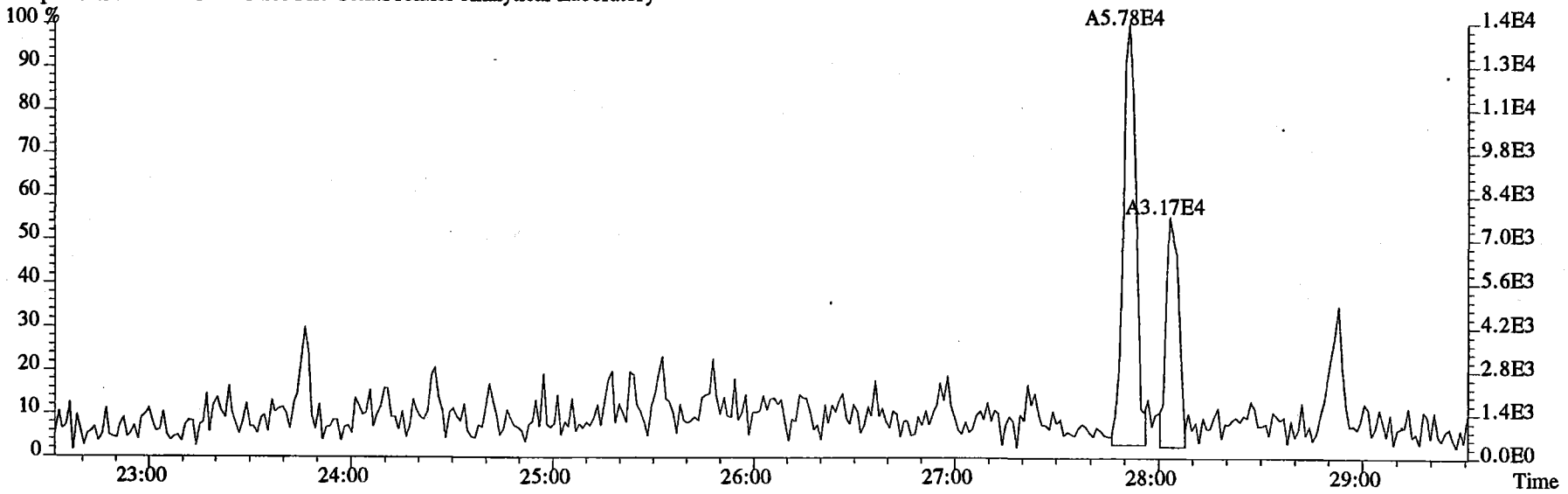
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



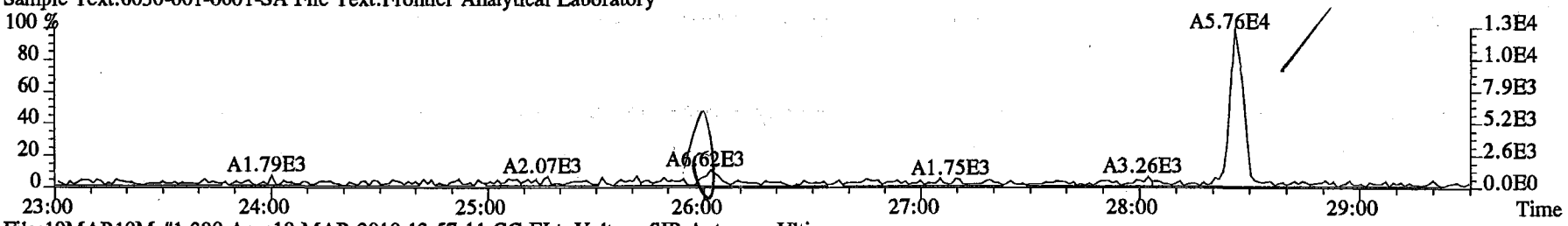
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



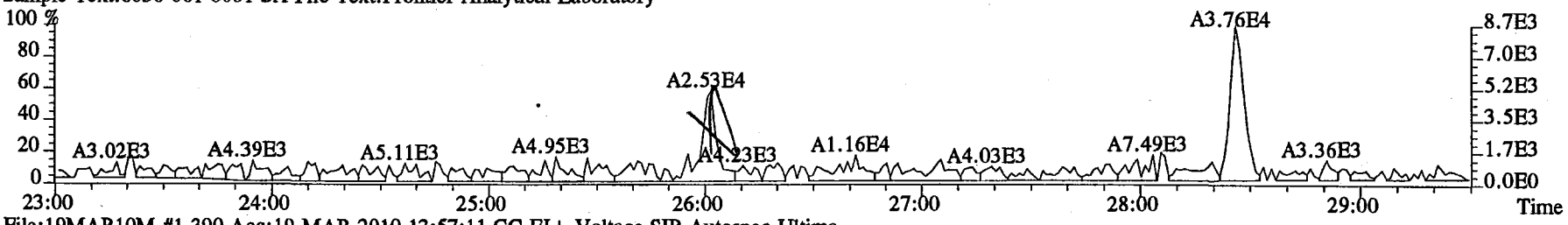
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



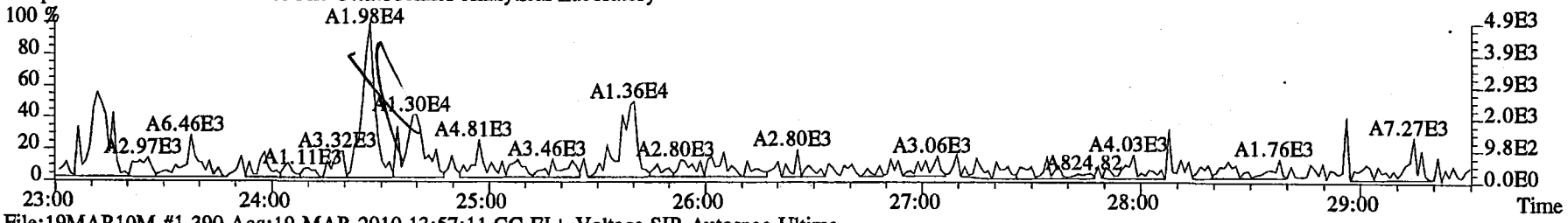
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



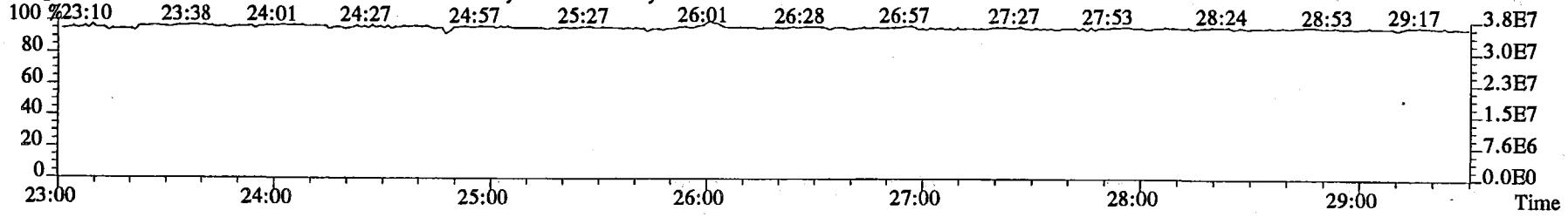
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



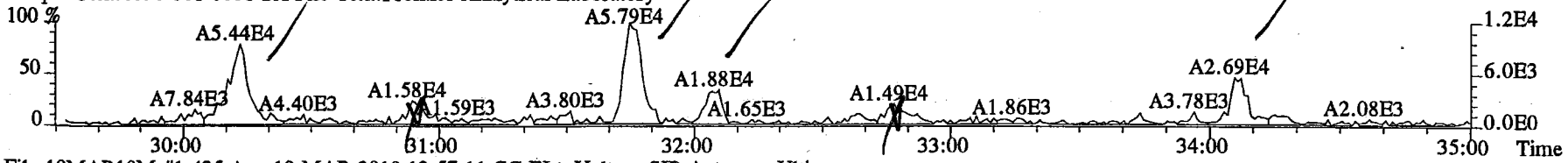
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



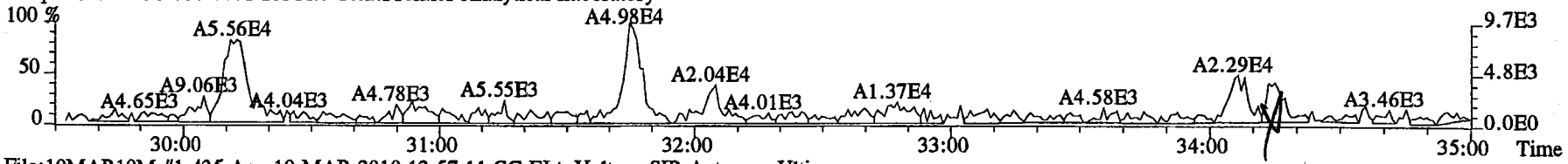
File:19MAR10M #1-390 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:7 Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



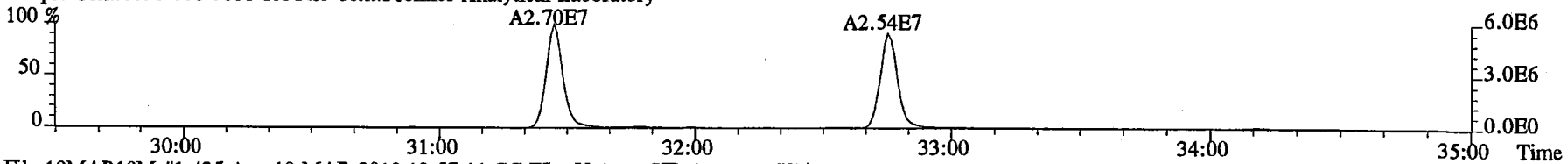
File:19MAR10M #1-425 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



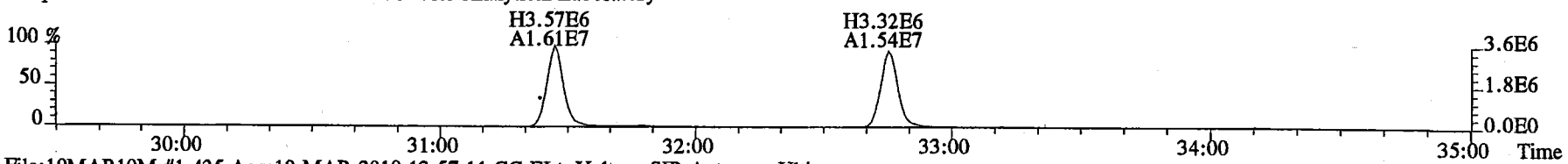
File:19MAR10M #1-425 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



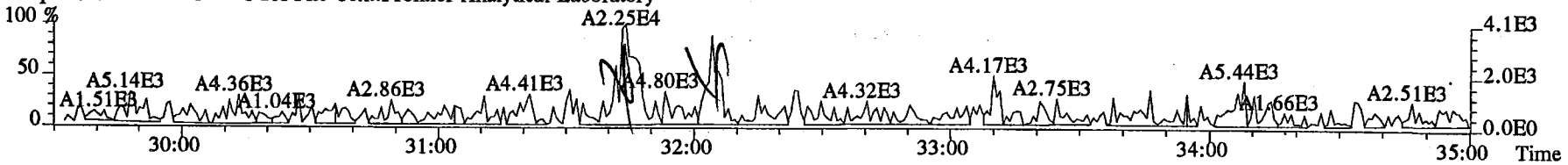
File:19MAR10M #1-425 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



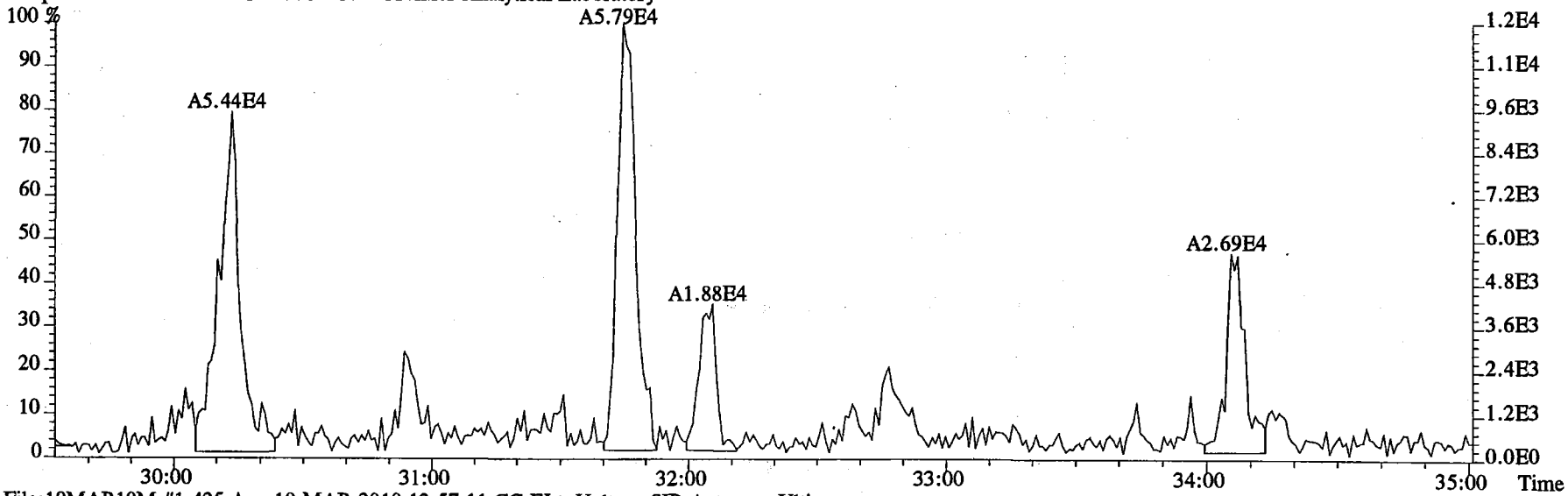
File:19MAR10M #1-425 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



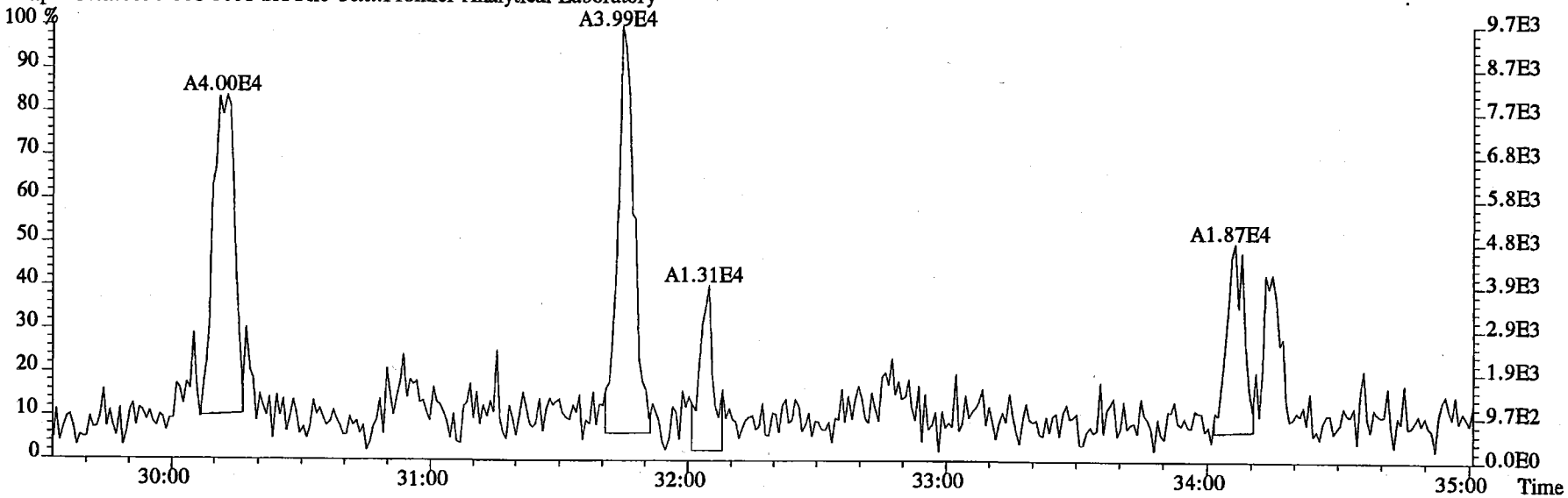
File:19MAR10M #1-425 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



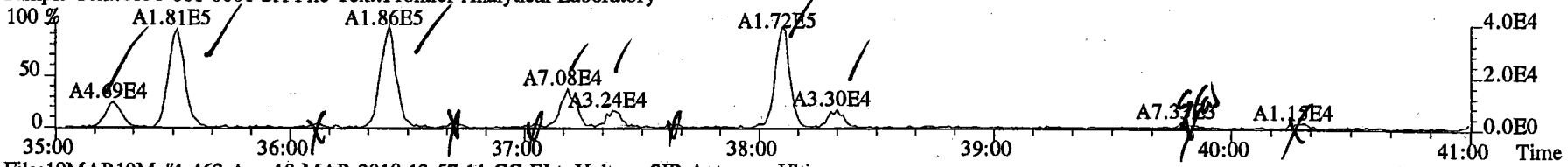
File:19MAR10M #1-425 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



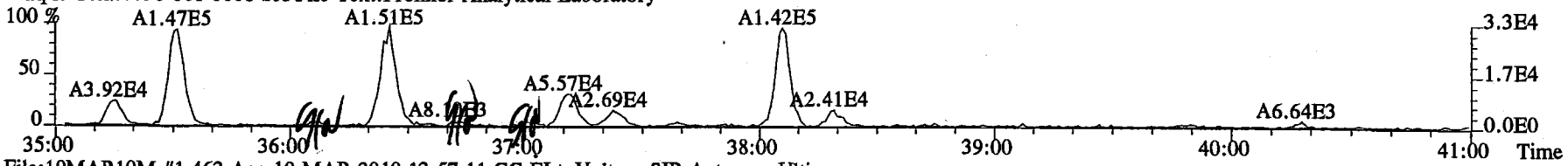
File:19MAR10M #1-425 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



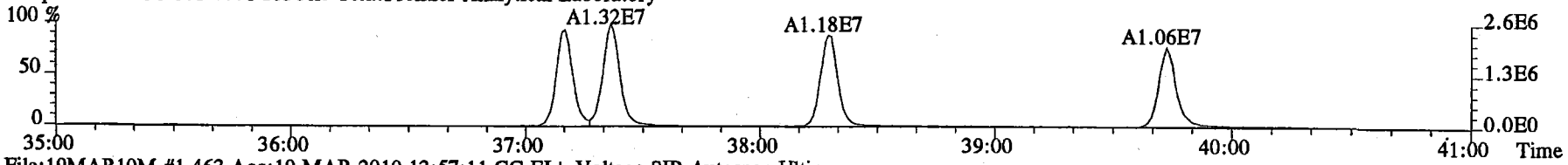
File:19MAR10M #1-463 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



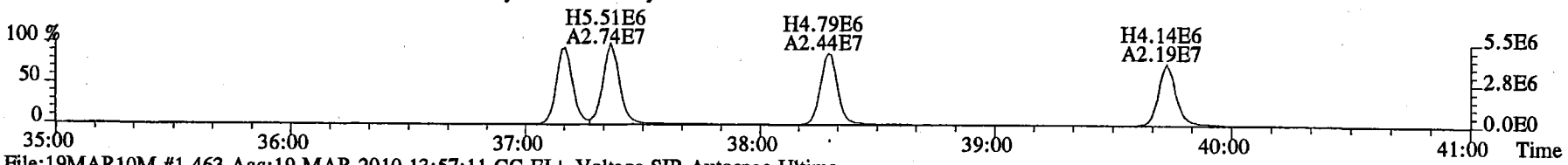
File:19MAR10M #1-463 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



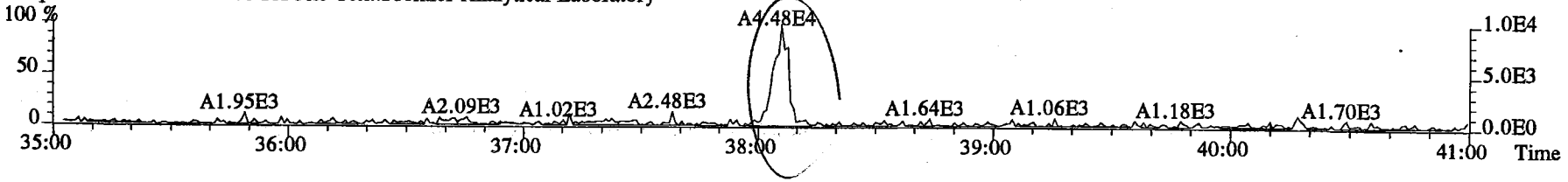
File:19MAR10M #1-463 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



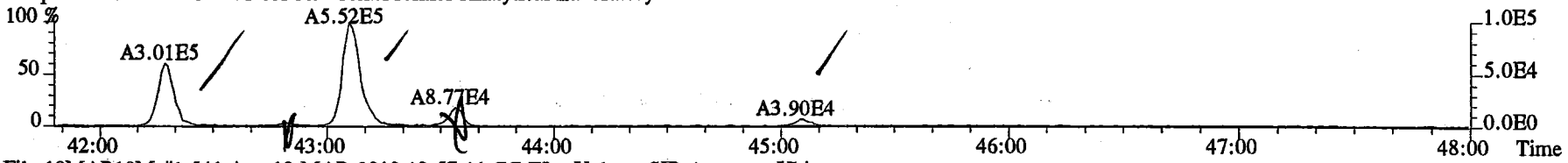
File:19MAR10M #1-463 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



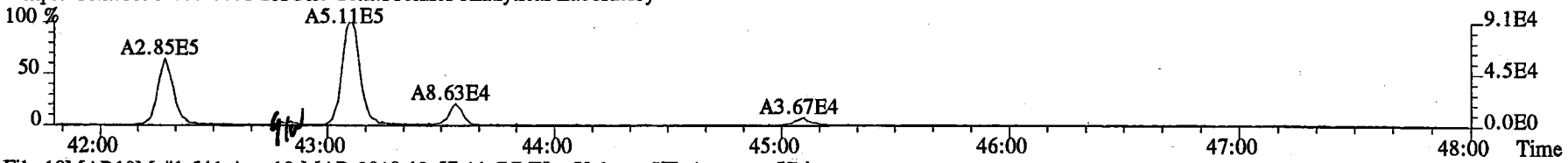
File:19MAR10M #1-463 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



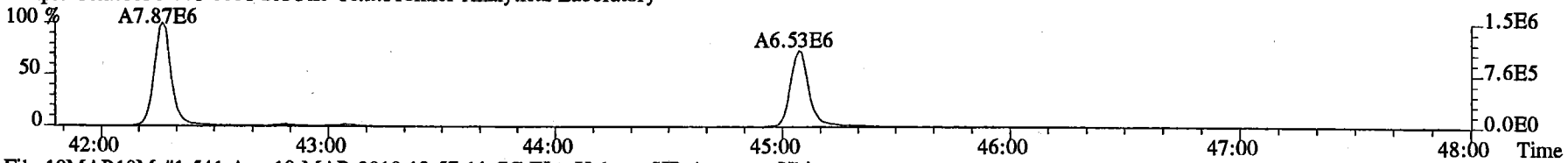
File:19MAR10M #1-541 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



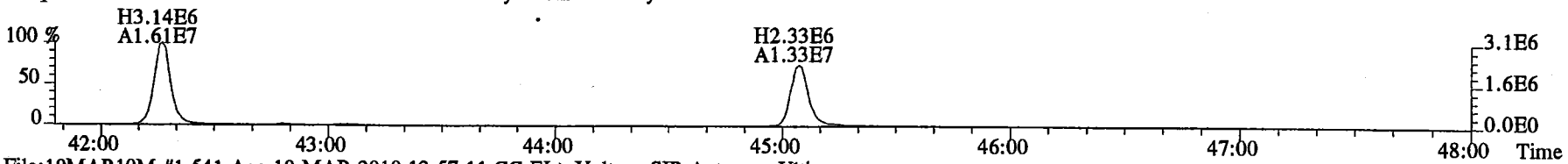
File:19MAR10M #1-541 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



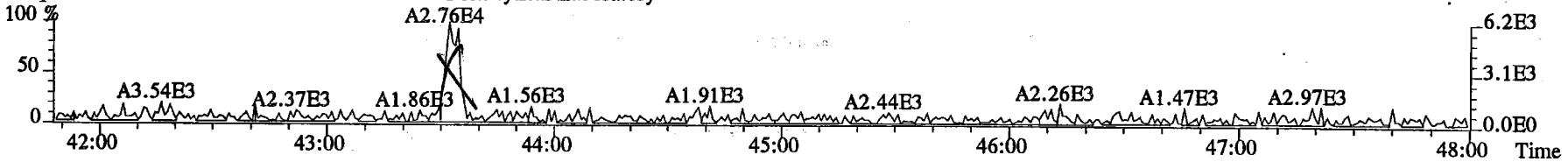
File:19MAR10M #1-541 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



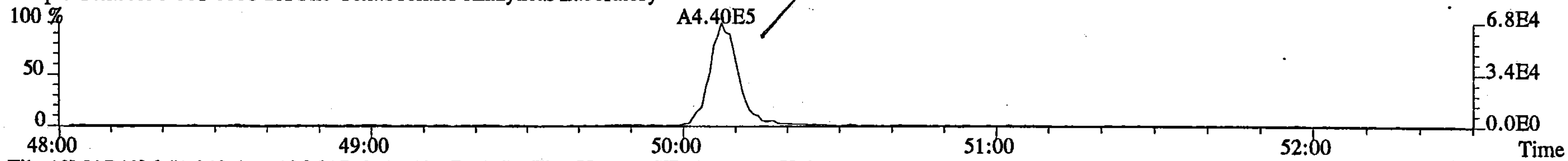
File:19MAR10M #1-541 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



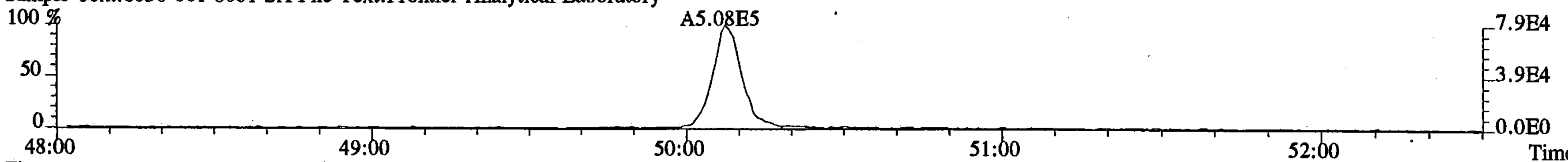
File:19MAR10M #1-541 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



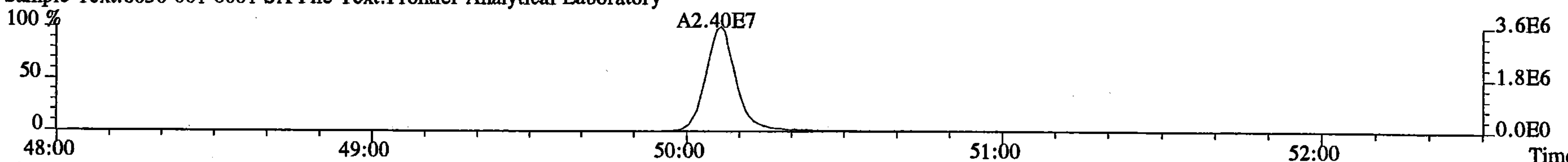
File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



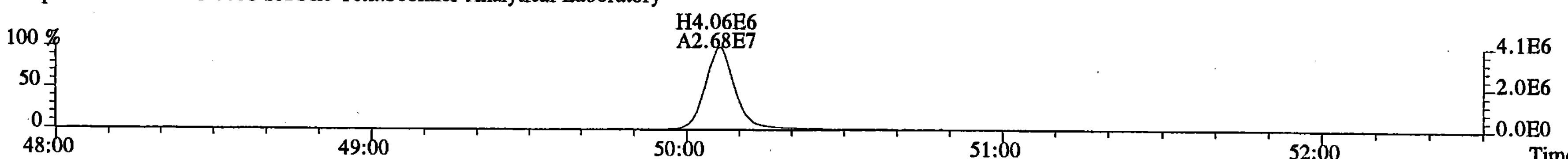
File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



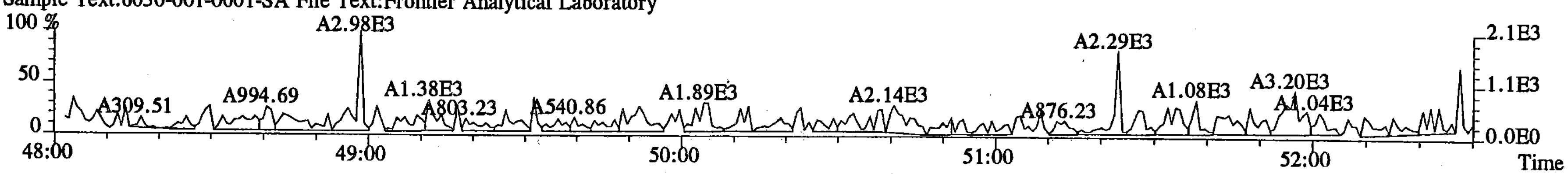
File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-001-0001-SA File Text:Frontier Analytical Laboratory



File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 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:6030-001-0001-SA File Text:Frontier Analytical Laboratory



File:19MAR10M #1-348 Acq:19-MAR-2010 13:57:11 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:6030-001-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 6030-002-0001-SA Filename: 19MAR10M Sam:8 Acquired: 19-MAR-10 14:52:34 ICal: PCDDFAL3-11-18-09
Client ID: CB4857031010COMP ConCal: ST031910M1 EndCal: ST031910M2
Results: 6030 GC Column: DB5 Amount: 1.038 NATO 1989 Tox: 3.03
WHO 1998 Tox: 2.50 WHO 2005 Tox: 2.62

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	942	860	1.36
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.96	*		2.50	1100	519	1.40
1,2,3,4,7,8-HxCDD	2.65e+04	1.39	y	38:35	1.37	1.65	J	2.50	-	-	*
1,2,3,6,7,8-HxCDD	5.46e+04	1.30	y	38:44	1.34	3.79	J	2.50	-	-	*
1,2,3,7,8,9-HxCDD	4.73e+04	1.28	y	39:12	1.37	3.09	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	1.04e+06	0.89	y	44:11	1.17	76.2		2.50	-	-	*
OCDD	5.75e+06	0.92	y	49:46	1.21	561		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	897	456	0.443
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	769	664	0.809
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	769	664	0.857
1,2,3,4,7,8-HxCDF	5.80e+04	1.33	y	37:11	1.00	3.08	J	2.50	-	-	*
1,2,3,6,7,8-HxCDF	3.03e+04	1.15	y	37:22	0.92	1.56	J	2.50	-	-	*
2,3,4,6,7,8-HxCDF	3.81e+04	1.29	y	38:20	0.99	1.98	J	2.50	-	-	*
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.09	*		2.50	476	351	0.591
1,2,3,4,6,7,8-HpCDF	2.51e+05	0.98	y	42:18	1.36	14.2	J	2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	3.19e+04	0.97	y	45:05	1.61	1.91	J	2.50	-	-	*
OCDF	3.99e+05	0.90	y	50:09	0.84	34.8	J	2.50	-	-	*

						Rec
13C-2,3,7,8-TCDD	2.74e+07	0.73	y	27:21	0.94	1800	93.6
13C-1,2,3,7,8-PeCDD	2.75e+07	1.54	y	33:11	1.02	1670	86.9
13C-1,2,3,4,7,8-HxCDD	2.25e+07	1.32	y	38:34	0.98	1750	90.6
13C-1,2,3,6,7,8-HxCDD	2.06e+07	1.29	y	38:44	0.94	1680	87.2
13C-1,2,3,4,6,7,8-HpCDD	2.24e+07	1.07	y	44:11	0.90	1900	98.8
13C-OCDD	3.25e+07	0.95	y	49:45	0.67	3720	96.6
13C-2,3,7,8-TCDF	4.75e+07	0.81	y	26:36	0.88	1770	91.9
13C-1,2,3,7,8-PeCDF	4.37e+07	1.66	y	31:27	0.88	1630	84.7
13C-2,3,4,7,8-PeCDF	4.08e+07	1.65	y	32:46	0.85	1570	81.5
13C-1,2,3,4,7,8-HxCDF	3.63e+07	0.48	y	37:11	1.72	1610	83.7
13C-1,2,3,6,7,8-HxCDF	4.10e+07	0.47	y	37:22	2.00	1560	80.9
13C-2,3,4,6,7,8-HxCDF	3.76e+07	0.47	y	38:18	1.74	1650	85.7
13C-1,2,3,7,8,9-HxCDF	3.30e+07	0.47	y	39:44	1.51	1670	86.8
13C-1,2,3,4,6,7,8-HpCDF	2.50e+07	0.49	y	42:17	1.10	1730	90.0
13C-1,2,3,4,7,8,9-HpCDF	2.01e+07	0.48	y	45:05	0.85	1810	93.8
13C-OCDF	5.24e+07	0.89	y	50:07	1.17	3410	88.4
37Cl-2,3,7,8-TCDD	1.29e+07			27:23	0.97	823	107
13C-1,2,3,4-TCDD	3.11e+07	0.75	y	26:48	-	114	
13C-1,2,3,4-TCDF	5.89e+07	0.80	y	25:32	-	123	
13C-1,2,3,7,8,9-HxCDD	2.53e+07	1.28	y	39:11	-	119	

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*			NotFnd	1.02	*	2.50	942	860	1.36	0
Total Penta-Dioxins	*			NotFnd	0.96	*	2.50	1100	519	1.40	0
Total Hexa-Dioxins	4.06e+05			36:09	1.36	26.8	2.50	-	-	*	6
Total Hepta-Dioxins	1.86e+06			42:49	1.17	137	2.50	-	-	*	2
Total Tetra-Furans	8.96e+04			27:52	1.29	2.83	J 2.50	-	-	*	1
1st Fn. Tot Penta-Furans	5.41e+04			28:27	0.90	2.75	J 2.50	-	-	*	PeCDF 1
Total Penta-Furans	1.06e+05			30:14	0.90	5.38	J 2.50	-	-	*	8.13 2
Total Hexa-Furans	5.74e+05			35:15	0.99	30.1	2.50	-	-	*	7
Total Hepta-Furans	7.15e+05			42:18	1.47	41.3	2.50	-	-	*	3

Analyst: _____ Date: 3/22/10

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 16 File: 19MAR10M S: 8 I: 1 F: 3
Acquired: 19-MAR-10 14:52:34

Total Concentration: 26.8 Unnamed Concentration: 18.234

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
36:09	4.18e+04	3.63e+04	1.15	y	7.81e+04	5.12	
37:04	1.59e+04	1.50e+04	1.06	y	3.09e+04	2.02	
37:28	9.87e+04	7.05e+04	1.40	y	1.69e+05	11.1	
38:35	1.54e+04	1.11e+04	1.39	y	2.65e+04	1.65	1,2,3,4,7,8-HxCDD
38:44	3.09e+04	2.37e+04	1.30	y	5.46e+04	3.79	1,2,3,6,7,8-HxCDD
39:12	2.66e+04	2.07e+04	1.28	y	4.73e+04	3.09	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 16 File: 19MAR10M S: 8 I: 1 F: 4
Acquired: 19-MAR-10 14:52:34

Total Concentration: 137 Unnamed Concentration: 60.538

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
42:49	3.92e+05	4.31e+05	0.91 y	8.23e+05	60.5	
44:11	4.88e+05	5.48e+05	0.89 y	1.04e+06	76.2	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 16 File: 19MAR10M S: 8 I: 1 F: 1
Acquired: 19-MAR-10 14:52:34

Total Concentration: 2.83 Unnamed Concentration: 2.828

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
27:52	3.62e+04	5.34e+04	0.68	y	8.96e+04	2.83	

Totals class: 1st Fn. Tot Penta-Furans Entry #: 43

Run: 16 File: 19MAR10M S: 8 I: 1 F: 1
Acquired: 19-MAR-10 14:52:34

Total Concentration: 2.75 Unnamed Concentration: 2.752

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
28:27	3.21e+04	2.20e+04	1.46	y	5.41e+04	2.75	

Totals class: Total Penta-Furans Entry #: 44

Run: 16 File: 19MAR10M S: 8 I: 1 F: 2
Acquired: 19-MAR-10 14:52:34

Total Concentration: 5.38 Unnamed Concentration: 5.375

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:14	3.54e+04	2.52e+04	1.40	y	6.06e+04	3.08	
31:45	2.58e+04	1.93e+04	1.34	y	4.51e+04	2.29	

Totals class: Total Hexa-Furans Entry #: 45

Run: 16 File: 19MAR10M S: 8 I: 1 F: 3
Acquired: 19-MAR-10 14:52:34

Total Concentration: 30.1 Unnamed Concentration: 23.530

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
35:15	2.29e+04	1.95e+04	1.17 y	4.24e+04	2.23	
35:32	8.31e+04	6.83e+04	1.22 y	1.51e+05	7.96	
36:25	7.61e+04	5.90e+04	1.29 y	1.35e+05	7.11	
37:11	3.31e+04	2.48e+04	1.33 y	5.80e+04	3.08	1,2,3,4,7,8-HxCDF
37:22	1.62e+04	1.41e+04	1.15 y	3.03e+04	1.56	1,2,3,6,7,8-HxCDF
38:06	6.84e+04	5.01e+04	1.37 y	1.18e+05	6.23	
38:20	2.15e+04	1.66e+04	1.29 y	3.81e+04	1.98	2,3,4,6,7,8-HxCDF

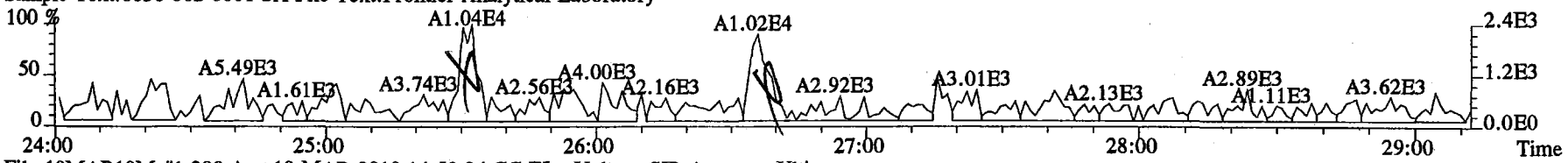
Totals class: Total Hepta-Furans Entry #: 46

Run: 16 File: 19MAR10M S: 8 I: 1 F: 4
Acquired: 19-MAR-10 14:52:34

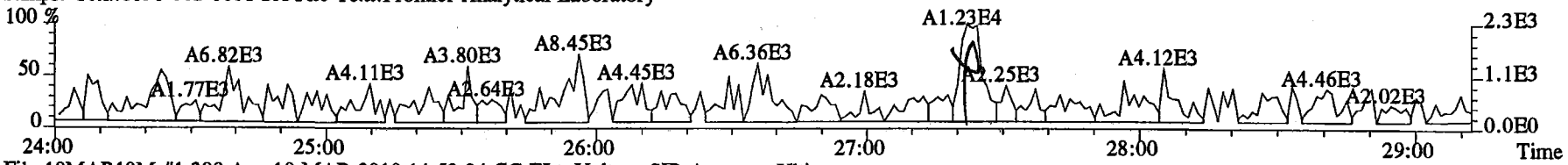
Total Concentration: 41.3 Unnamed Concentration: 25.206

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
42:18	1.24e+05	1.27e+05	0.98	y	2.51e+05	14.2	1,2,3,4,6,7,8-HpCDF
43:07	2.26e+05	2.06e+05	1.10	y	4.32e+05	25.2	
45:05	1.57e+04	1.62e+04	0.97	y	3.19e+04	1.91	1,2,3,4,7,8,9-HpCDF

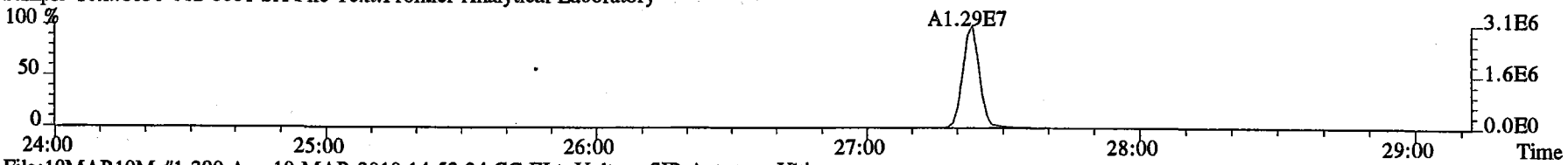
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



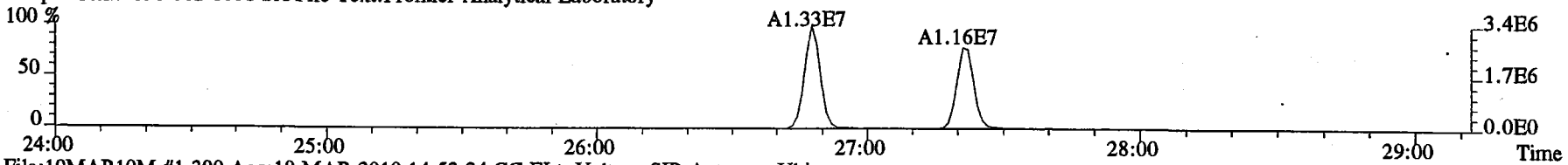
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



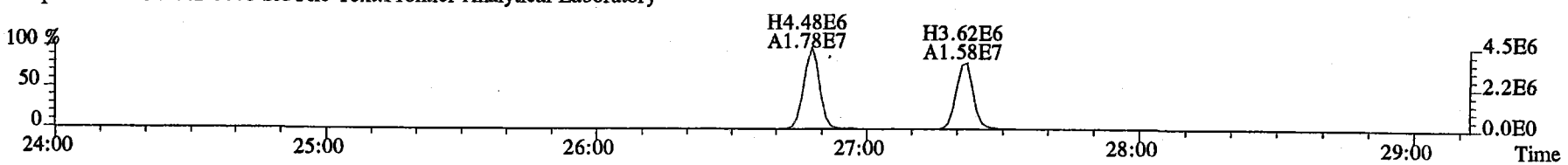
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



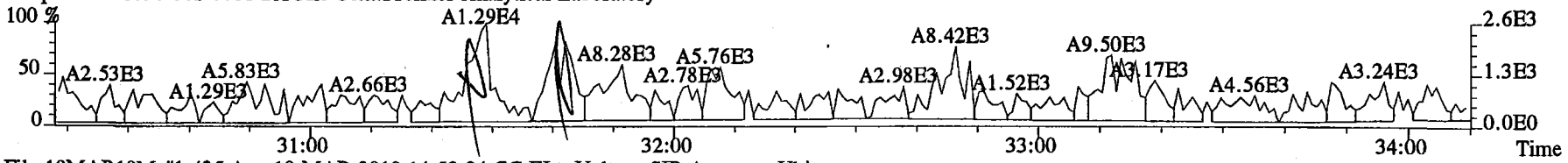
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



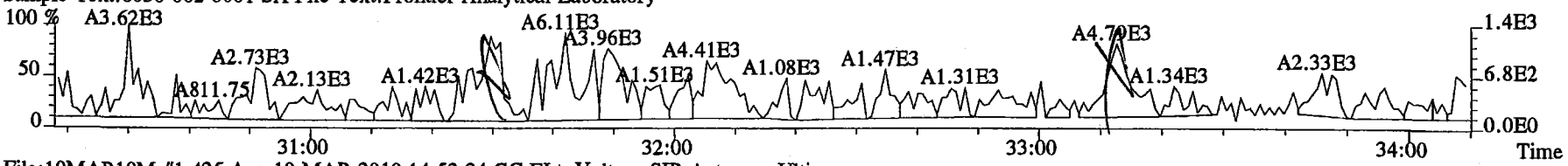
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



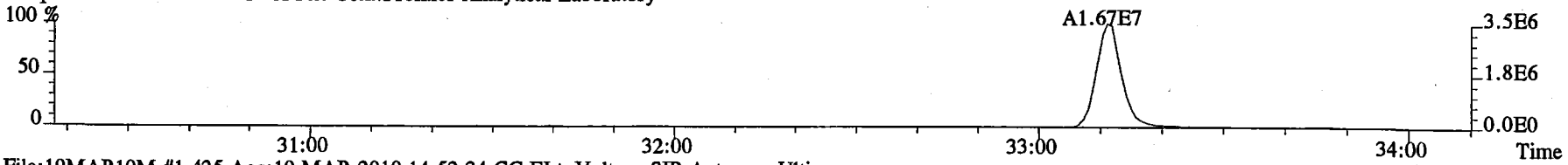
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



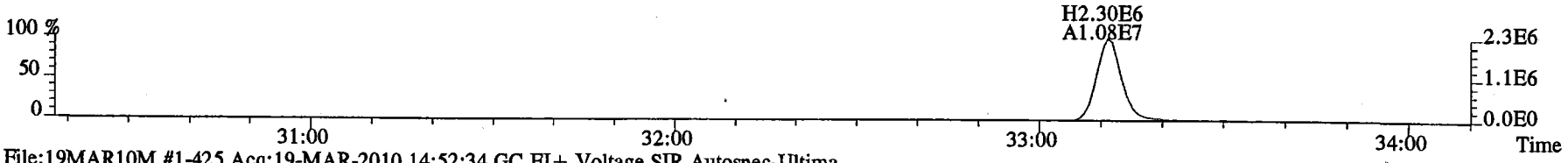
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



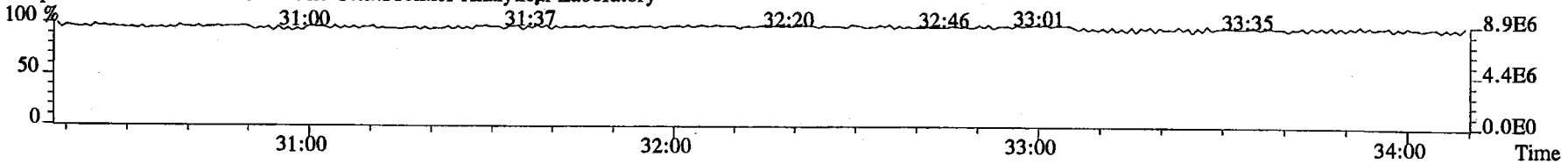
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



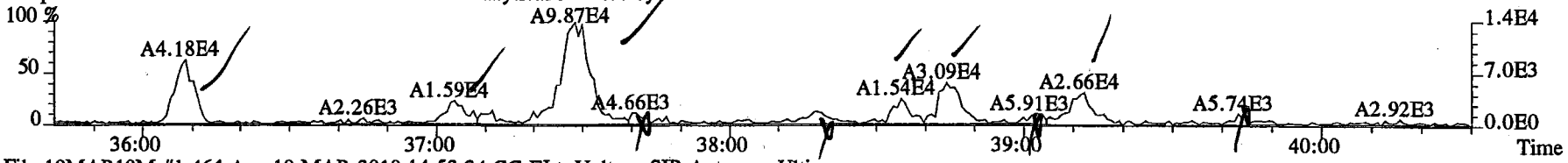
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



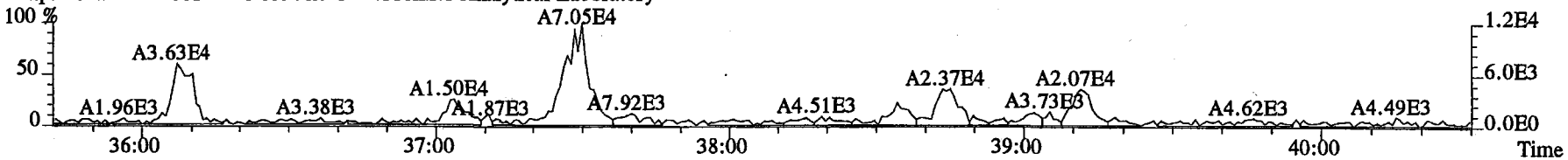
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:8 F:2 Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



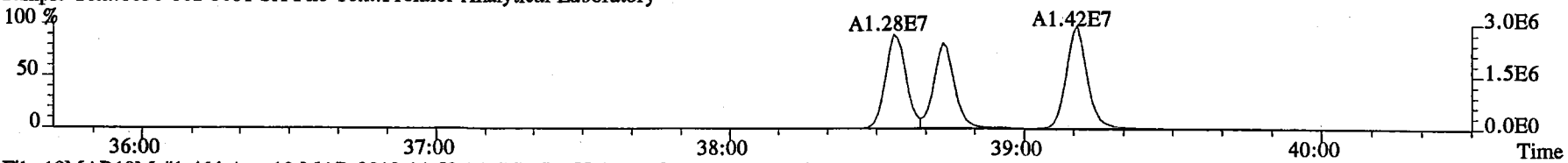
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



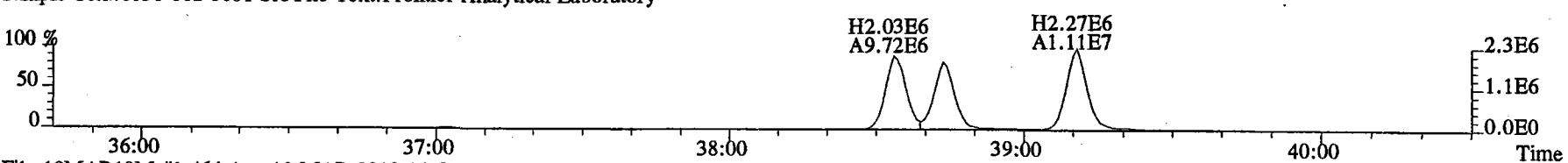
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



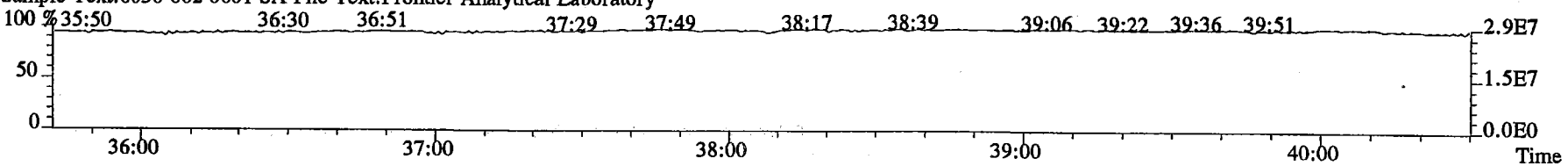
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



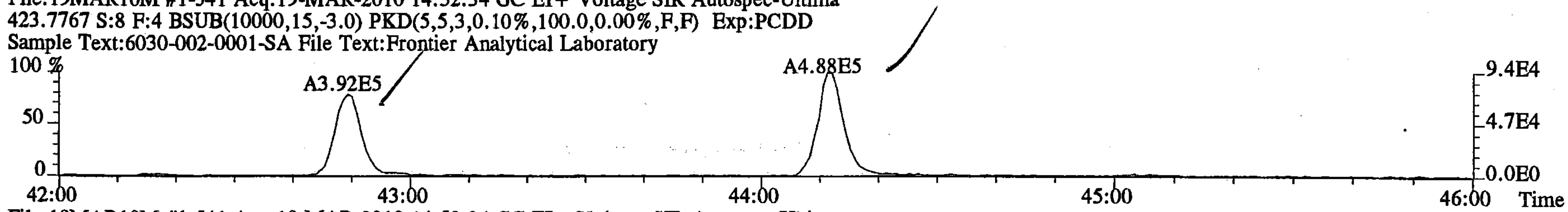
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



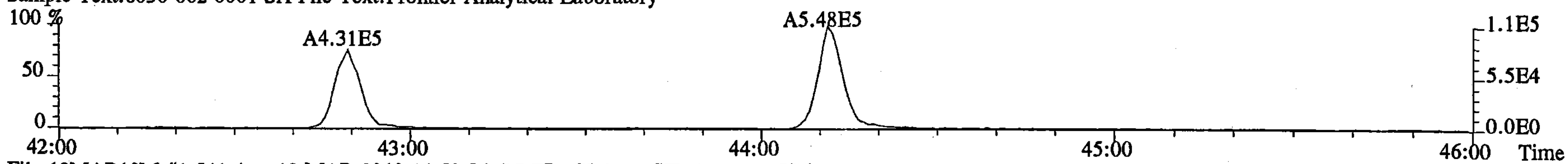
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:8 F:3 Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



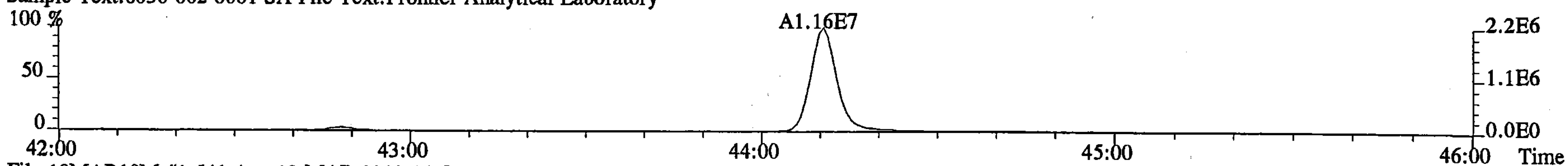
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



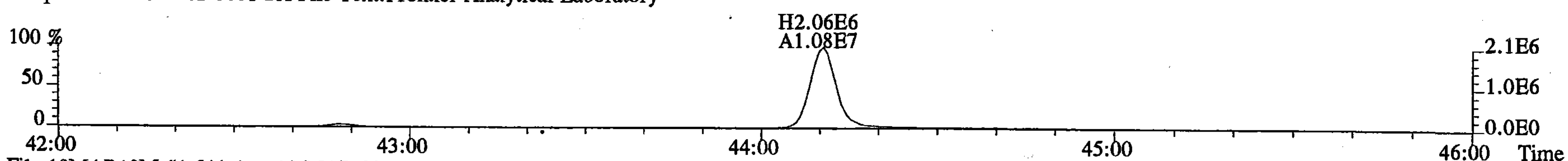
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



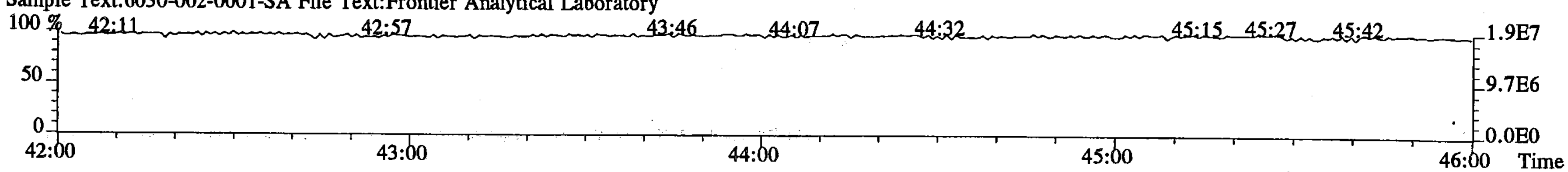
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



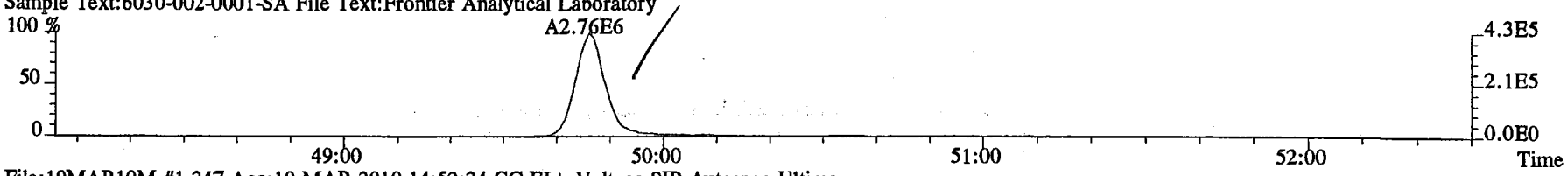
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



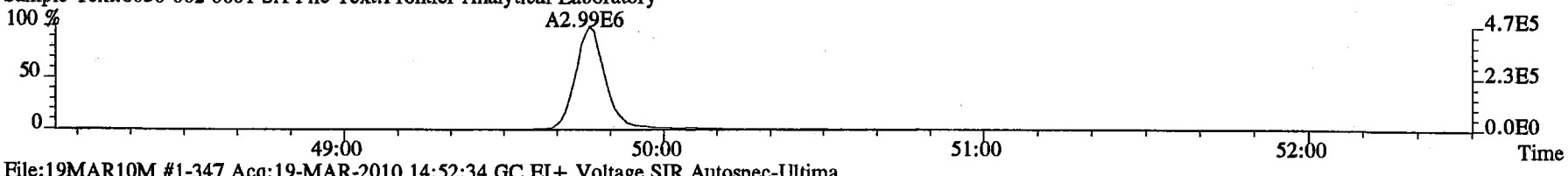
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:8 F:4 Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



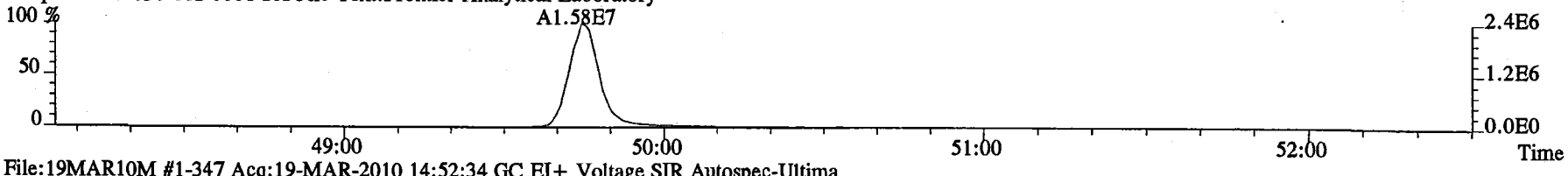
File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



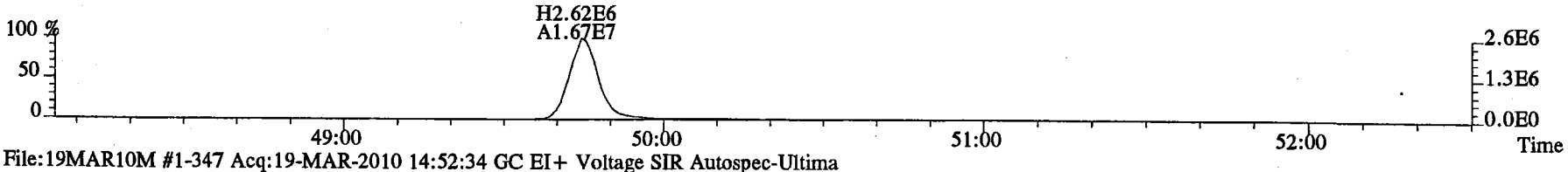
File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



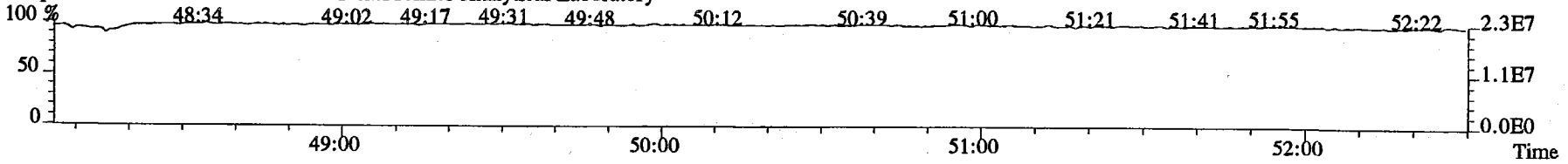
File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



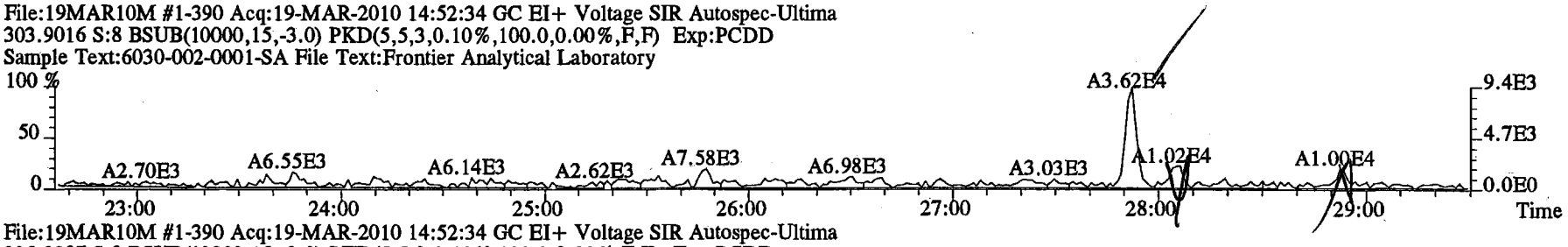
File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



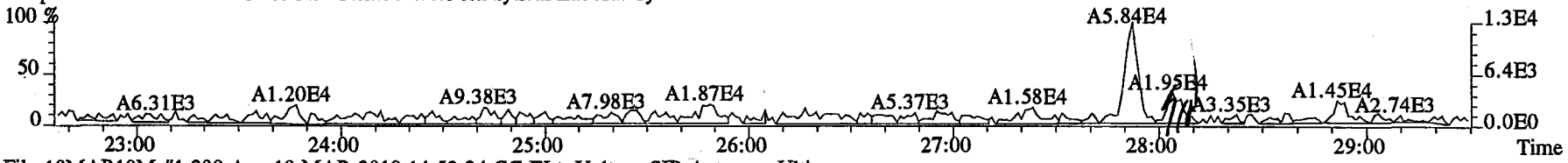
File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:8 F:5 Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



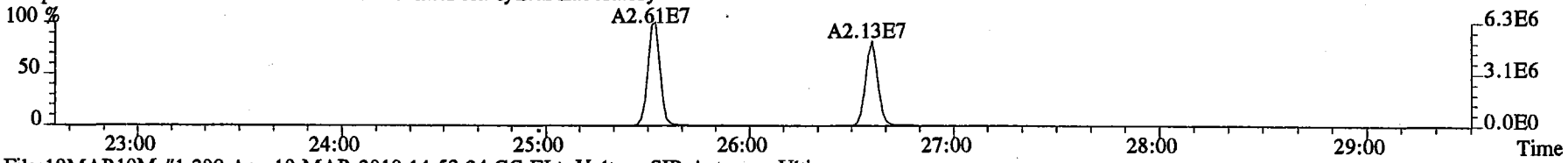
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



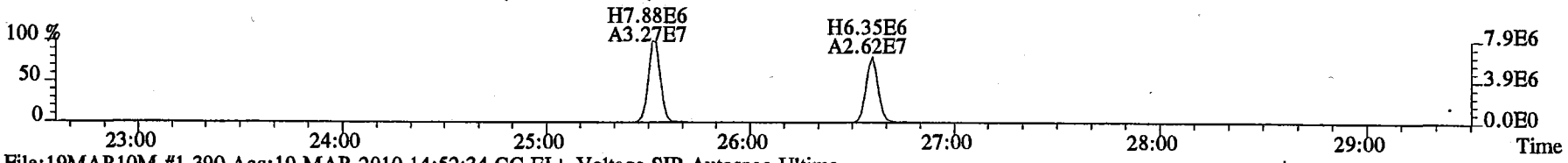
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



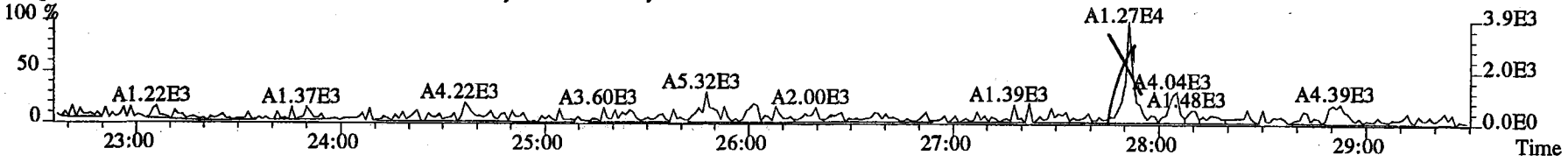
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



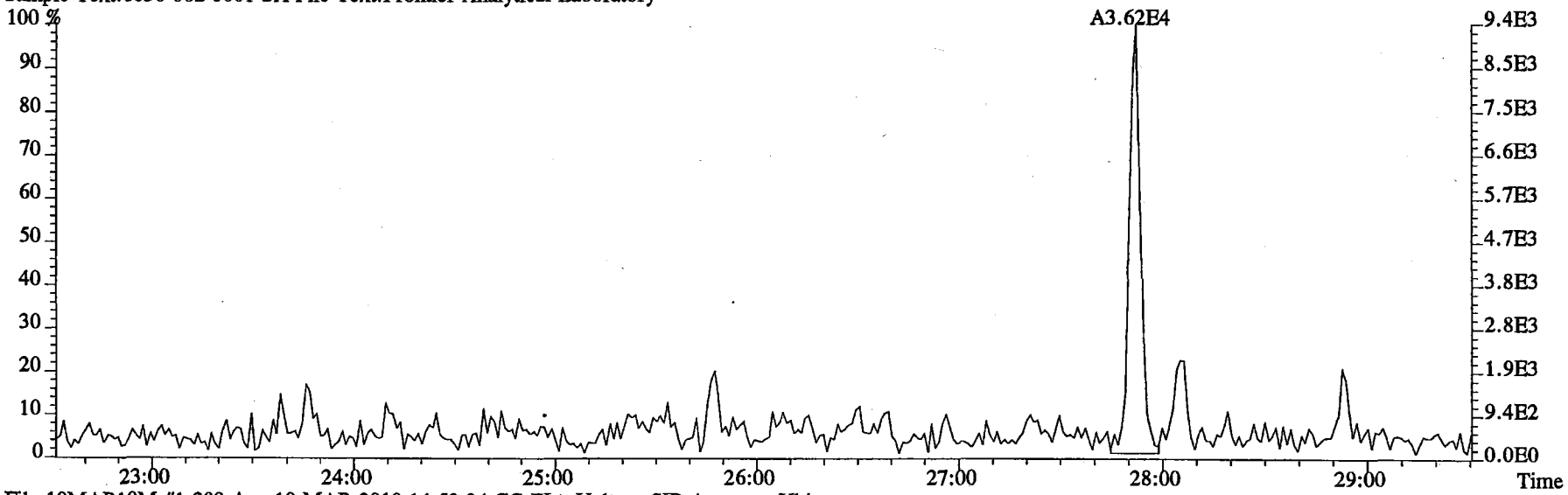
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



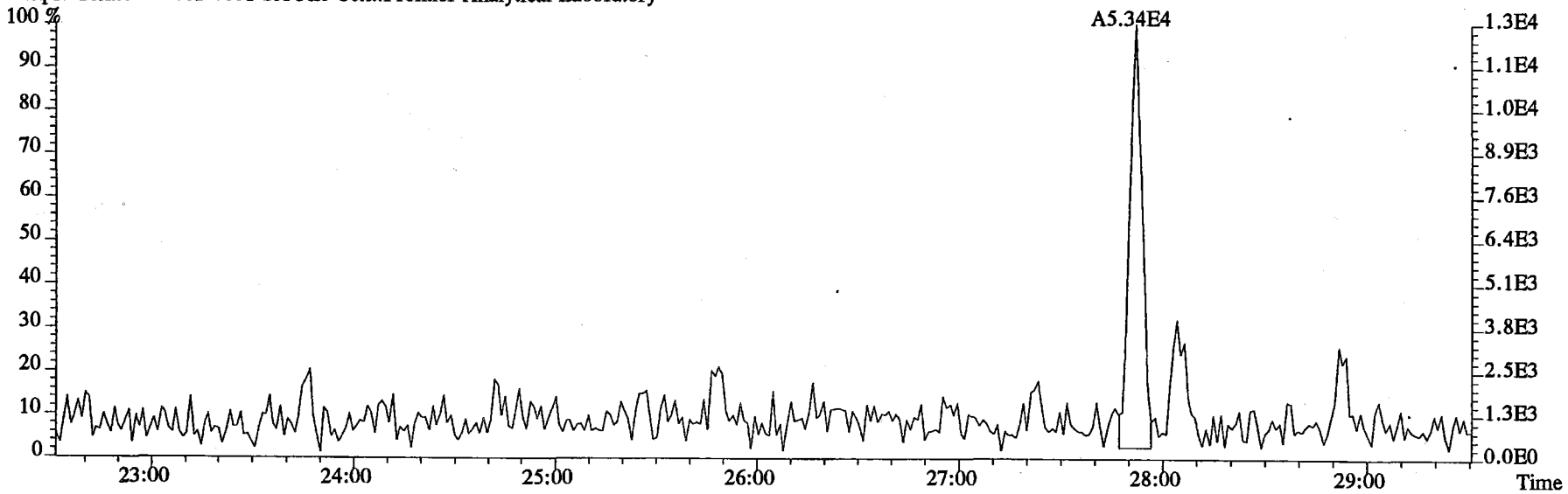
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



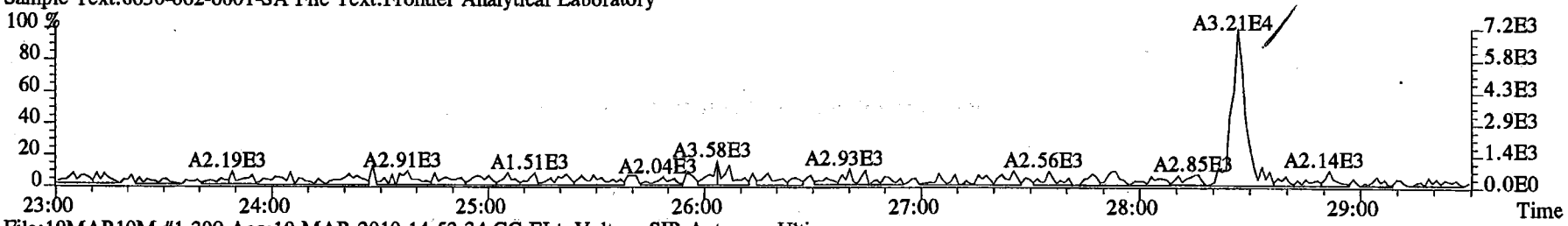
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



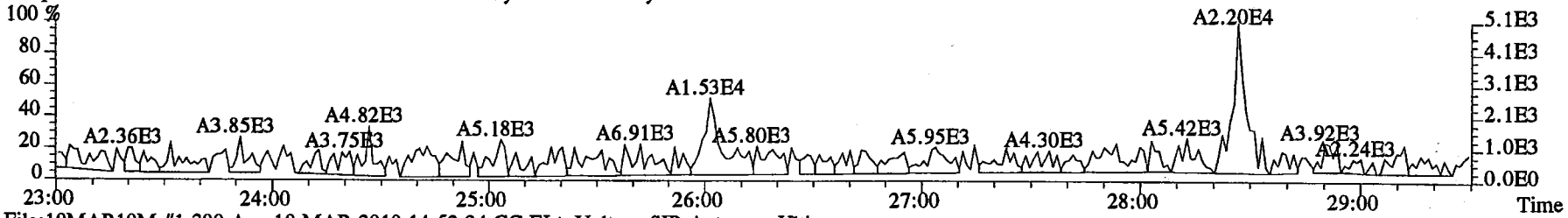
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



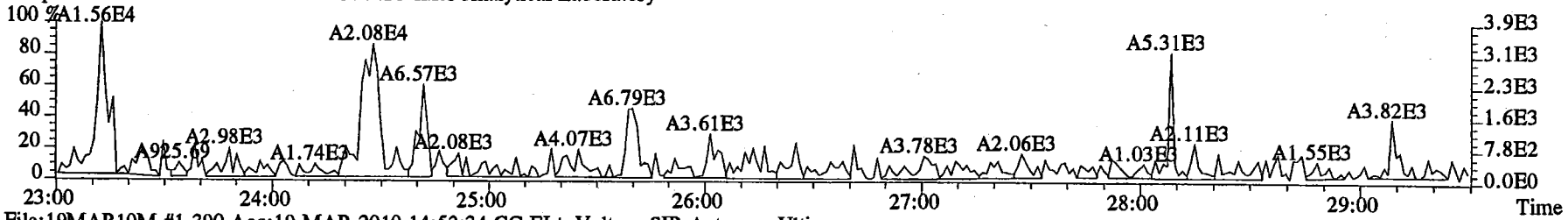
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



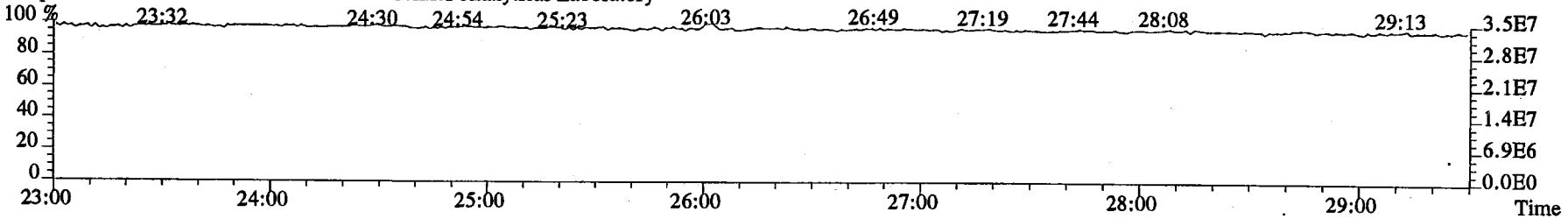
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



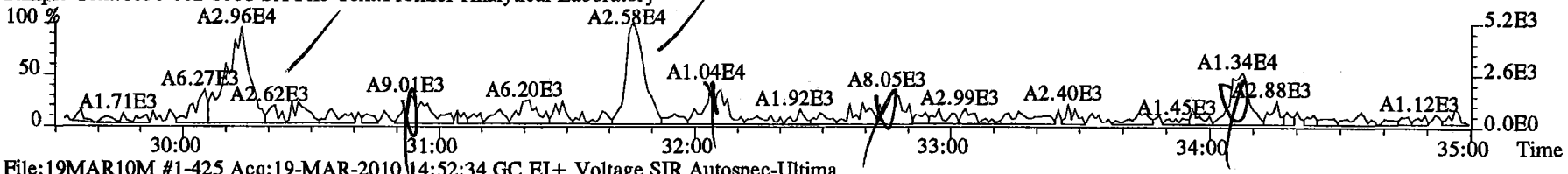
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



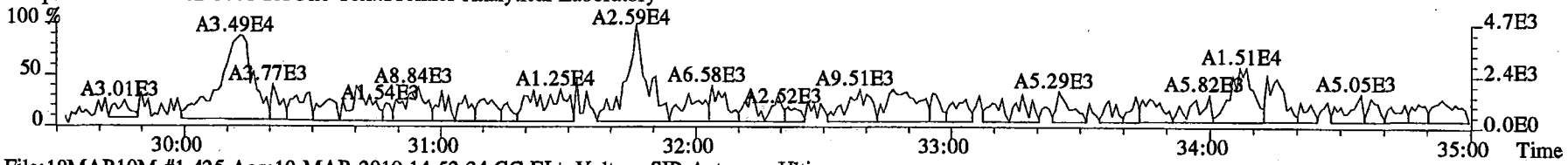
File:19MAR10M #1-390 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:8 Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



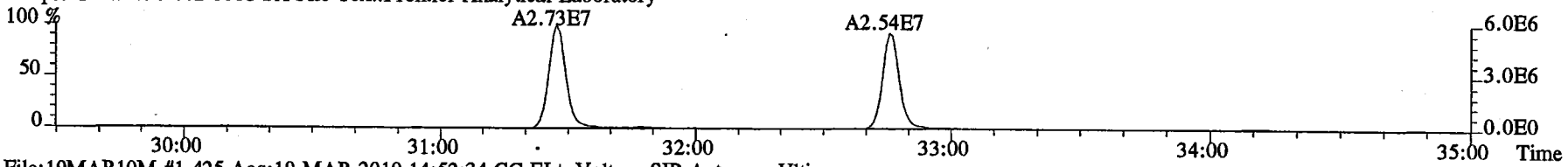
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



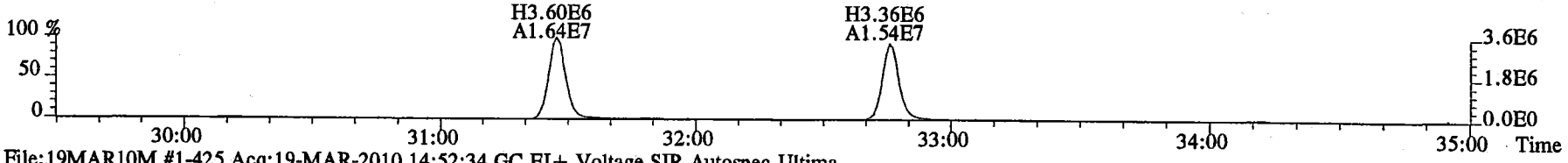
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



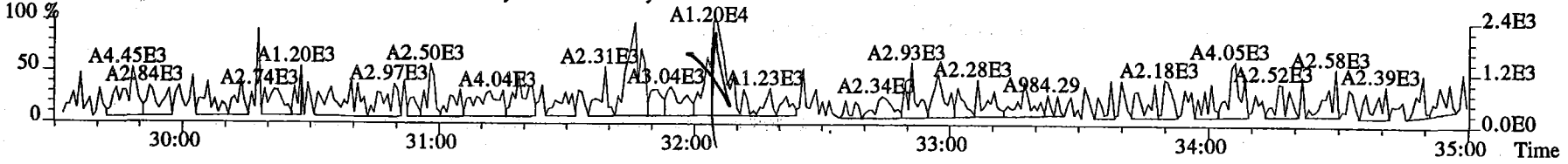
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



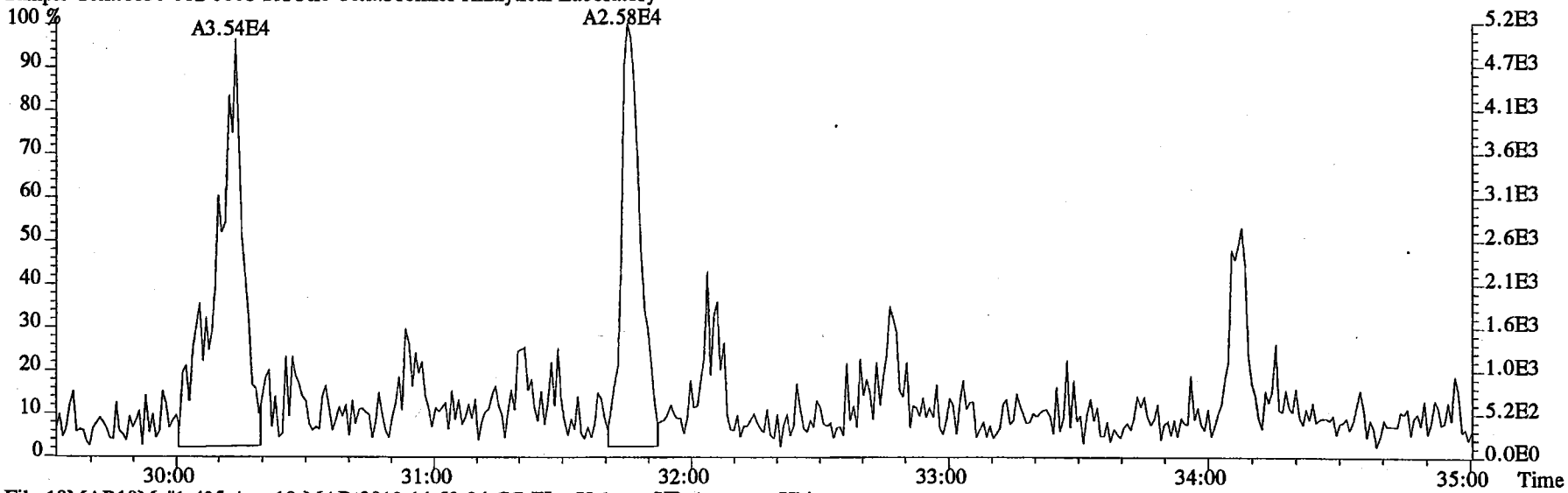
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



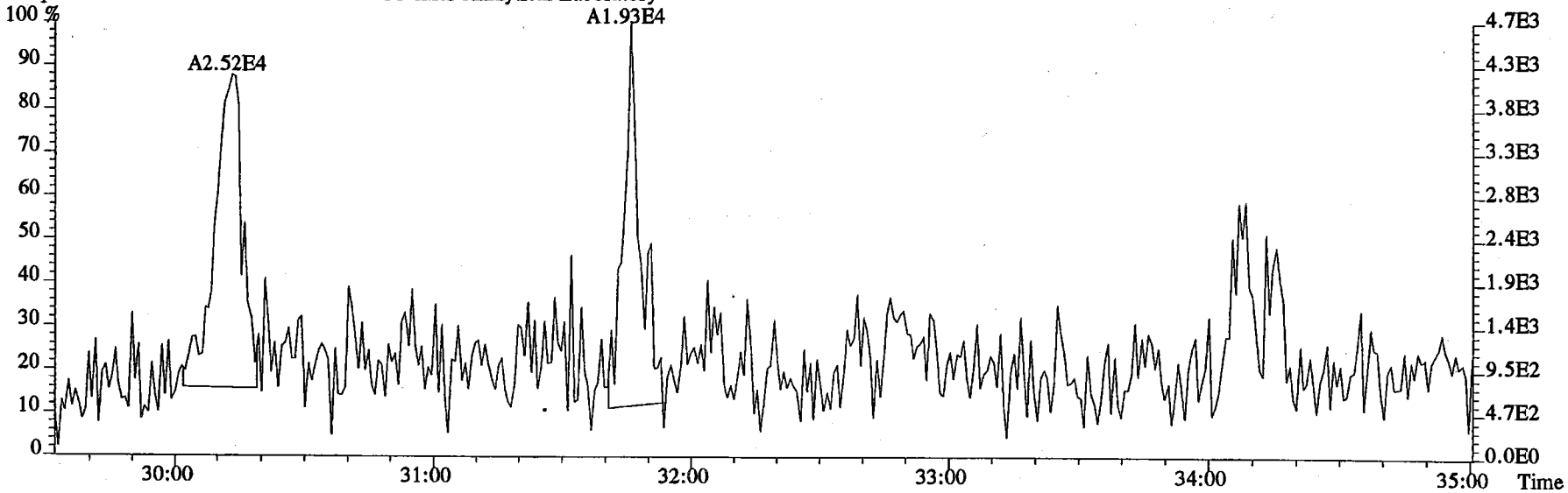
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



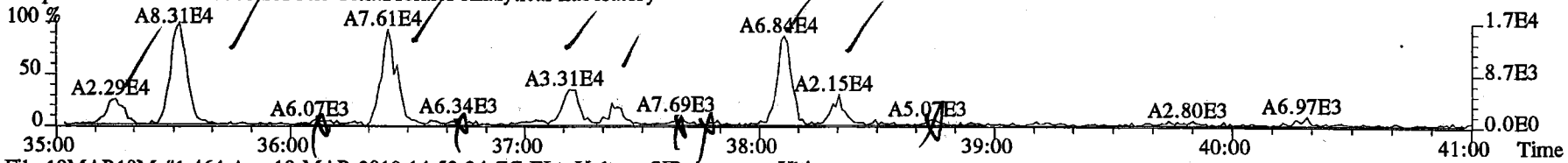
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



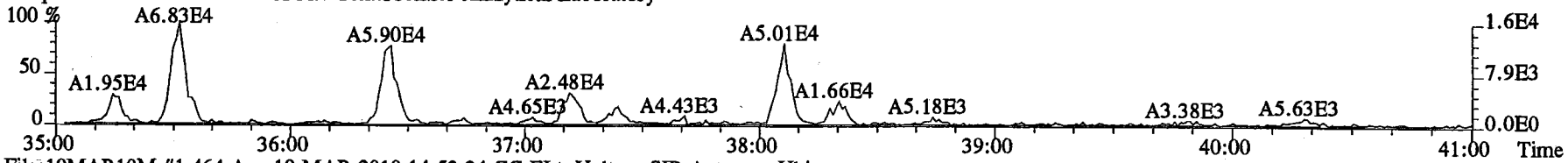
File:19MAR10M #1-425 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



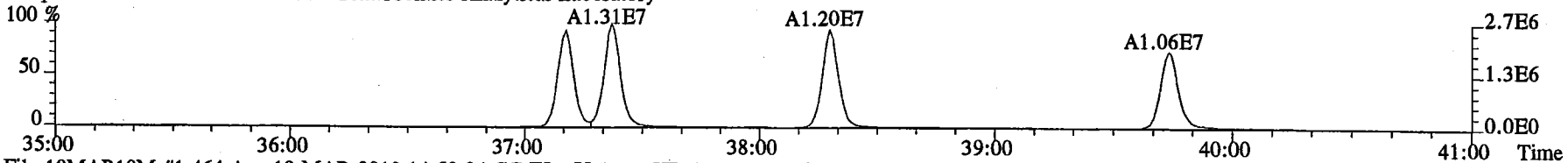
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



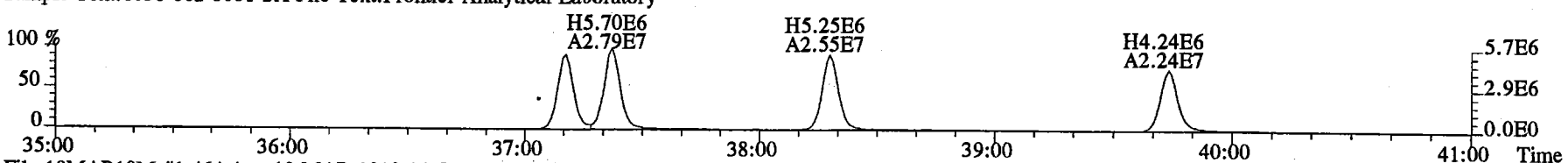
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



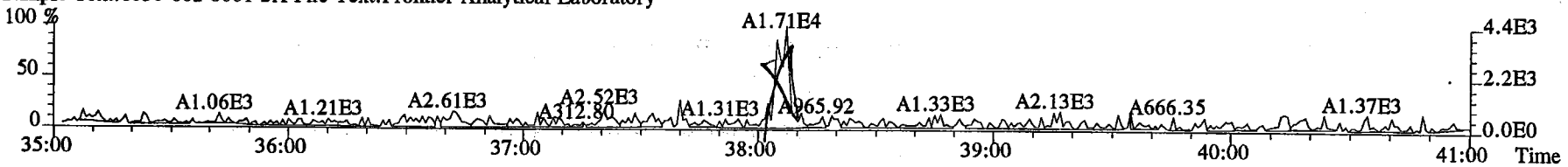
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



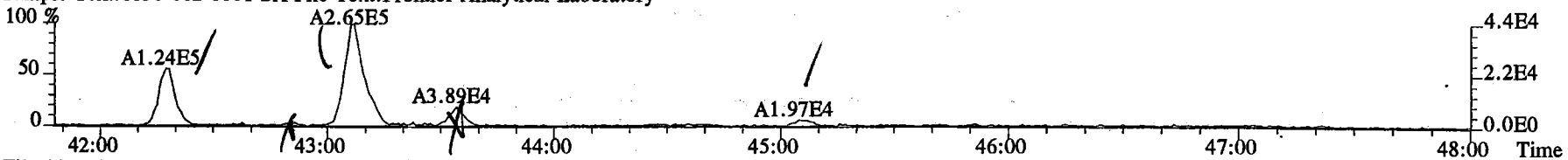
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



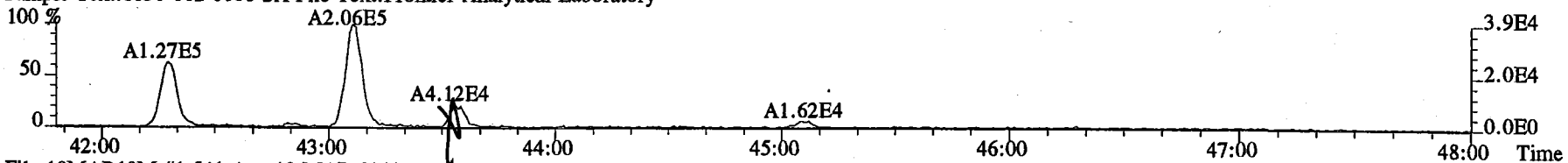
File:19MAR10M #1-464 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



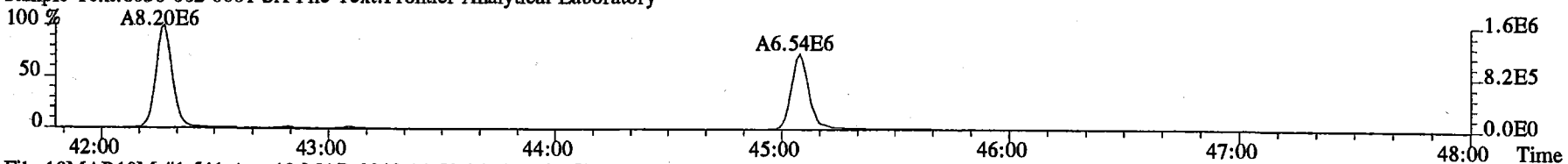
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



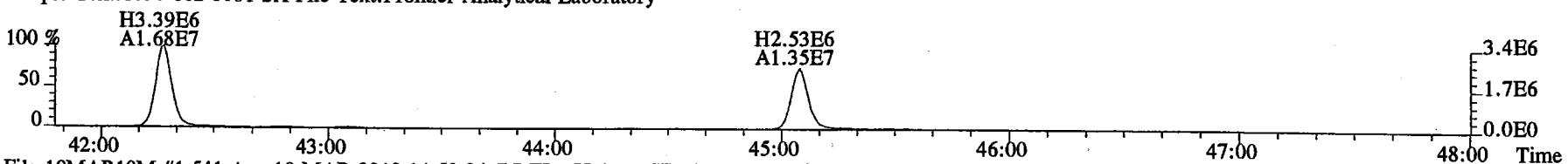
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



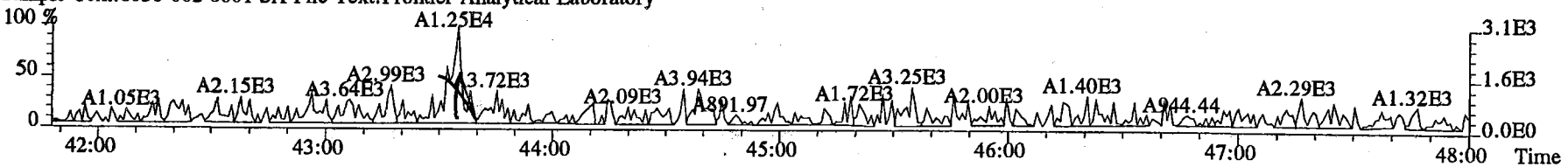
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



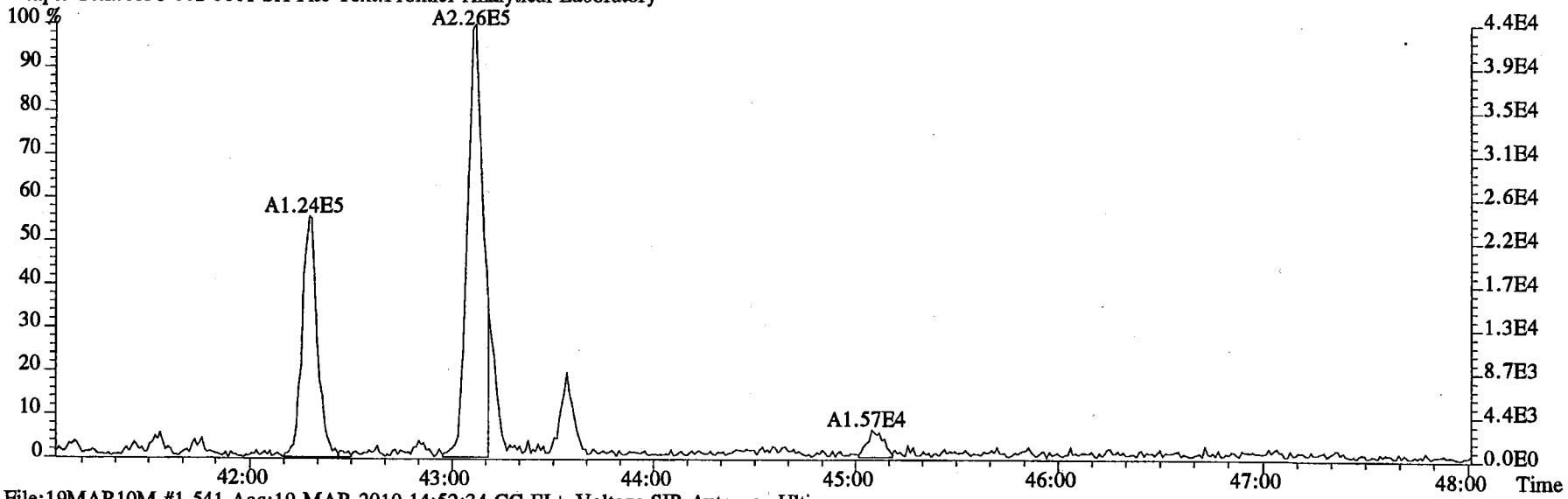
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



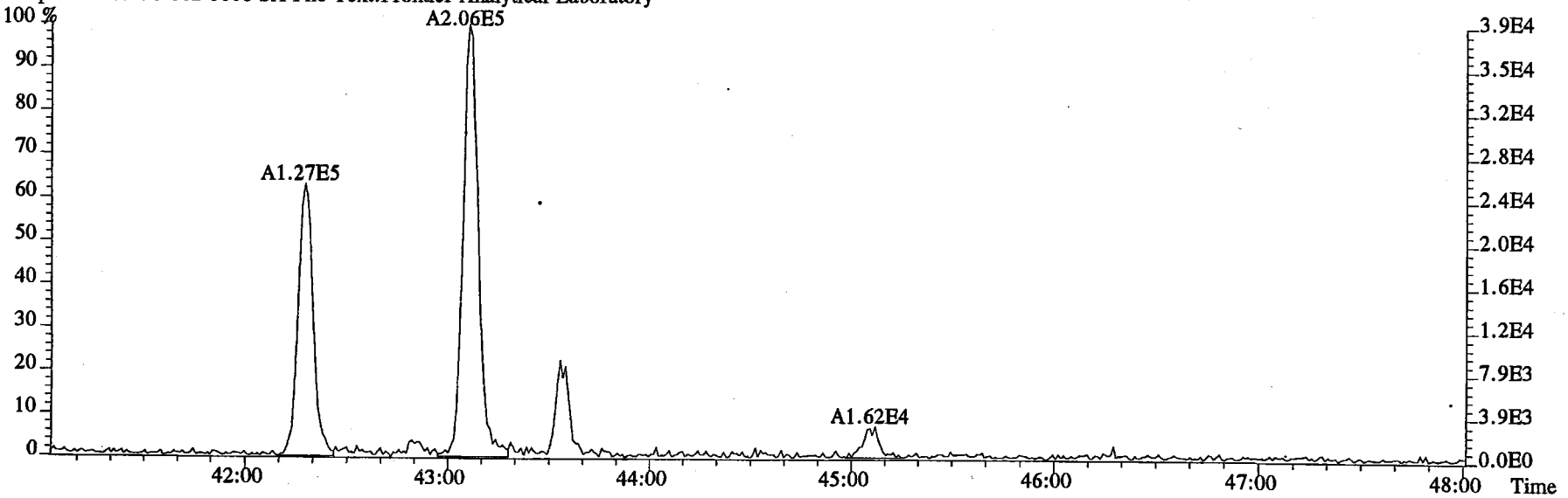
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



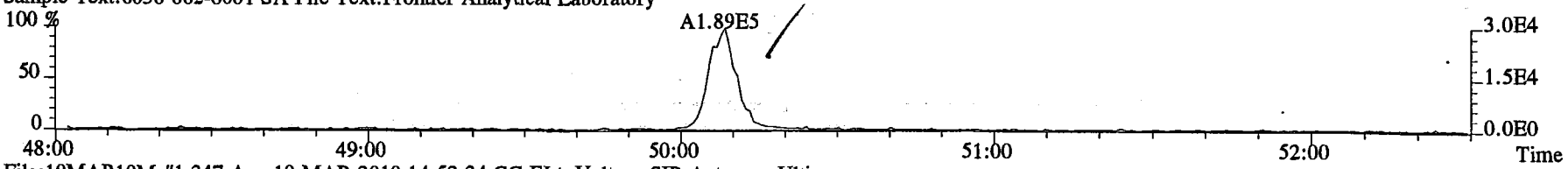
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



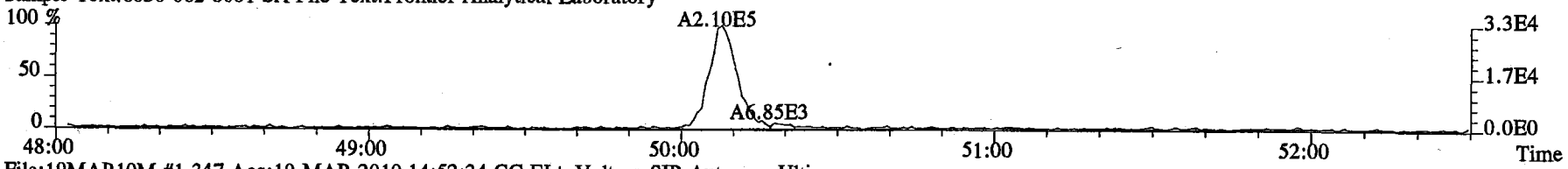
File:19MAR10M #1-541 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



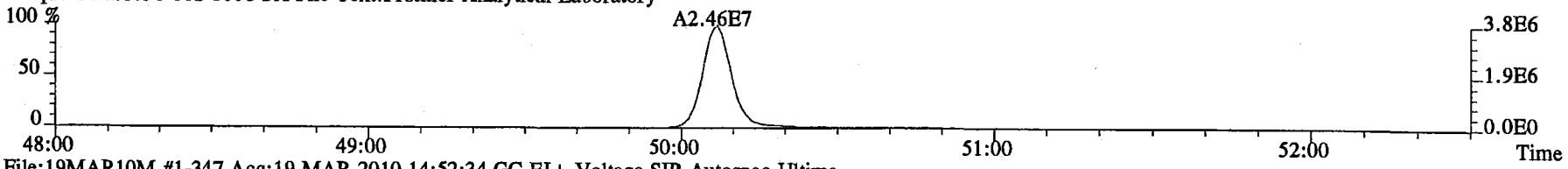
File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



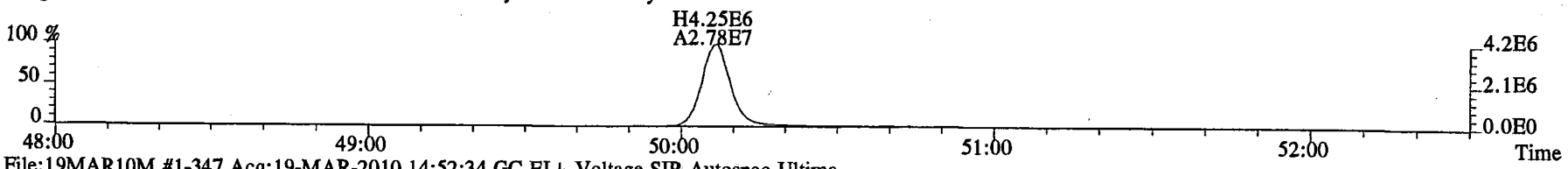
File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



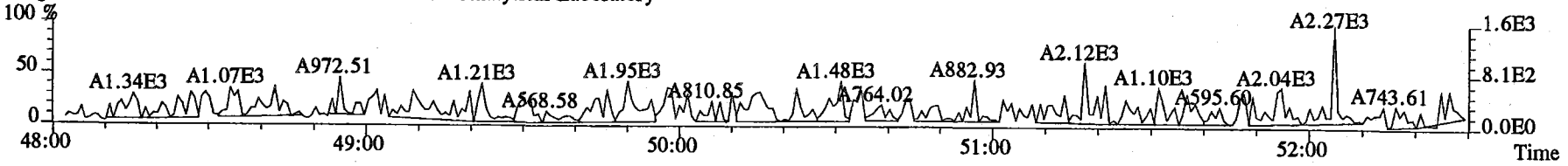
File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



File:19MAR10M #1-347 Acq:19-MAR-2010 14:52:34 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-002-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 6030-003-0001-SA Filename: 19MAR10M Sam:11 Acquired: 19-MAR-10 17:38:38 ICal: PCDDFAL3-11-18-09
Client ID: CB1031010COMP ConCal: ST031910M1 EndCal: ST031910M2
Results: 6030 GC Column: DB5 Amount: 1.027 NATO 1989 Tox: 0.368
WHO 1998 Tox: 0.278 WHO 2005 Tox: 0.298

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	766	1090	1.52
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.96	*		2.50	862	502	1.37
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	1390	863	2.06
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.34	*		2.50	1390	863	2.48
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.37	*		2.50	1390	863	2.25
1,2,3,4,6,7,8-HpCDD	2.34e+05	0.93	y	44:11	1.17	24.1	J	2.50	-	-	*
OCDD	7.60e+05	0.92	y	49:46	1.21	99.8		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	447	942	0.540
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	508	904	0.920
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	508	904	0.999
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	1.00	*		2.50	732	547	1.04
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	732	547	1.04
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.99	*		2.50	732	547	1.10
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.09	*		2.50	732	547	1.23
1,2,3,4,6,7,8-HpCDF	3.40e+04	0.94	y	42:17	1.36	2.73	J	2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.61	*		2.50	442	280	0.828
OCDF	*	*	n	NotFnd	0.84	*		2.50	897	977	3.76
											Rec
13C-2,3,7,8-TCDD	2.42e+07	0.74	y	27:21	0.94	1780					91.7
13C-1,2,3,7,8-PeCDD	2.36e+07	1.53	y	33:11	1.02	1610					82.7
13C-1,2,3,4,7,8-HxCDD	1.79e+07	1.31	y	38:34	0.98	1740					89.6
13C-1,2,3,6,7,8-HxCDD	1.65e+07	1.34	y	38:43	0.94	1690					86.6
13C-1,2,3,4,6,7,8-HpCDD	1.62e+07	1.07	y	44:10	0.90	1720					88.4
13C-OCDD	2.44e+07	0.97	y	49:45	0.67	3510					90.2
13C-2,3,7,8-TCDF	4.24e+07	0.80	y	26:35	0.88	1790					92.1
13C-1,2,3,7,8-PeCDF	3.83e+07	1.66	y	31:27	0.88	1620					83.4
13C-2,3,4,7,8-PeCDF	3.55e+07	1.66	y	32:46	0.85	1550					79.7
13C-1,2,3,4,7,8-HxCDF	2.92e+07	0.48	y	37:11	1.72	1630					83.7
13C-1,2,3,6,7,8-HxCDF	3.27e+07	0.47	y	37:22	2.00	1570					80.4
13C-2,3,4,6,7,8-HxCDF	2.86e+07	0.48	y	38:18	1.74	1580					81.1
13C-1,2,3,7,8,9-HxCDF	2.51e+07	0.48	y	39:44	1.51	1600					81.9
13C-1,2,3,4,6,7,8-HpCDF	1.78e+07	0.49	y	42:17	1.10	1550					79.8
13C-1,2,3,4,7,8,9-HpCDF	1.40e+07	0.49	y	45:05	0.85	1590					81.6
13C-OCDF	3.77e+07	0.87	y	50:07	1.17	3080					79.1
37Cl-2,3,7,8-TCDD	1.19e+07			27:22	0.97	852					109
13C-1,2,3,4-TCDD	2.81e+07	0.75	y	26:48	-	105					
13C-1,2,3,4-TCDF	5.24e+07	0.81	y	25:31	-	110					
13C-1,2,3,7,8,9-HxCDD	2.03e+07	1.33	y	39:11	-	96.4					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*		NotFnd	1.02	*		2.50	766	1090	1.52		0
Total Penta-Dioxins	*		NotFnd	0.96	*		2.50	862	502	1.37		0
Total Hexa-Dioxins	1.17e+05		36:09	1.36	9.71	J	2.50	-	-	*		2
Total Hepta-Dioxins	5.22e+05		42:50	1.17	53.9		2.50	-	-	*		2
Total Tetra-Furans	*		NotFnd	1.29	*		2.50	447	942	0.540		0
1st Fn. Tot Penta-Furans	*		NotFnd	0.90	*		2.50	862	502	0.999	PeCDF	0
Total Penta-Furans	*		NotFnd	0.90	*		2.50	862	502	0.999	*	0
Total Hexa-Furans	2.36e+04		35:31	0.99	1.60	J	2.50	-	-	*		1
Total Hepta-Furans	6.30e+04		42:17	1.47	5.14	J	2.50	-	-	*		2

Analyst: _____ Date: 3/22/10

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 19 File: 19MAR10M S: 11 I: 1 F: 3
Acquired: 19-MAR-10 17:38:38

Total Concentration: 9.71 Unnamed Concentration: 9.715

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
36:09	2.74e+04	2.22e+04	1.23 y	4.96e+04	4.13	
37:30	3.64e+04	3.08e+04	1.18 y	6.72e+04	5.59	

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 19 File: 19MAR10M S: 11 I: 1 F: 4
Acquired: 19-MAR-10 17:38:38

Total Concentration: 53.9 Unnamed Concentration: 29.800

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
42:50	1.36e+05	1.53e+05	0.89	y	2.88e+05	29.8	
44:11	1.13e+05	1.21e+05	0.93	y	2.34e+05	24.1	1,2,3,4,6,7,8-HpCDD

Totals class: Total Hexa-Furans Entry #: 45

Run: 19 File: 19MAR10M S: 11 I: 1 F: 3
Acquired: 19-MAR-10 17:38:38

Total Concentration: 1.60 Unnamed Concentration: 1.604

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
35:31	1.32e+04	1.03e+04	1.28 y	2.36e+04	1.60	

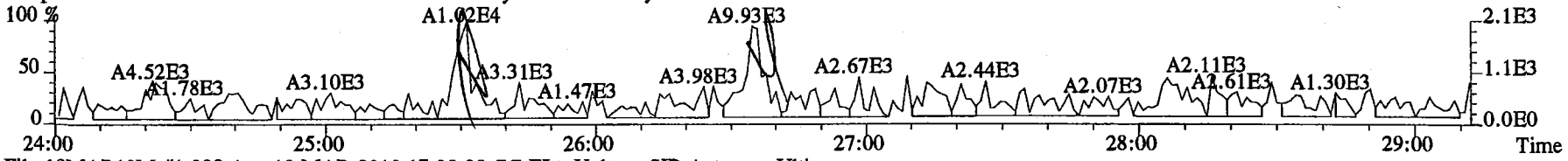
Totals class: Total Hepta-Furans Entry #: 46

Run: 19 File: 19MAR10M S: 11 I: 1 F: 4
Acquired: 19-MAR-10 17:38:38

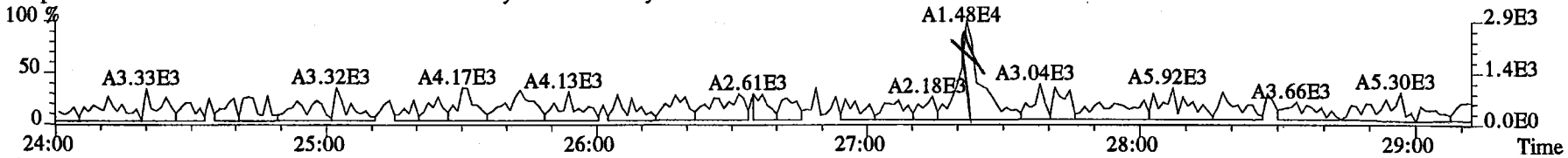
Total Concentration: 5.14 Unnamed Concentration: 2.413

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
42:17	1.65e+04	1.75e+04	0.94 y	3.40e+04	2.73	1,2,3,4,6,7,8-HpCDF
43:08	1.45e+04	1.44e+04	1.01 y	2.90e+04	2.41	

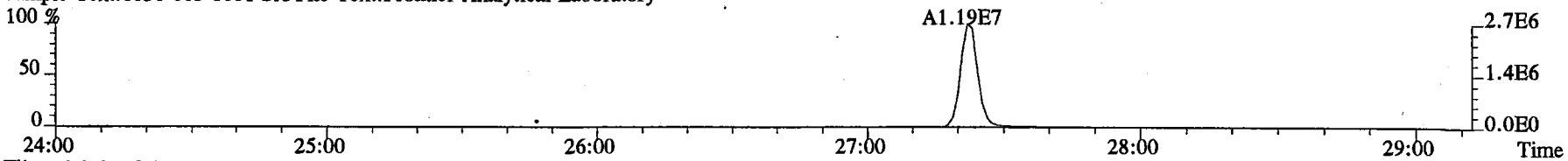
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



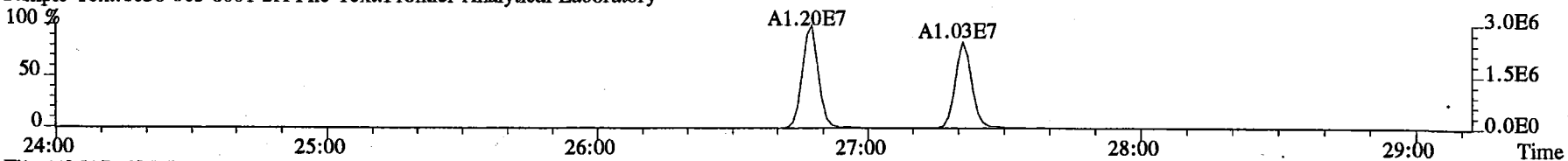
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



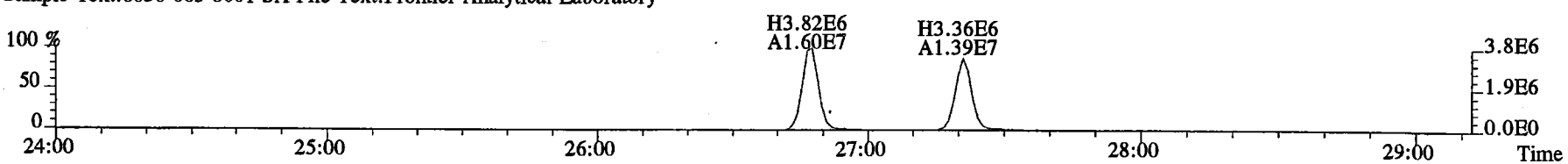
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



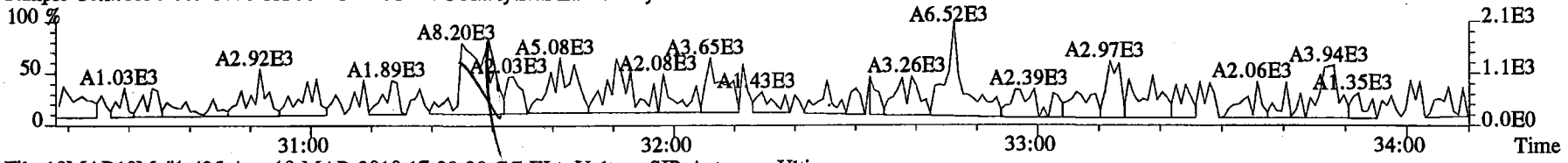
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



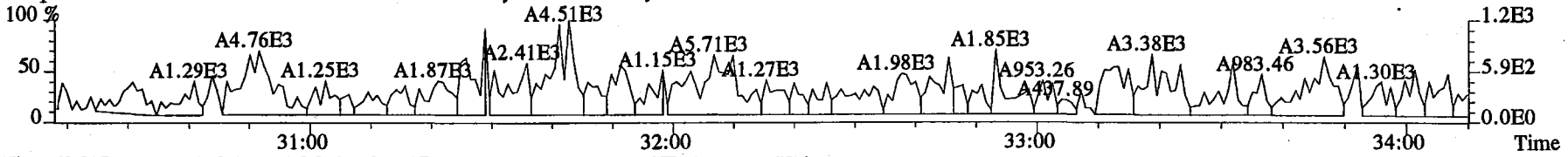
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



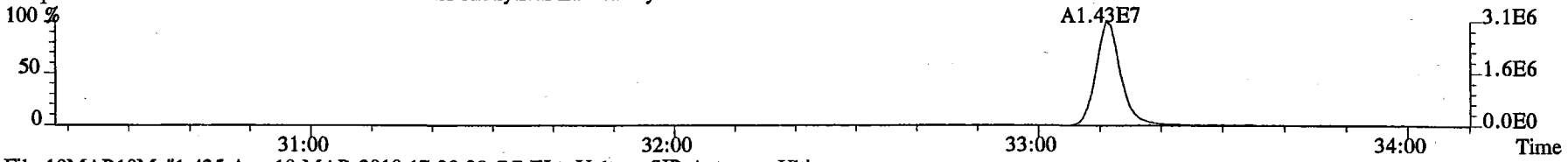
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



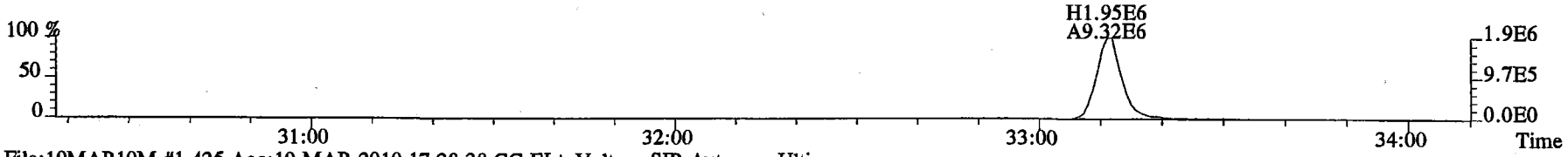
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



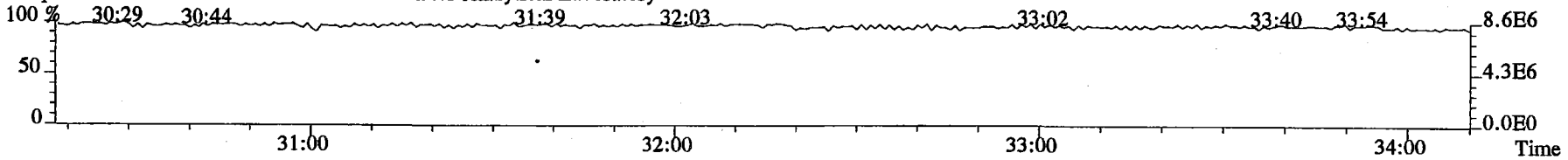
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



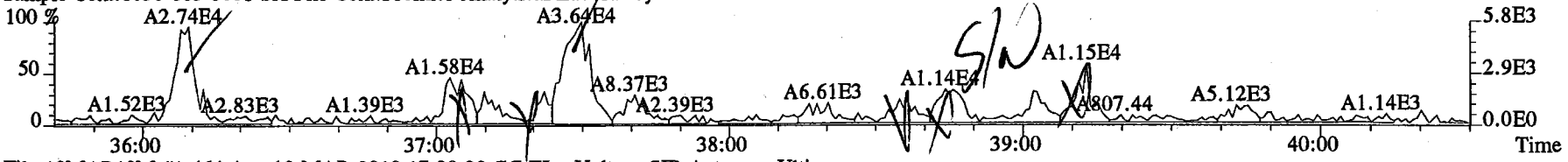
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



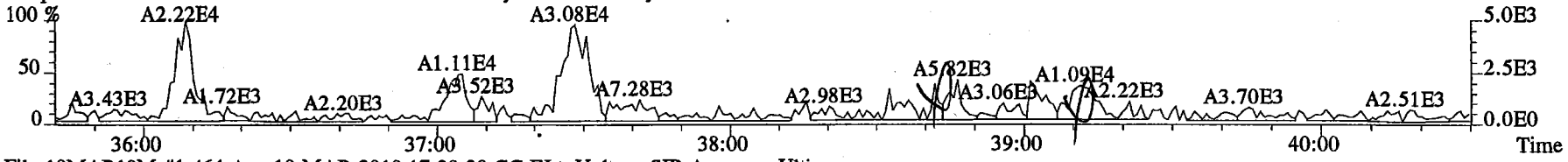
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:11 F:2 Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



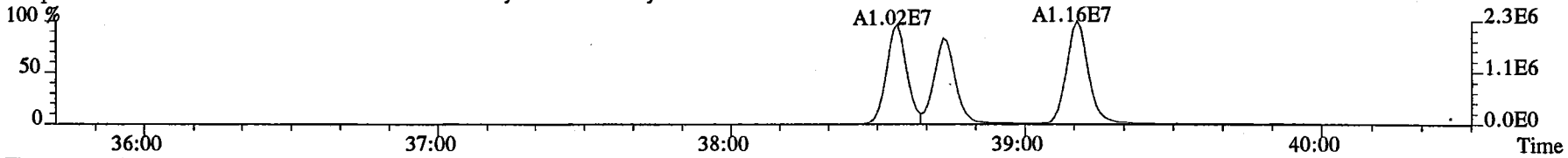
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



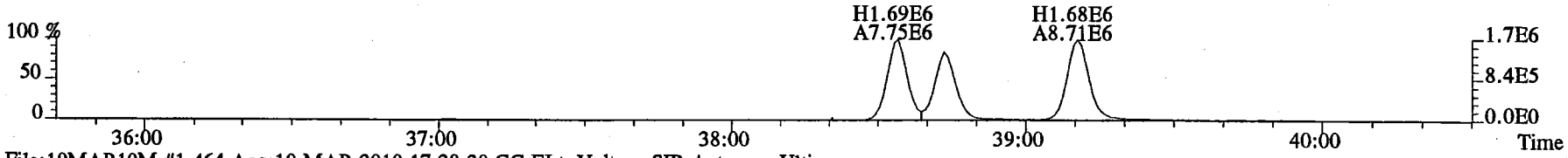
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



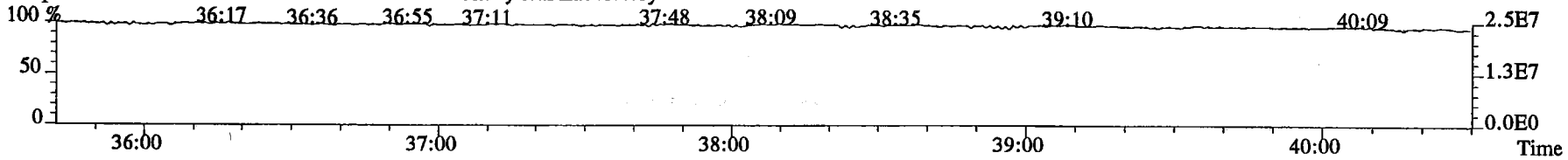
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



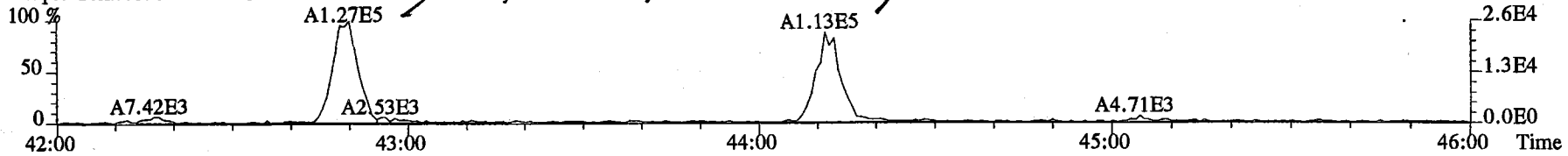
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



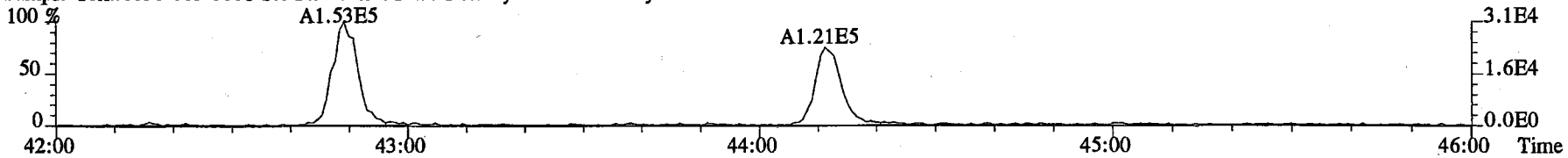
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:11 F:3 Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



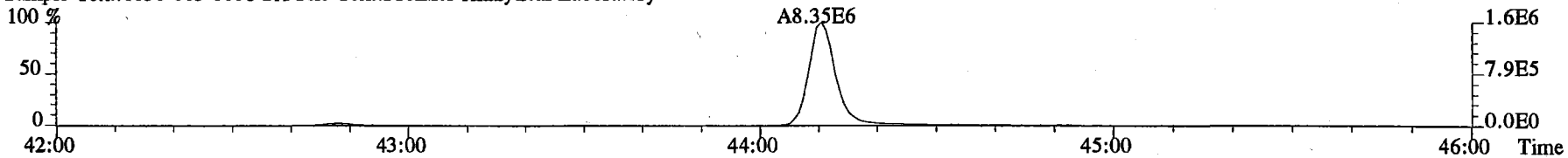
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



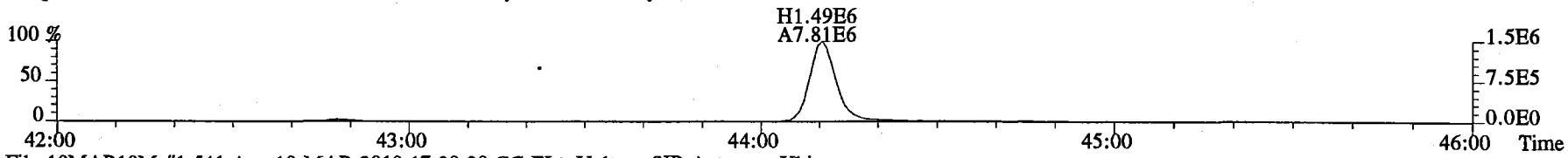
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



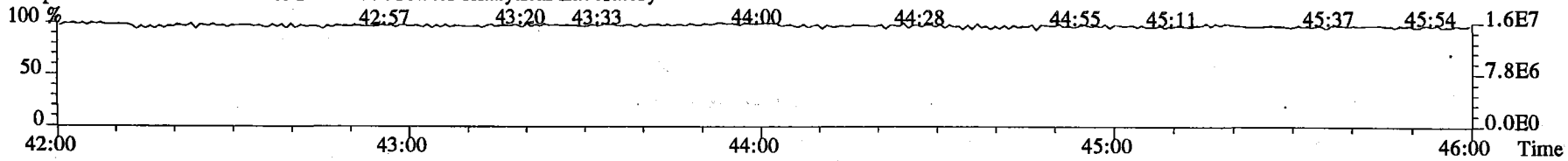
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



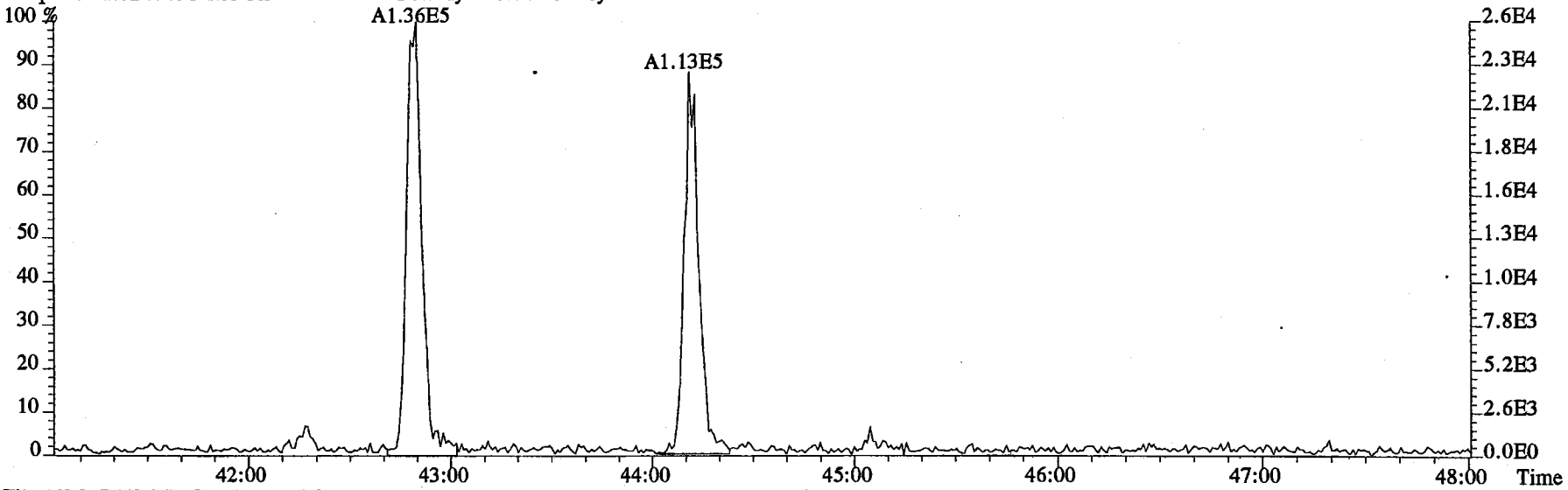
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



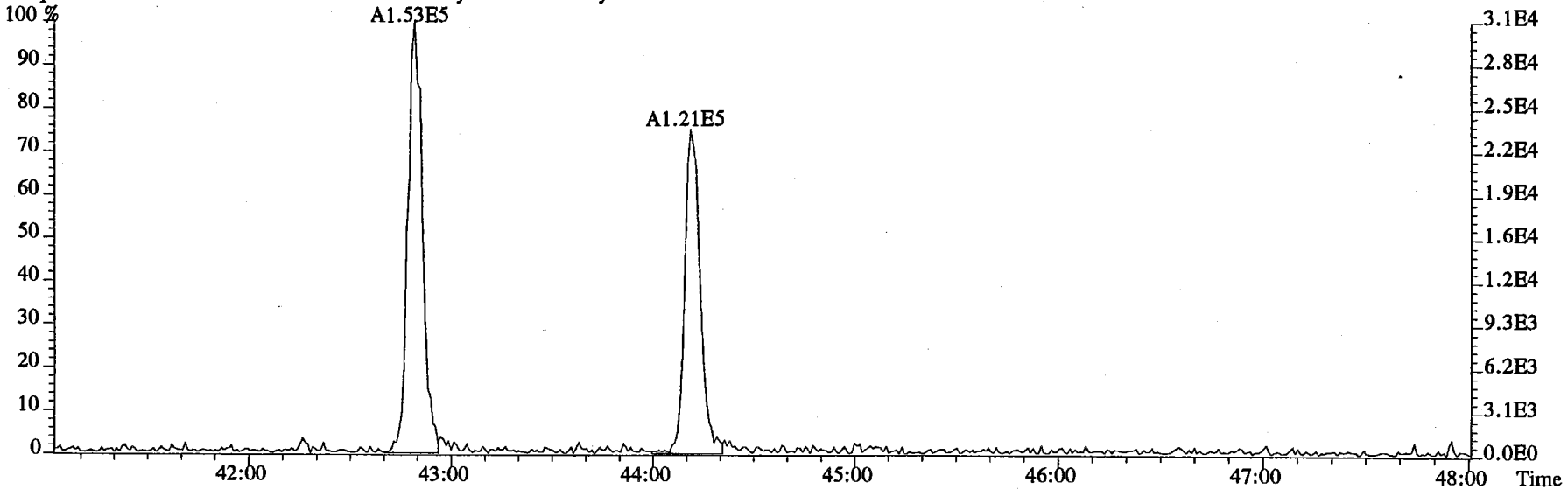
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:11 F:4 Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



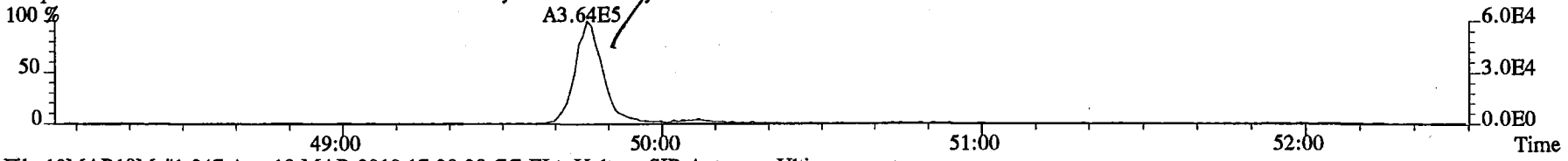
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:SB031910M1 File Text:Frontier Analytical Laboratory



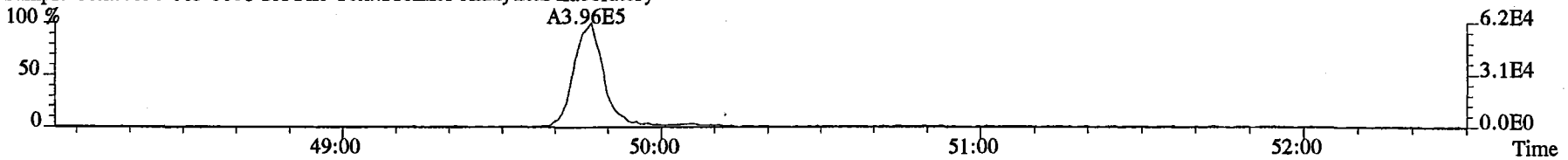
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:SB031910M1 File Text:Frontier Analytical Laboratory



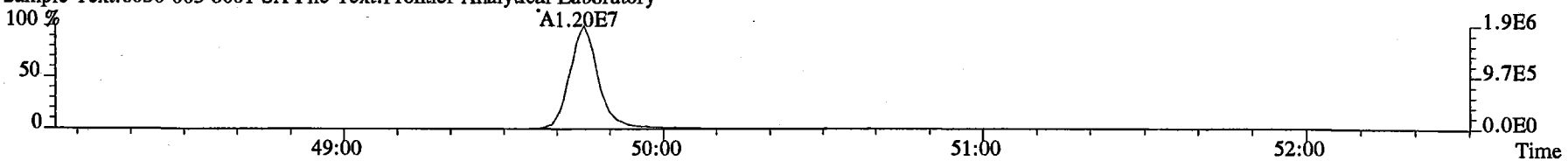
File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



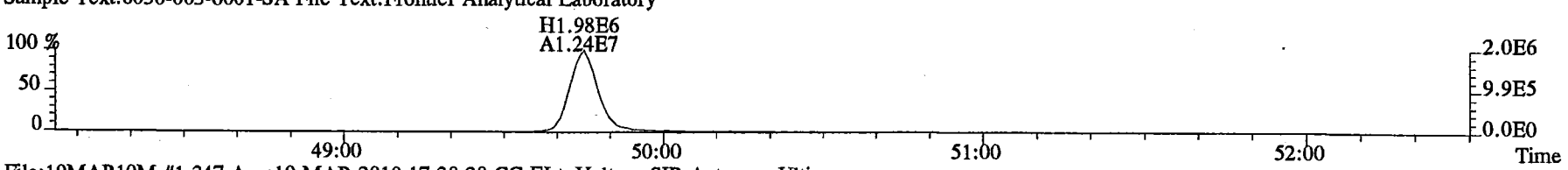
File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



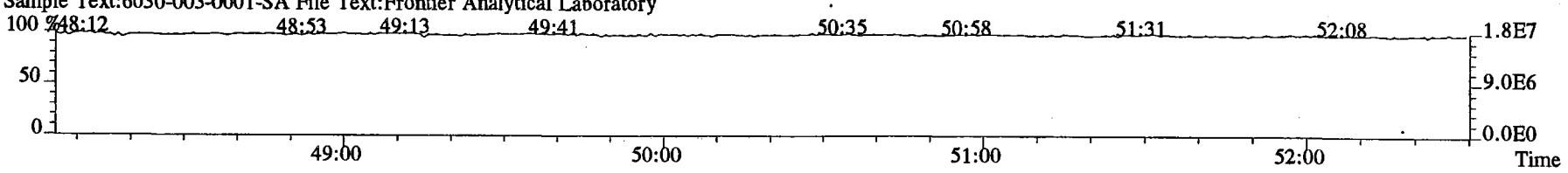
File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



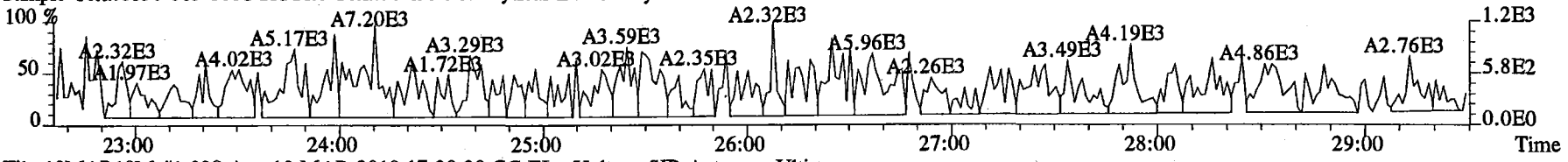
File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



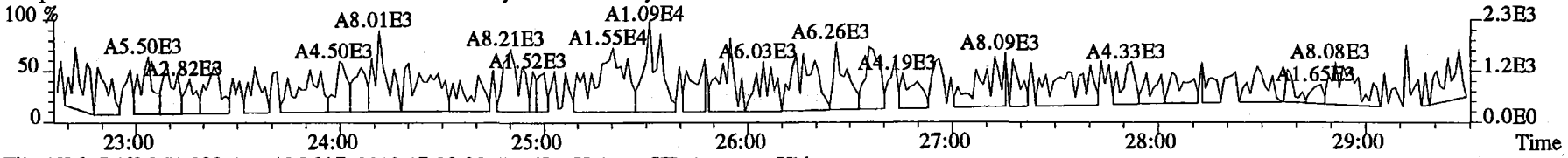
File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:11 F:5 Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



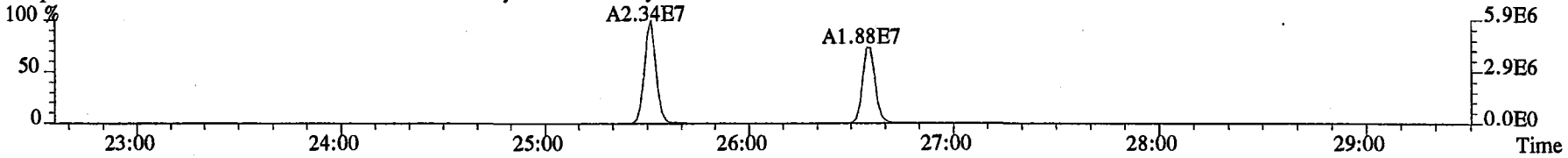
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



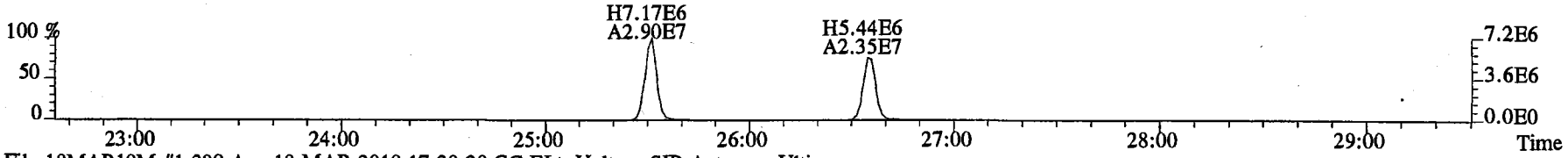
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



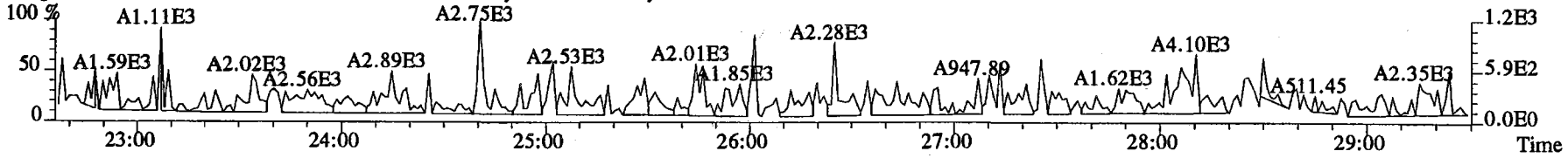
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



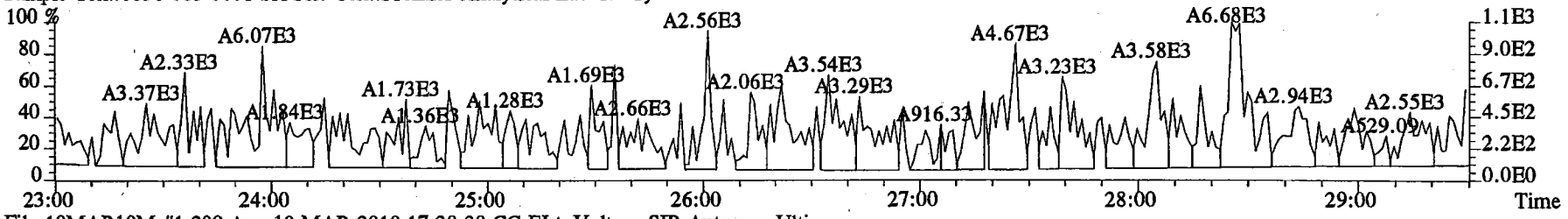
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



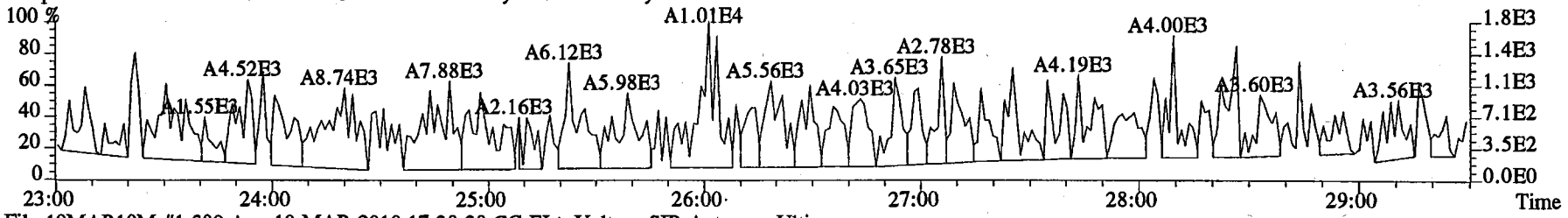
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



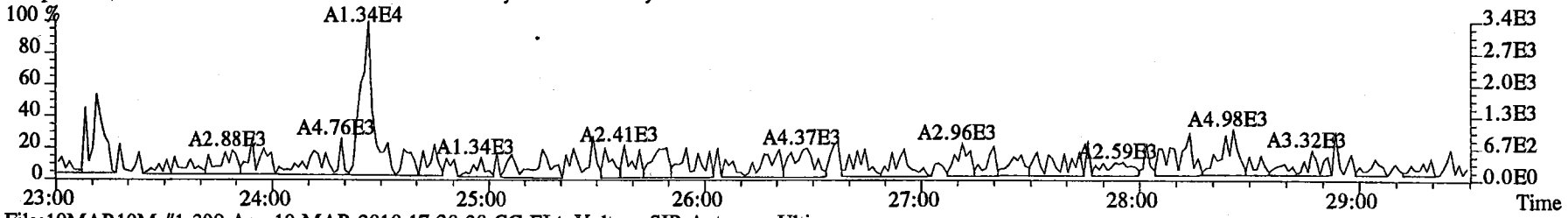
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



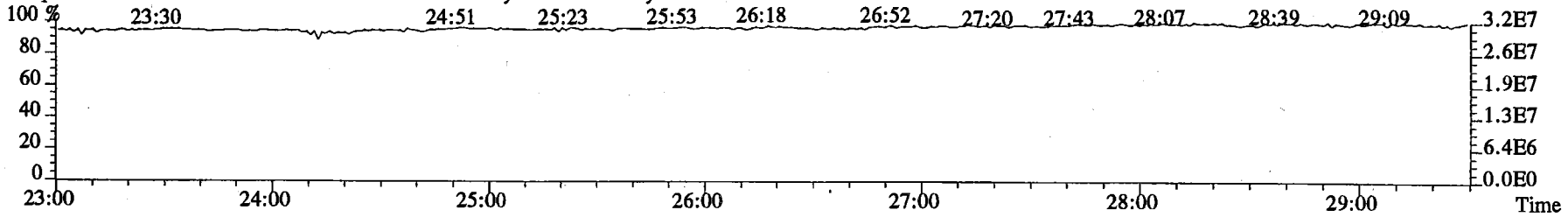
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



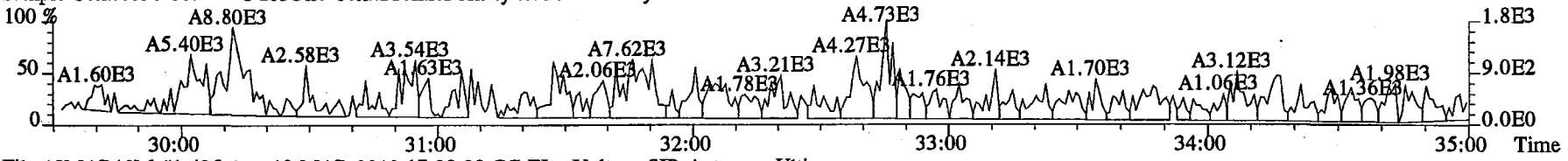
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



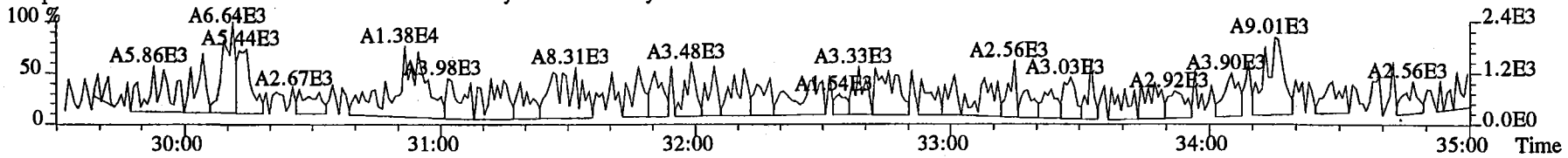
File:19MAR10M #1-390 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:11 Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



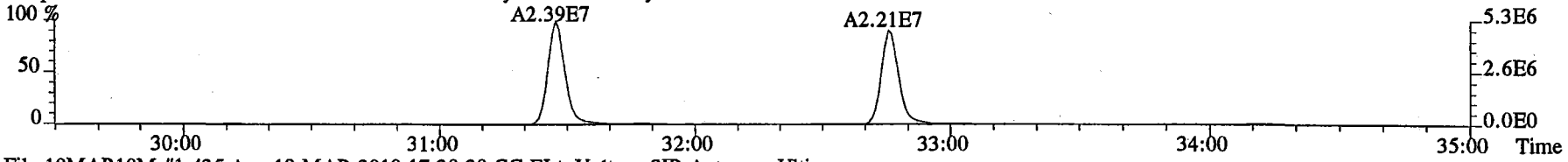
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



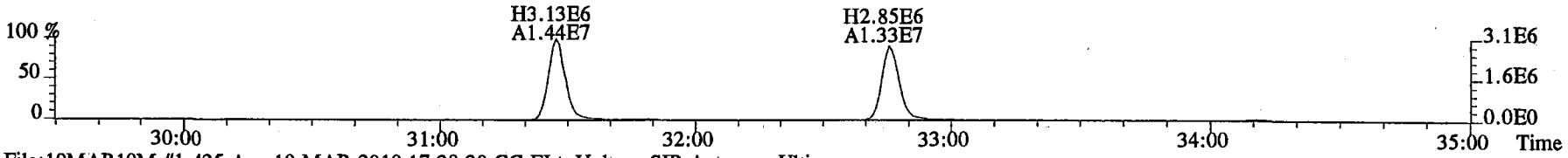
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



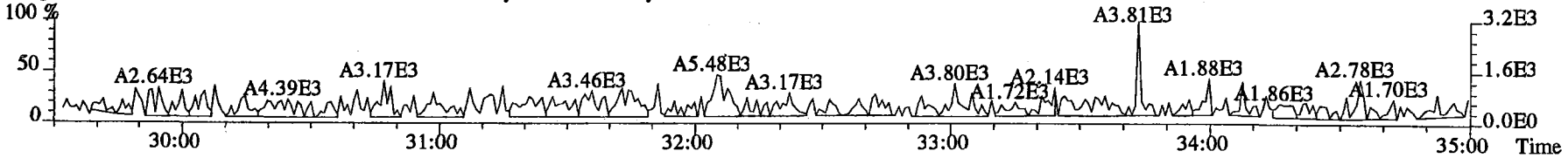
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



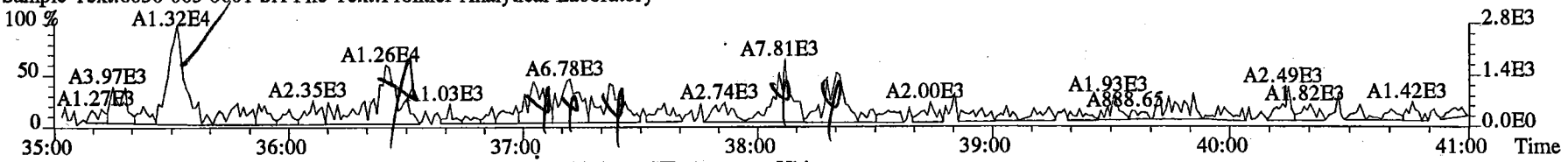
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



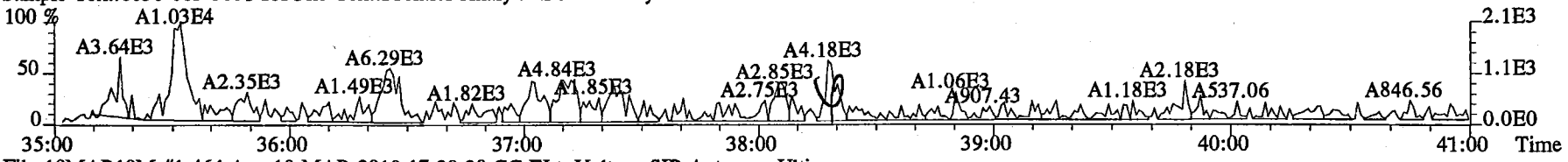
File:19MAR10M #1-425 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



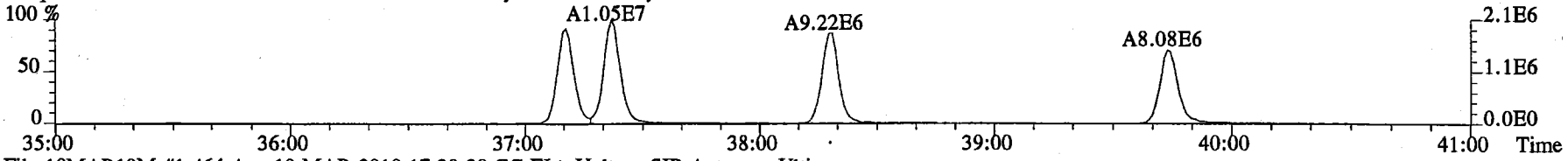
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



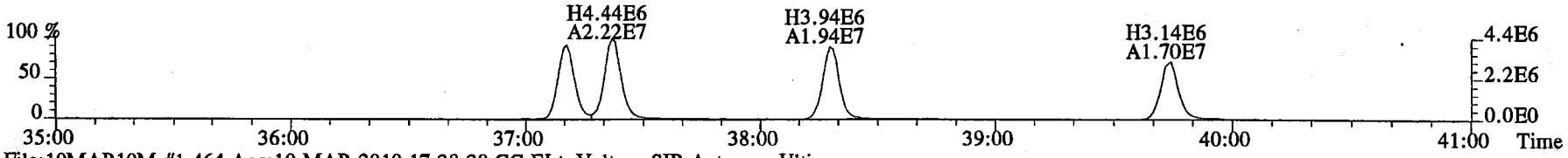
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



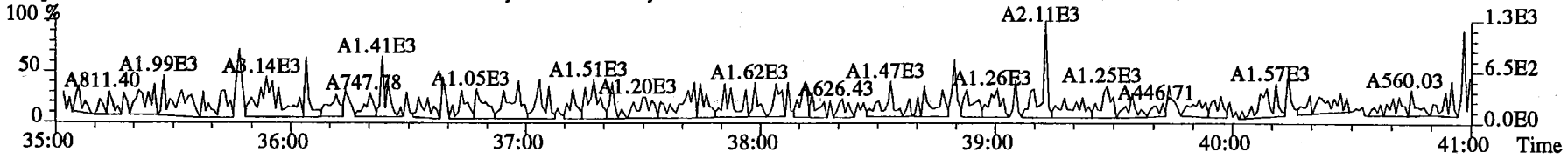
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



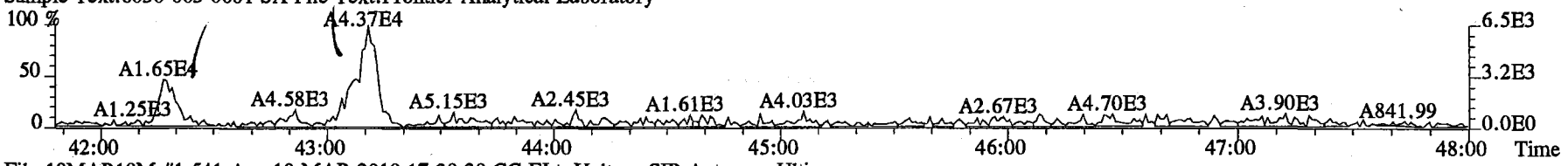
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



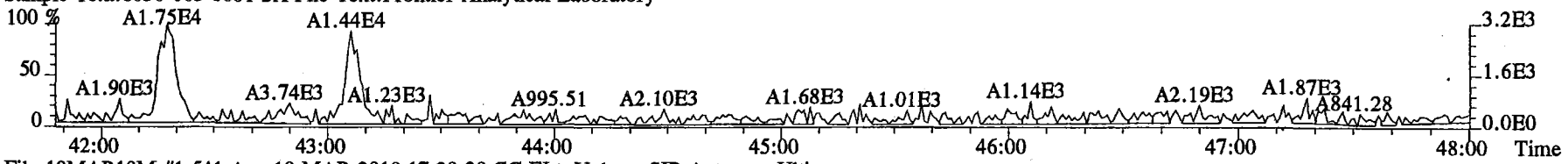
File:19MAR10M #1-464 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



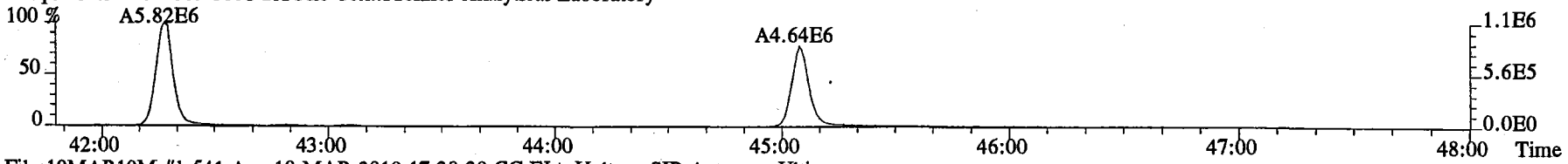
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



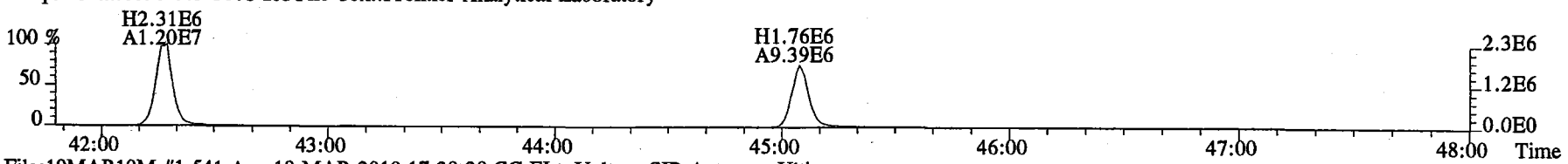
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



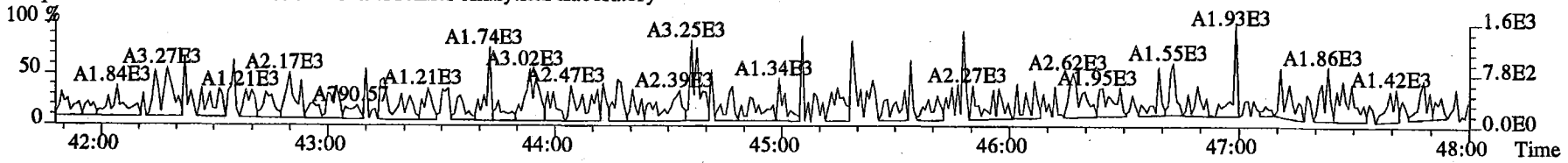
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



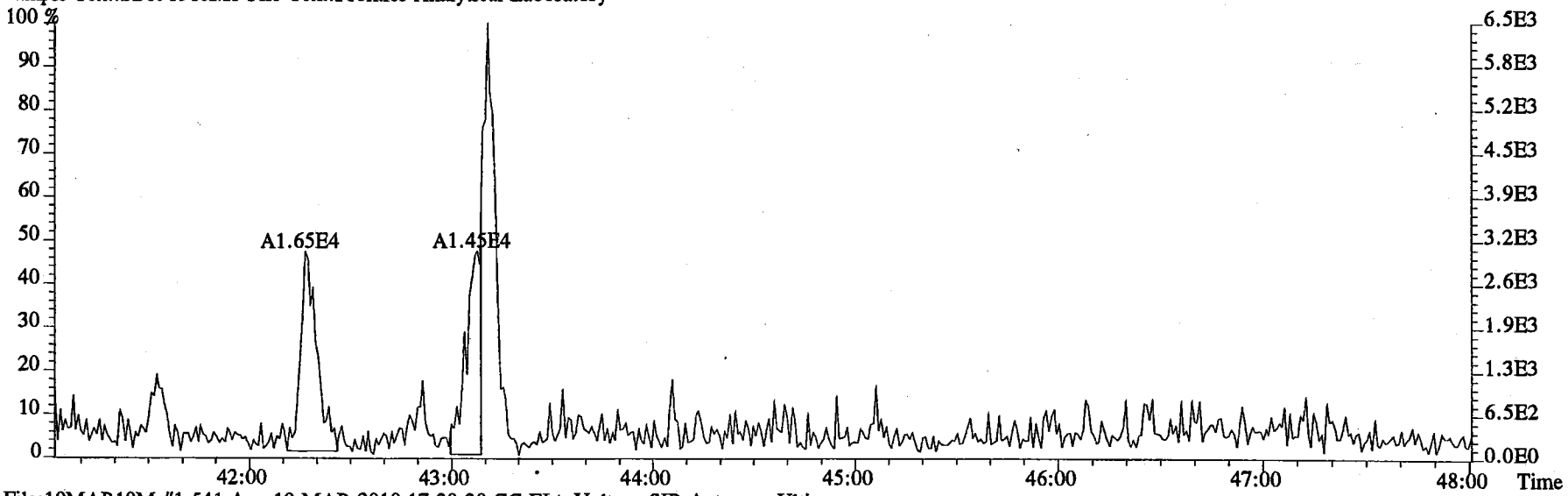
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



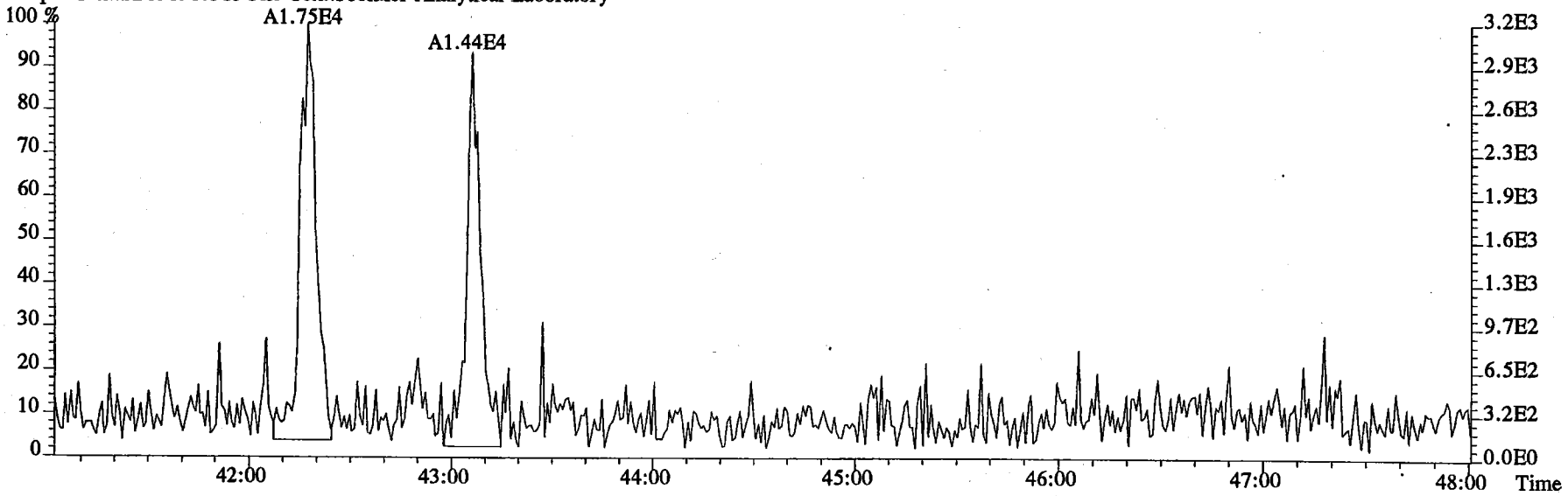
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



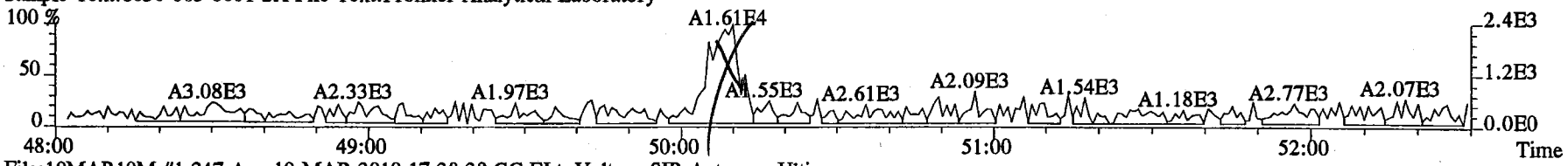
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:SB031910M1 File Text:Frontier Analytical Laboratory



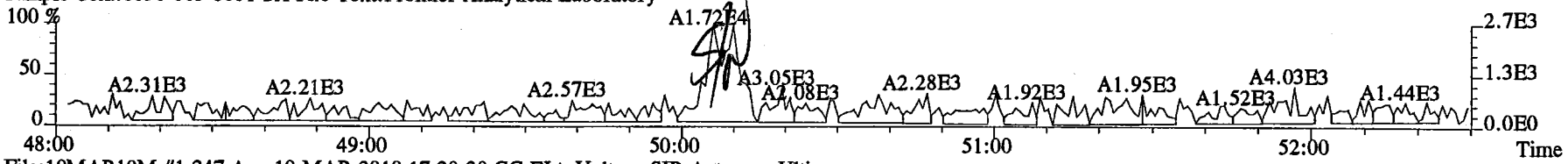
File:19MAR10M #1-541 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:SB031910M1 File Text:Frontier Analytical Laboratory



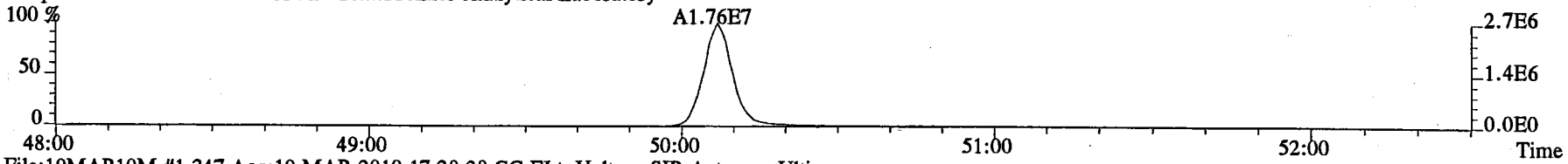
File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



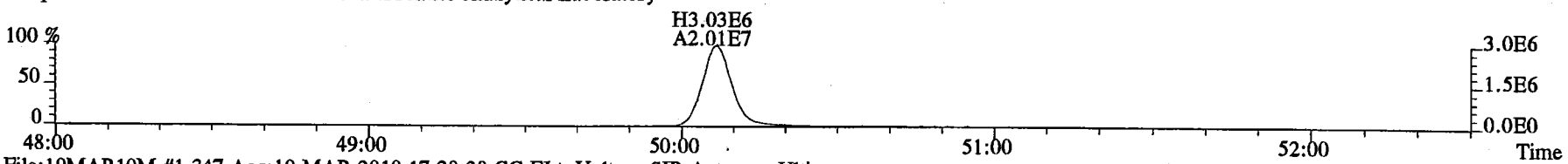
File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



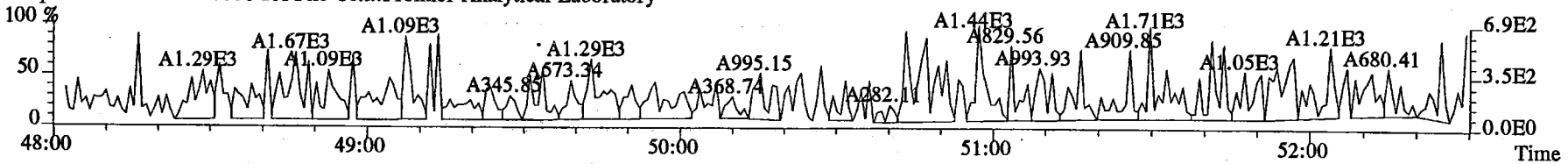
File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



File:19MAR10M #1-347 Acq:19-MAR-2010 17:38:38 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-003-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 6030-004-0001-SA Filename: 19MAR10M Sam:10 Acquired: 19-MAR-10 16:43:15 ICal: PCDDFAL3-11-18-09
Client ID: CB101031010COMP ConCal: ST031910M1 EndCal: ST031910M2
Results: 6030 GC Column: DB5 Amount: 1.033 NATO 1989 Tox: 3.10
WHO 1998 Tox: 2.56 WHO 2005 Tox: 2.68

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	1080	1000	1.75
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.96	*		2.50	1080	572	1.64
1,2,3,4,7,8-HxCDD	2.10e+04	1.11	y	38:36	1.37	1.57	J	2.50	-	-	*
1,2,3,6,7,8-HxCDD	4.52e+04	1.15	y	38:45	1.34	3.71	J	2.50	-	-	*
1,2,3,7,8,9-HxCDD	3.99e+04	1.05	y	39:12	1.37	3.11	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	8.55e+05	0.89	y	44:12	1.17	78.8		2.50	-	-	*
OCDD	4.75e+06	0.93	y	49:46	1.21	557		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	466	964	0.534
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	789	730	0.942
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	789	730	1.05
1,2,3,4,7,8-HxCDF	5.01e+04	1.26	y	37:12	1.00	3.15	J	2.50	-	-	*
1,2,3,6,7,8-HxCDF	2.58e+04	1.11	y	37:24	0.92	1.59	J	2.50	-	-	*
2,3,4,6,7,8-HxCDF	3.18e+04	1.07	y	38:21	0.99	2.08	J	2.50	-	-	*
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.09	*		2.50	521	442	0.828
1,2,3,4,6,7,8-HpCDF	2.32e+05	1.07	y	42:18	1.36	16.9	J	2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	2.84e+04	1.18	y	45:05	1.61	2.14	J	2.50	-	-	*
OCDF	3.63e+05	0.79	y	50:08	0.84	39.5	J	2.50	-	-	*
											Rec
13C-2,3,7,8-TCDD	2.44e+07	0.74	y	27:22	0.94	1810					93.6
13C-1,2,3,7,8-PeCDD	2.44e+07	1.56	y	33:11	1.02	1680					86.9
13C-1,2,3,4,7,8-HxCDD	1.88e+07	1.32	y	38:34	0.98	1680					86.8
13C-1,2,3,6,7,8-HxCDD	1.75e+07	1.32	y	38:44	0.94	1640					84.9
13C-1,2,3,4,6,7,8-HpCDD	1.80e+07	1.07	y	44:11	0.90	1760					90.8
13C-OCDD	2.72e+07	0.97	y	49:45	0.67	3580					92.4
13C-2,3,7,8-TCDF	4.18e+07	0.80	y	26:35	0.88	1800					93.0
13C-1,2,3,7,8-PeCDF	3.89e+07	1.68	y	31:28	0.88	1670					86.5
13C-2,3,4,7,8-PeCDF	3.59e+07	1.69	y	32:46	0.85	1600					82.6
13C-1,2,3,4,7,8-HxCDF	3.09e+07	0.47	y	37:11	1.72	1580					81.5
13C-1,2,3,6,7,8-HxCDF	3.42e+07	0.47	y	37:22	2.00	1500					77.4
13C-2,3,4,6,7,8-HxCDF	3.01e+07	0.47	y	38:18	1.74	1520					78.7
13C-1,2,3,7,8,9-HxCDF	2.74e+07	0.47	y	39:44	1.51	1600					82.4
13C-1,2,3,4,6,7,8-HpCDF	1.96e+07	0.49	y	42:17	1.10	1570					81.0
13C-1,2,3,4,7,8,9-HpCDF	1.60e+07	0.48	y	45:05	0.85	1660					85.6
13C-OCDF	4.22e+07	0.91	y	50:07	1.17	3160					81.6
37Cl-2,3,7,8-TCDD	1.18e+07			27:23	0.97	852					110
13C-1,2,3,4-TCDD	2.76e+07	0.73	y	26:47	-	102					
13C-1,2,3,4-TCDF	5.12e+07	0.80	y	25:31	-	107					
13C-1,2,3,7,8,9-HxCDD	2.20e+07	1.33	y	39:11	-	104					

				Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*	NotFnd	1.02	*		2.50	1080	1000	1.75		0
Total Penta-Dioxins	*	NotFnd	0.96	*		2.50	1080	572	1.64		0
Total Hexa-Dioxins	3.27e+05	36:09	1.36	25.6		2.50	-	-	*		6
Total Hepta-Dioxins	1.52e+06	42:50	1.17	140		2.50	-	-	*		2
Total Tetra-Furans	5.80e+04	27:52	1.29	2.09	J	2.50	-	-	*		1
1st Fn. Tot Penta-Furans	4.71e+04	28:27	0.90	2.71	J	2.50	-	-	*	PeCDF	1
Total Penta-Furans	4.76e+04	30:13	0.90	2.75	J	2.50	-	-	*	5.46	1
Total Hexa-Furans	4.83e+05	35:16	0.99	30.7		2.50	-	-	*		7
Total Hepta-Furans	6.62e+05	42:18	1.47	48.7		2.50	-	-	*		3

Analyst: _____ Date: 3/22/10

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 18 File: 19MAR10M S: 10 I: 1 F: 3
Acquired: 19-MAR-10 16:43:15

Total Concentration: 25.6 Unnamed Concentration: 17.252

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
36:09	4.03e+04	3.37e+04	1.20 y	7.41e+04	5.79	
37:05	1.50e+04	1.23e+04	1.22 y	2.73e+04	2.13	
37:28	6.87e+04	5.06e+04	1.36 y	1.19e+05	9.33	
38:36	1.10e+04	9.93e+03	1.11 y	2.10e+04	1.57	1,2,3,4,7,8-HxCDD
38:45	2.42e+04	2.10e+04	1.15 y	4.52e+04	3.71	1,2,3,6,7,8-HxCDD
39:12	2.05e+04	1.94e+04	1.05 y	3.99e+04	3.11	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 18 File: 19MAR10M S: 10 I: 1 F: 4
Acquired: 19-MAR-10 16:43:15

Total Concentration: 140 Unnamed Concentration: 61.289

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
42:50	3.14e+05	3.51e+05	0.89 y	6.65e+05	61.3	
44:12	4.02e+05	4.53e+05	0.89 y	8.55e+05	78.8	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 18 File: 19MAR10M S: 10 I: 1 F: 1
Acquired: 19-MAR-10 16:43:15

Total Concentration: 2.09 Unnamed Concentration: 2.089

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
27:52	2.40e+04	3.40e+04	0.71 y	5.80e+04	2.09	

Totals class: 1st Fn. Tot Penta-Furans Entry #: 43

Run: 18 File: 19MAR10M S: 10 I: 1 F: 1
Acquired: 19-MAR-10 16:43:15

Total Concentration: 2.71 Unnamed Concentration: 2.715

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
28:27	2.89e+04	1.81e+04	1.60 y	4.71e+04	2.71	

Totals class: Total Penta-Furans Entry #: 44

Run: 18 File: 19MAR10M S: 10 I: 1 F: 2
Acquired: 19-MAR-10 16:43:15

Total Concentration: 2.75 Unnamed Concentration: 2.747

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
30:13	2.75e+04	2.01e+04	1.36 y	4.76e+04	2.75	

Totals class: Total Hexa-Furans Entry #: 45

Run: 18 File: 19MAR10M S: 10 I: 1 F: 3
Acquired: 19-MAR-10 16:43:15

Total Concentration: 30.7 Unnamed Concentration: 23.921

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
35:16	2.14e+04	1.81e+04	1.18 y	3.95e+04	2.52	
35:31	7.88e+04	6.28e+04	1.25 y	1.42e+05	9.04	
36:25	7.43e+04	6.06e+04	1.23 y	1.35e+05	8.61	
37:12	2.79e+04	2.22e+04	1.26 y	5.01e+04	3.15	1,2,3,4,7,8-HxCDF
37:24	1.36e+04	1.22e+04	1.11 y	2.58e+04	1.59	1,2,3,6,7,8-HxCDF
38:06	3.25e+04	2.63e+04	1.24 y	5.88e+04	3.75	
38:21	1.65e+04	1.54e+04	1.07 y	3.18e+04	2.08	2,3,4,6,7,8-HxCDF

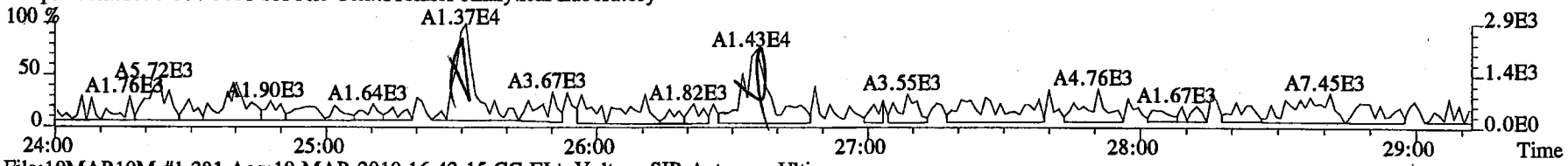
Totals class: Total Hepta-Furans Entry #: 46

Run: 18 File: 19MAR10M S: 10 I: 1 F: 4
Acquired: 19-MAR-10 16:43:15

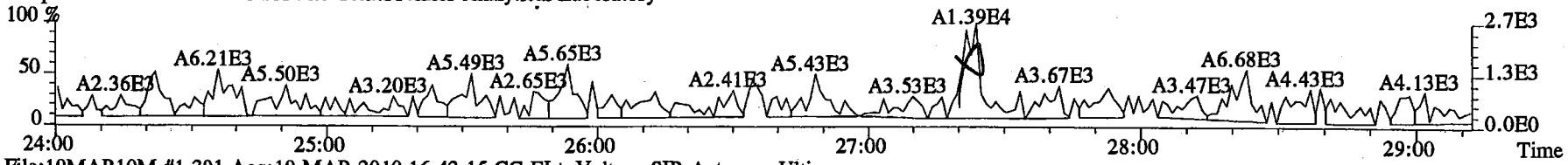
Total Concentration: 48.7 Unnamed Concentration: 29.741

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:18	1.20e+05	1.12e+05	1.07 y	2.32e+05	16.9	1,2,3,4,6,7,8-HpCDF
43:07	2.15e+05	1.86e+05	1.16 y	4.01e+05	29.7	
45:05	1.54e+04	1.31e+04	1.18 y	2.84e+04	2.14	1,2,3,4,7,8,9-HpCDF

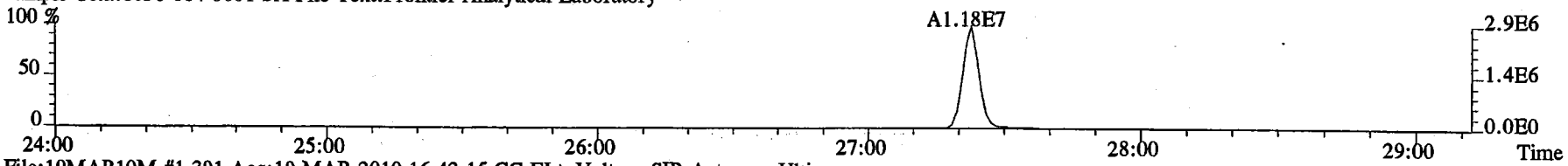
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



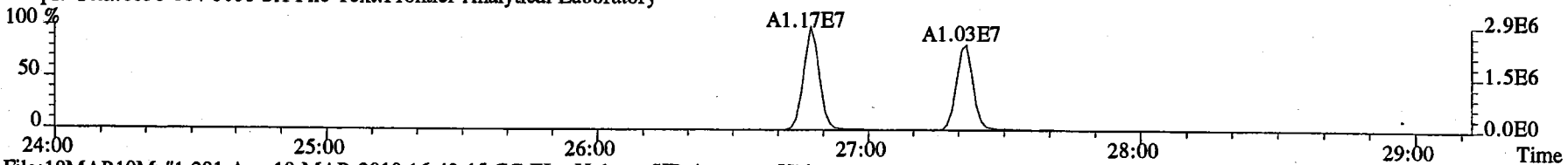
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



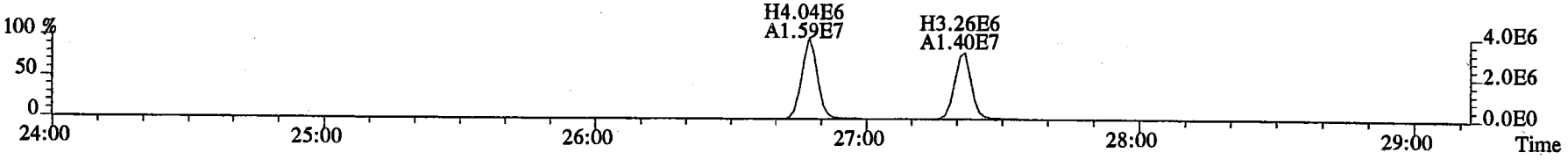
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



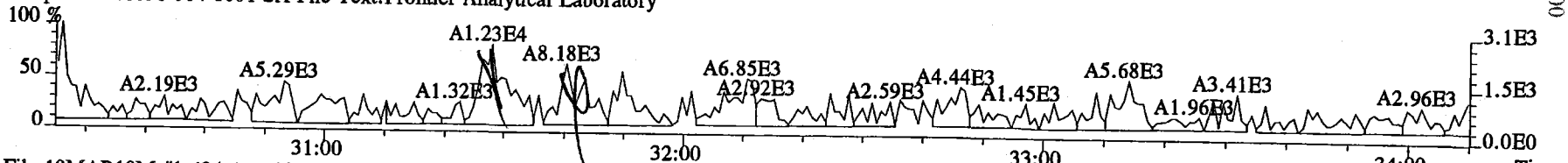
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



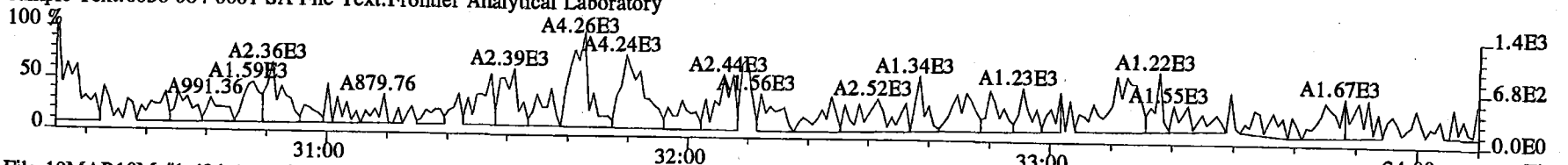
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



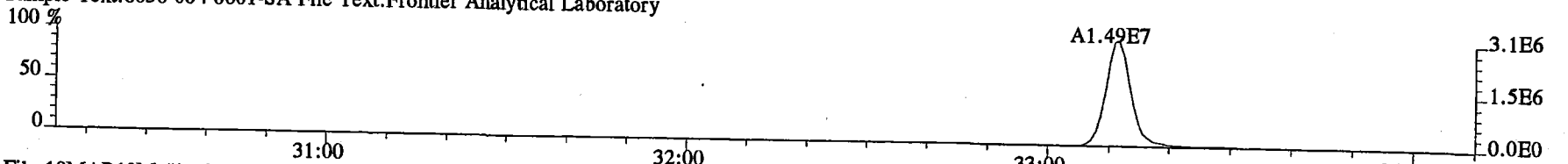
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



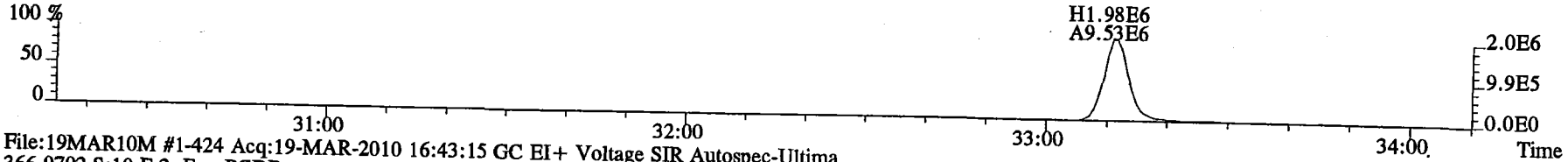
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



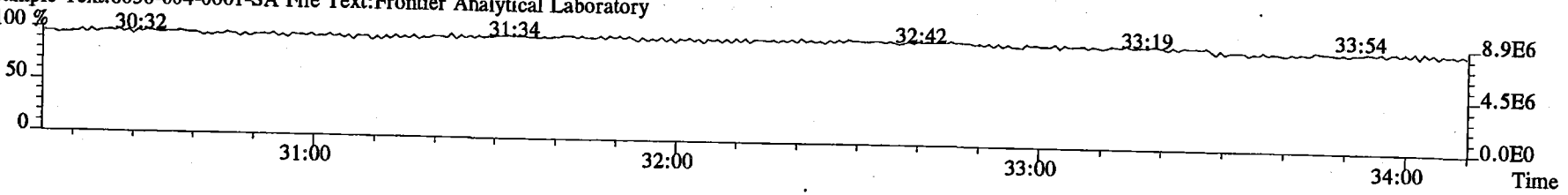
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



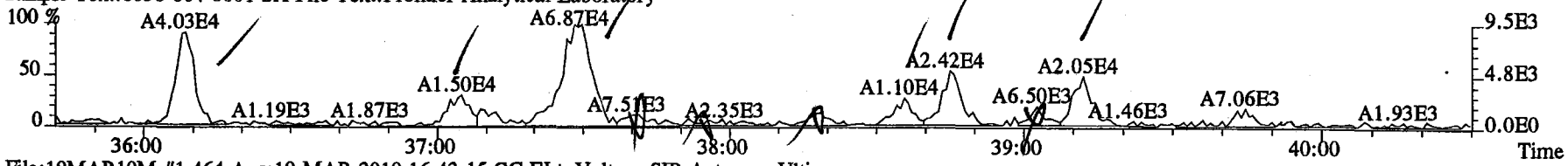
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



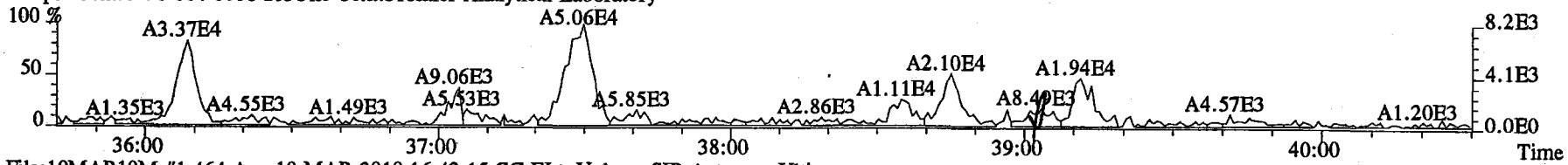
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:10 F:2 Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



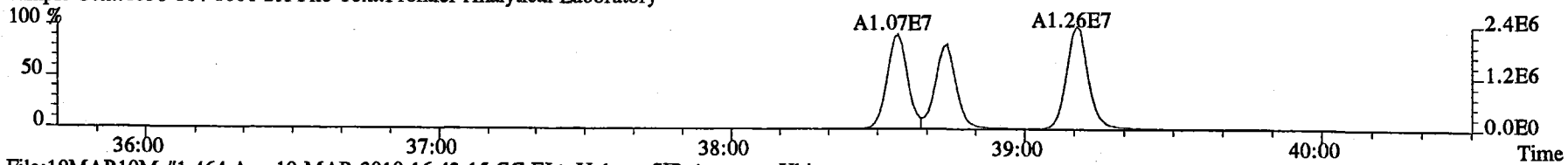
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



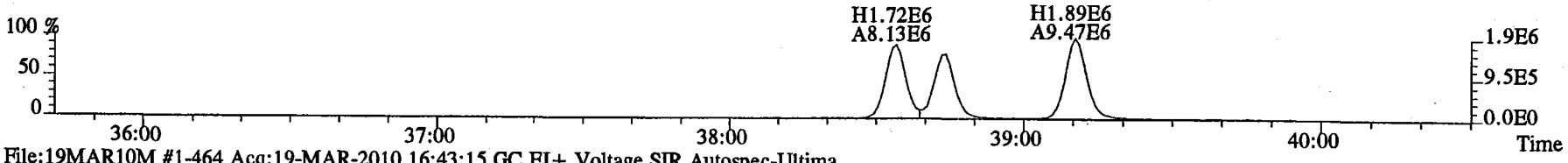
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



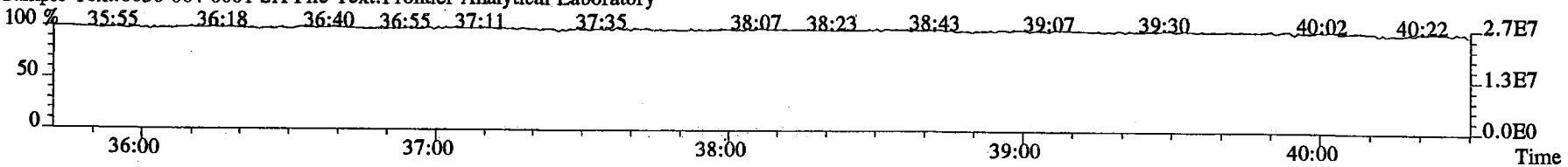
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



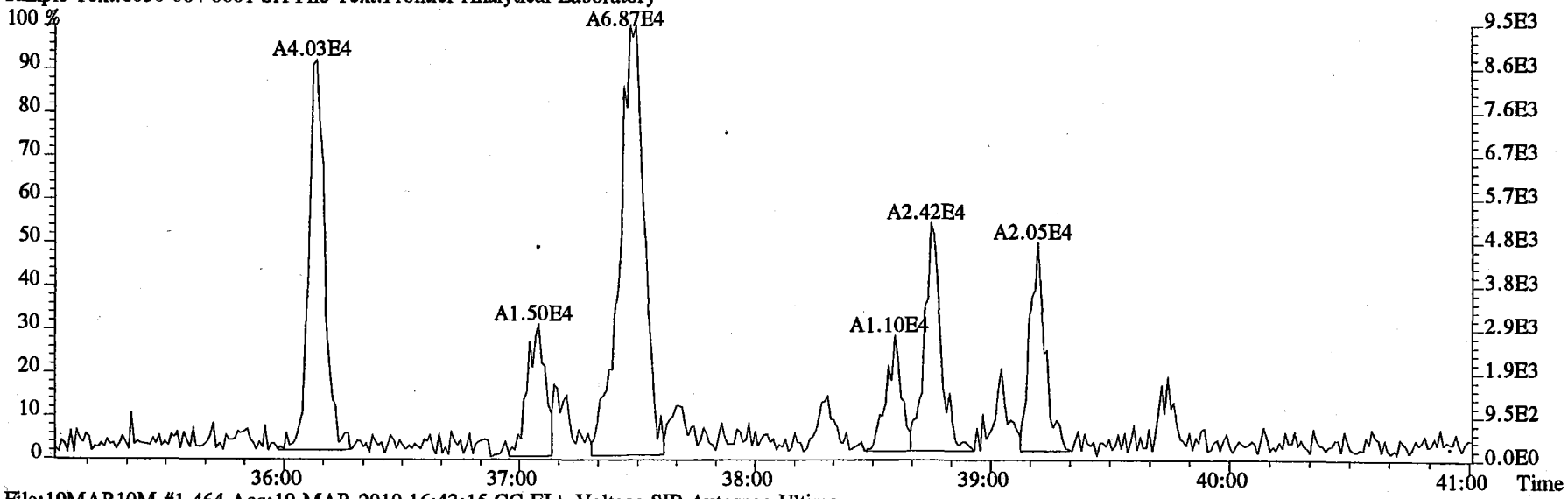
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



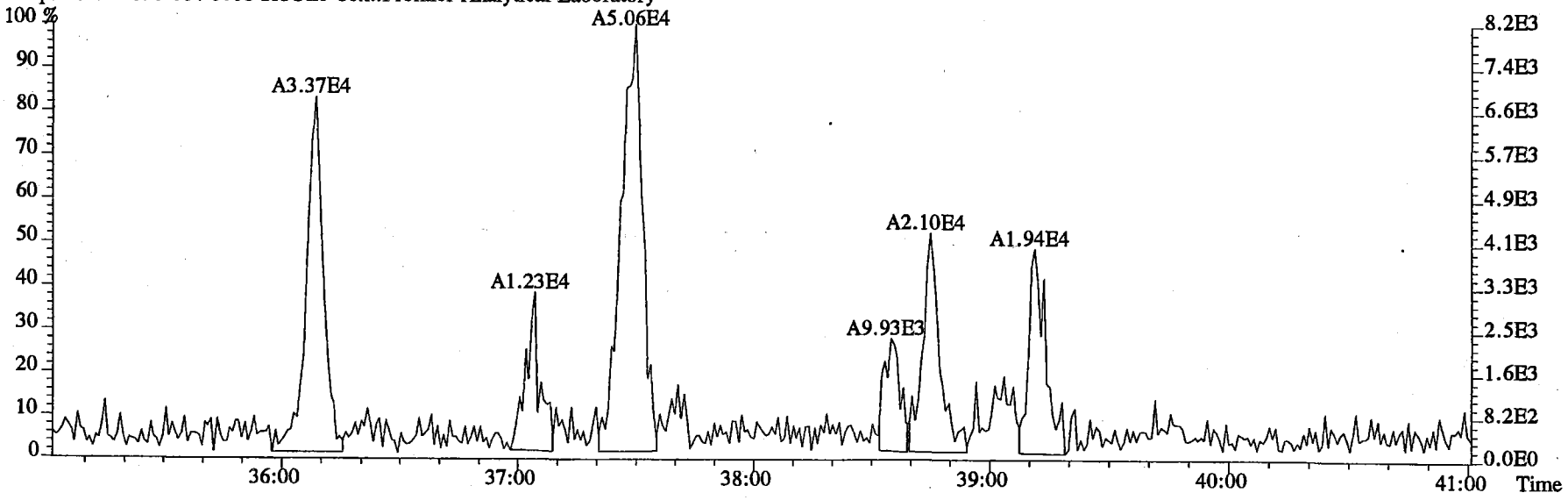
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:10 F:3 Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



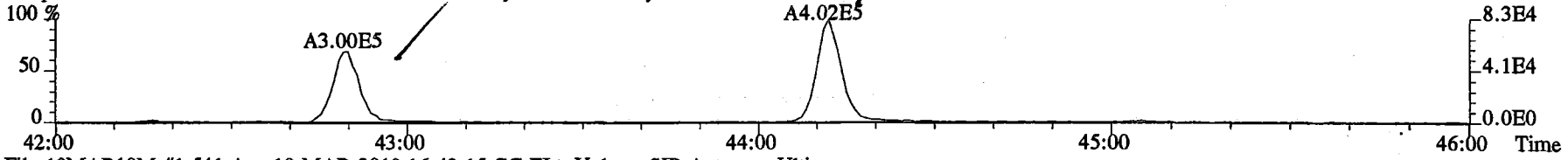
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



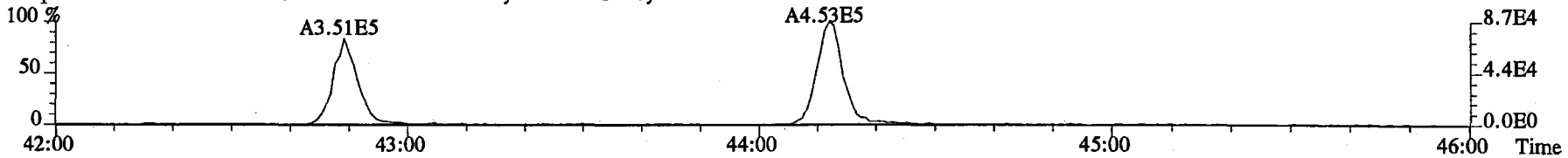
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



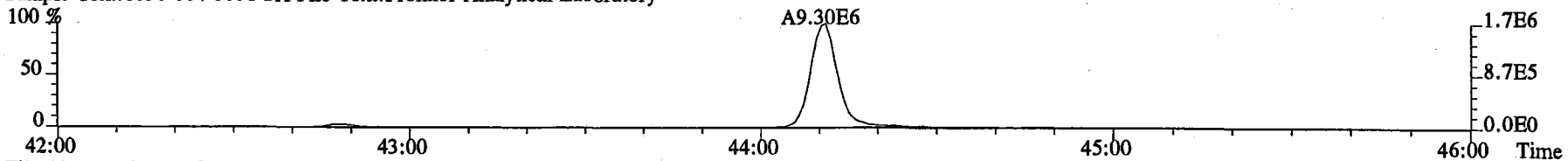
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



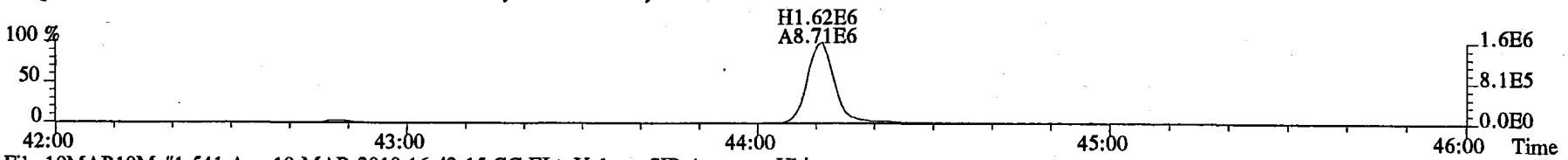
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



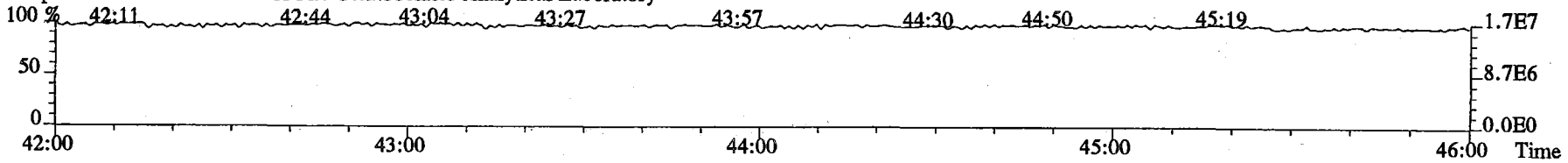
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



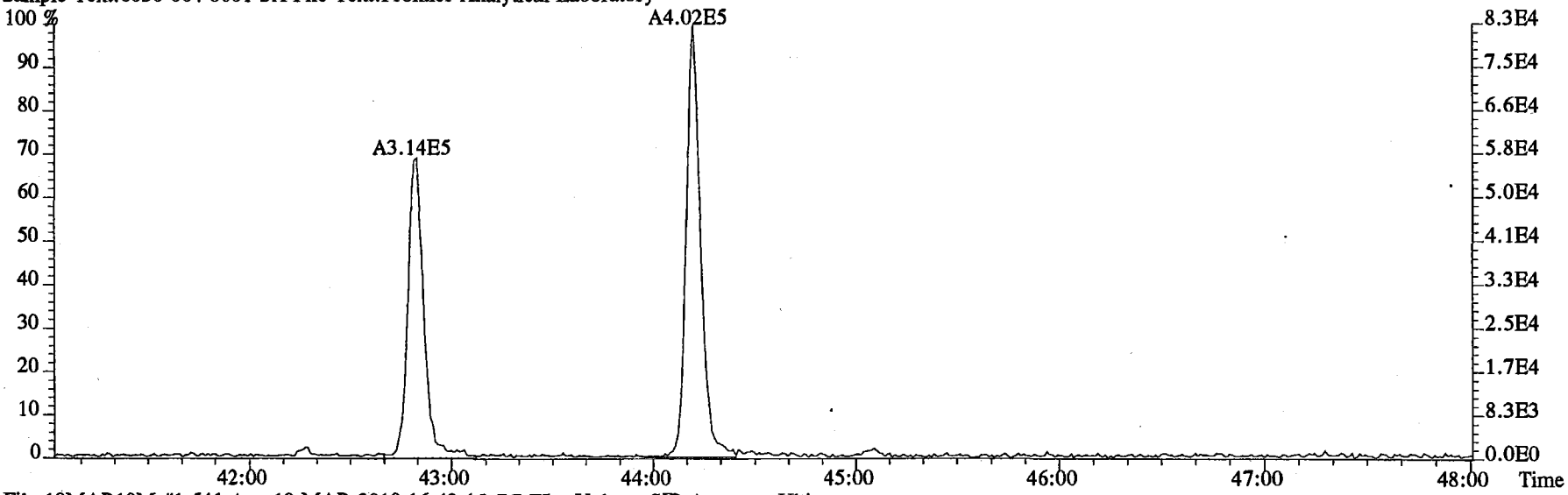
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



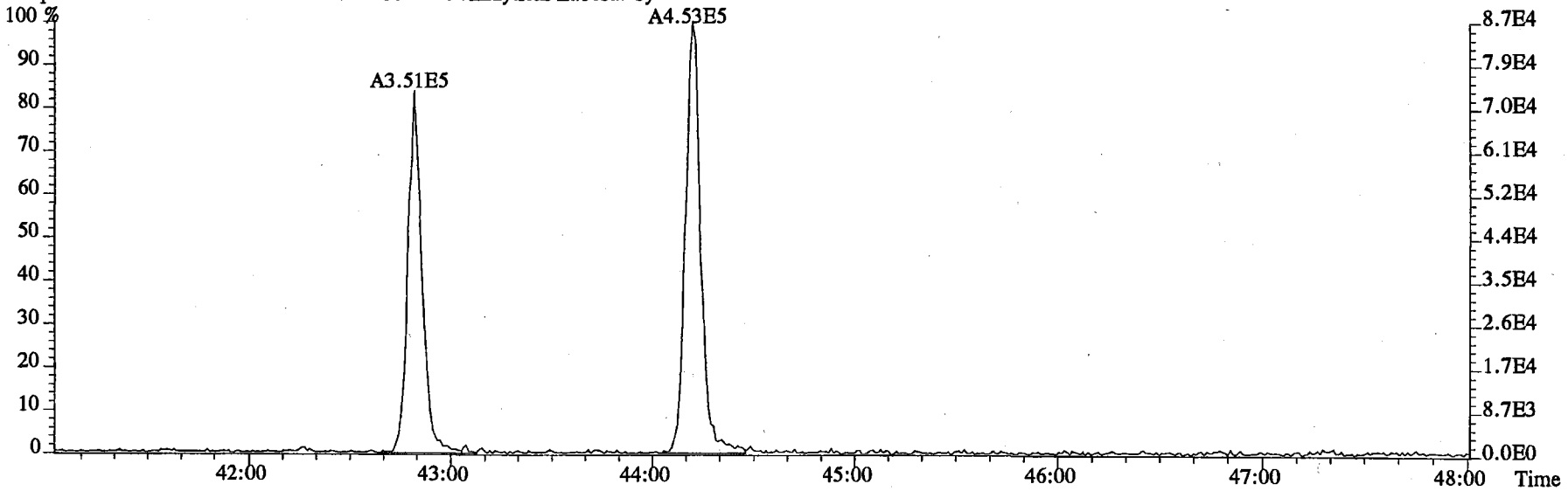
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:10 F:4 Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



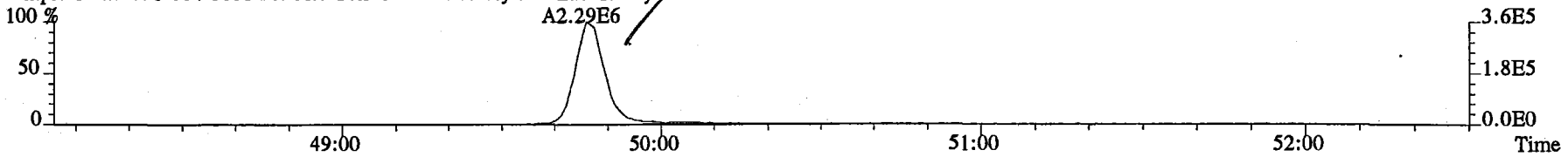
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



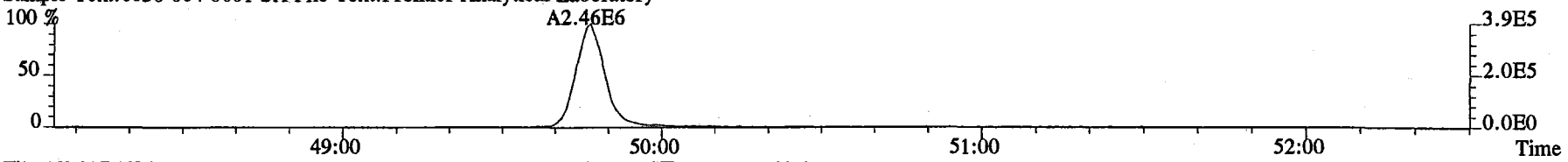
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



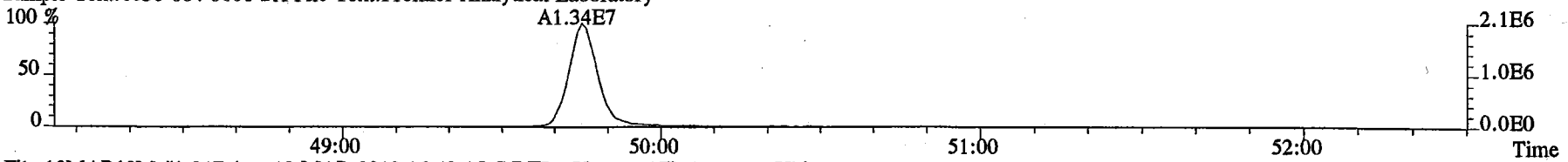
File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



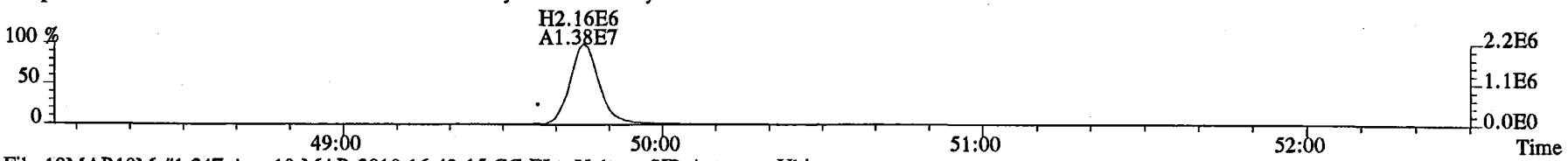
File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



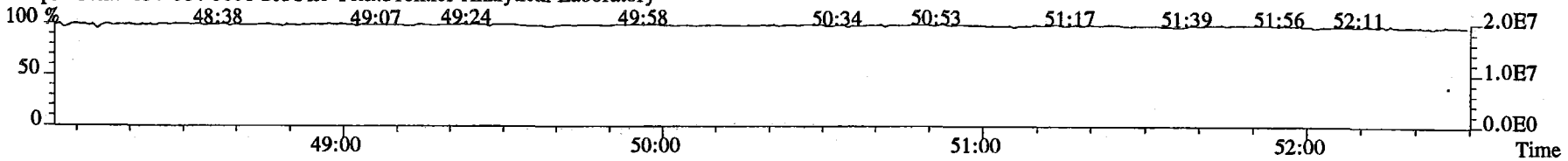
File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



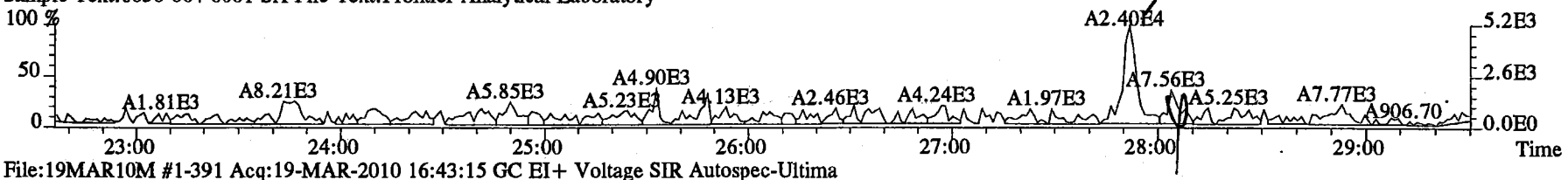
File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



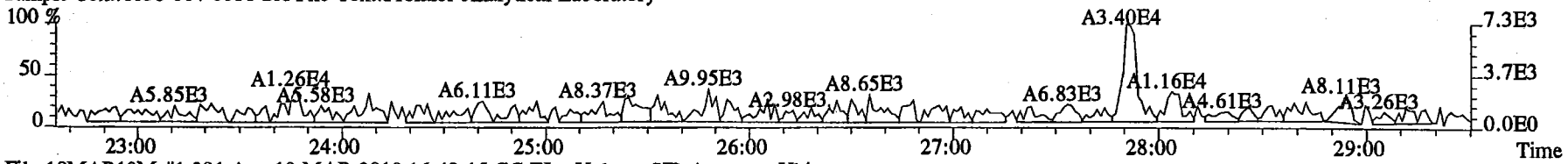
File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:10 F:5 Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



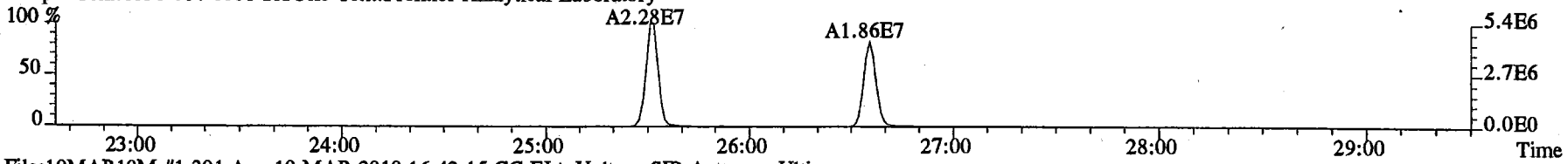
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



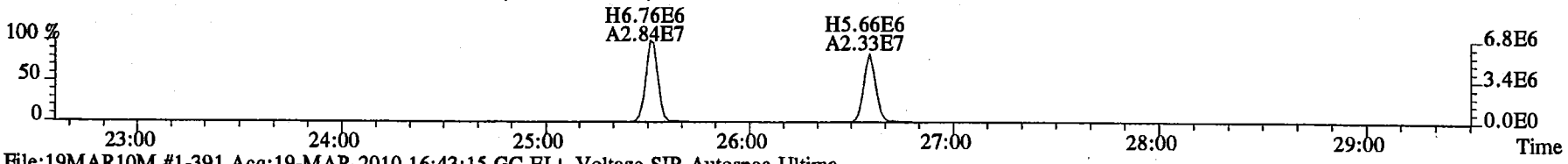
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



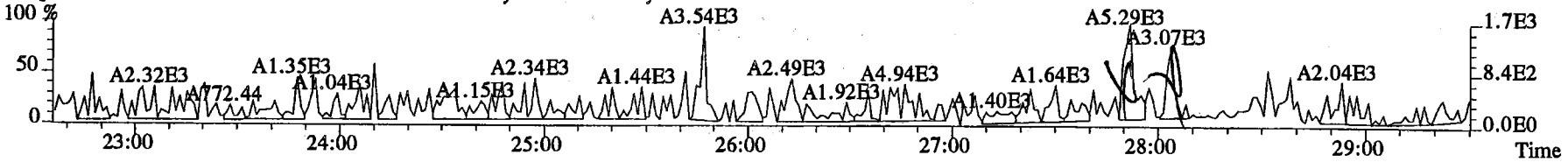
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



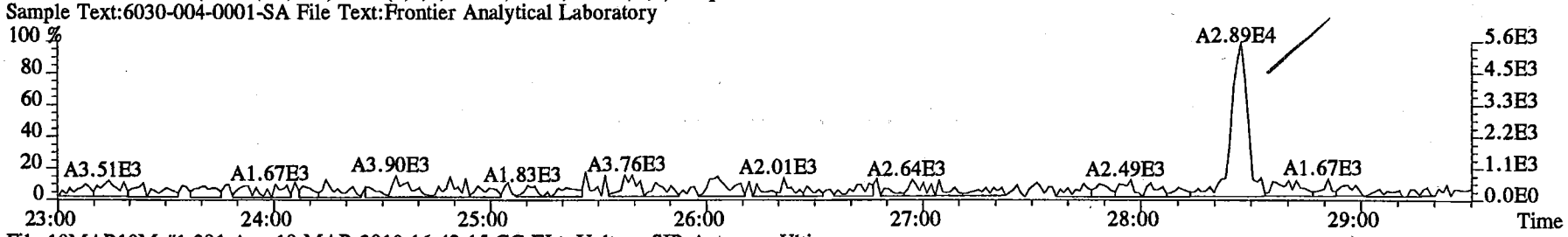
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



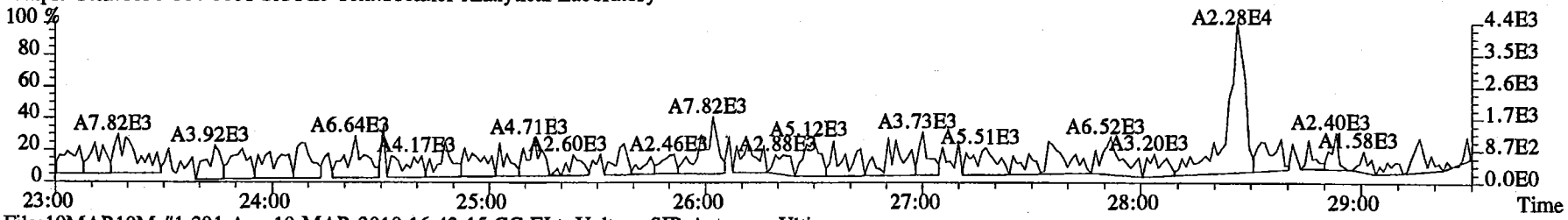
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



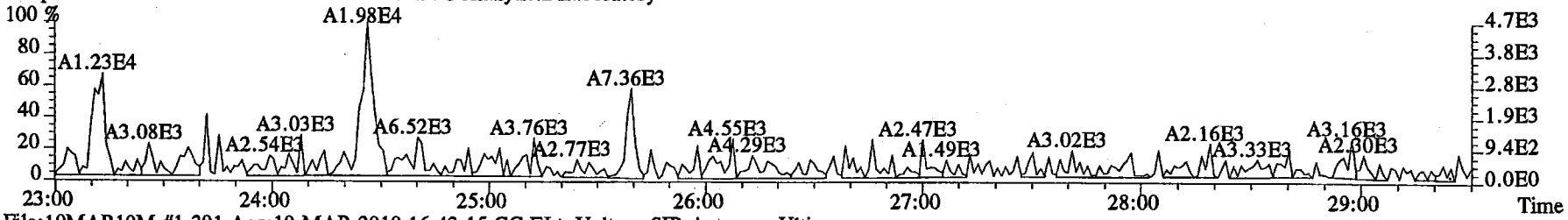
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



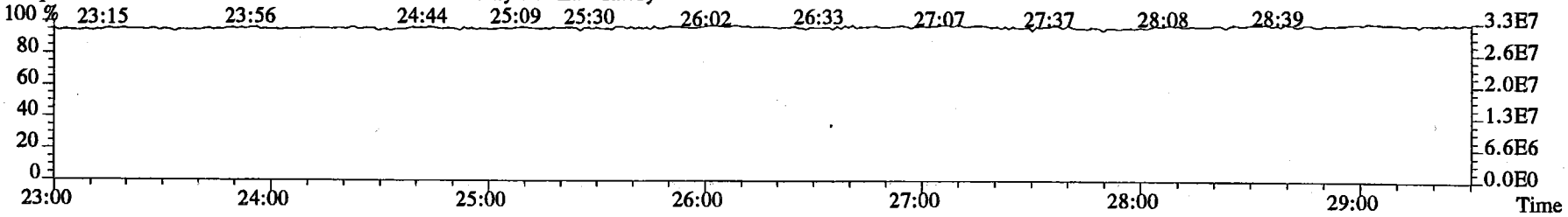
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



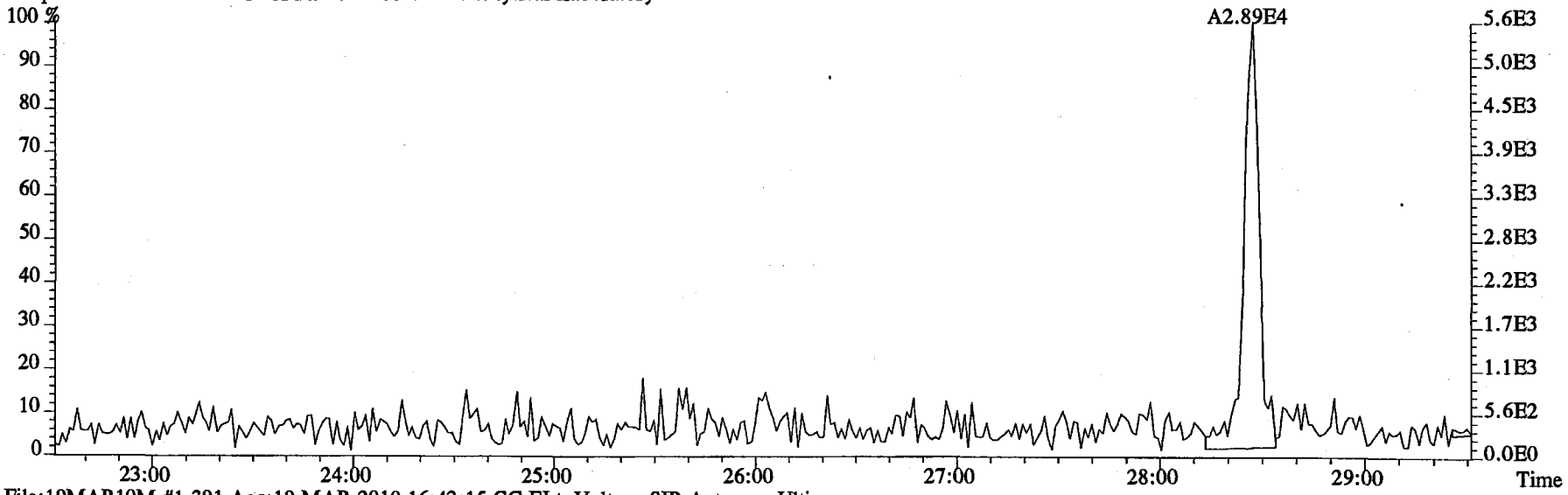
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



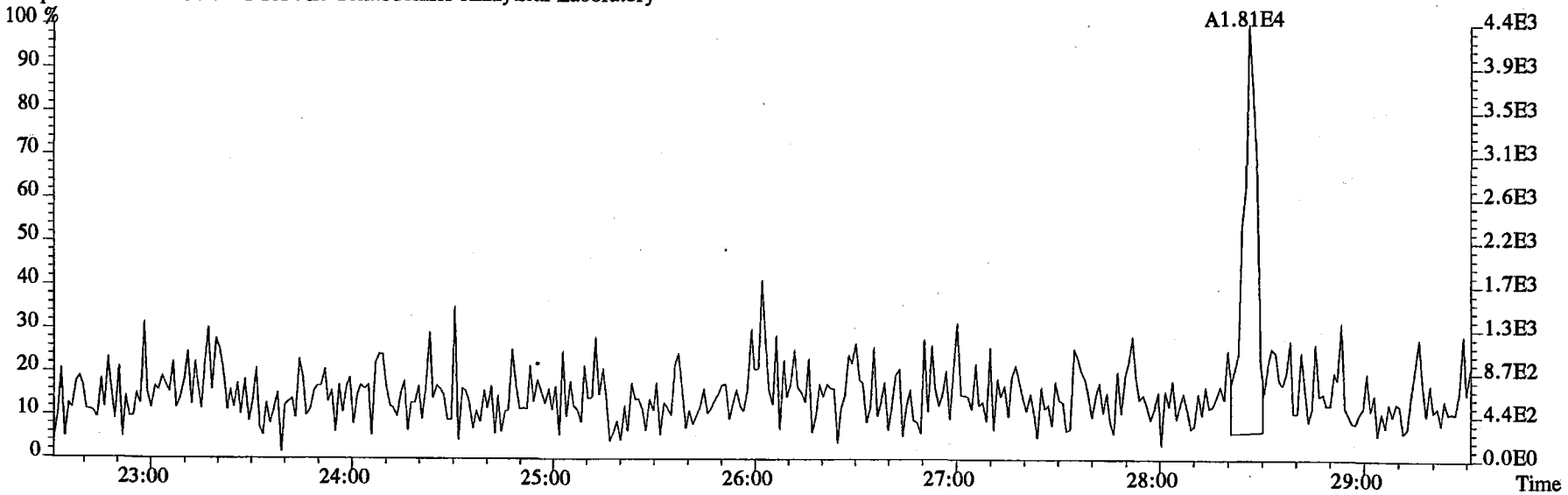
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:10 Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



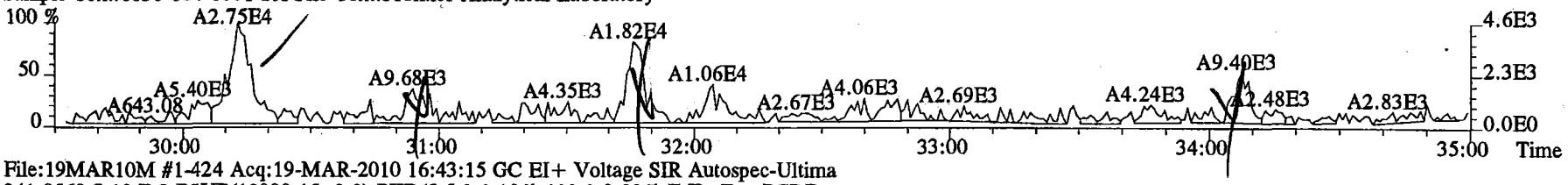
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



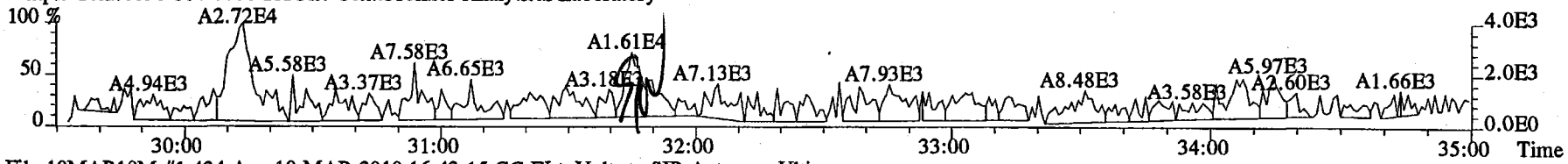
File:19MAR10M #1-391 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



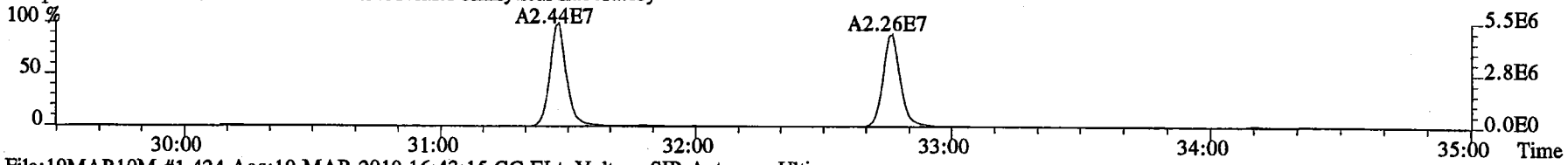
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



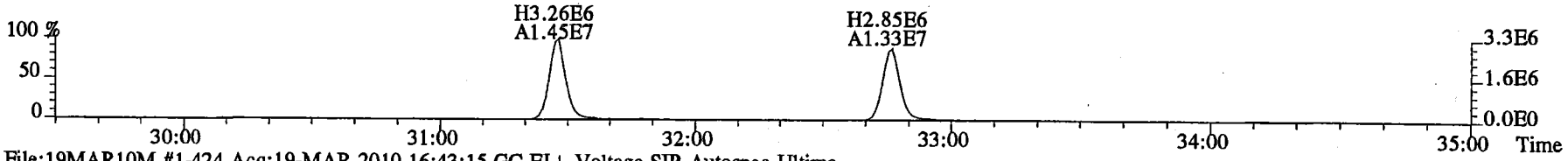
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



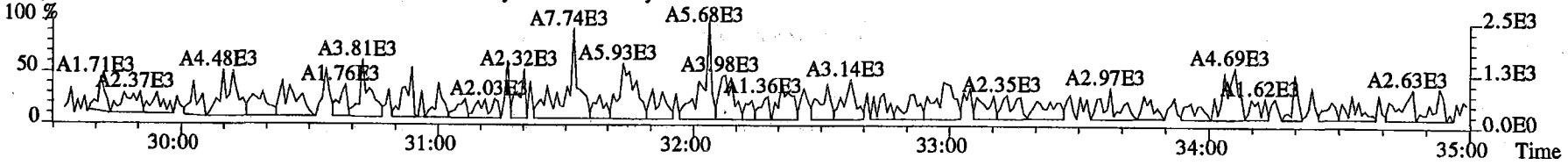
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



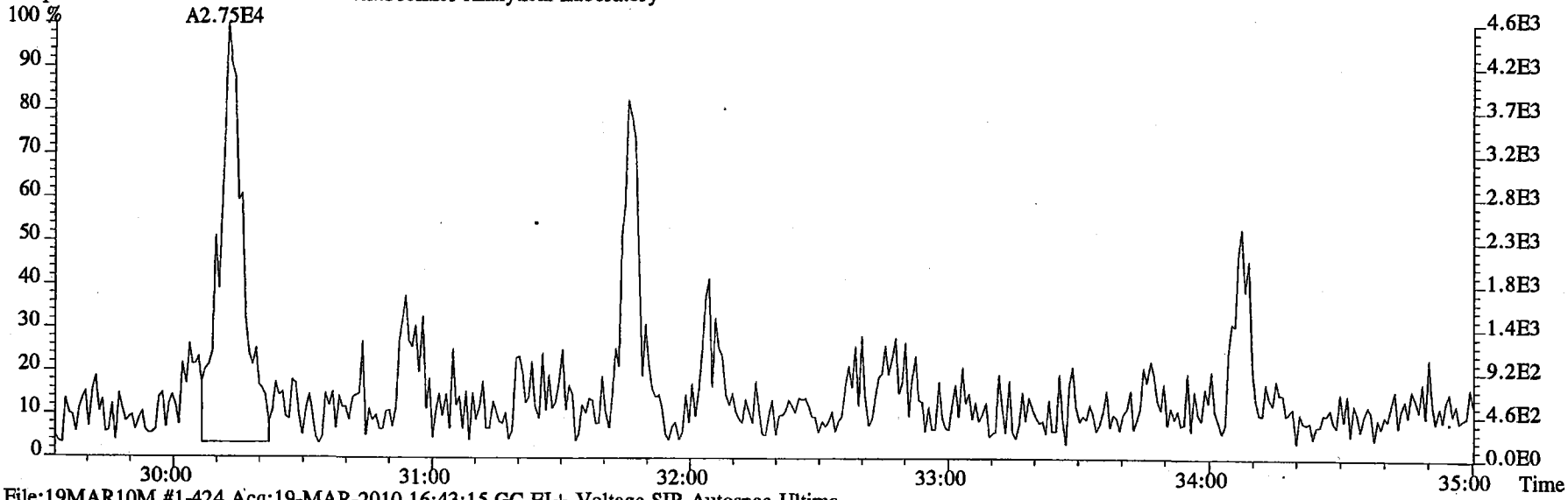
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



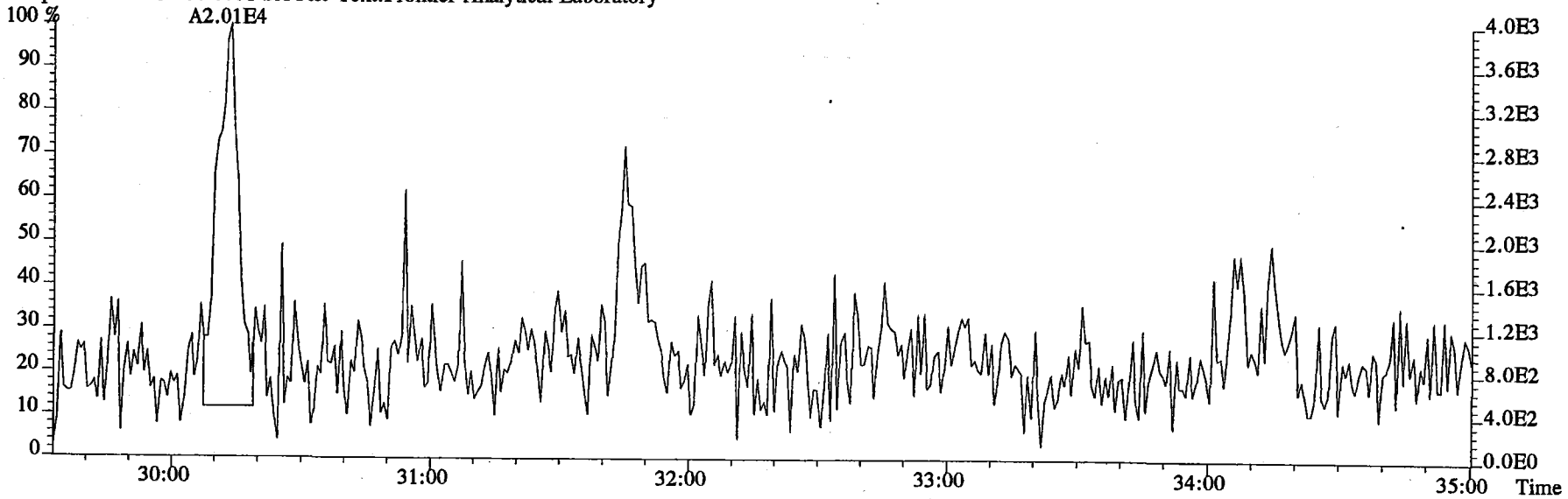
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



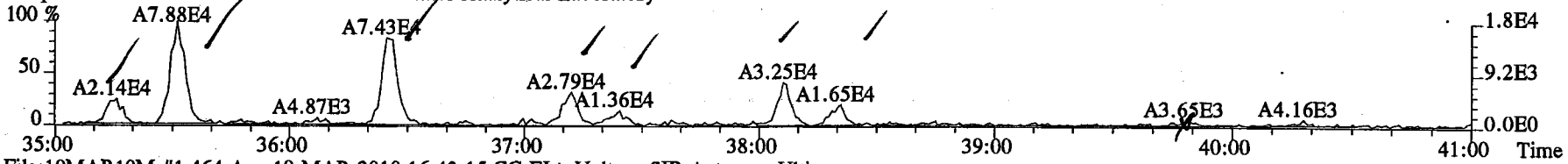
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



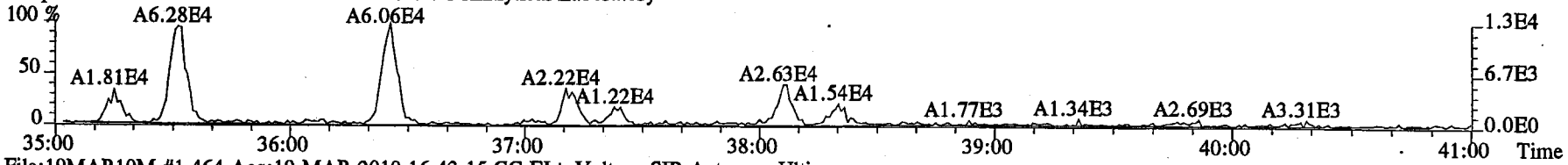
File:19MAR10M #1-424 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



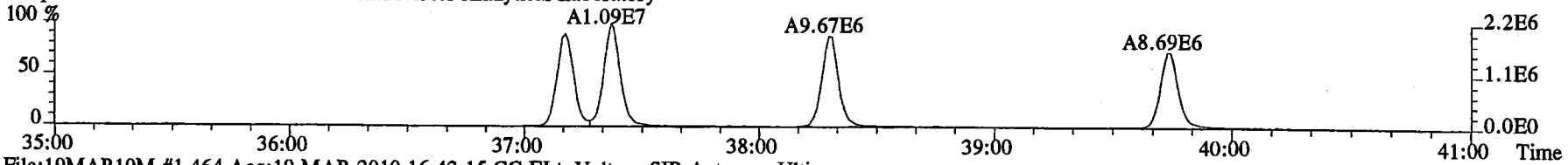
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



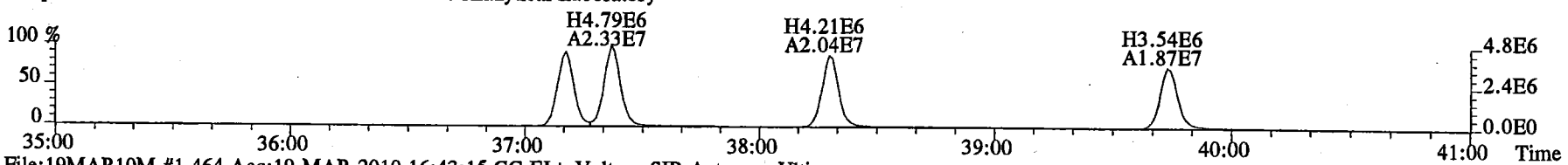
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



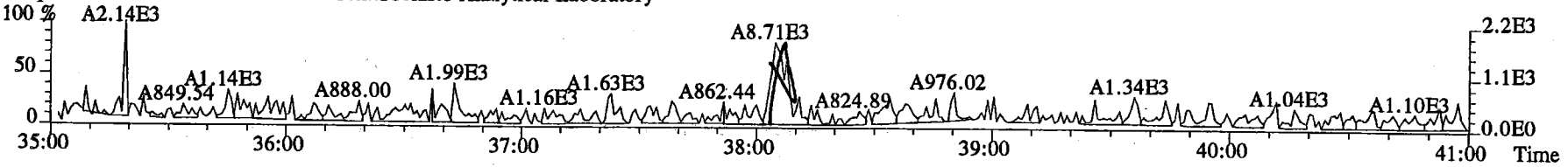
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



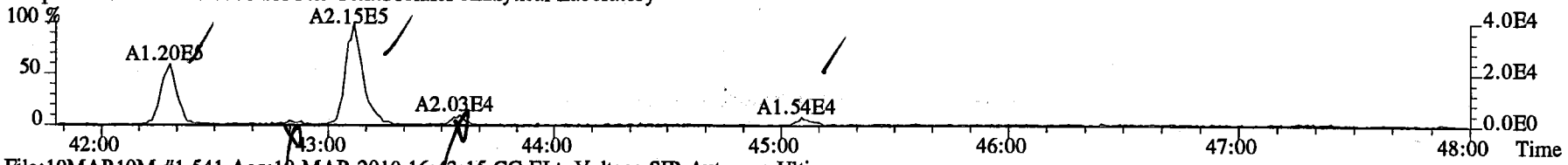
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



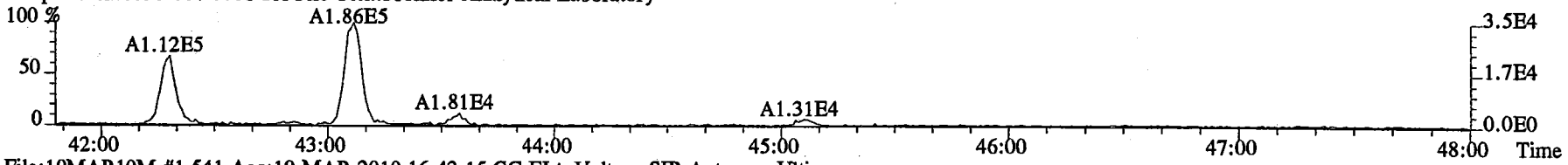
File:19MAR10M #1-464 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



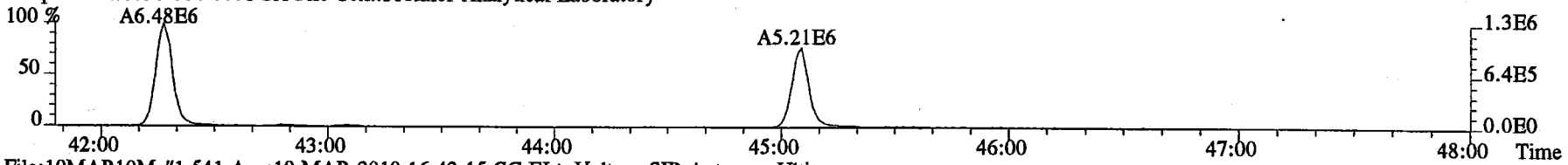
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



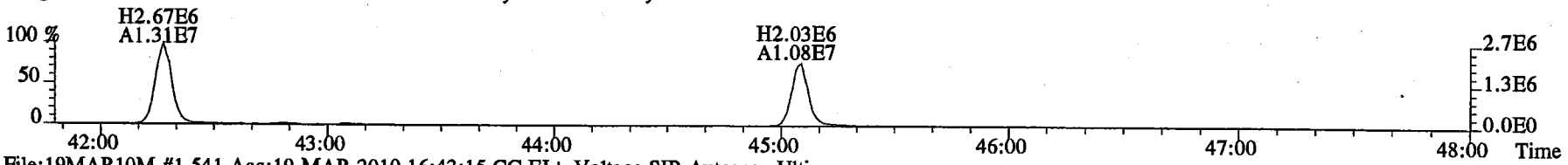
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



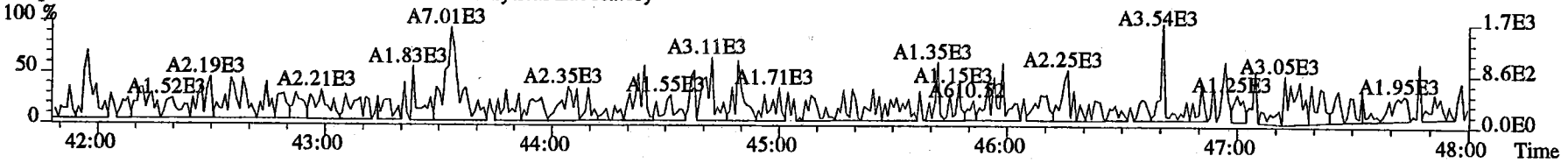
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



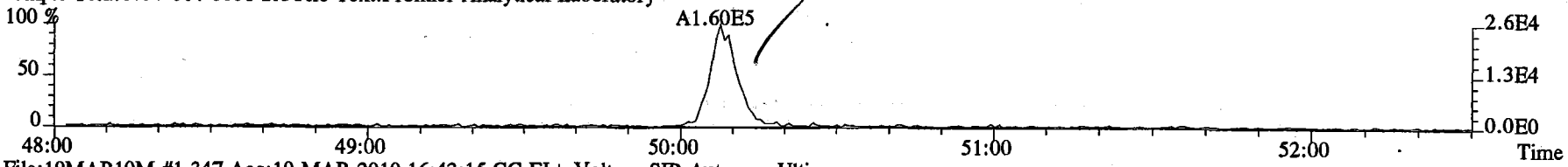
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



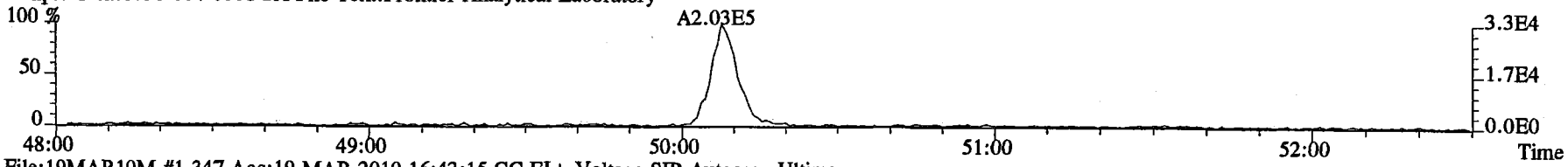
File:19MAR10M #1-541 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



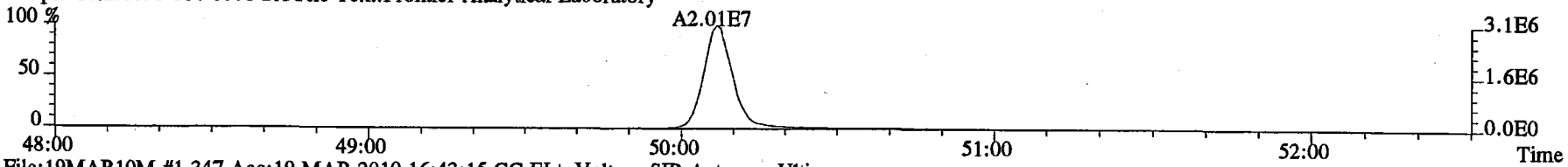
File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



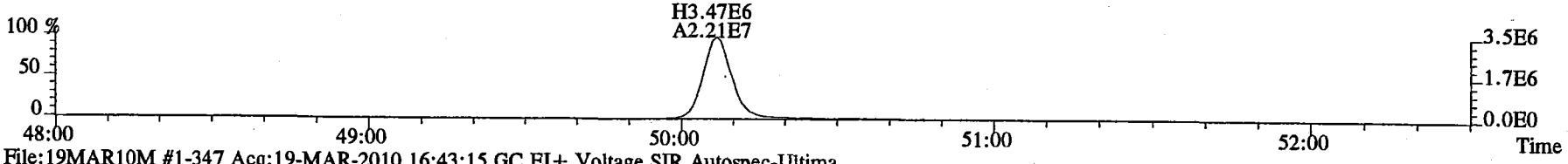
File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



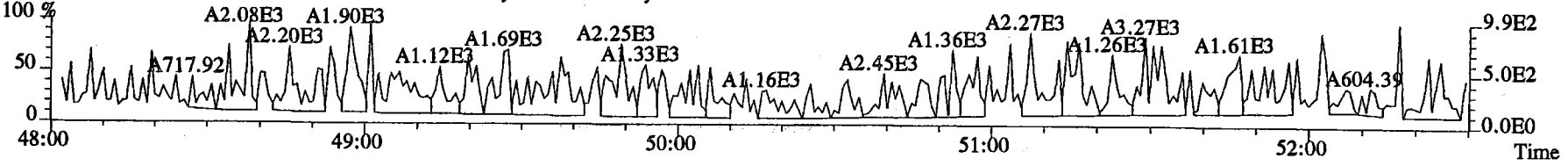
File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



File:19MAR10M #1-347 Acq:19-MAR-2010 16:43:15 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6030-004-0001-SA File Text:Frontier Analytical Laboratory



Initial Calibration Results

Frontier Analytical Laboratory

Data Filename: 18NOV09M

Analyte: PCDDFAL3-11-18-09 Cal: PCDDFAL3-11-18-09

Name	RRF	S. D.	%RSD	S2 RRF#1	S3 RRF#2	S4 RRF#3	S1 RRF#4	S5 RRF#5	S6 RRF#6
2,3,7,8-TCDD	1.02	0.0735	7.22 %	1.00	0.93	0.95	1.04	1.07	1.12
1,2,3,7,8-PeCDD	0.96	0.0778	8.09 %	0.88	0.88	0.93	0.99	1.02	1.07
1,2,3,4,7,8-HxCDD	1.37	0.110	8.00 %	1.26	1.27	1.31	1.41	1.48	1.52
1,2,3,6,7,8-HxCDD	1.34	0.0611	4.55 %	1.26	1.33	1.30	1.35	1.40	1.42
1,2,3,7,8,9-HxCDD	1.37	0.0751	5.49 %	1.32	1.27	1.32	1.40	1.43	1.47
1,2,3,4,6,7,8-HpCDD	1.17	0.0712	6.10 %	1.12	1.09	1.12	1.16	1.25	1.26
OCDD	1.21	0.113	9.27 %	1.09	1.11	1.17	1.23	1.34	1.35
2,3,7,8-TCDF	1.29	0.0564	4.39 %	1.22	1.28	1.25	1.26	1.31	1.38
1,2,3,7,8-PeCDF	0.89	0.0808	9.08 %	0.79	0.81	0.85	0.94	0.96	0.98
2,3,4,7,8-PeCDF	0.91	0.0710	7.85 %	0.83	0.84	0.87	0.92	0.98	1.00
1,2,3,4,7,8-HxCDF	1.00	0.0925	9.26 %	0.89	0.91	0.97	1.03	1.08	1.11
1,2,3,6,7,8-HxCDF	0.92	0.0747	8.16 %	0.82	0.86	0.88	0.93	0.99	1.01
2,3,4,6,7,8-HxCDF	0.99	0.0785	7.97 %	0.91	0.90	0.95	1.00	1.06	1.09
1,2,3,7,8,9-HxCDF	1.09	0.0901	8.28 %	0.98	1.01	1.06	1.11	1.17	1.20
1,2,3,4,6,7,8-HpCDF	1.36	0.131	9.61 %	1.22	1.22	1.31	1.39	1.50	1.51
1,2,3,4,7,8,9-HpCDF	1.61	0.159	9.90 %	1.49	1.44	1.50	1.62	1.77	1.82
OCDF	0.84	0.0791	9.39 %	0.75	0.76	0.81	0.86	0.93	0.93
13C-2,3,7,8-TCDD	0.94	0.0249	2.65 %	0.92	0.91	0.93	0.96	0.95	0.98
13C-1,2,3,7,8-PeCDD	1.02	0.0718	7.06 %	0.99	0.93	1.00	1.00	1.02	1.15
13C-1,2,3,4,7,8-HxCDD	0.98	0.0126	1.28 %	0.99	0.97	1.00	0.99	0.98	0.97
13C-1,2,3,6,7,8-HxCDD	0.94	0.0188	2.01 %	0.93	0.93	0.96	0.94	0.95	0.91
13C-1,2,3,4,6,7,8-HpCDD	0.90	0.0218	2.42 %	0.92	0.89	0.87	0.91	0.89	0.92
13C-OCDD	0.67	0.0306	4.59 %	0.69	0.66	0.62	0.69	0.64	0.70
13C-2,3,7,8-TCDF	0.88	0.0307	3.49 %	0.85	0.85	0.86	0.88	0.92	0.91
13C-1,2,3,7,8-PeCDF	0.88	0.0612	6.98 %	0.83	0.79	0.87	0.88	0.92	0.96
13C-2,3,4,7,8-PeCDF	0.85	0.0560	6.60 %	0.83	0.76	0.85	0.85	0.88	0.93
13C-1,2,3,4,7,8-HxCDF	1.72	0.0550	3.20 %	1.74	1.75	1.75	1.71	1.75	1.61
13C-1,2,3,6,7,8-HxCDF	2.00	0.0743	3.71 %	2.01	2.02	2.06	2.01	2.05	1.86
13C-2,3,4,6,7,8-HxCDF	1.74	0.0562	3.24 %	1.74	1.73	1.79	1.77	1.75	1.63
13C-1,2,3,7,8,9-HxCDF	1.51	0.0258	1.71 %	1.51	1.47	1.48	1.54	1.53	1.51
13C-1,2,3,4,6,7,8-HpCDF	1.10	0.0153	1.39 %	1.12	1.10	1.08	1.10	1.08	1.11
13C-1,2,3,4,7,8,9-HpCDF	0.85	0.0310	3.67 %	0.82	0.84	0.81	0.87	0.84	0.89
13C-OCDF	1.17	0.0555	4.73 %	1.18	1.15	1.10	1.21	1.14	1.26
37Cl-2,3,7,8-TCDD	0.97	0.0838	8.61 %	0.90	0.93	0.90	0.98	1.03	1.11
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-
13C-1,2,3,4-TCDF	-	-	- %	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-
Total Tetra-Dioxins	1.02	0.0735	7.22 %	1.00	0.93	0.95	1.04	1.07	1.12
Total Penta-Dioxins	0.96	0.0778	8.09 %	0.88	0.88	0.93	0.99	1.02	1.07
Total Hexa-Dioxins	1.36	0.0803	5.89 %	1.28	1.29	1.31	1.38	1.44	1.47
Total Hepta-Dioxins	1.17	0.0712	6.10 %	1.12	1.09	1.12	1.16	1.25	1.26
Total Tetra-Furans	1.29	0.0564	4.39 %	1.22	1.28	1.25	1.26	1.31	1.38
1st Fn. Tot Penta-Furans	0.90	0.0756	8.43 %	0.81	0.82	0.86	0.93	0.97	0.99
Total Penta-Furans	0.90	0.0756	8.43 %	0.81	0.82	0.86	0.93	0.97	0.99
Total Hexa-Furans	0.99	0.0838	8.45 %	0.89	0.91	0.96	1.01	1.07	1.10
Total Hepta-Furans	1.47	0.144	9.82 %	1.33	1.32	1.39	1.49	1.62	1.65

Analyst: _____ Date: 11/19/09

Run #1 Filename 18NOV09M S: 2 Acquired: 18-NOV-09 14:40:53 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M0 Analyte: FAL ID: 1613 CSO 090918G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	0.25	6.29e+04	0.72 y	27:25	-	0.999	y
2	Unk	1,2,3,7,8-PeCDD	1.25	2.97e+05	1.58 y	33:14	-	0.878	y
3	Unk	1,2,3,4,7,8-HxCDD	1.25	3.17e+05	1.22 y	38:36	-	1.26	y
4	Unk	1,2,3,6,7,8-HxCDD	1.25	2.97e+05	1.25 y	38:46	-	1.26	y
5	Unk	1,2,3,7,8,9-HxCDD	1.25	3.23e+05	1.29 y	39:13	-	1.32	y
6	Unk	1,2,3,4,6,7,8-HpCDD	1.25	2.62e+05	0.93 y	44:14	-	1.12	y
7	Unk	OCDD	2.50	3.81e+05	0.92 y	49:49	-	1.09	y
8	Unk	2,3,7,8-TCDF	0.25	1.27e+05	0.69 y	26:39	-	1.22	y
9	Unk	1,2,3,7,8-PeCDF	1.25	4.03e+05	1.75 y	31:30	-	0.794	y
10	Unk	2,3,4,7,8-PeCDF	1.25	4.20e+05	1.65 y	32:49	-	0.830	y
11	Unk	1,2,3,4,7,8-HxCDF	1.25	3.91e+05	1.24 y	37:13	-	0.887	y
12	Unk	1,2,3,6,7,8-HxCDF	1.25	4.20e+05	1.21 y	37:26	-	0.822	y
13	Unk	2,3,4,6,7,8-HxCDF	1.25	4.00e+05	1.29 y	38:21	-	0.906	y
14	Unk	1,2,3,7,8,9-HxCDF	1.25	3.77e+05	1.28 y	39:47	-	0.981	y
15	Unk	1,2,3,4,6,7,8-HpCDF	1.25	3.46e+05	1.00 y	42:19	-	1.22	y
16	Unk	1,2,3,4,7,8,9-HpCDF	1.25	3.09e+05	1.00 y	45:08	-	1.49	y
17	Unk	OCDF	2.50	4.50e+05	0.88 y	50:10	-	0.754	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.52e+07	0.73 y	27:23	-	0.925	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.71e+07	1.63 y	33:13	-	0.994	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	2.02e+07	1.31 y	38:35	-	0.994	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.89e+07	1.33 y	38:45	-	0.930	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.87e+07	1.06 y	44:12	-	0.922	y
23	IS	13C-OCDD	200.00	2.79e+07	1.01 y	49:47	-	0.689	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.15e+07	0.81 y	26:38	-	0.852	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	4.06e+07	1.67 y	31:28	-	0.835	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	4.04e+07	1.68 y	32:48	-	0.831	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.52e+07	0.48 y	37:12	-	1.74	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.09e+07	0.48 y	37:24	-	2.01	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.53e+07	0.49 y	38:20	-	1.74	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	3.07e+07	0.49 y	39:47	-	1.51	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.27e+07	0.46 y	42:18	-	1.12	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.66e+07	0.46 y	45:07	-	0.821	y
33	IS	13C-OCDF	200.00	4.77e+07	0.92 y	50:10	-	1.18	y
34	C/Up	37Cl-2,3,7,8-TCDD	0.25	6.12e+04		27:25	-	0.900	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.72e+07	0.74 y	26:49	2.72e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.87e+07	0.81 y	25:33	4.87e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	2.03e+07	1.33 y	39:12	2.03e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	0.999	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.878	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.28	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.12	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.22	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.812	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.812	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	0.893	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.33	y

Analyst: _____ Date: 11/19/09

Run #2 Filename 18NOV09M S: 3 Acquired: 18-NOV-09 15:36:11 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M1 Analyte: FAL ID: 1613 CS1 090918H

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	0.50	1.11e+05	0.75	y	27:24	-	0.929	y
2	Unk	1,2,3,7,8-PeCDD	2.50	5.36e+05	1.55	y	33:13	-	0.880	y
3	Unk	1,2,3,4,7,8-HxCDD	2.50	5.91e+05	1.24	y	38:36	-	1.27	y
4	Unk	1,2,3,6,7,8-HxCDD	2.50	5.90e+05	1.34	y	38:46	-	1.33	y
5	Unk	1,2,3,7,8,9-HxCDD	2.50	5.76e+05	1.27	y	39:13	-	1.27	y
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	4.64e+05	0.91	y	44:14	-	1.09	y
7	Unk	OCDD	5.00	7.02e+05	0.93	y	49:48	-	1.11	y
8	Unk	2,3,7,8-TCDF	0.50	2.57e+05	0.66	y	26:38	-	1.28	y
9	Unk	1,2,3,7,8-PeCDF	2.50	7.54e+05	1.68	y	31:29	-	0.811	y
10	Unk	2,3,4,7,8-PeCDF	2.50	7.51e+05	1.69	y	32:48	-	0.839	y
11	Unk	1,2,3,4,7,8-HxCDF	2.50	7.60e+05	1.28	y	37:12	-	0.906	y
12	Unk	1,2,3,6,7,8-HxCDF	2.50	8.29e+05	1.28	y	37:25	-	0.857	y
13	Unk	2,3,4,6,7,8-HxCDF	2.50	7.51e+05	1.20	y	38:21	-	0.905	y
14	Unk	1,2,3,7,8,9-HxCDF	2.50	7.09e+05	1.26	y	39:47	-	1.01	y
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	6.45e+05	1.00	y	42:19	-	1.22	y
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	5.81e+05	0.96	y	45:08	-	1.44	y
17	Unk	OCDF	5.00	8.42e+05	0.93	y	50:11	-	0.763	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.38e+07	0.73	y	27:22	-	0.913	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.44e+07	1.69	y	33:12	-	0.934	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.86e+07	1.36	y	38:35	-	0.969	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.78e+07	1.31	y	38:44	-	0.928	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.70e+07	1.07	y	44:12	-	0.886	y
23	IS	13C-OCDD	200.00	2.54e+07	1.00	y	49:47	-	0.662	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.01e+07	0.81	y	26:37	-	0.850	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.72e+07	1.68	y	31:28	-	0.790	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.58e+07	1.71	y	32:47	-	0.759	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.36e+07	0.48	y	37:11	-	1.75	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	3.87e+07	0.48	y	37:23	-	2.02	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.32e+07	0.49	y	38:20	-	1.73	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	2.82e+07	0.49	y	39:46	-	1.47	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.11e+07	0.45	y	42:17	-	1.10	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.61e+07	0.45	y	45:07	-	0.842	y
33	IS	13C-OCDF	200.00	4.41e+07	0.92	y	50:09	-	1.15	y
34	C/Up	37Cl-2,3,7,8-TCDD	0.50	1.21e+05			27:24	-	0.926	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.61e+07	0.73	y	26:48	2.61e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.71e+07	0.81	y	25:32	4.71e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.92e+07	1.31	y	39:11	1.92e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	0.929	y
39	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.880	y
40	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.29	y
41	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.09	y
42	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.28	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	-	n	-	-	0.824	y
44	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.824	y
45	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	0.913	y
46	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.32	y

Analyst: _____ Date: 11/19/09

Run #3 Filename 18NOV09M S: 4 Acquired: 18-NOV-09 16:31:26 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M2 Analyte: FAL ID: 1613 CS2 090918I

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	2.00	4.69e+05	0.80 y	27:23	-	0.945	y
2	Unk	1,2,3,7,8-PeCDD	10.00	2.50e+06	1.55 y	33:13	-	0.933	y
3	Unk	1,2,3,4,7,8-HxCDD	10.00	2.60e+06	1.24 y	38:36	-	1.31	y
4	Unk	1,2,3,6,7,8-HxCDD	10.00	2.48e+06	1.24 y	38:46	-	1.30	y
5	Unk	1,2,3,7,8,9-HxCDD	10.00	2.57e+06	1.27 y	39:12	-	1.32	y
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	1.93e+06	0.91 y	44:13	-	1.12	y
7	Unk	OCDD	20.00	2.90e+06	0.92 y	49:48	-	1.17	y
8	Unk	2,3,7,8-TCDF	2.00	1.02e+06	0.66 y	26:38	-	1.25	y
9	Unk	1,2,3,7,8-PeCDF	10.00	3.54e+06	1.71 y	31:29	-	0.852	y
10	Unk	2,3,4,7,8-PeCDF	10.00	3.49e+06	1.69 y	32:48	-	0.868	y
11	Unk	1,2,3,4,7,8-HxCDF	10.00	3.37e+06	1.23 y	37:12	-	0.972	y
12	Unk	1,2,3,6,7,8-HxCDF	10.00	3.62e+06	1.22 y	37:25	-	0.884	y
13	Unk	2,3,4,6,7,8-HxCDF	10.00	3.37e+06	1.24 y	38:20	-	0.951	y
14	Unk	1,2,3,7,8,9-HxCDF	10.00	3.10e+06	1.21 y	39:47	-	1.06	y
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	2.82e+06	1.00 y	42:18	-	1.31	y
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	2.41e+06	1.01 y	45:08	-	1.50	y
17	Unk	OCDF	20.00	3.55e+06	0.91 y	50:10	-	0.813	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.48e+07	0.73 y	27:22	-	0.929	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.68e+07	1.66 y	33:12	-	1.00	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.99e+07	1.32 y	38:35	-	1.00	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.91e+07	1.31 y	38:44	-	0.964	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.73e+07	1.06 y	44:12	-	0.871	y
23	IS	13C-OCDD	200.00	2.47e+07	0.98 y	49:46	-	0.624	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.07e+07	0.82 y	26:37	-	0.856	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	4.15e+07	1.68 y	31:28	-	0.873	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	4.02e+07	1.66 y	32:47	-	0.845	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.46e+07	0.49 y	37:11	-	1.75	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.09e+07	0.50 y	37:23	-	2.06	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.55e+07	0.50 y	38:19	-	1.79	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	2.93e+07	0.49 y	39:46	-	1.48	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.15e+07	0.46 y	42:18	-	1.08	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.60e+07	0.46 y	45:06	-	0.809	y
33	IS	13C-OCDF	200.00	4.36e+07	0.93 y	50:09	-	1.10	y
34	C/Up	37Cl-2,3,7,8-TCDD	2.00	4.80e+05		27:23	-	0.899	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.67e+07	0.74 y	26:48	2.67e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.76e+07	0.81 y	25:31	4.76e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.98e+07	1.32 y	39:12	1.98e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	0.945	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.933	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.31	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.12	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.25	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.860	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.860	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	0.959	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.39	y

Analyst: _____ Date: 11/19/09

Run #4 Filename 18NOV09M S: 1 Acquired: 18-NOV-09 13:45:10 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M3 Analyte: FAL ID: 1613 CS3 090918J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	10.00	2.56e+06	0.76 y	27:24	-	1.04	y
2	Unk	1,2,3,7,8-PeCDD	50.00	1.28e+07	1.56 y	33:14	-	0.993	y
3	Unk	1,2,3,4,7,8-HxCDD	50.00	1.38e+07	1.29 y	38:36	-	1.41	y
4	Unk	1,2,3,6,7,8-HxCDD	50.00	1.26e+07	1.28 y	38:47	-	1.35	y
5	Unk	1,2,3,7,8,9-HxCDD	50.00	1.34e+07	1.27 y	39:14	-	1.40	y
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	1.05e+07	0.95 y	44:14	-	1.16	y
7	Unk	OCDD	100.00	1.68e+07	0.91 y	49:49	-	1.23	y
8	Unk	2,3,7,8-TCDF	10.00	5.06e+06	0.66 y	26:38	-	1.26	y
9	Unk	1,2,3,7,8-PeCDF	50.00	1.89e+07	1.72 y	31:30	-	0.936	y
10	Unk	2,3,4,7,8-PeCDF	50.00	1.80e+07	1.72 y	32:49	-	0.923	y
11	Unk	1,2,3,4,7,8-HxCDF	50.00	1.75e+07	1.25 y	37:13	-	1.03	y
12	Unk	1,2,3,6,7,8-HxCDF	50.00	1.87e+07	1.25 y	37:25	-	0.930	y
13	Unk	2,3,4,6,7,8-HxCDF	50.00	1.77e+07	1.26 y	38:21	-	1.00	y
14	Unk	1,2,3,7,8,9-HxCDF	50.00	1.70e+07	1.24 y	39:48	-	1.11	y
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	1.53e+07	1.01 y	42:19	-	1.39	y
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	1.40e+07	0.99 y	45:09	-	1.62	y
17	Unk	OCDF	100.00	2.08e+07	0.92 y	50:11	-	0.863	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.46e+07	0.74 y	27:22	-	0.959	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.58e+07	1.60 y	33:13	-	1.00	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.96e+07	1.34 y	38:36	-	0.985	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.88e+07	1.34 y	38:45	-	0.943	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.81e+07	1.09 y	44:13	-	0.909	y
23	IS	13C-OCDD	200.00	2.74e+07	1.02 y	49:48	-	0.689	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.03e+07	0.82 y	26:37	-	0.883	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	4.03e+07	1.68 y	31:28	-	0.884	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.90e+07	1.69 y	32:47	-	0.854	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.40e+07	0.49 y	37:11	-	1.71	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.01e+07	0.49 y	37:24	-	2.01	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.52e+07	0.49 y	38:20	-	1.77	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	3.06e+07	0.49 y	39:46	-	1.54	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.19e+07	0.46 y	42:18	-	1.10	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.74e+07	0.44 y	45:08	-	0.872	y
33	IS	13C-OCDF	200.00	4.82e+07	0.94 y	50:10	-	1.21	y
34	C/Up	37Cl-2,3,7,8-TCDD	10.00	2.51e+06		27:24	-	0.978	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.57e+07	0.74 y	26:48	2.57e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.56e+07	0.81 y	25:32	4.56e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.99e+07	1.34 y	39:12	1.99e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.04	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.993	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.38	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.16	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.26	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.930	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.930	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.01	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.49	y

Analyst: _____ Date: 11/19/09

Run #5 Filename 18NOV09M S: 5 Acquired: 18-NOV-09 17:26:40 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M4 Analyte: FAL ID: 1613 CS4 090918K

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	40.00	1.15e+07	0.78 y	27:23	-	1.07	y
2	Unk	1,2,3,7,8-PeCDD	200.00	5.92e+07	1.60 y	33:13	-	1.02	y
3	Unk	1,2,3,4,7,8-HxCDD	200.00	6.29e+07	1.27 y	38:35	-	1.48	y
4	Unk	1,2,3,6,7,8-HxCDD	200.00	5.74e+07	1.28 y	38:46	-	1.40	y
5	Unk	1,2,3,7,8,9-HxCDD	200.00	5.95e+07	1.26 y	39:13	-	1.43	y
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	4.77e+07	0.95 y	44:13	-	1.25	y
7	Unk	OCDD	400.00	7.39e+07	0.92 y	49:48	-	1.34	y
8	Unk	2,3,7,8-TCDF	40.00	2.33e+07	0.66 y	26:37	-	1.31	y
9	Unk	1,2,3,7,8-PeCDF	200.00	8.59e+07	1.69 y	31:29	-	0.964	y
10	Unk	2,3,4,7,8-PeCDF	200.00	8.30e+07	1.71 y	32:48	-	0.978	y
11	Unk	1,2,3,4,7,8-HxCDF	200.00	8.21e+07	1.25 y	37:12	-	1.08	y
12	Unk	1,2,3,6,7,8-HxCDF	200.00	8.80e+07	1.25 y	37:24	-	0.991	y
13	Unk	2,3,4,6,7,8-HxCDF	200.00	8.00e+07	1.23 y	38:21	-	1.06	y
14	Unk	1,2,3,7,8,9-HxCDF	200.00	7.74e+07	1.25 y	39:47	-	1.17	y
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	7.01e+07	1.02 y	42:18	-	1.50	y
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	6.47e+07	1.02 y	45:08	-	1.77	y
17	Unk	OCDF	400.00	9.18e+07	0.92 y	50:11	-	0.930	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.70e+07	0.73 y	27:22	-	0.950	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.91e+07	1.73 y	33:12	-	1.02	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	2.13e+07	1.33 y	38:35	-	0.983	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	2.05e+07	1.33 y	38:44	-	0.946	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.91e+07	1.06 y	44:12	-	0.885	y
23	IS	13C-OCDD	200.00	2.76e+07	0.99 y	49:47	-	0.638	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.44e+07	0.82 y	26:36	-	0.918	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	4.45e+07	1.70 y	31:27	-	0.921	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	4.24e+07	1.70 y	32:47	-	0.877	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.79e+07	0.50 y	37:11	-	1.75	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.44e+07	0.49 y	37:23	-	2.05	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.79e+07	0.49 y	38:19	-	1.75	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	3.30e+07	0.48 y	39:46	-	1.53	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.33e+07	0.47 y	42:17	-	1.08	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.82e+07	0.46 y	45:07	-	0.843	y
33	IS	13C-OCDF	200.00	4.94e+07	0.92 y	50:09	-	1.14	y
34	C/Up	37Cl-2,3,7,8-TCDD	40.00	1.17e+07		27:23	-	1.03	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.85e+07	0.74 y	26:47	2.85e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.84e+07	0.82 y	25:32	4.84e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	2.16e+07	1.31 y	39:12	2.16e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.07	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	1.02	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.44	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.25	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.31	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.971	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.971	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.07	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.62	y

Analyst: _____ Date: 11/19/09

Run #6 Filename 18NOV09M S: 6 Acquired: 18-NOV-09 18:21:58 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M5 Analyte: PCDDFAL3-11-18-09 FAL ID: 1613 CS5 090918L

	Typ	Name	Amount	Resp	RA		RT		RF	RRF	
1	Unk	2,3,7,8-TCDD	200.00	4.98e+07	0.78	y	27:23		-	1.12	y
2	Unk	1,2,3,7,8-PeCDD	1000.00	2.79e+08	1.55	y	33:13		-	1.07	y
3	Unk	1,2,3,4,7,8-HxCDD	1000.00	3.29e+08	1.27	y	38:36		-	1.52	y
4	Unk	1,2,3,6,7,8-HxCDD	1000.00	2.88e+08	1.27	y	38:46		-	1.42	y
5	Unk	1,2,3,7,8,9-HxCDD	1000.00	3.07e+08	1.25	y	39:13		-	1.47	y
6	Unk	1,2,3,4,6,7,8-HpCDD	1000.00	2.60e+08	0.97	y	44:13		-	1.26	y
7	Unk	OCDD	2000.00	4.20e+08	0.91	y	49:49		-	1.35	y
8	Unk	2,3,7,8-TCDF	200.00	1.00e+08	0.68	y	26:38		-	1.38	y
9	Unk	1,2,3,7,8-PeCDF	1000.00	3.75e+08	1.67	y	31:29		-	0.979	y
10	Unk	2,3,4,7,8-PeCDF	1000.00	3.68e+08	1.68	y	32:48		-	0.995	y
11	Unk	1,2,3,4,7,8-HxCDF	1000.00	3.99e+08	1.26	y	37:12		-	1.11	y
12	Unk	1,2,3,6,7,8-HxCDF	1000.00	4.18e+08	1.25	y	37:24		-	1.01	y
13	Unk	2,3,4,6,7,8-HxCDF	1000.00	3.97e+08	1.25	y	38:20		-	1.09	y
14	Unk	1,2,3,7,8,9-HxCDF	1000.00	4.04e+08	1.24	y	39:47		-	1.20	y
15	Unk	1,2,3,4,6,7,8-HpCDF	1000.00	3.72e+08	1.01	y	42:18		-	1.51	y
16	Unk	1,2,3,4,7,8,9-HpCDF	1000.00	3.62e+08	1.01	y	45:08		-	1.82	y
17	Unk	OCDF	2000.00	5.23e+08	0.93	y	50:12		-	0.933	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.22e+07	0.74	y	27:22		-	0.980	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.61e+07	1.65	y	33:12		-	1.15	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	2.17e+07	1.33	y	38:35		-	0.972	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	2.02e+07	1.33	y	38:44		-	0.909	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	2.06e+07	1.07	y	44:12		-	0.923	y
23	IS	13C-OCDD	200.00	3.11e+07	1.02	y	49:48		-	0.698	y
24	IS	13C-2,3,7,8-TCDF	100.00	3.62e+07	0.83	y	26:37		-	0.911	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.83e+07	1.66	y	31:27		-	0.963	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.70e+07	1.70	y	32:46		-	0.930	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.59e+07	0.49	y	37:11		-	1.61	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.14e+07	0.50	y	37:23		-	1.86	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.63e+07	0.49	y	38:20		-	1.63	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	3.35e+07	0.48	y	39:46		-	1.51	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.47e+07	0.46	y	42:17		-	1.11	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.99e+07	0.47	y	45:06		-	0.892	y
33	IS	13C-OCDF	200.00	5.61e+07	0.94	y	50:10		-	1.26	y
34	C/Up	37Cl-2,3,7,8-TCDD	200.00	5.04e+07			27:23		-	1.11	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.27e+07	0.74	y	26:47	2.27e+05	-		n
36	RS	13C-1,2,3,4-TCDF	100.00	3.98e+07	0.82	y	25:31	3.98e+05	-		n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	2.23e+07	1.31	y	39:11	2.23e+05	-		n
38	Tot	Total Tetra-Dioxins	0.00	-	-	n	-		-	1.12	y
39	Tot	Total Penta-Dioxins	0.00	-	-	n	-		-	1.07	y
40	Tot	Total Hexa-Dioxins	0.00	-	-	n	-		-	1.47	y
41	Tot	Total Hepta-Dioxins	0.00	-	-	n	-		-	1.26	y
42	Tot	Total Tetra-Furans	0.00	-	-	n	-		-	1.38	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	-	n	-		-	0.987	y
44	Tot	Total Penta-Furans	0.00	-	-	n	-		-	0.987	y
45	Tot	Total Hexa-Furans	0.00	-	-	n	-		-	1.10	y
46	Tot	Total Hepta-Furans	0.00	-	-	n	-		-	1.65	y

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 18NOV09M S2 CS3 Data Filename: 18NOV09M S1

CS1 Data Filename: 18NOV09M S3 CS4 Data Filename: 18NOV09M S5

CS2 Data Filename: 18NOV09M S4 CS5 Data Filename: 18NOV09M S6

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
NATIVE ANALYTES								
2,3,7,8-TCDD	1.00	0.93	0.95	1.04	1.07	1.12	1.02	7.22
1,2,3,7,8-PeCDD	0.88	0.88	0.93	0.99	1.02	1.07	0.96	8.09
1,2,3,4,7,8-HxCDD	1.26	1.27	1.31	1.41	1.48	1.52	1.37	8.00
1,2,3,6,7,8-HxCDD	1.26	1.33	1.30	1.35	1.40	1.42	1.34	4.55
1,2,3,7,8,9-HxCDD	1.32	1.27	1.32	1.40	1.43	1.47	1.37	5.49
1,2,3,4,6,7,8-HpCDD	1.12	1.09	1.12	1.16	1.25	1.26	1.17	6.10
OCDD	1.09	1.11	1.17	1.23	1.34	1.35	1.21	9.27
2,3,7,8-TCDF	1.22	1.28	1.25	1.26	1.31	1.38	1.29	4.39
1,2,3,7,8-PeCDF	0.79	0.81	0.85	0.94	0.96	0.98	0.89	9.08
2,3,4,7,8-PeCDF	0.83	0.84	0.87	0.92	0.98	1.00	0.91	7.85
1,2,3,4,7,8-HxCDF	0.89	0.91	0.97	1.03	1.08	1.11	1.00	9.26
1,2,3,6,7,8-HxCDF	0.82	0.86	0.88	0.93	0.99	1.01	0.92	8.16
2,3,4,6,7,8-HxCDF	0.91	0.90	0.95	1.00	1.06	1.09	0.99	7.97
1,2,3,7,8,9-HxCDF	0.98	1.01	1.06	1.11	1.17	1.20	1.09	8.28
1,2,3,4,6,7,8-HpCDF	1.22	1.22	1.31	1.39	1.50	1.51	1.36	9.61
1,2,3,4,7,8,9-HpCDF	1.49	1.44	1.50	1.62	1.77	1.82	1.61	9.90
OCDF	0.75	0.76	0.81	0.86	0.93	0.93	0.84	9.39

Analyst:  Date: 11/19/09

USEPA - ITD

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 18NOV09M S2 CS4 Data Filename: 18NOV09M S1

CS1 Data Filename: 18NOV09M S3 CS4 Data Filename: 18NOV09M S5

CS2 Data Filename: 18NOV09M S4 CS5 Data Filename: 18NOV09M S6

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
LABELED COMPOUNDS								
13C-2,3,7,8-TCDD	0.92	0.91	0.93	0.96	0.95	0.98	0.94	2.65
13C-1,2,3,7,8-PeCDD	0.99	0.93	1.00	1.00	1.02	1.15	1.02	7.06
13C-1,2,3,4,7,8-HxCDD	0.99	0.97	1.00	0.99	0.98	0.97	0.98	1.28
13C-1,2,3,6,7,8-HxCDD	0.93	0.93	0.96	0.94	0.95	0.91	0.94	2.01
13C-1,2,3,4,6,7,8-HpCDD	0.92	0.89	0.87	0.91	0.89	0.92	0.90	2.42
13C-OCDD	0.69	0.66	0.62	0.69	0.64	0.70	0.67	4.59
13C-2,3,7,8-TCDF	0.85	0.85	0.86	0.88	0.92	0.91	0.88	3.49
13C-1,2,3,7,8-PeCDF	0.83	0.79	0.87	0.88	0.92	0.96	0.88	6.98
13C-2,3,4,7,8-PeCDF	0.83	0.76	0.85	0.85	0.88	0.93	0.85	6.60
13C-1,2,3,4,7,8-HxCDF	1.74	1.75	1.75	1.71	1.75	1.61	1.72	3.20
13C-1,2,3,6,7,8-HxCDF	2.01	2.02	2.06	2.01	2.05	1.86	2.00	3.71
13C-2,3,4,6,7,8-HxCDF	1.74	1.73	1.79	1.77	1.75	1.63	1.74	3.24
13C-1,2,3,7,8,9-HxCDF	1.51	1.47	1.48	1.54	1.53	1.51	1.51	1.71
13C-1,2,3,4,6,7,8-HpCDF	1.12	1.10	1.08	1.10	1.08	1.11	1.10	1.39
13C-1,2,3,4,7,8,9-HpCDF	0.82	0.84	0.81	0.87	0.84	0.89	0.85	3.67
13C-OCDF	1.18	1.15	1.10	1.21	1.14	1.26	1.17	4.73
CLEANUP STANDARD								
37Cl-2,3,7,8-TCDD	0.90	0.93	0.90	0.98	1.03	1.11	0.97	8.61

Analyst: _____ Date: 11/19/09

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: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 18NOV09M S2 CS3 Data Filename: 18NOV09M S1

CS1 Data Filename: 18NOV09M S3 CS4 Data Filename: 18NOV09M S5

CS2 Data Filename: 18NOV09M S4 CS5 Data Filename: 18NOV09M S6

NATIVE ANALYTES	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS
2,3,7,8-TCDD	M/M+2	0.72	0.75	0.80	0.76	0.78	0.78	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.55	1.55	1.56	1.60	1.55	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.24	1.24	1.29	1.27	1.27	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.34	1.24	1.28	1.28	1.27	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.27	1.27	1.27	1.26	1.25	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.93	0.91	0.91	0.95	0.95	0.97	0.88-1.20
OCDD	M+2/M+4	0.92	0.93	0.92	0.91	0.92	0.91	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.69	0.66	0.66	0.66	0.66	0.68	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.75	1.68	1.71	1.72	1.69	1.67	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.65	1.69	1.69	1.72	1.71	1.68	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.28	1.23	1.25	1.25	1.26	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.21	1.28	1.22	1.25	1.25	1.25	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.20	1.24	1.26	1.23	1.25	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.26	1.21	1.24	1.25	1.24	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.00	1.00	1.00	1.01	1.02	1.01	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.96	1.01	0.99	1.02	1.01	0.88-1.20
OCDF	M+2/M+4	0.88	0.93	0.91	0.92	0.92	0.93	0.76-1.02

Analyst: _____ Date: 11/19/09

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: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 18NOV09M S2 CS3 Data Filename: 18NOV09M S1

CS1 Data Filename: 18NOV09M S3 CS4 Data Filename: 18NOV09M S5

CS2 Data Filename: 18NOV09M S4 CS5 Data Filename: 18NOV09M S6

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	0.73	0.73	0.73	0.74	0.73	0.74	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.63	1.69	1.66	1.60	1.73	1.65	1.32-1.78
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.36	1.32	1.34	1.33	1.33	1.05-1.43
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.33	1.31	1.31	1.34	1.33	1.33	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	1.07	1.06	1.09	1.06	1.07	0.88-1.20
13C-OCDD	M+2/M+4	1.01	1.00	0.98	1.02	0.99	1.02	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.81	0.81	0.82	0.82	0.82	0.83	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.67	1.68	1.68	1.68	1.70	1.66	1.32-1.78
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.68	1.71	1.66	1.69	1.70	1.70	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.48	0.48	0.49	0.49	0.50	0.49	0.43-0.59
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.48	0.48	0.50	0.49	0.49	0.50	0.43-0.59
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.49	0.50	0.49	0.49	0.49	0.43-0.59
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.49	0.49	0.49	0.49	0.48	0.48	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.45	0.46	0.46	0.47	0.46	0.37-0.51
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.45	0.46	0.44	0.46	0.47	0.37-0.51
13C-OCDF	M+2/M+4	0.92	0.92	0.93	0.94	0.92	0.94	0.76-1.02

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 18NOV09M Sam:1 Analysis Date: 18-NOV-09 13:45:10

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.2	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	51.6	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	51.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	50.1	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	51.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.95	0.88-1.20	y	49.5	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	101	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.66	0.65-0.89	y	9.77	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.72	1.32-1.78	y	52.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.72	1.32-1.78	y	50.9	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.8	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	50.9	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	51.1	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	51.3	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.99	0.88-1.20	y	50.3	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	102	63.0 - 159

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

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

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

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 18NOV09M Sam:1 Analysis Date: 18-NOV-09 13:45:10

	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	0.74	0.65-0.89	y	102	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.60	1.32-1.78	y	98.5	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.34	1.05-1.43	y	100	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.34	1.05-1.43	y	101	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.09	0.88-1.20	y	101	72.0 - 138
13C-OCDD	M+2/M+4	1.02	0.76-1.02	y	207	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.82	0.65-0.89	y	100	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.68	1.32-1.78	y	101	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.69	1.32-1.78	y	101	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	99.5	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	101	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	102	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.49	0.43-0.59	y	102	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37-0.51	y	100	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	103	77.0 - 129
13C-OCDF	M+2/M+4	0.94	0.76-1.02	y	206	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					10.0	7.80 - 12.8

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

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

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

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

Analyst: _____ Date: 11/19/09

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: 11/18/09

RT Window Data Filename: 18NOV09M Sam:1 Analysis Date: 18-NOV-09 Time: 13:45:10

DB-5 IS Data Filename: 18NOV09M Sam:1 Analysis Date: 18-NOV-09 Time: 13:45:10

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)	28:20	1,2,8,9-TCDF (L)	28:33
1,2,4,7,9-PeCDD (F)	30:15	1,3,4,6,8-PeCDF (F)	28:26
1,2,3,8,9-PeCDD (L)	33:49	1,2,3,8,9-PeCDF (L)	34:14
1,2,4,6,7,9-HxCDD (F)	36:09	1,2,3,4,6,8-HxCDF (F)	35:16
1,2,3,7,8,9-HxCDD (L)	39:14	1,2,3,7,8,9-HxCDF (L)	39:48
1,2,3,4,6,7,9-HpCDD (F)	42:51	1,2,3,4,6,7,8-HpCDF (F)	42:19
1,2,3,4,6,7,8-HpCDD (L)	44:14	1,2,3,4,7,8,9-HpCDF (L)	45:09

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

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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

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

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 18-NOV-09 13:45:10 CS3 or VER Data Filename: 18NOV09M 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	1.023	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		1.224	0.923-1.303

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

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 18-NOV-09 13:45:10 CS3 or VER Data Filename: 18NOV09M 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	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-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	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	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		1.280	1.000-1.311

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

Analyst: _____ Date: 11/19/09

FAL ID: ST111809M3 Filename: 18NOV09M Sam:1 Acquired: 18-NOV-09 13:45:10 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 090918J ConCal: ST111809M3 EndCal: ST111809M6
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 103
WHO 1998 Tox: 128 WHO 2005 Tox: 117

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.56e+06	0.76 y	27:24	1.02	10.2		2.50	-	-	*
1,2,3,7,8-PeCDD	1.28e+07	1.56 y	33:14	0.96	51.6		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.38e+07	1.29 y	38:36	1.37	51.2		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.26e+07	1.28 y	38:47	1.34	50.1		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.34e+07	1.27 y	39:14	1.37	51.1		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	1.05e+07	0.95 y	44:14	1.17	49.5		2.50	-	-	*
OCDD	1.68e+07	0.91 y	49:49	1.21	101		2.50	-	-	*
2,3,7,8-TCDF	5.06e+06	0.66 y	26:38	1.29	9.77		2.50	-	-	*
1,2,3,7,8-PeCDF	1.89e+07	1.72 y	31:30	0.89	52.6		2.50	-	-	*
2,3,4,7,8-PeCDF	1.80e+07	1.72 y	32:49	0.91	50.9		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.75e+07	1.25 y	37:13	1.00	51.5		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.87e+07	1.25 y	37:25	0.92	50.8		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.77e+07	1.26 y	38:21	0.99	50.9		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.70e+07	1.24 y	39:48	1.09	51.1		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.53e+07	1.01 y	42:19	1.36	51.3		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.40e+07	0.99 y	45:09	1.61	50.3		2.50	-	-	*
OCDF	2.08e+07	0.92 y	50:11	0.84	102		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.46e+07	0.74 y	27:22	0.94	102					102
13C-1,2,3,7,8-PeCDD	2.58e+07	1.60 y	33:13	1.02	98.5					98.5
13C-1,2,3,4,7,8-HxCDD	1.96e+07	1.34 y	38:36	0.98	100					100
13C-1,2,3,6,7,8-HxCDD	1.88e+07	1.34 y	38:45	0.94	101					101
13C-1,2,3,4,6,7,8-HpCDD	1.81e+07	1.09 y	44:13	0.90	101					101
13C-OCDD	2.74e+07	1.02 y	49:48	0.67	207					103
13C-2,3,7,8-TCDF	4.03e+07	0.82 y	26:37	0.88	100					100
13C-1,2,3,7,8-PeCDF	4.03e+07	1.68 y	31:28	0.88	101					101
13C-2,3,4,7,8-PeCDF	3.90e+07	1.69 y	32:47	0.85	101					101
13C-1,2,3,4,7,8-HxCDF	3.40e+07	0.49 y	37:11	1.72	99.5					99.5
13C-1,2,3,6,7,8-HxCDF	4.01e+07	0.49 y	37:24	2.00	101					101
13C-2,3,4,6,7,8-HxCDF	3.52e+07	0.49 y	38:20	1.74	102					102
13C-1,2,3,7,8,9-HxCDF	3.06e+07	0.49 y	39:46	1.51	102					102
13C-1,2,3,4,6,7,8-HpCDF	2.19e+07	0.46 y	42:18	1.10	100					100
13C-1,2,3,4,7,8,9-HpCDF	1.74e+07	0.44 y	45:08	0.85	103					103
13C-OCDF	4.82e+07	0.94 y	50:10	1.17	206					103
37Cl-2,3,7,8-TCDD	2.51e+06		27:24	0.97	10.0					100
13C-1,2,3,4-TCDD	2.57e+07	0.74 y	26:48	-	98.3					
13C-1,2,3,4-TCDF	4.56e+07	0.81 y	25:32	-	98.8					
13C-1,2,3,7,8,9-HxCDD	1.99e+07	1.34 y	39:12	-	97.0					

							Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.39e+07		24:23	1.02	55.3		2.50	-	-	*		20
Total Penta-Dioxins	2.72e+07		30:15	0.96	110		2.50	-	-	*		13
Total Hexa-Dioxins	4.52e+07		36:09	1.36	173		2.50	-	-	*		14
Total Hepta-Dioxins	2.21e+07		42:51	1.17	105		2.50	-	-	*		10
Total Tetra-Furans	2.16e+07		23:02	1.29	41.7		2.50	-	-	*		18
1st Fn. Tot Penta-Furans	1.85e+07		28:26	0.90	51.9		2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.36e+07		30:11	0.90	151		2.50	-	-	*	203	.9
Total Hexa-Furans	8.22e+07		35:16	0.99	237		2.50	-	-	*		15
Total Hepta-Furans	2.95e+07		42:19	1.47	102		2.50	-	-	*		4

Analyst: _____ Date: 11/19/09

Frontier Analytical Laboratory - Acquisition Log

Run Name:18NOV09M Instrument: FAL3 GC: DB5 Experiment:PCDD

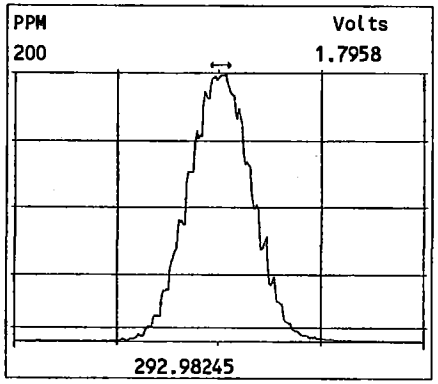
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
18NOV09M	1	ST111809M3	1613 CS3 090918J	18-NOV-09 13:45:10	ST111809M3	ST111809M6	BS
18NOV09M	2	ST111809M0	1613 CS0 090918G	18-NOV-09 14:40:53	ST111809M3	ST111809M6	BS
18NOV09M	3	ST111809M1	1613 CS1 090918H	18-NOV-09 15:36:11	ST111809M3	ST111809M6	BS
18NOV09M	4	ST111809M2	1613 CS2 090918I	18-NOV-09 16:31:26	ST111809M3	ST111809M6	BS
18NOV09M	5	ST111809M4	1613 CS4 090918K	18-NOV-09 17:26:40	ST111809M3	ST111809M6	BS
18NOV09M	6	ST111809M5	1613 CS5 090918L	18-NOV-09 18:21:58	ST111809M3	ST111809M6	BS
18NOV09M	7	SB111809M1	Solvent Blank	18-NOV-09 19:17:18	ST111809M3	ST111809M6	BS
18NOV09M	8	1882-001-0001-OPR	OPR	18-NOV-09 20:12:37	ST111809M3	ST111809M6	BS
18NOV09M	9	1882-001-0001-MB	Method Blank	18-NOV-09 21:07:56	ST111809M3	ST111809M6	BS
18NOV09M	10	5820-009-0001-SA	EDS-114-106+69-C1-0.7	18-NOV-09 22:03:10	ST111809M3	ST111809M6	BS
18NOV09M	11	5820-014-0001-SA	EDS-116-105+86-W2-7.1	18-NOV-09 22:58:30	ST111809M3	ST111809M6	BS
18NOV09M	12	5820-002-0001-SA	EDS-119-106+09-W3-5.2	18-NOV-09 23:53:48	ST111809M3	ST111809M6	BS
18NOV09M	13	5820-011-0001-SA	EDS-105-106+69-W2-6.0	19-NOV-09 00:49:06	ST111809M3	ST111809M6	BS
18NOV09M	14	SB111809M2	Solvent Blank	19-NOV-09 01:44:25	ST111809M3	ST111809M6	BS
18NOV09M	15	SB111809M3	Solvent Blank	19-NOV-09 02:39:43	ST111809M3	ST111809M6	BS
18NOV09M	16	ST111809M6	1613 CS3 090918J	19-NOV-09 03:35:00	ST111809M6	ST111809M7	BS
18NOV09M	17	5820-003-0001-SA	EDS-117-105+86-W3-4.9	19-NOV-09 04:30:11	ST111809M6	ST111809M7	BS
18NOV09M	18	5820-006-0001-SA	EDS-118-106+09-W2-5.7	19-NOV-09 05:25:26	ST111809M6	ST111809M7	BS
18NOV09M	19	5820-010-0001-SA	EDS-104-106+69-W1-5.5	19-NOV-09 06:20:41	ST111809M6	ST111809M7	BS
18NOV09M	20	5820-008-0001-SA	EDS-120-106+09-W4-6.4	19-NOV-09 07:16:00	ST111809M6	ST111809M7	BS
18NOV09M	21	5820-007-0001-SA	EDS-113-106+44-W8-7.6	19-NOV-09 08:11:14	ST111809M6	ST111809M7	BS
18NOV09M	22	5820-004-0001-SA	EDS-107-106+69-W4-7.5	19-NOV-09 09:06:32	ST111809M6	ST111809M7	BS
18NOV09M	23	5820-001-0001-SA	EDS-115-105+86-W1-5.8	19-NOV-09 10:01:51	ST111809M6	ST111809M7	BS
18NOV09M	24	5820-005-0001-SA	EDS-106-106+69-W3-7.0	19-NOV-09 10:57:09	ST111809M6	ST111809M7	BS
18NOV09M	25	SB111809M4	Solvent Blank	19-NOV-09 11:52:24	ST111809M6	ST111809M7	BS
18NOV09M	26	SB111809M5	Solvent Blank	19-NOV-09 12:47:43	ST111809M6	ST111809M7	BS
18NOV09M	27	ST111809M7	1613 CS3 090918J	19-NOV-09 13:43:06	ST111809M6	ST111809M7	BS

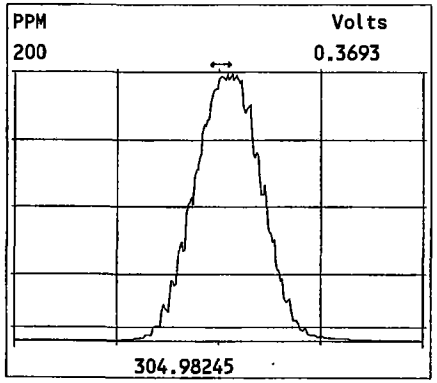
DN 11/19/09

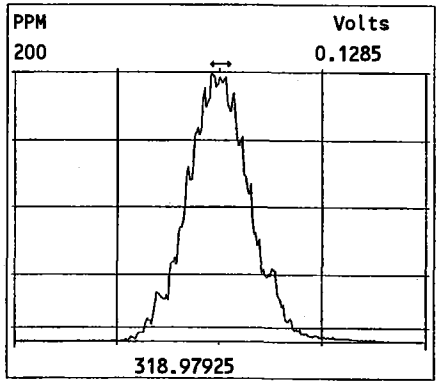
Data Backed Up:_____

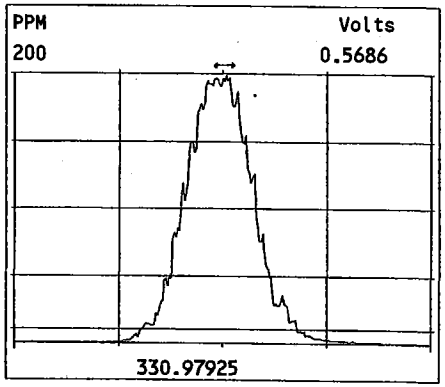
Date:_____

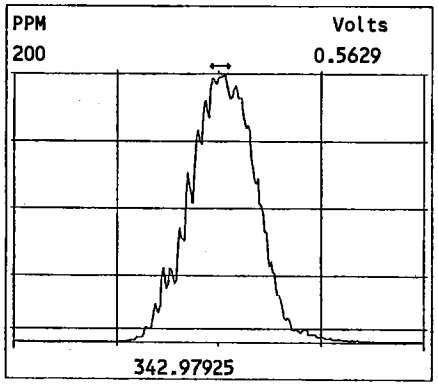
Peak Locate Examination:18-NOV-2009:13:42 File:18NOV09M
Experiment:PCDD Function:1 Reference:PFK

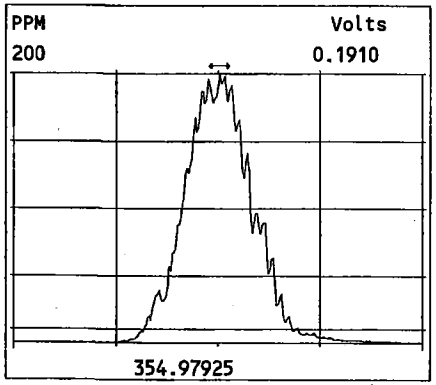


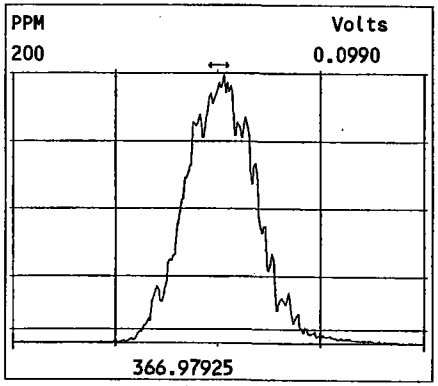


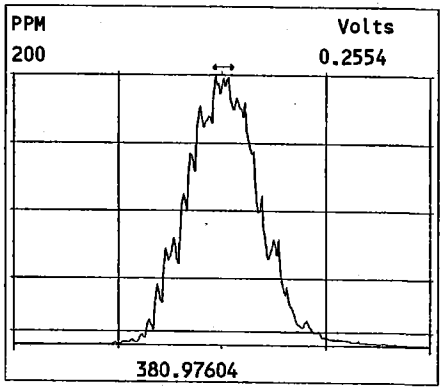


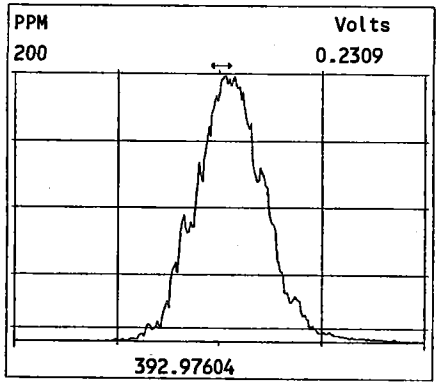


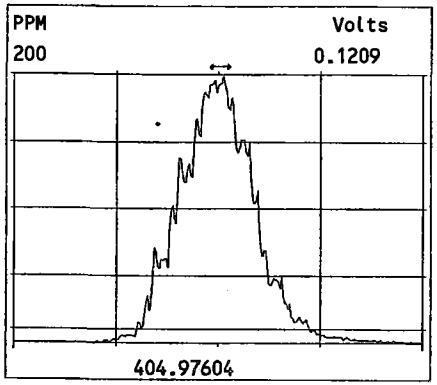


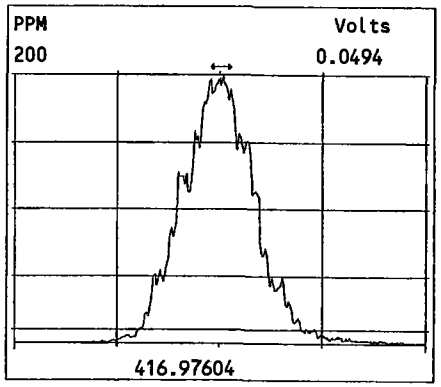






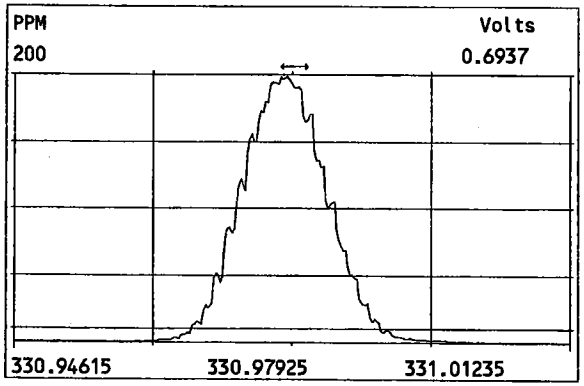


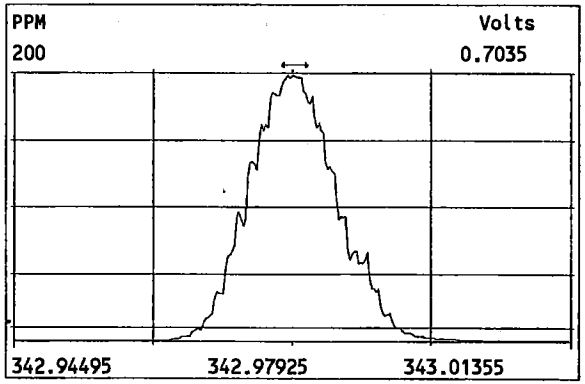


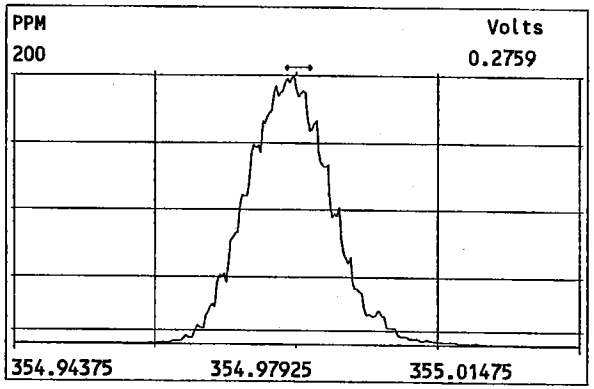


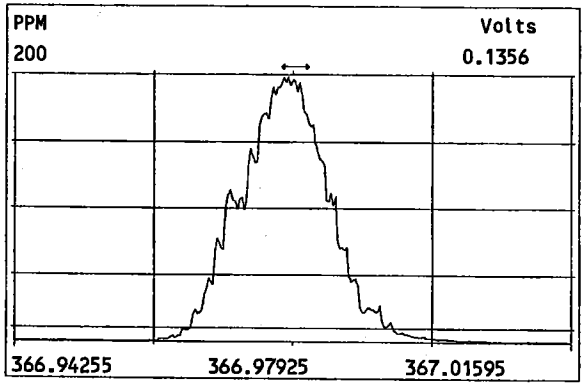
Peak Locate Examination:18-NOV-2009:13:43 File:18NOV09M

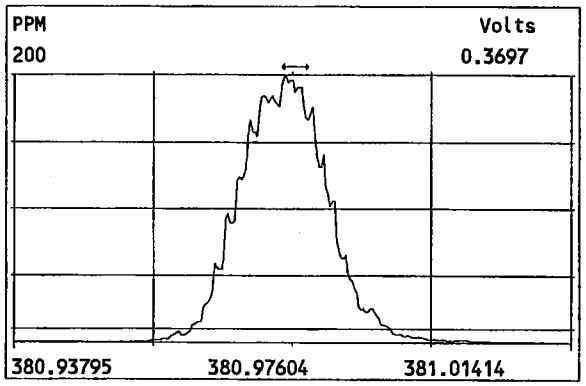
Experiment:PCDD Function:2 Reference:PFK

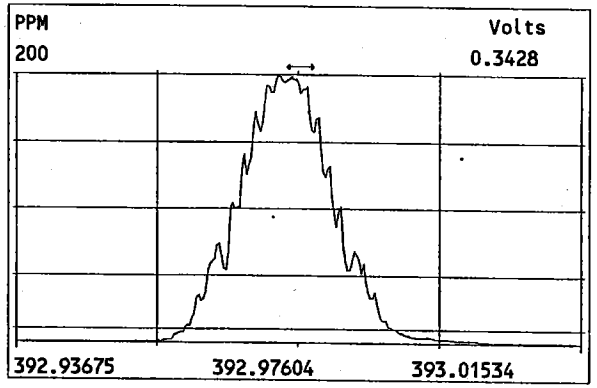


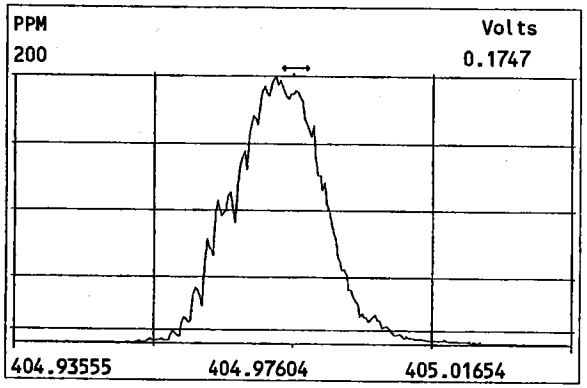


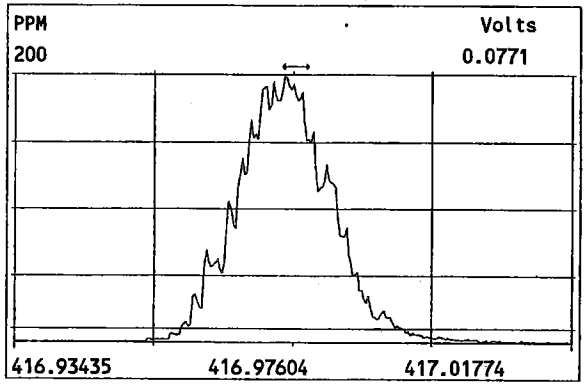




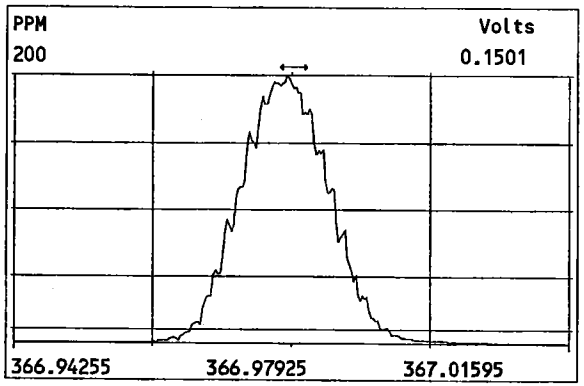


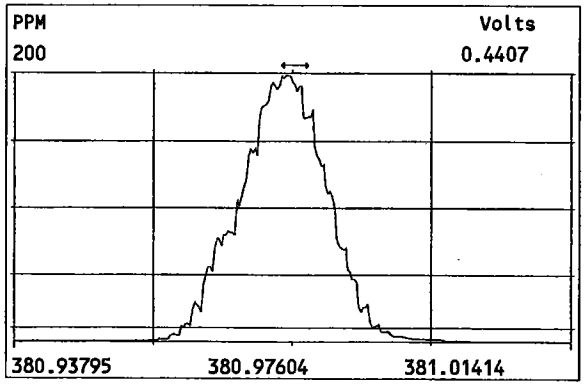


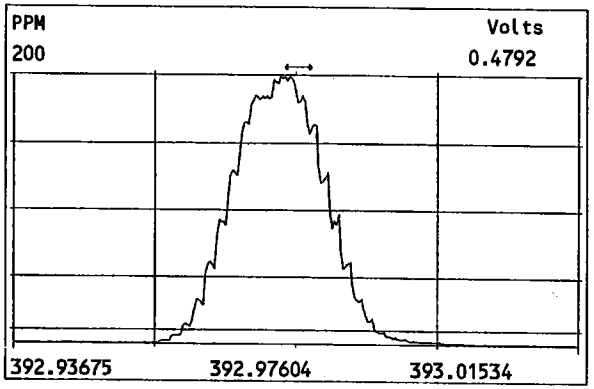


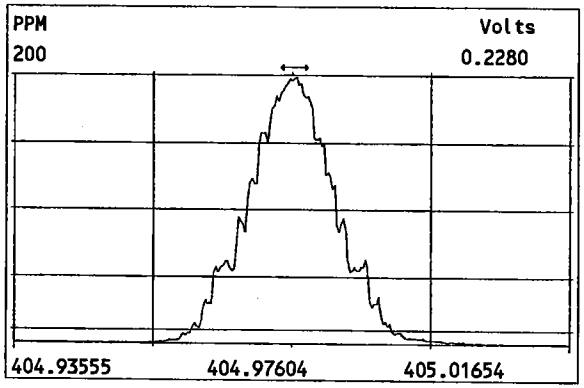


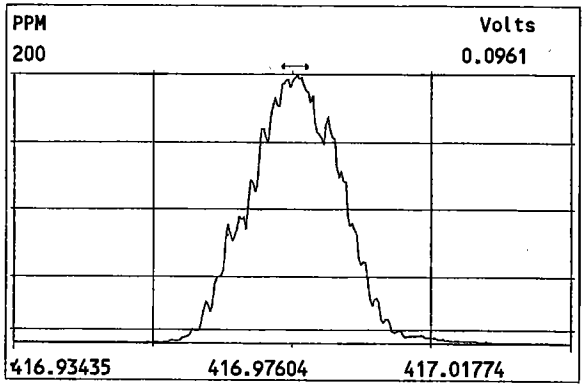
Peak Locate Examination:18-NOV-2009:13:43 File:18NOV09M
Experiment:PCDD Function:3 Reference:PFK

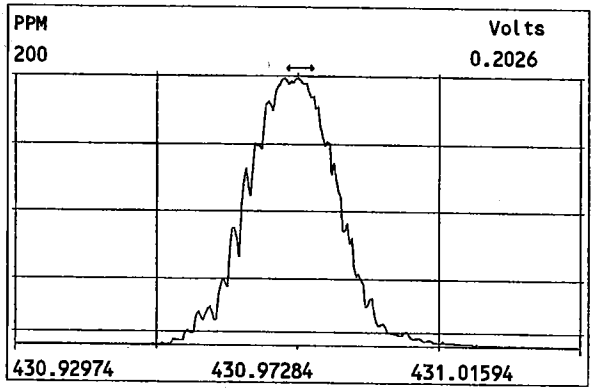


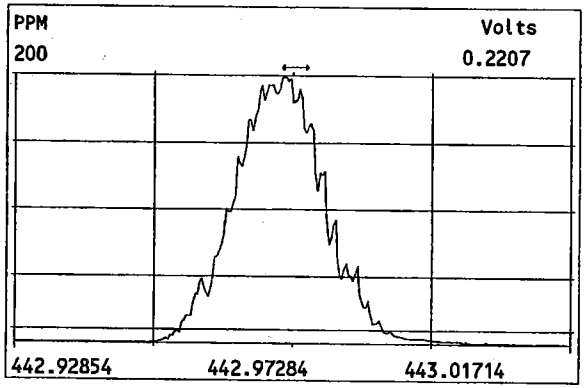


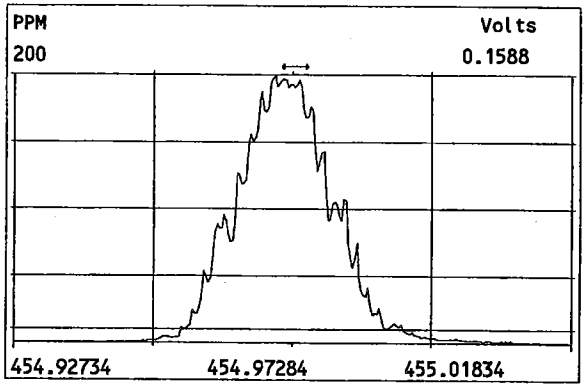




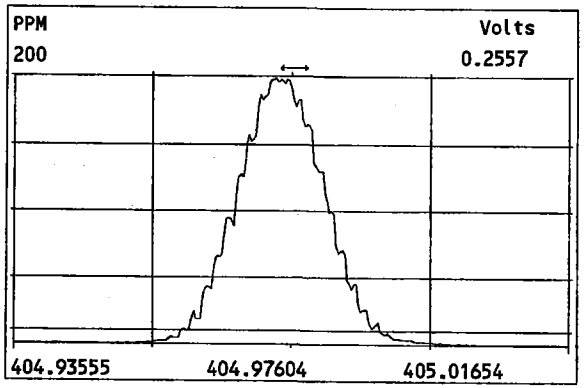


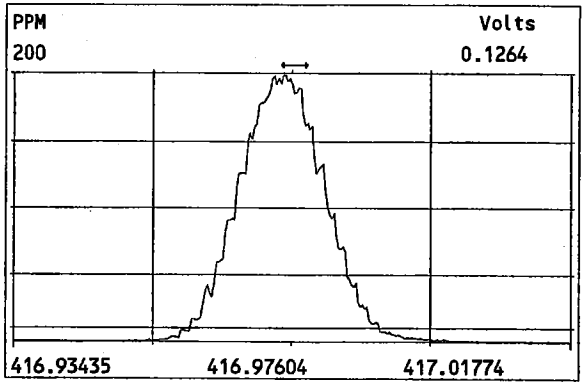


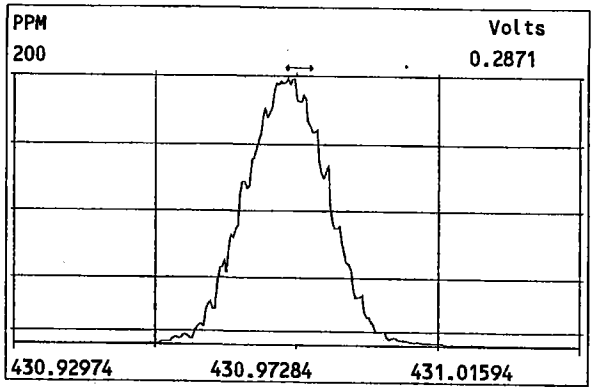


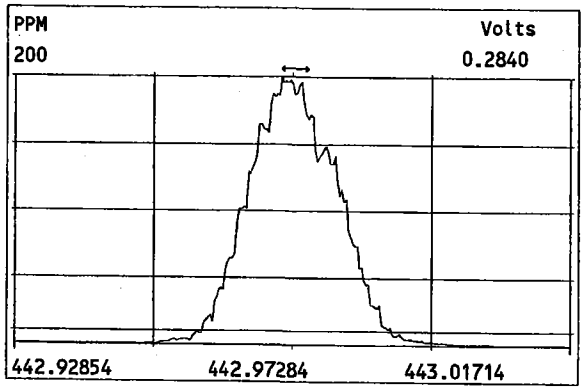


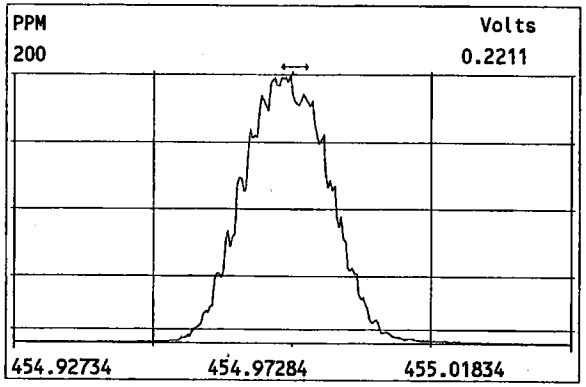
Peak Locate Examination:18-NOV-2009:13:44 File:18NOV09M
Experiment:PCDD Function:4 Reference:PFK

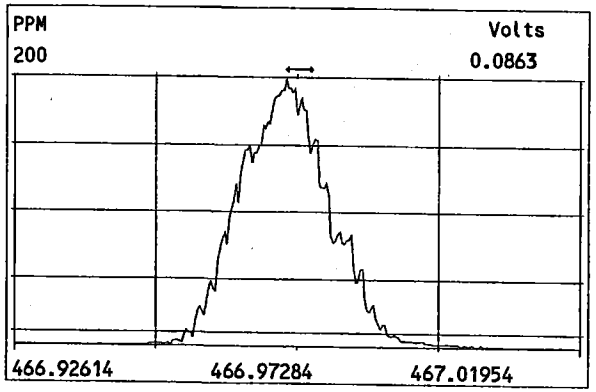


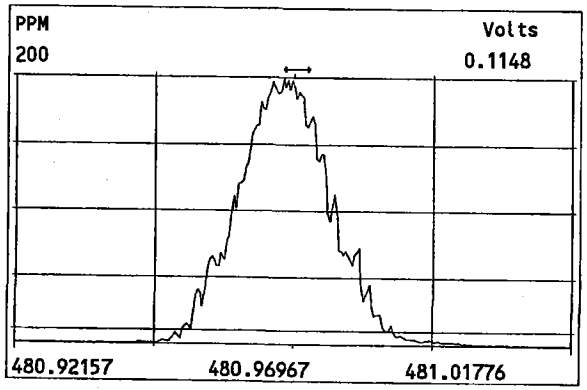




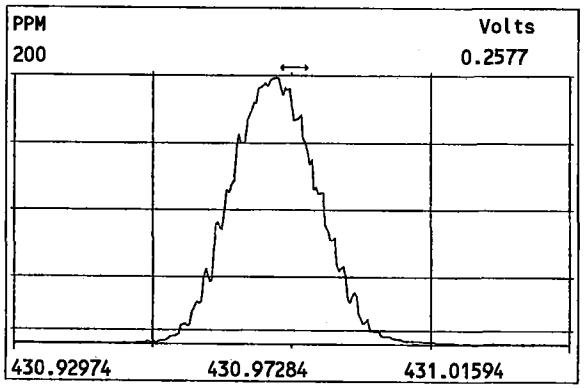


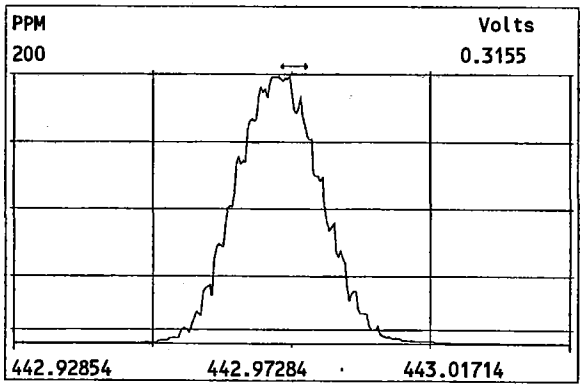


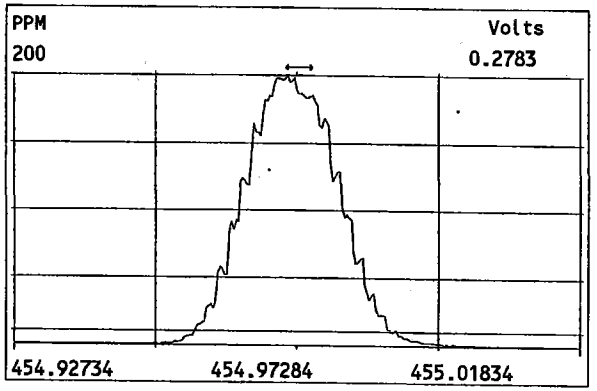


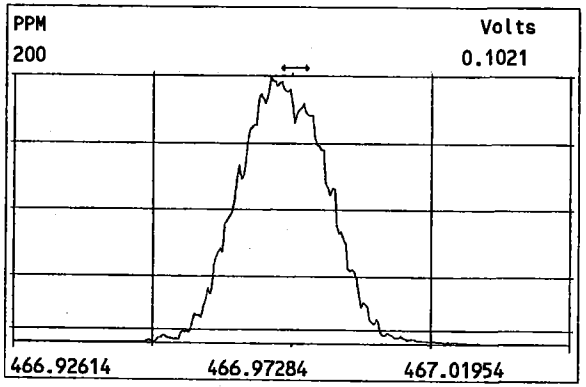


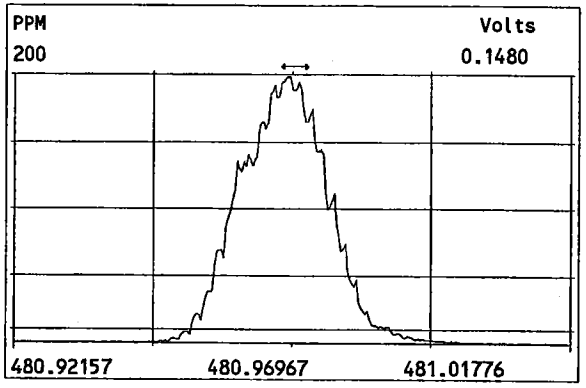
Peak Locate Examination:18-NOV-2009:13:44 File:18NOV09M
Experiment:PCDD Function:5 Reference:PFK

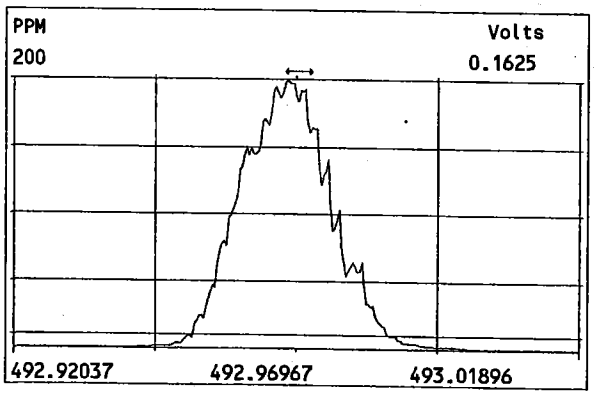


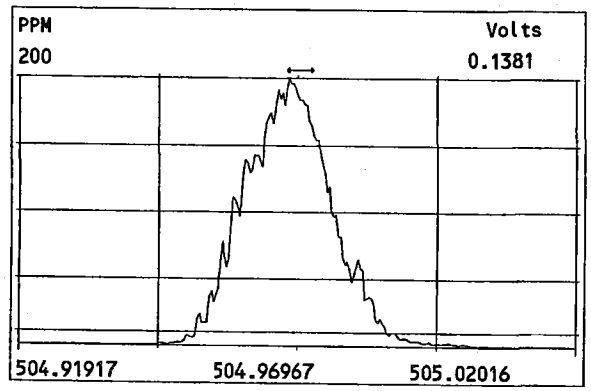


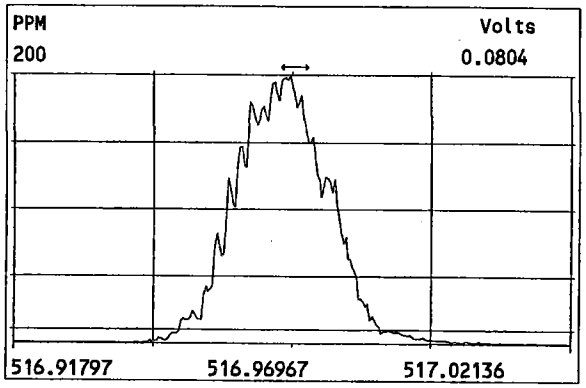




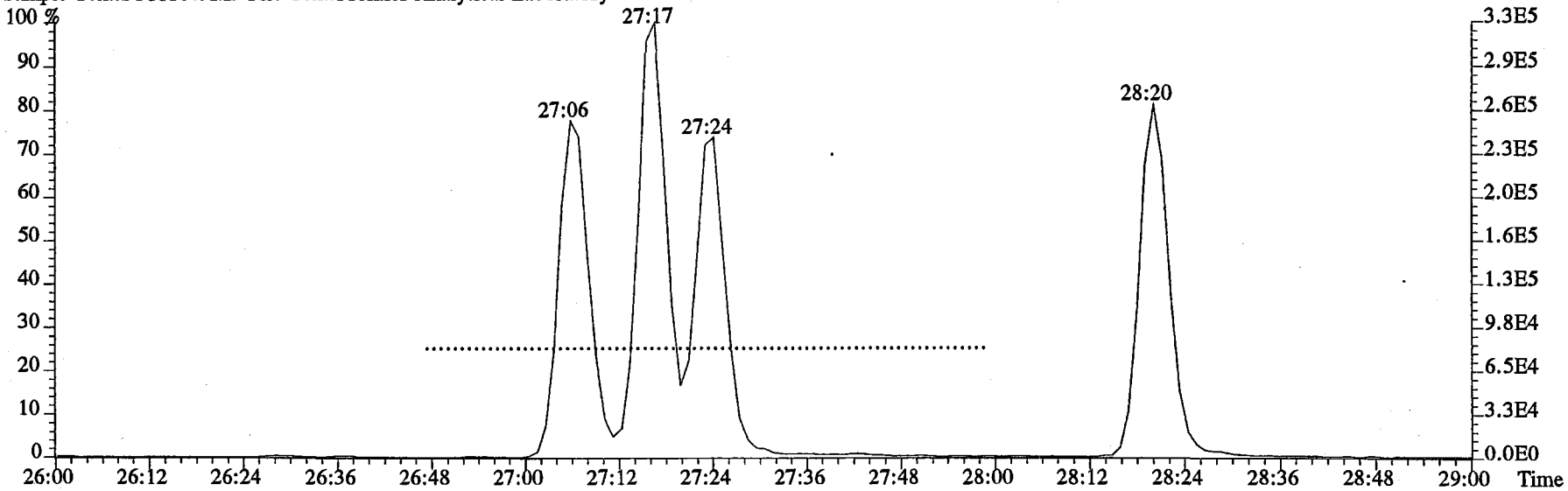




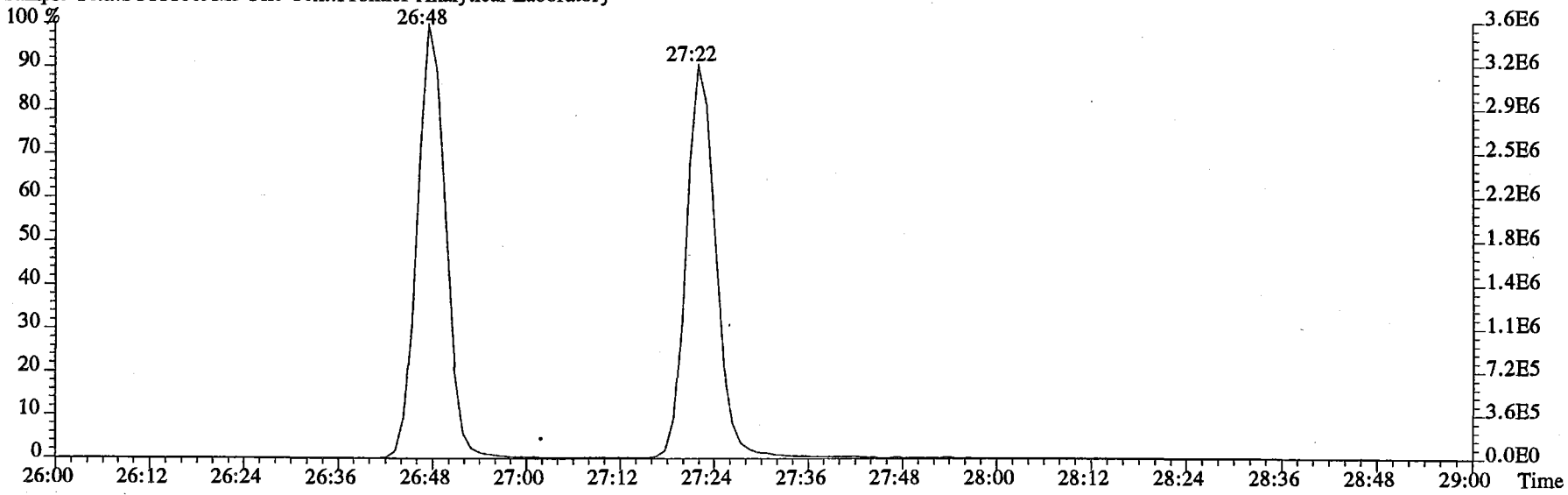




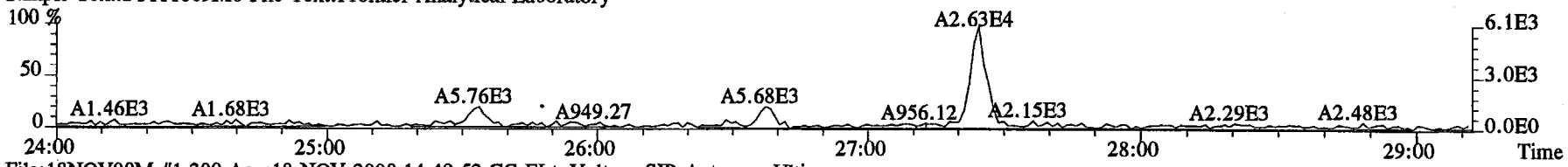
File:18NOV09M #1-372 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



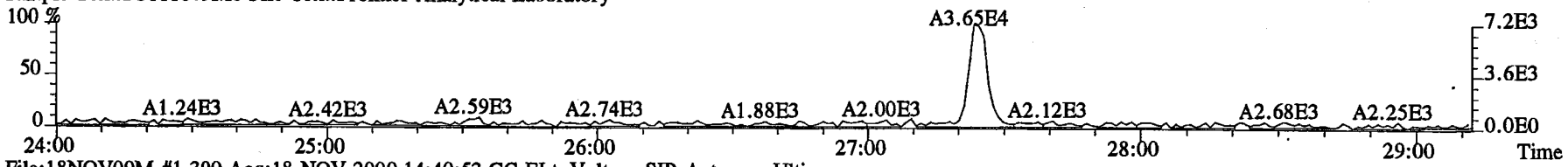
File:18NOV09M #1-372 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



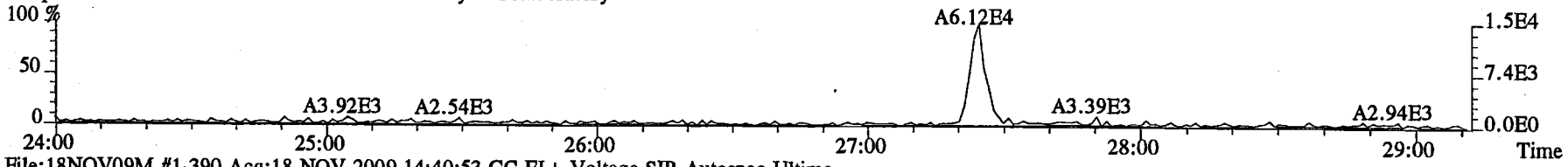
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



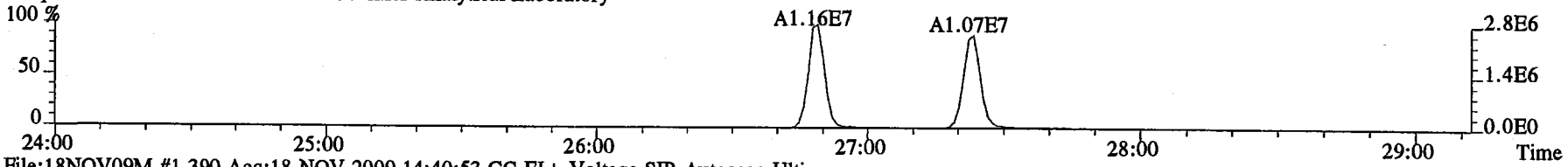
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



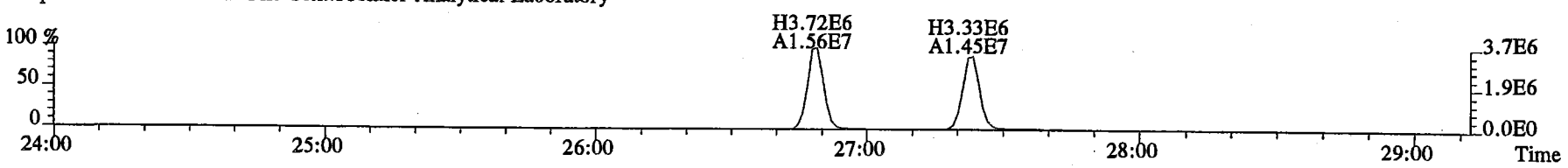
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



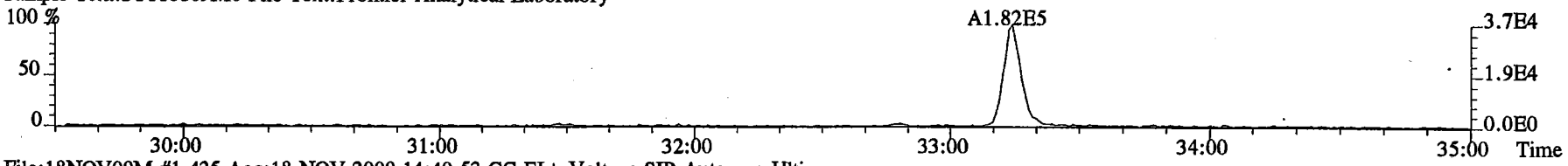
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



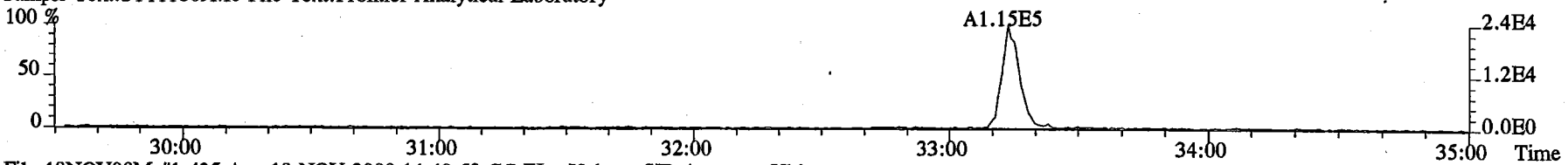
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



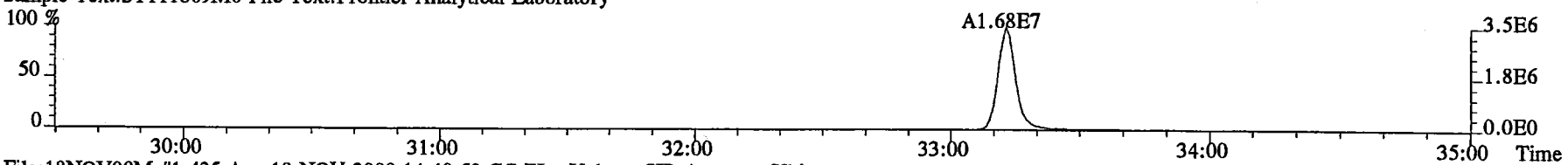
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



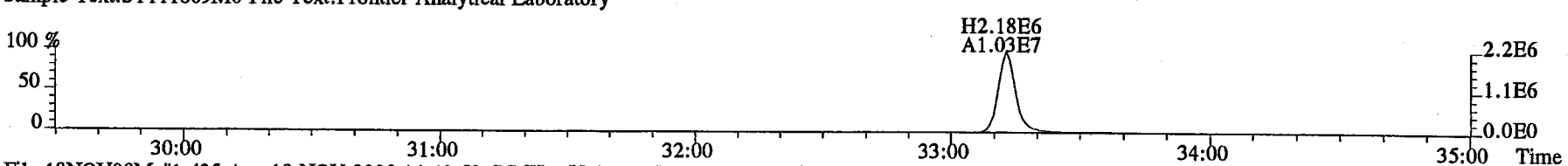
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



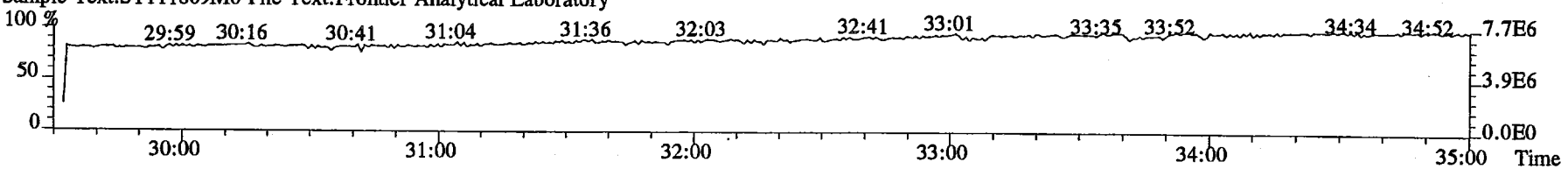
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



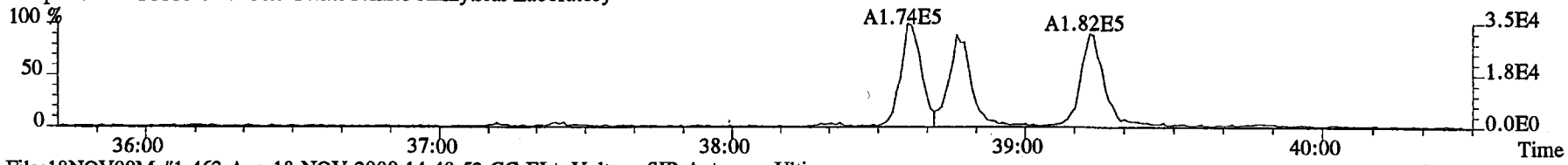
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



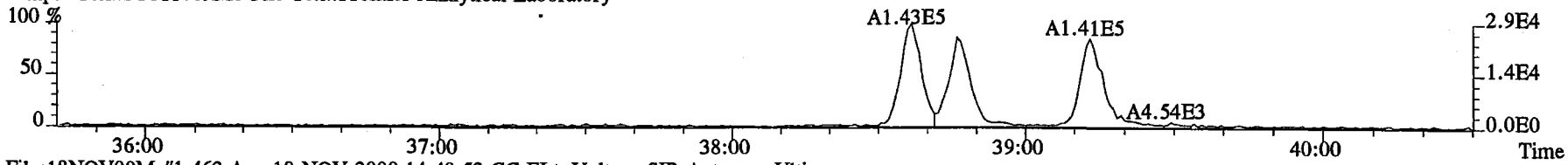
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



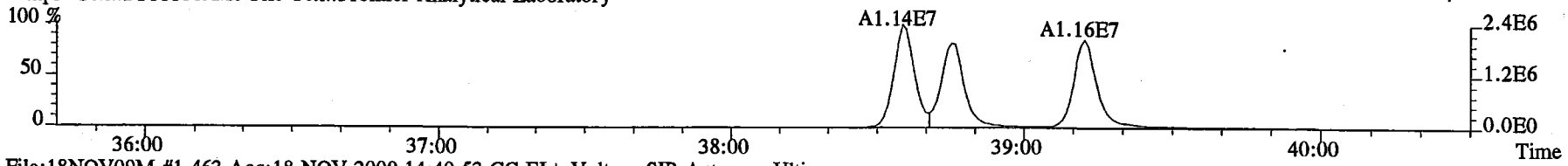
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



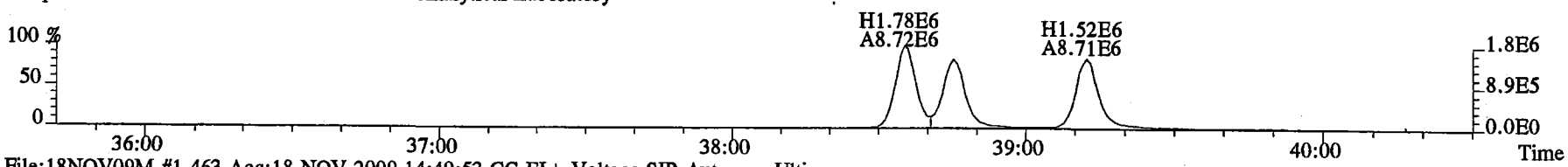
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



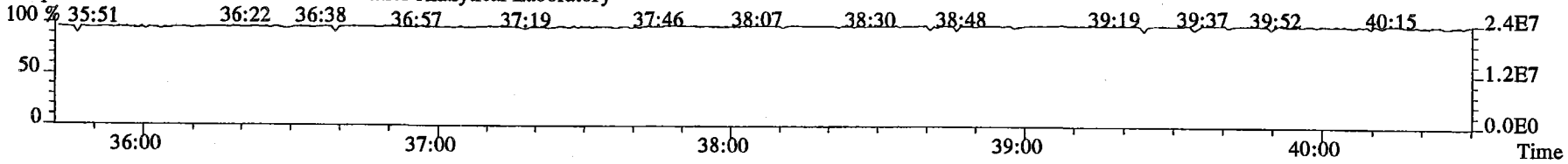
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



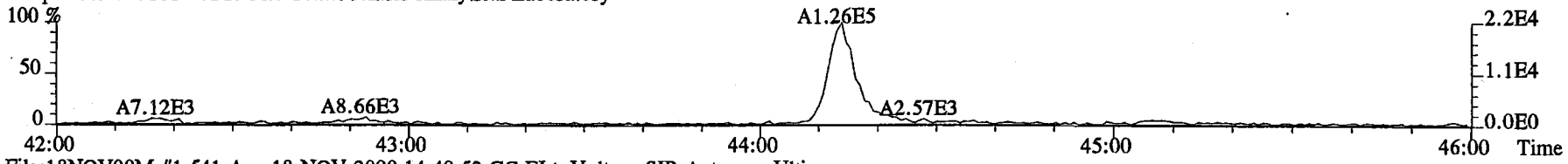
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



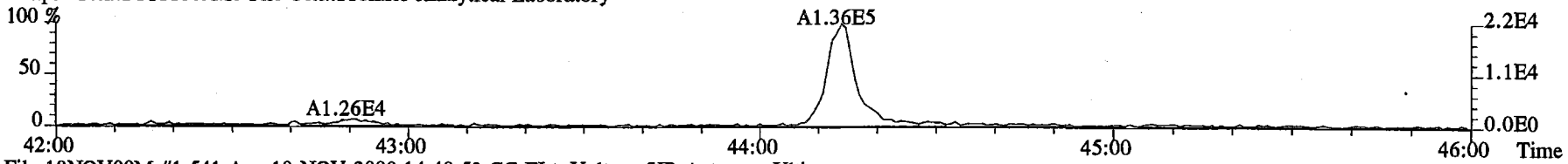
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



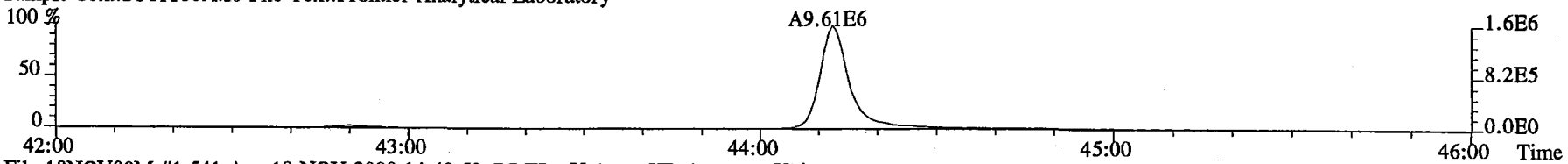
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



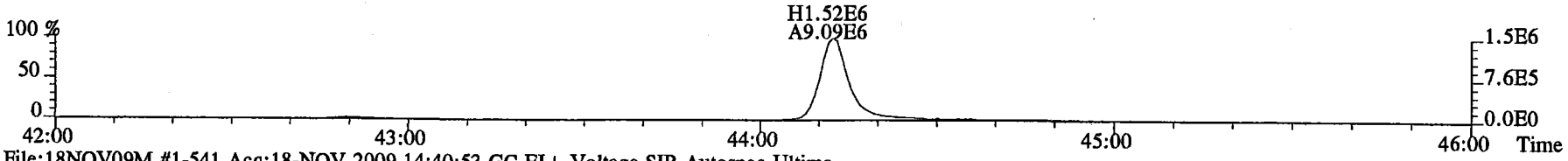
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



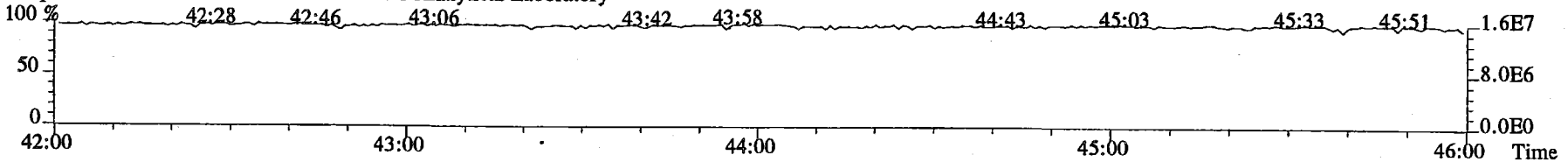
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



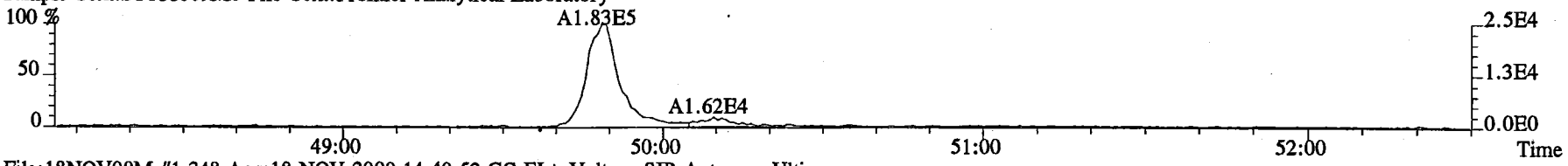
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



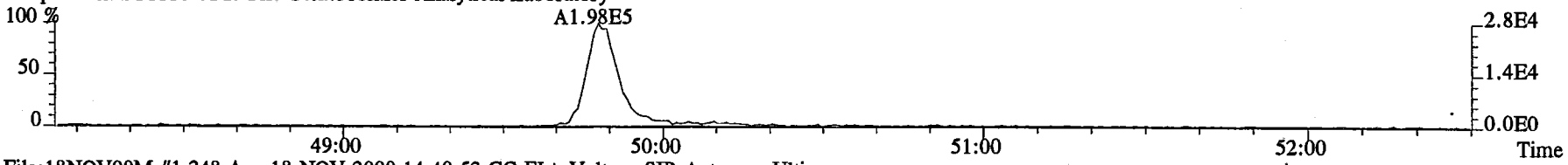
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



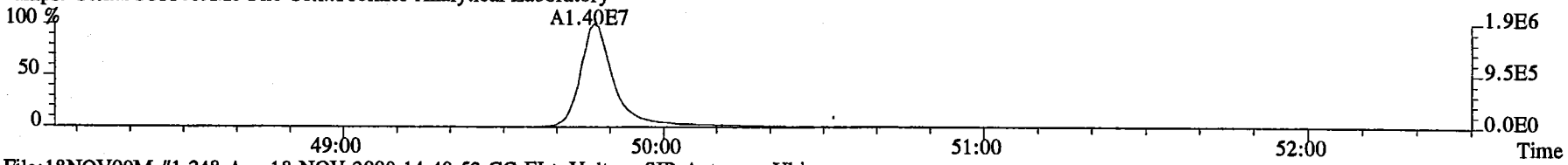
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



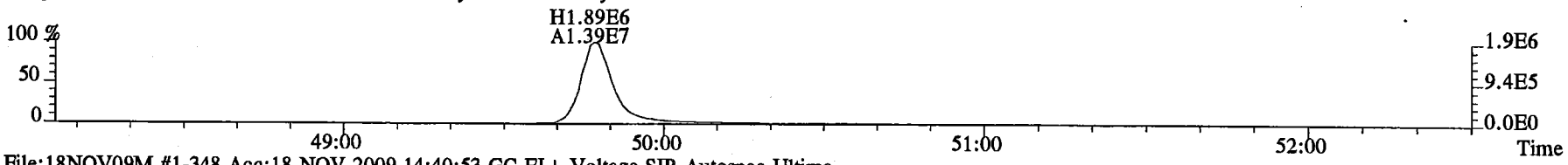
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



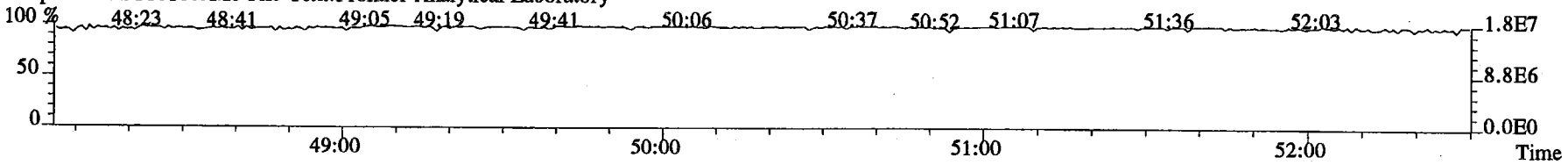
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



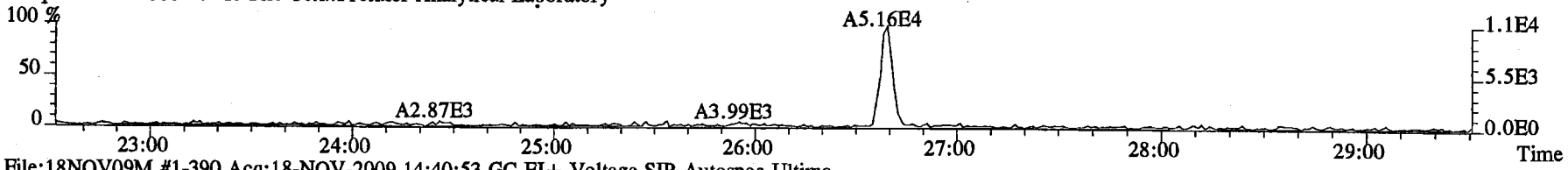
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



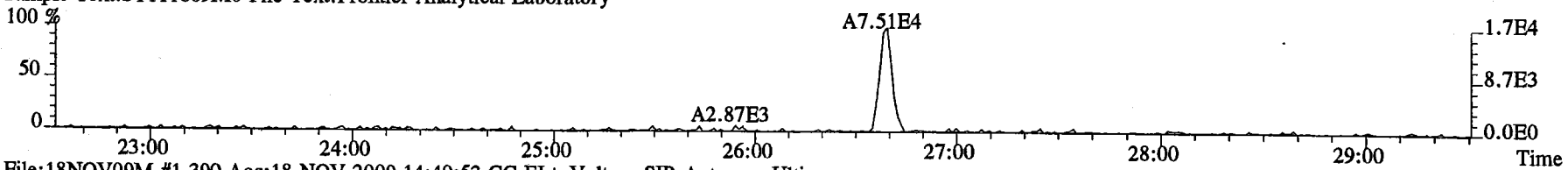
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



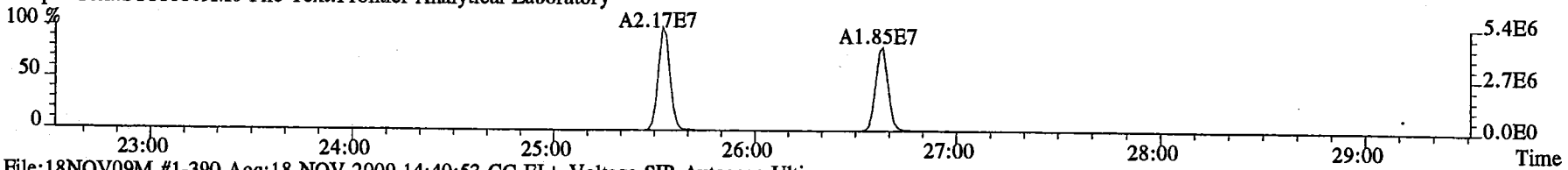
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



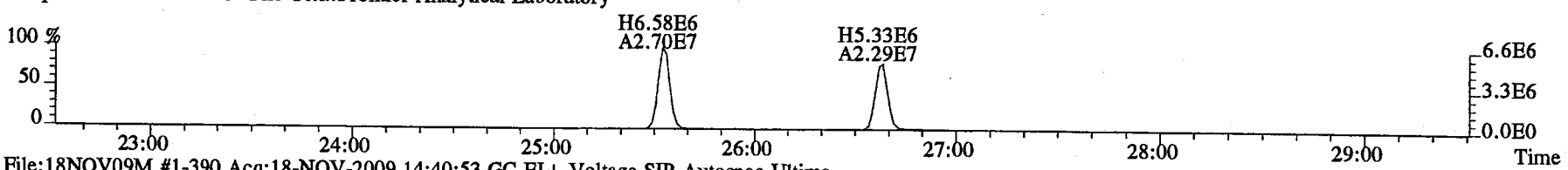
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,0.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



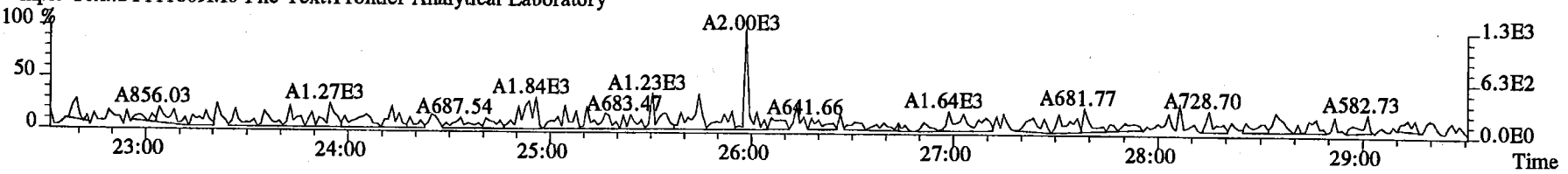
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



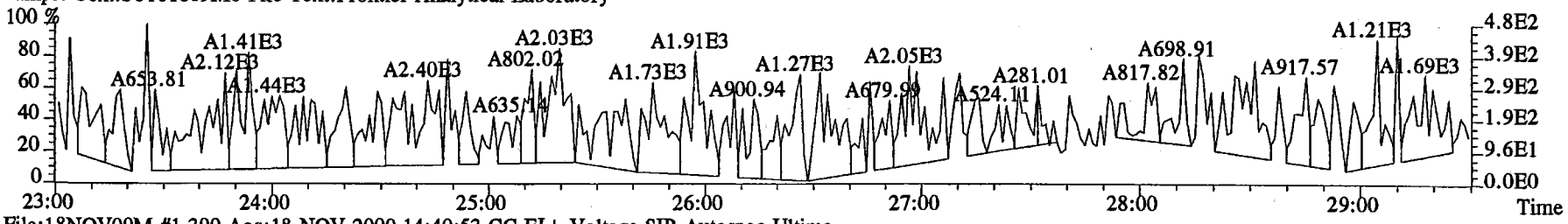
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



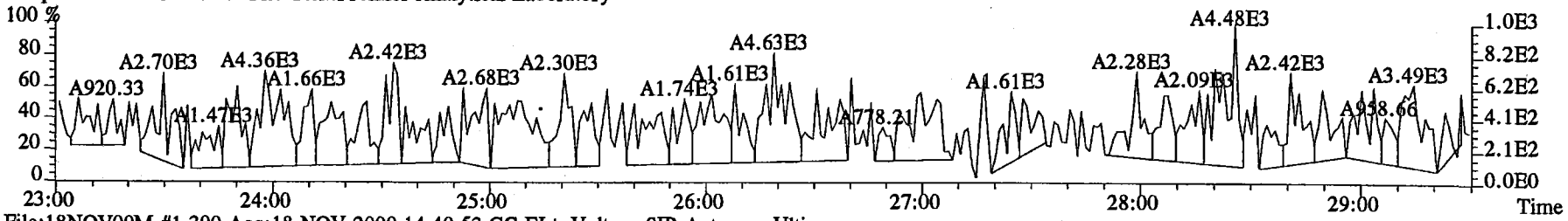
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



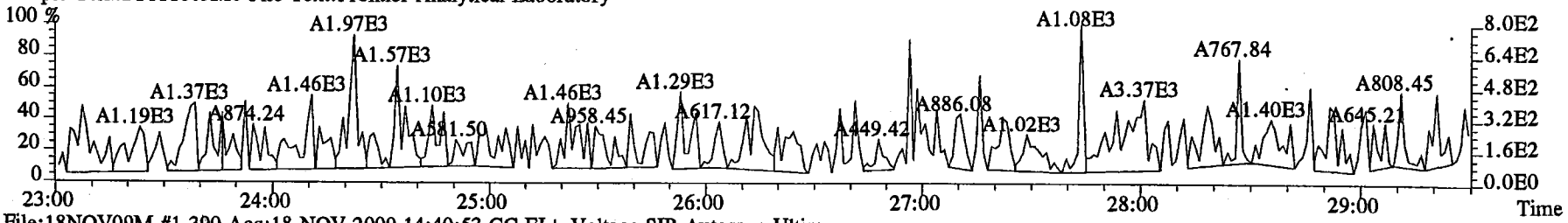
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



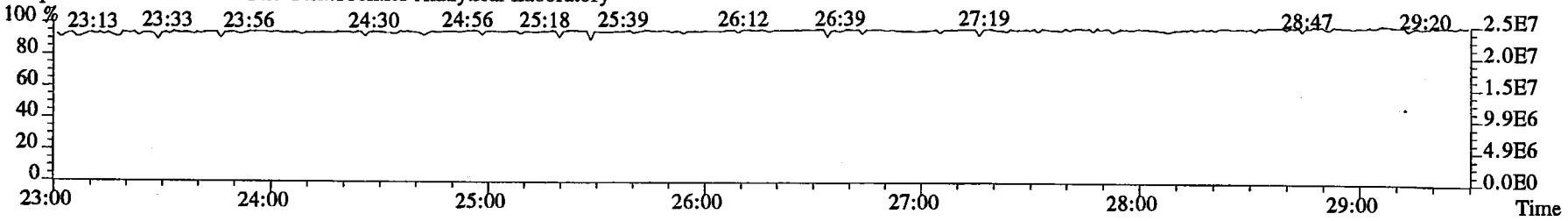
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



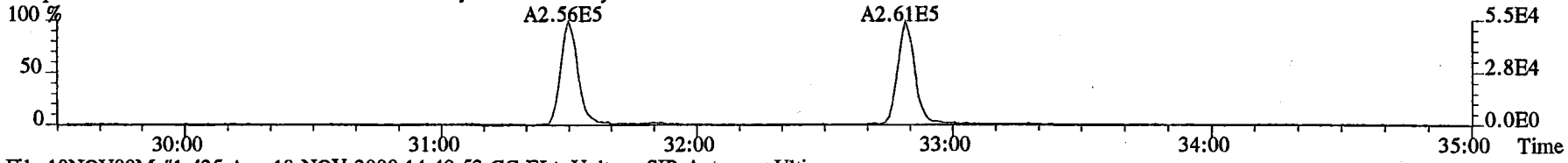
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



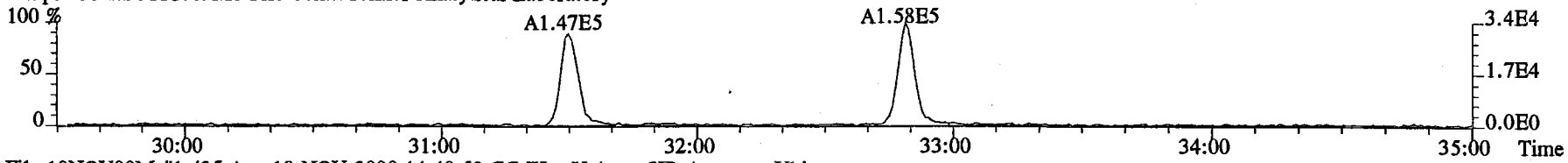
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



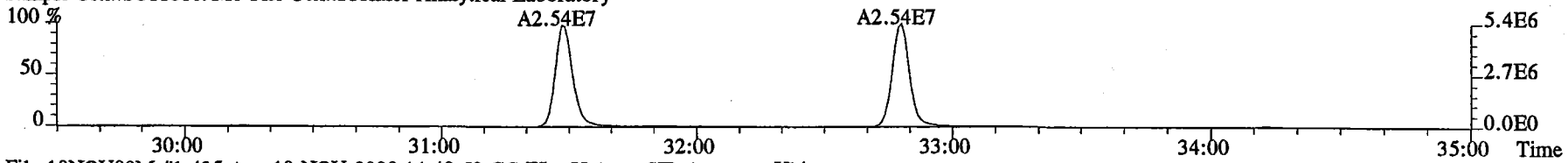
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



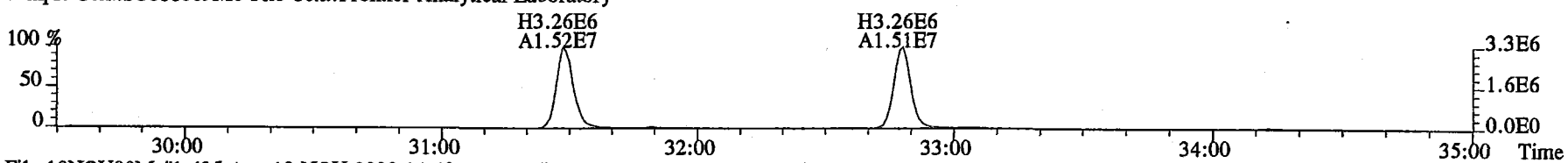
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



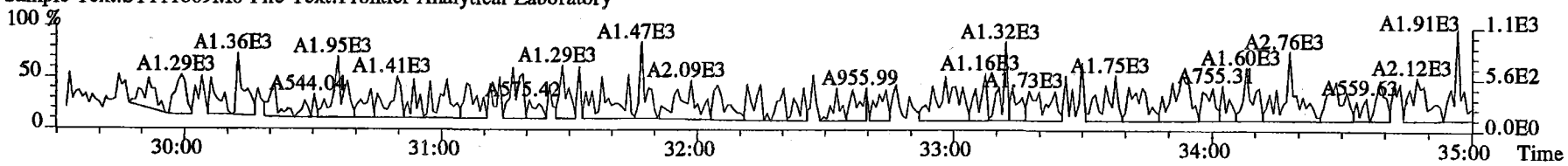
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



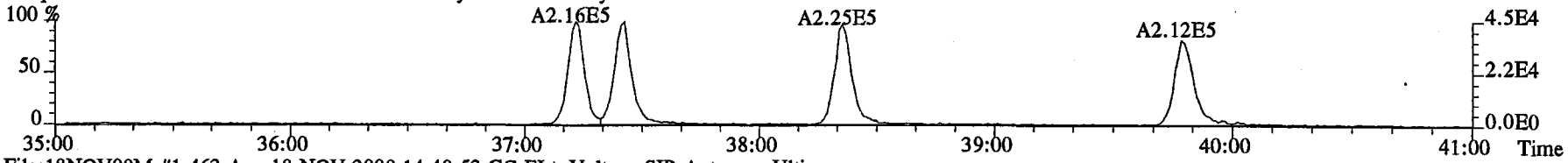
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



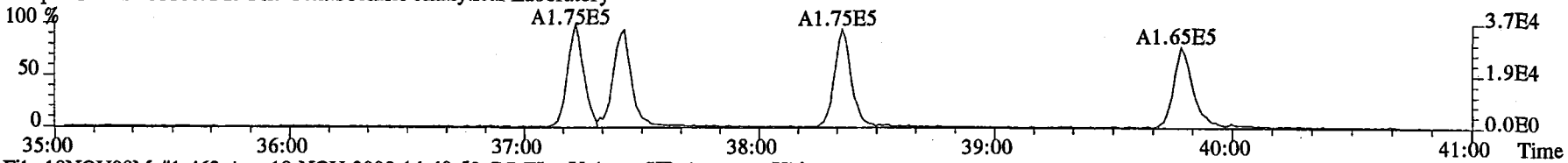
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



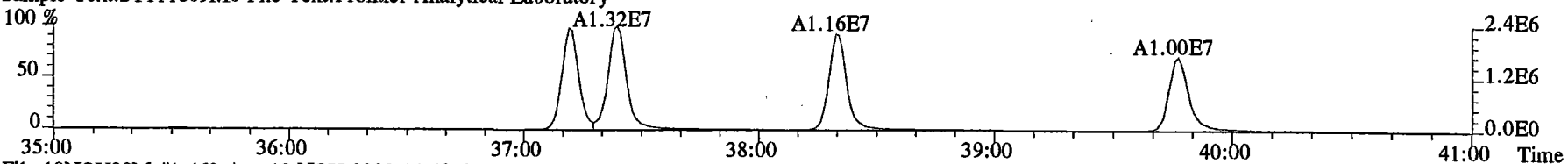
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



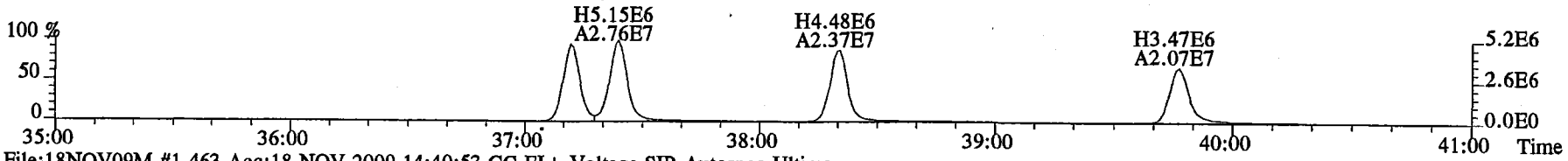
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



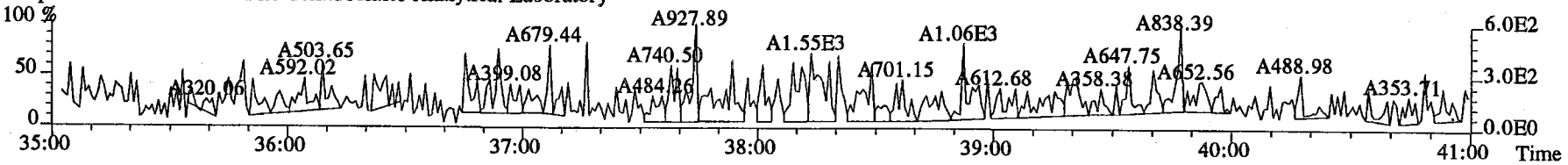
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



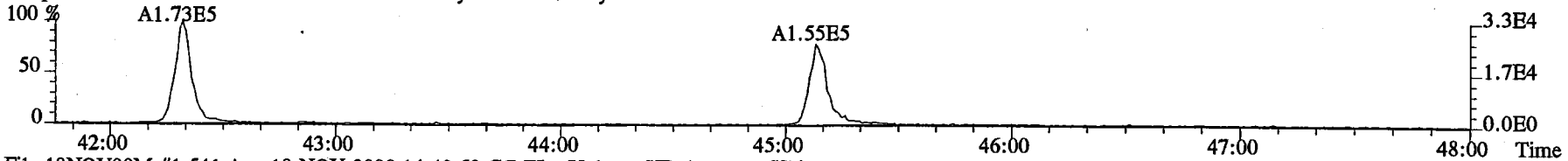
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



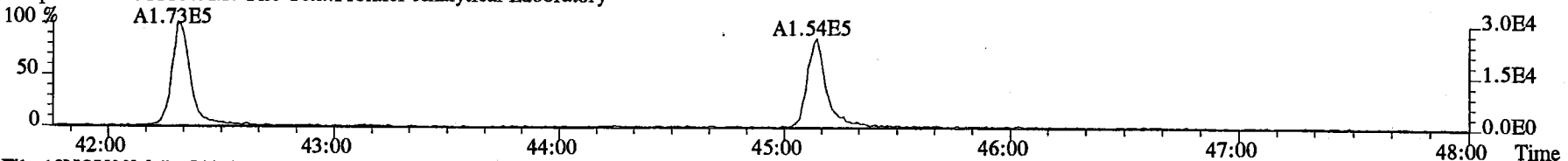
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



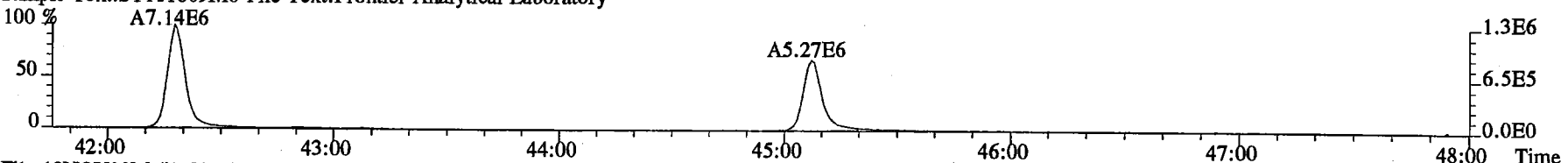
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



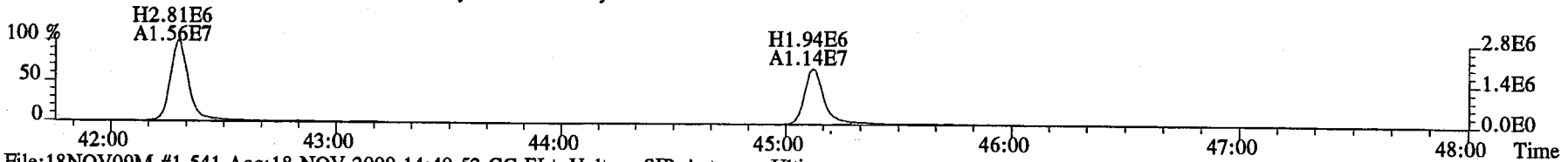
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



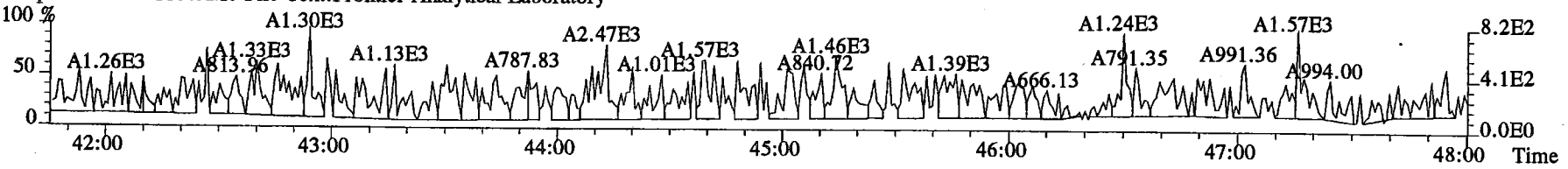
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



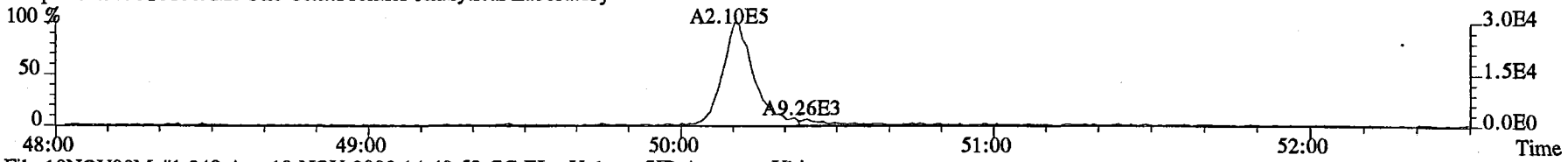
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



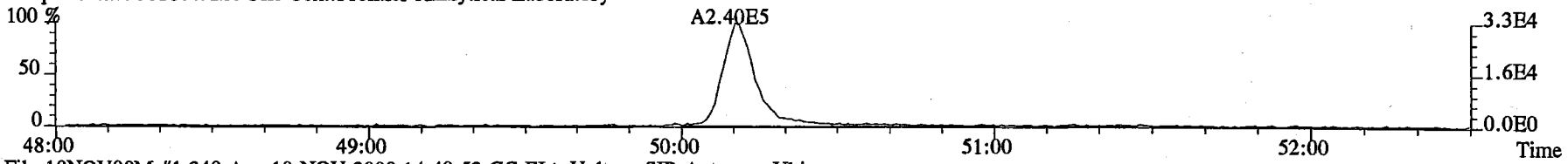
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



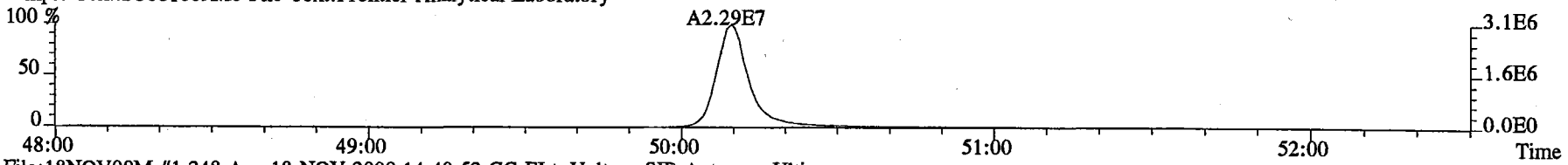
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



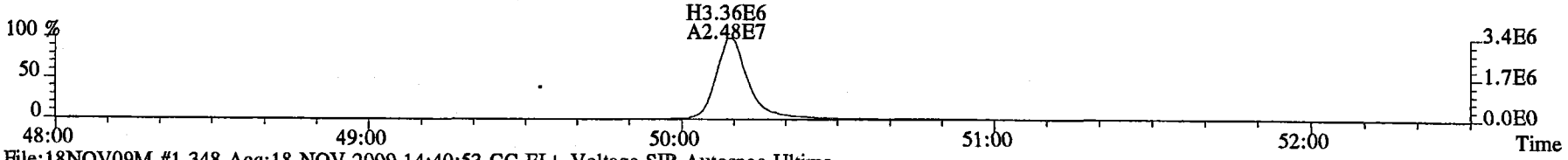
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



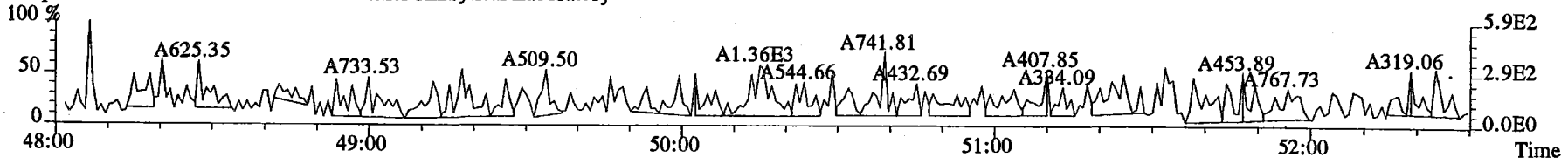
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



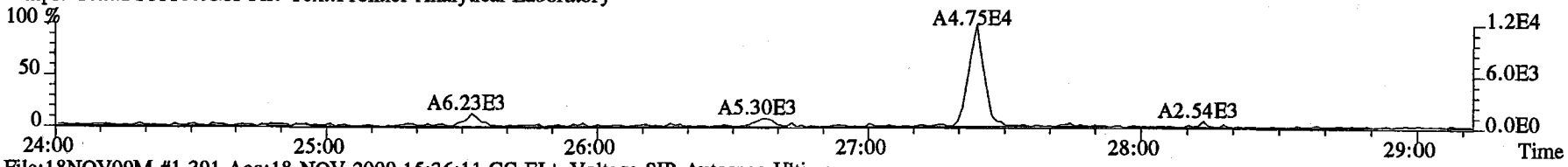
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



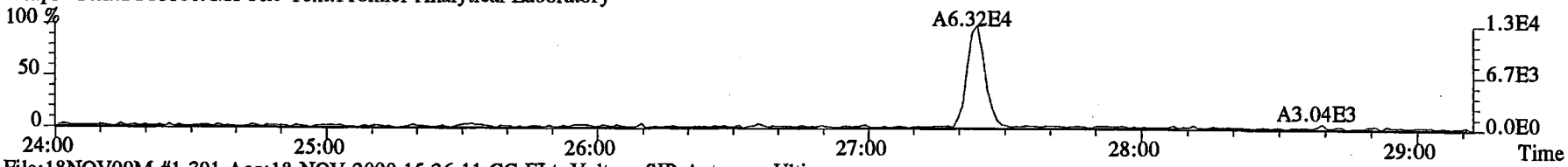
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



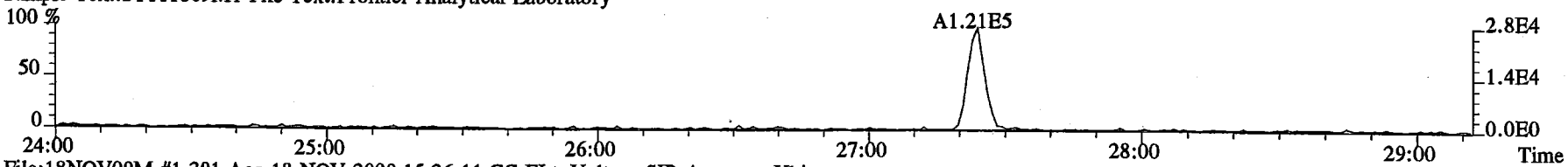
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



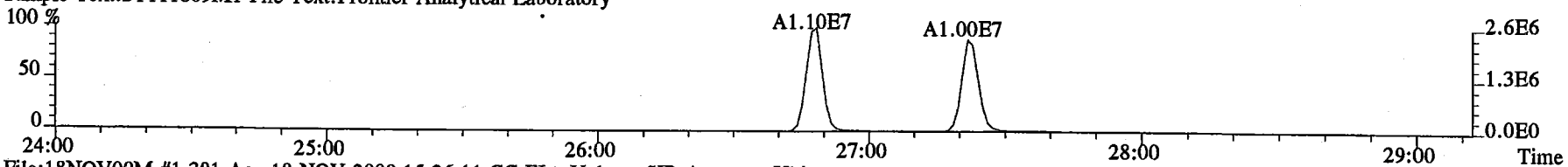
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



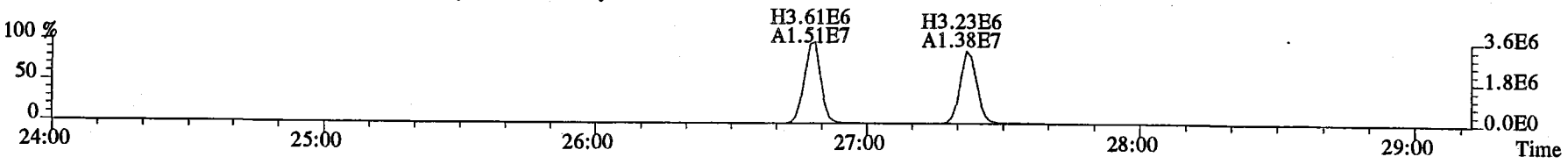
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



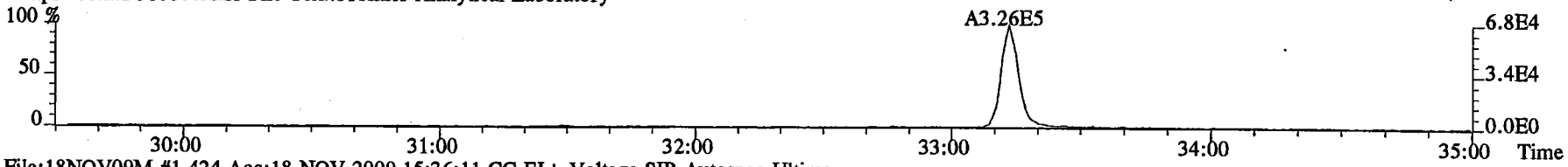
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



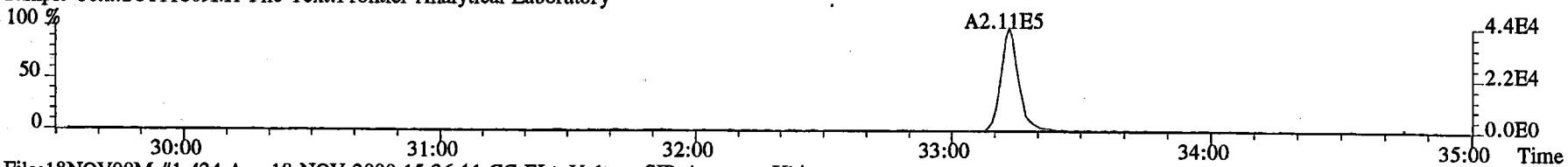
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



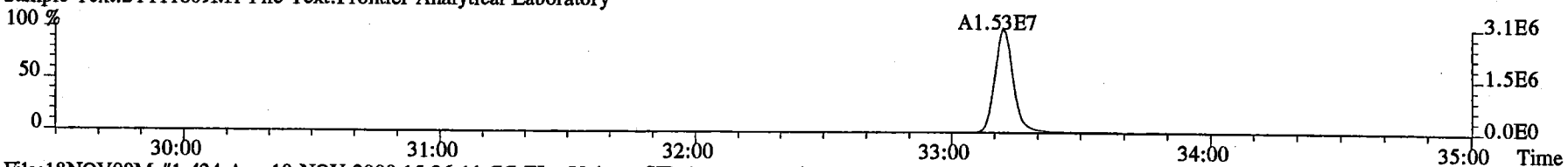
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



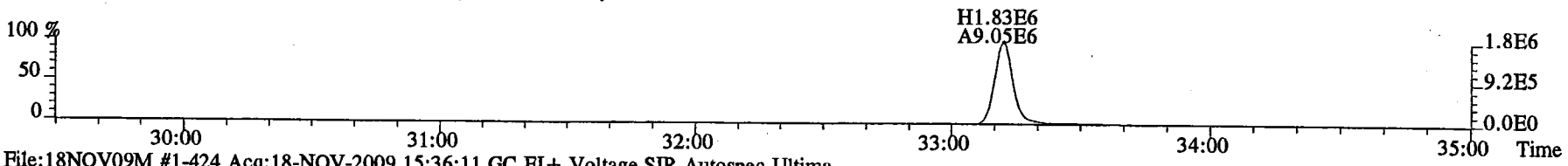
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



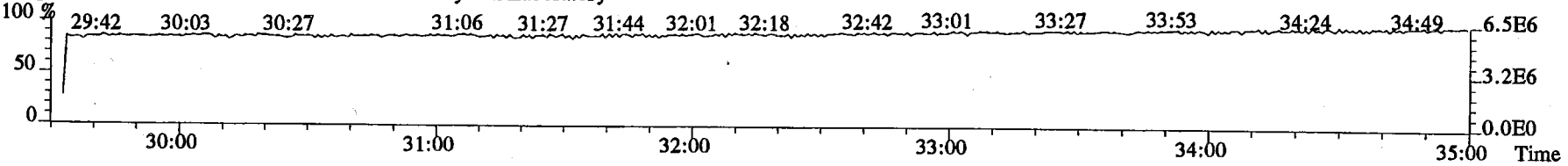
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



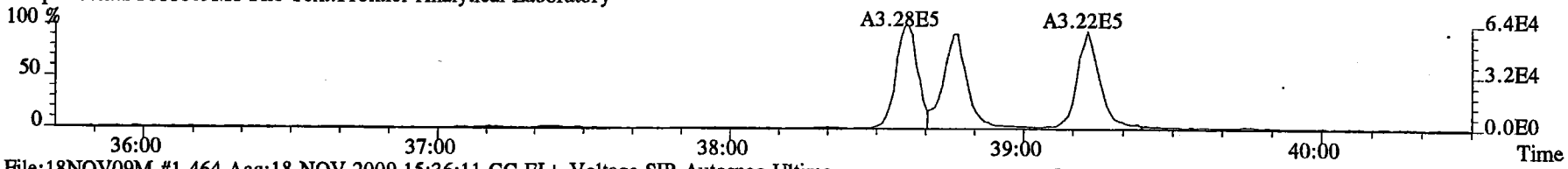
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



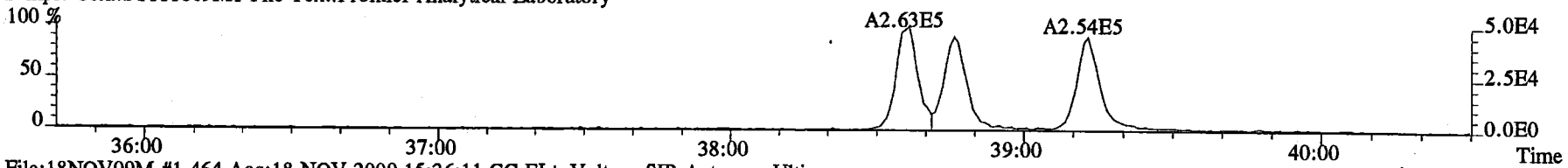
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



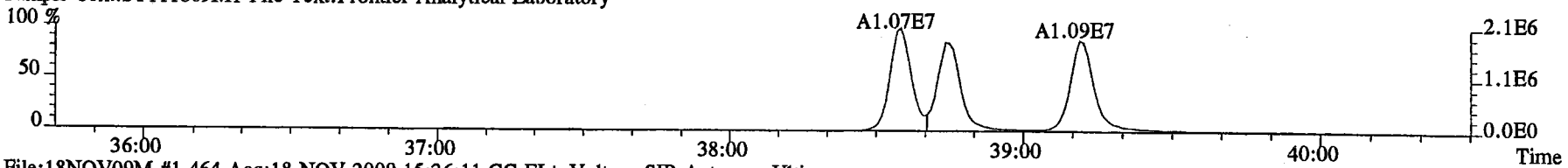
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



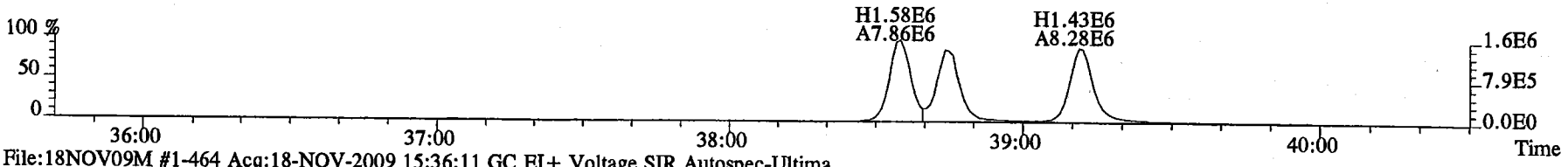
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



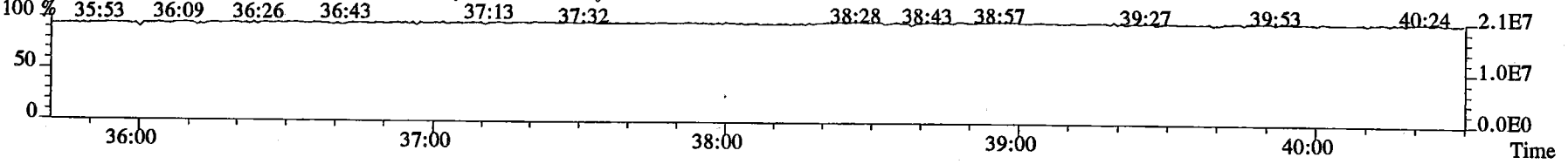
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



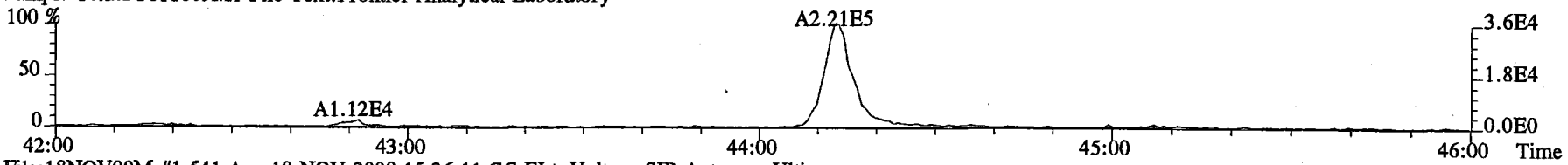
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



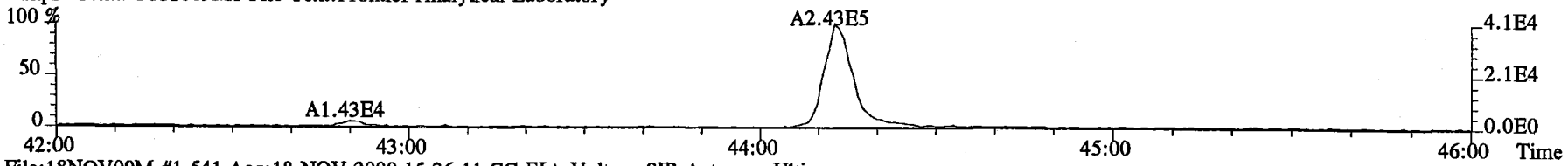
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



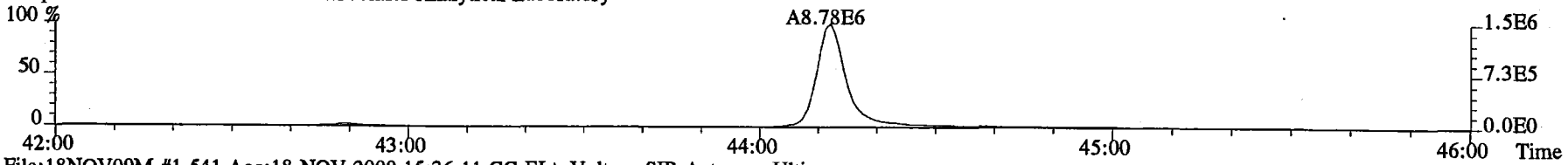
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



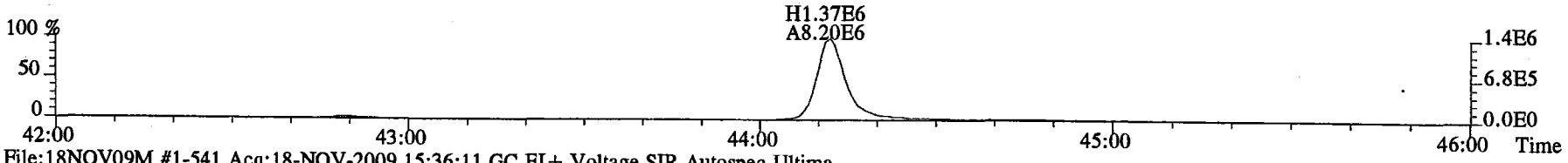
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



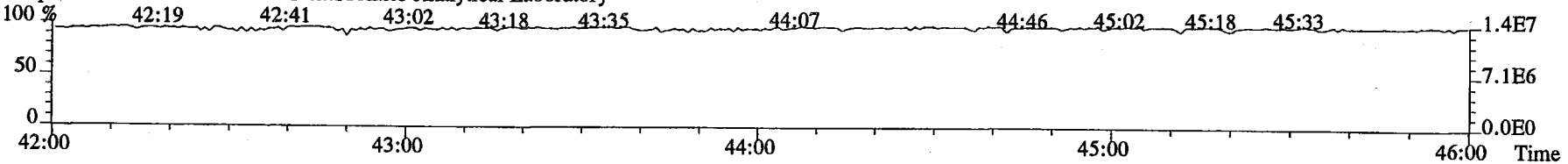
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



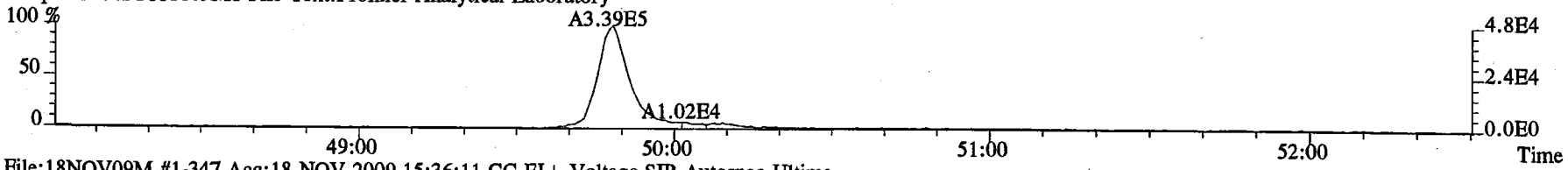
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



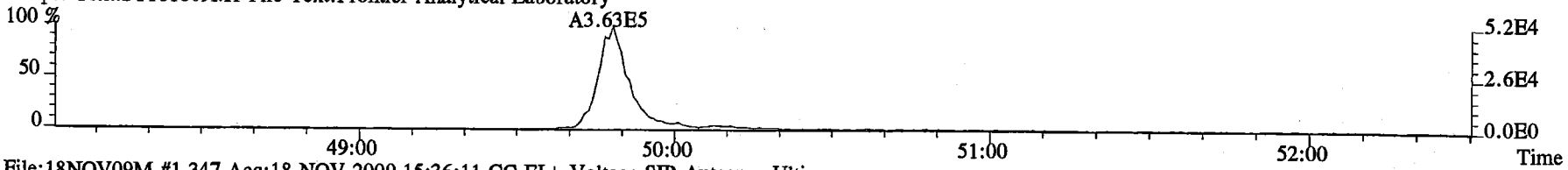
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



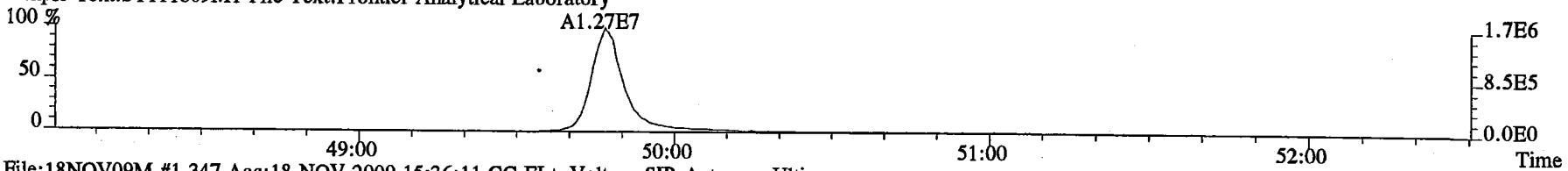
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



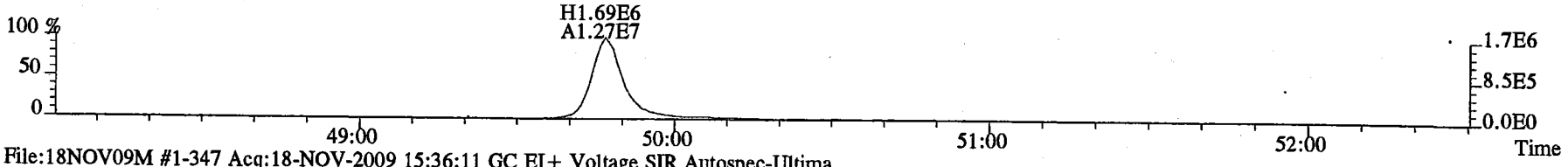
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



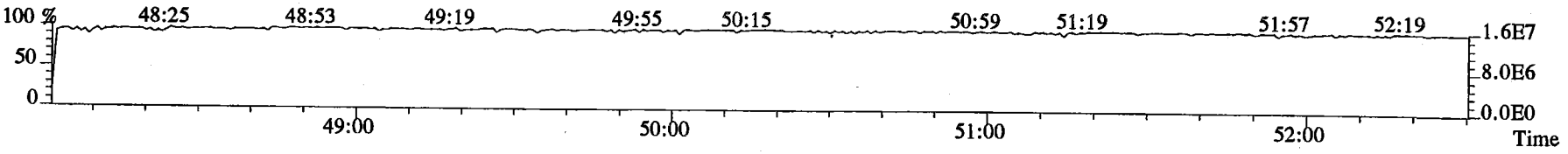
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



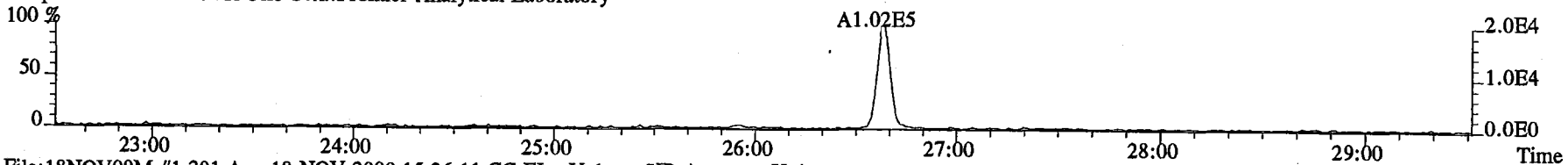
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



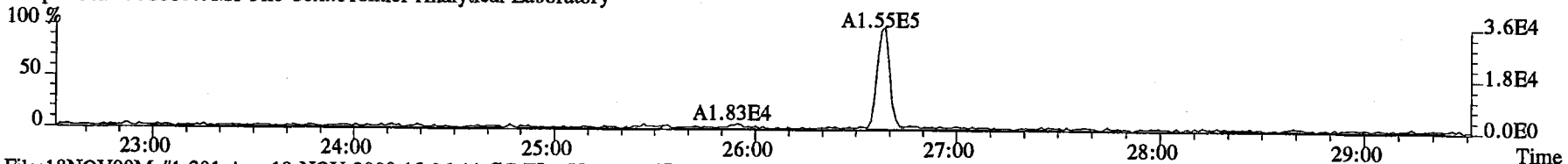
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



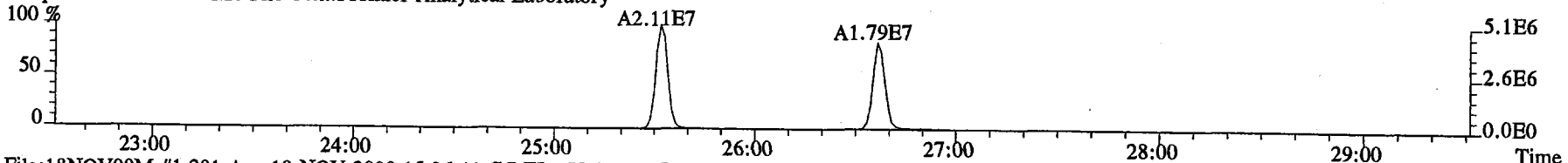
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



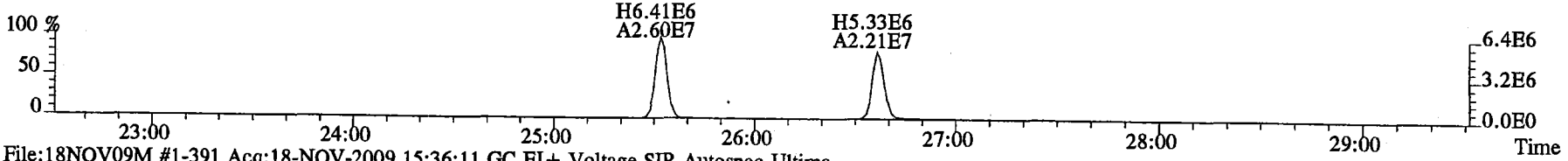
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



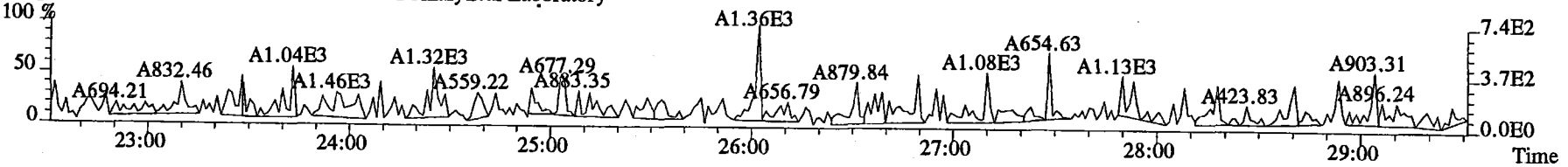
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



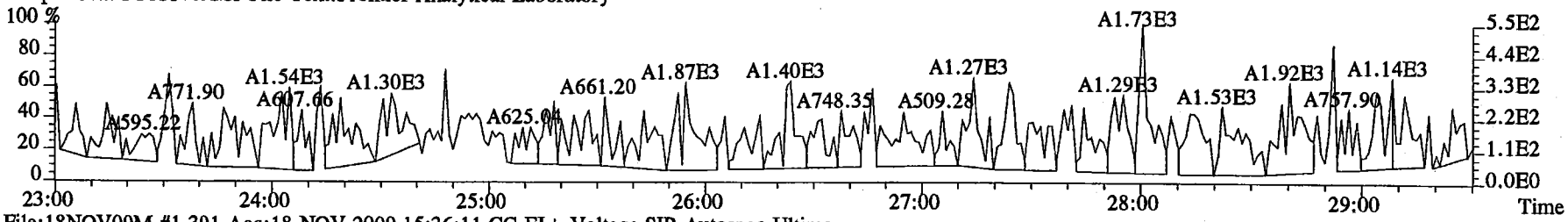
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



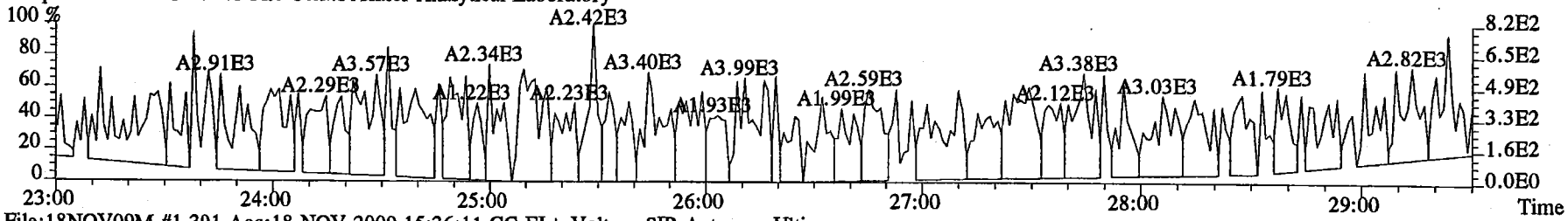
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



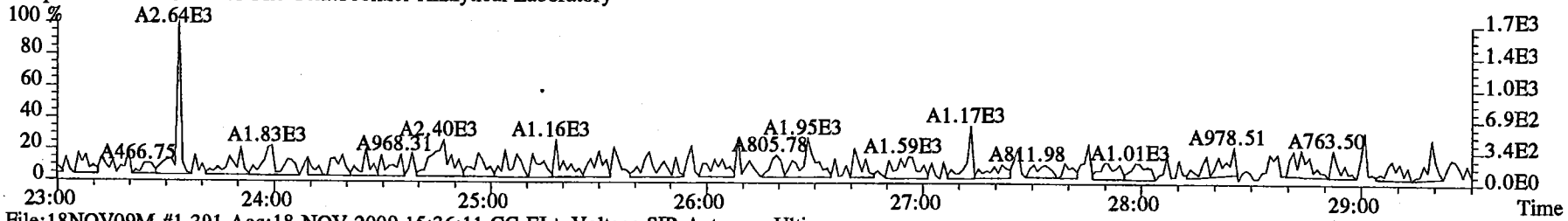
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



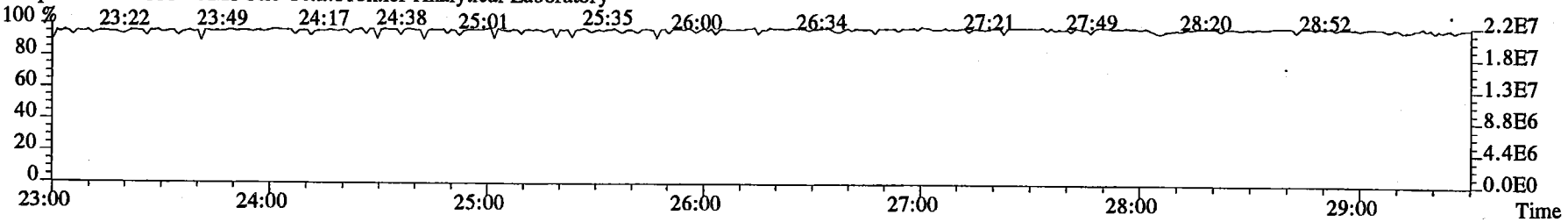
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



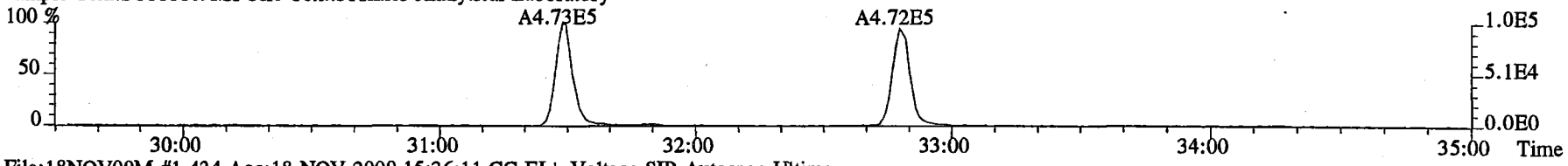
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



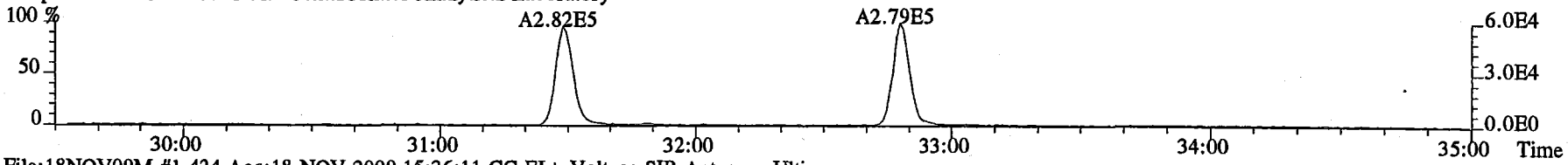
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



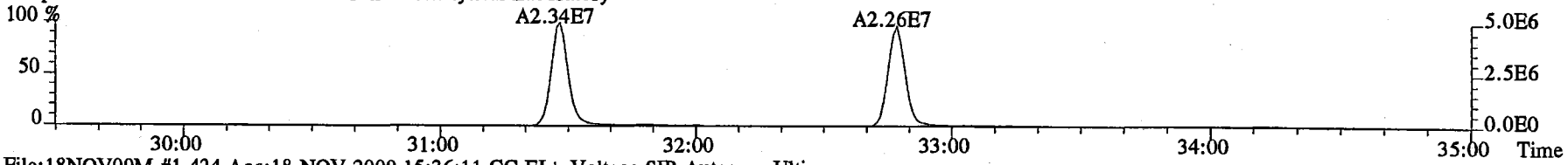
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



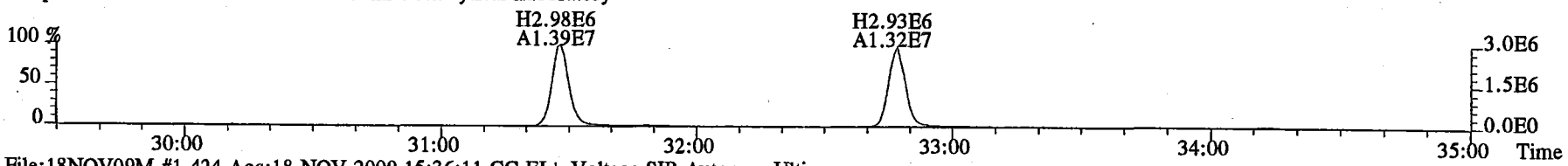
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



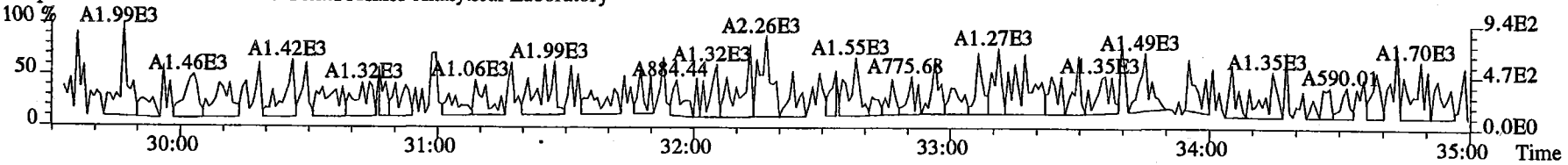
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



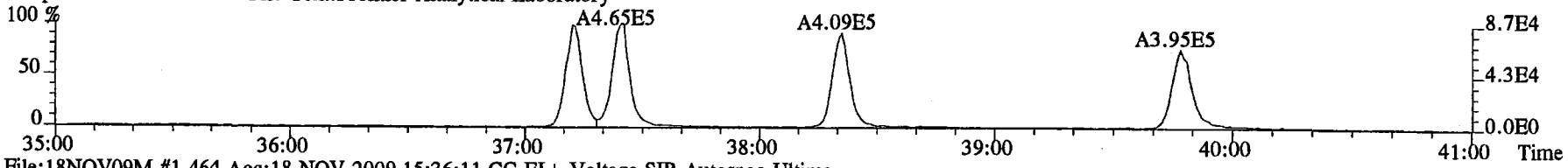
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



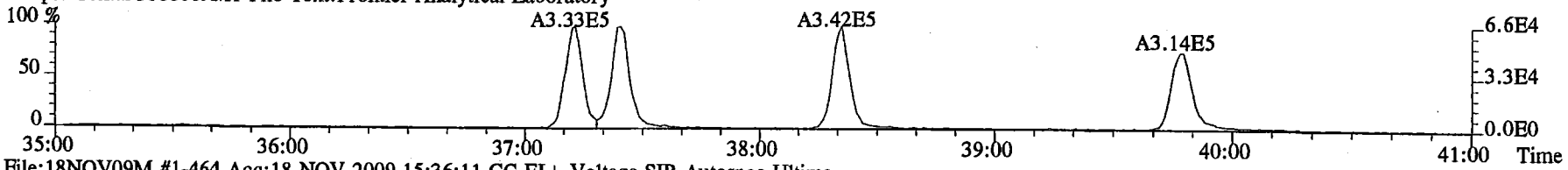
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



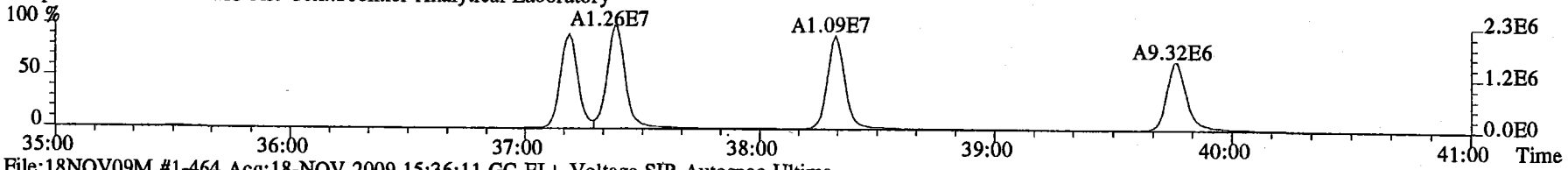
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



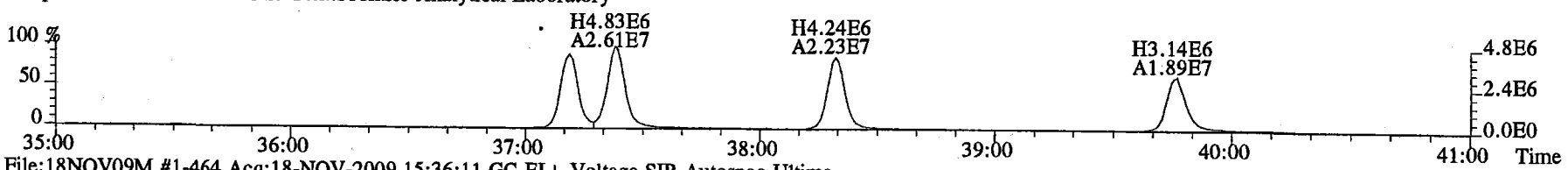
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



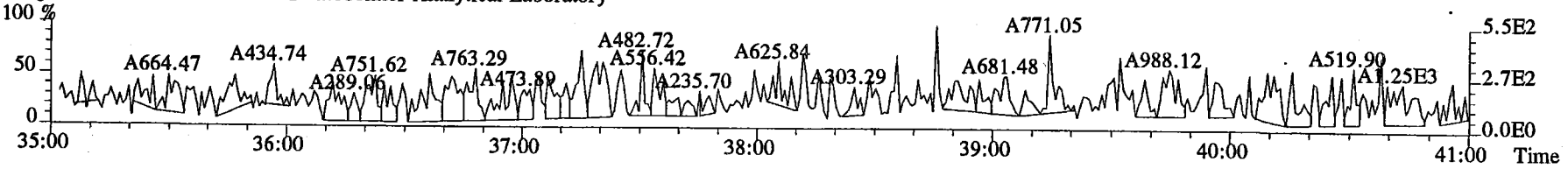
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



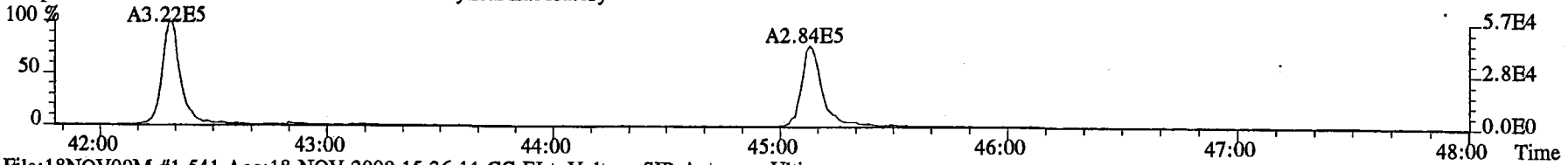
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



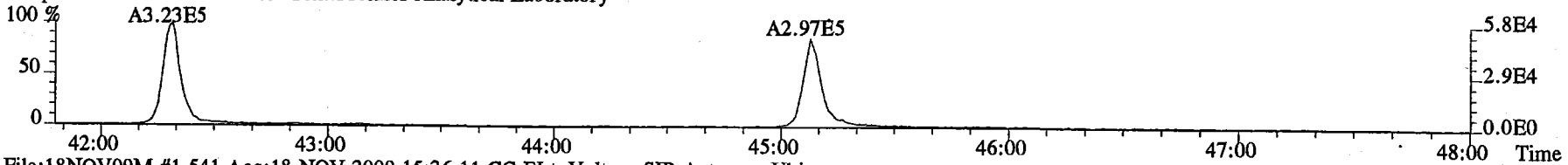
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



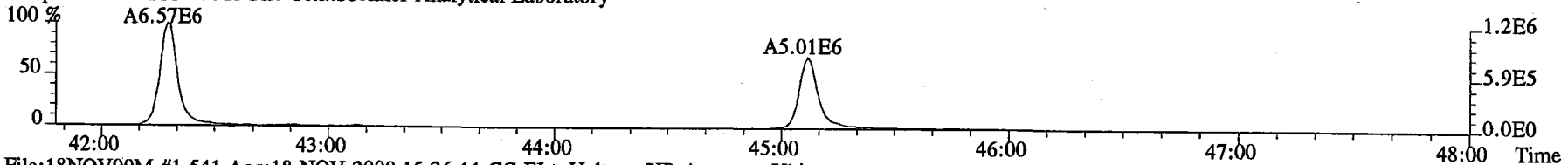
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



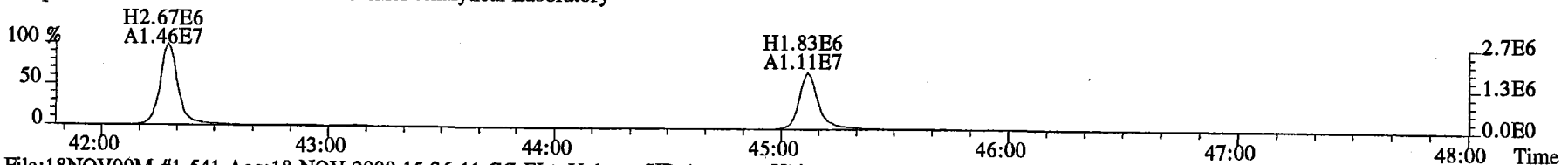
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



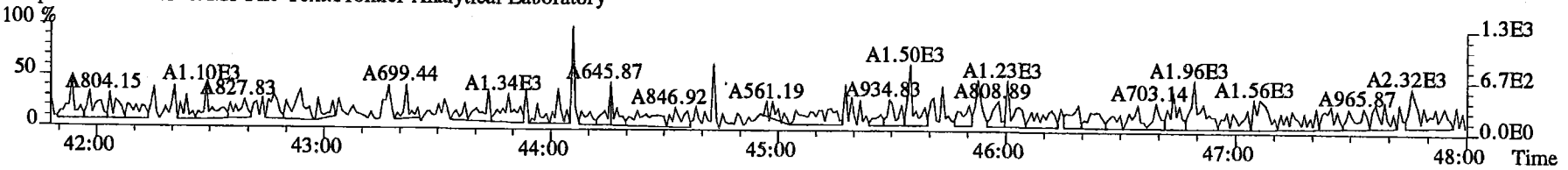
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



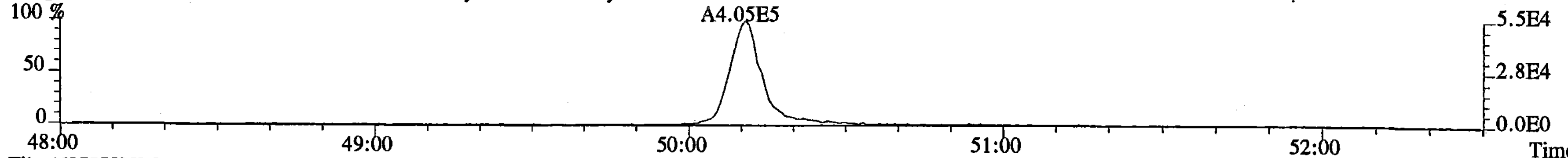
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



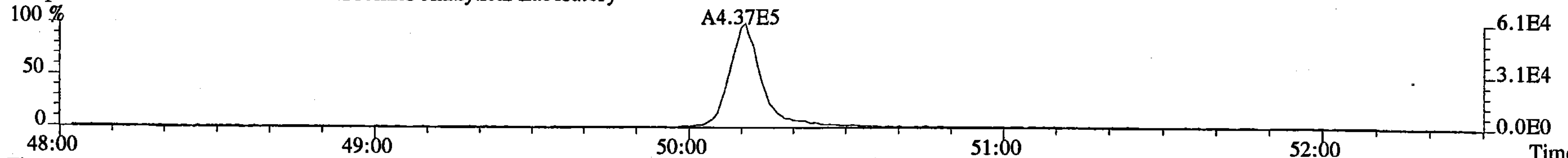
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



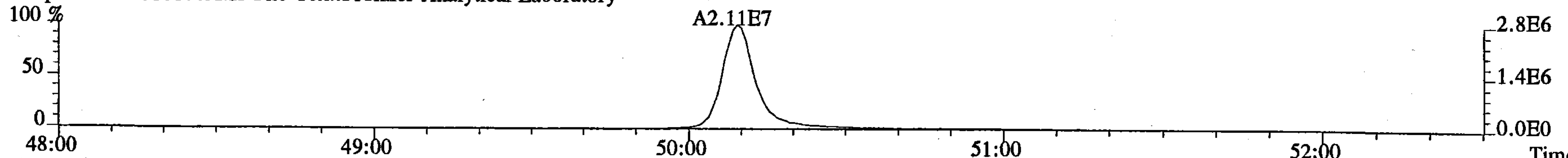
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



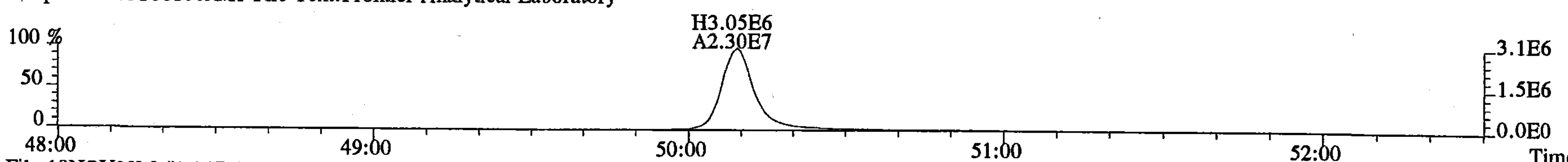
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



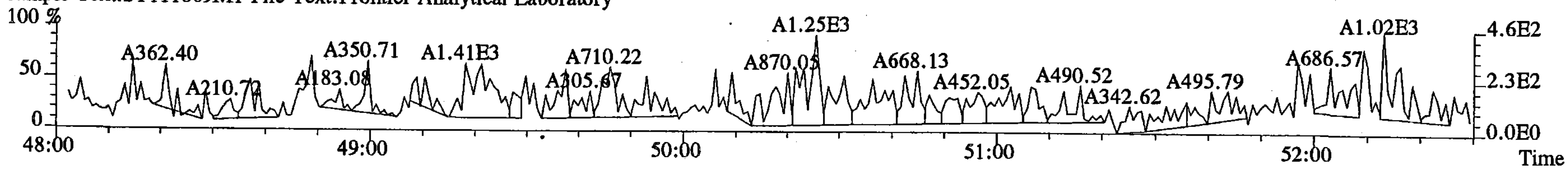
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 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:ST111809M1 File Text:Frontier Analytical Laboratory

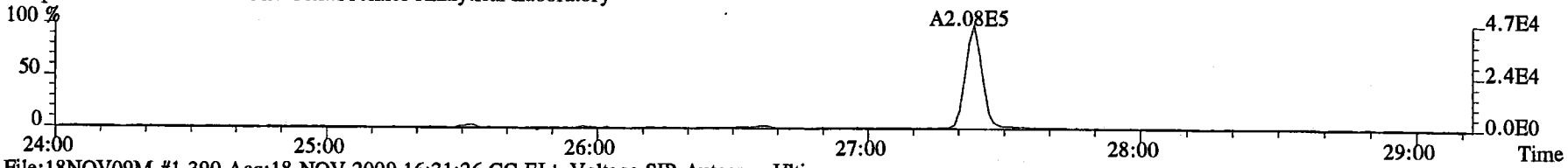


File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory

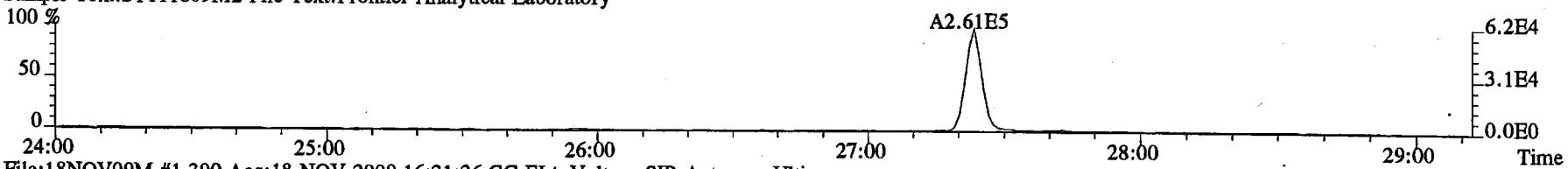


QN21 : 00747

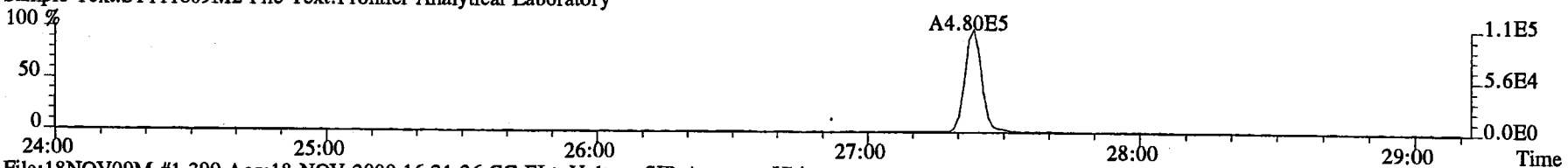
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



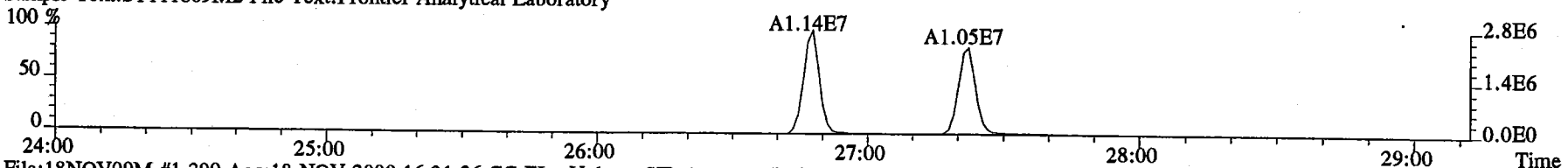
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



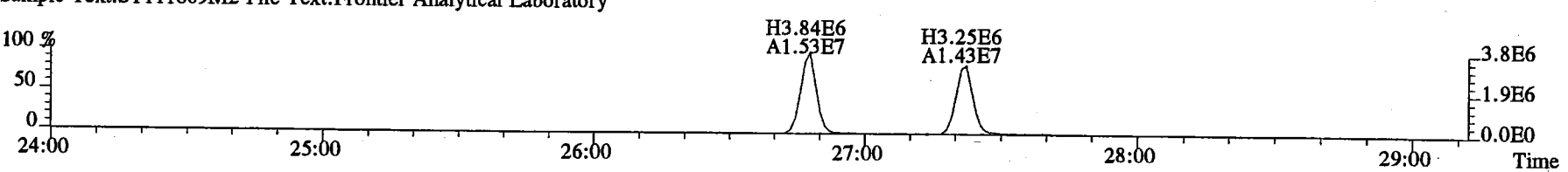
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



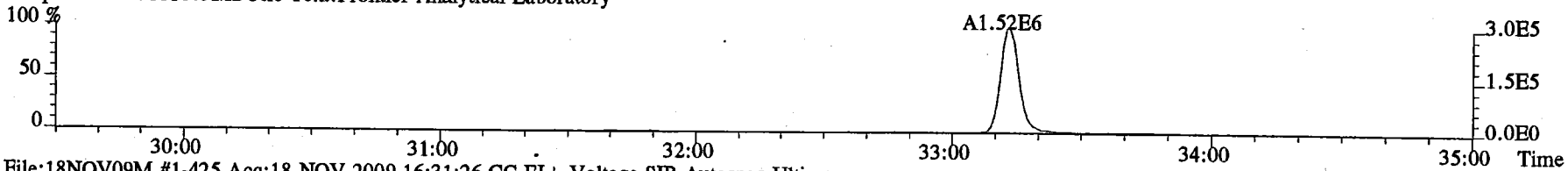
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



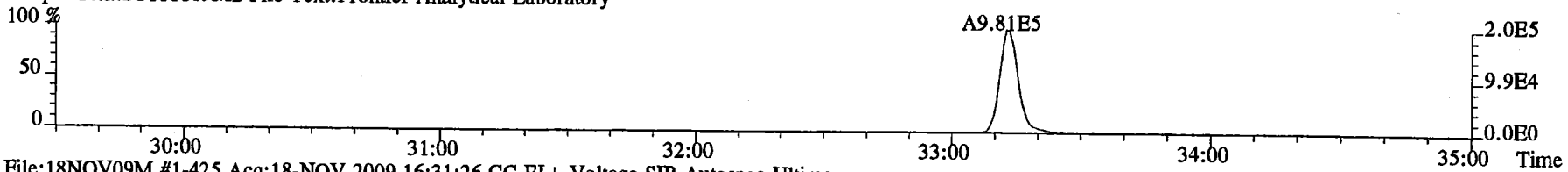
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



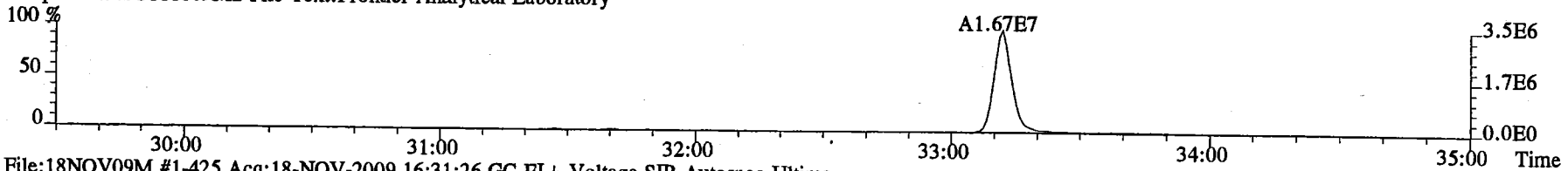
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



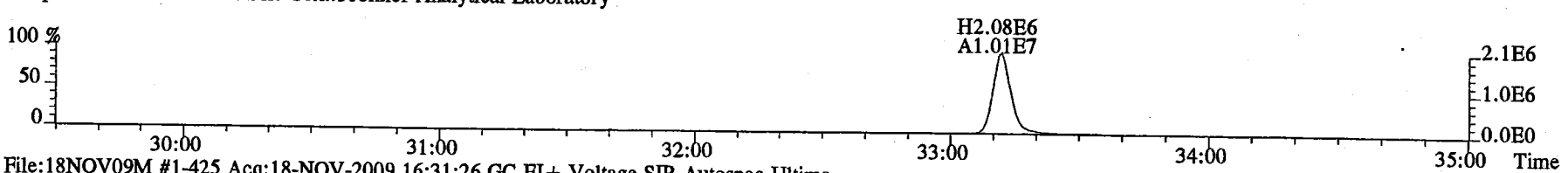
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



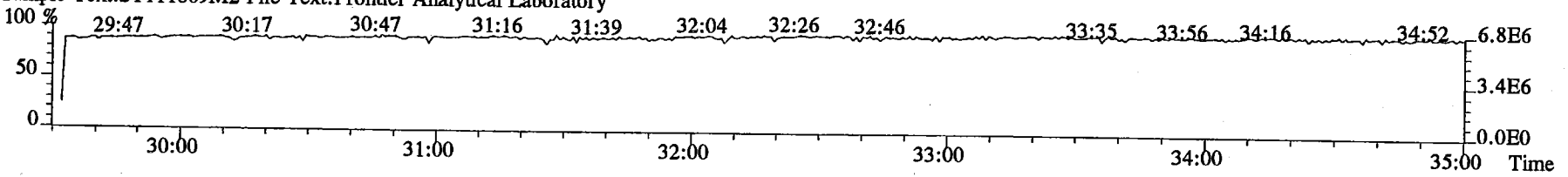
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



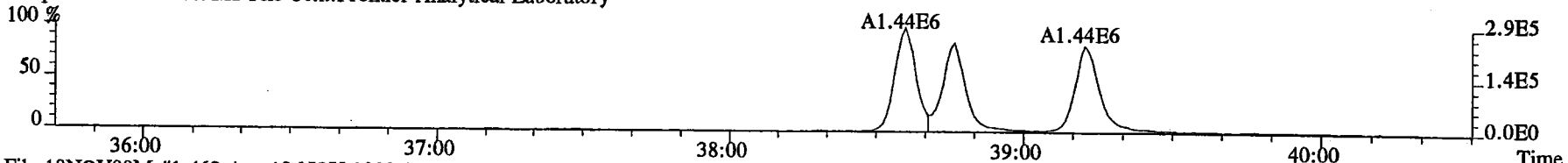
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



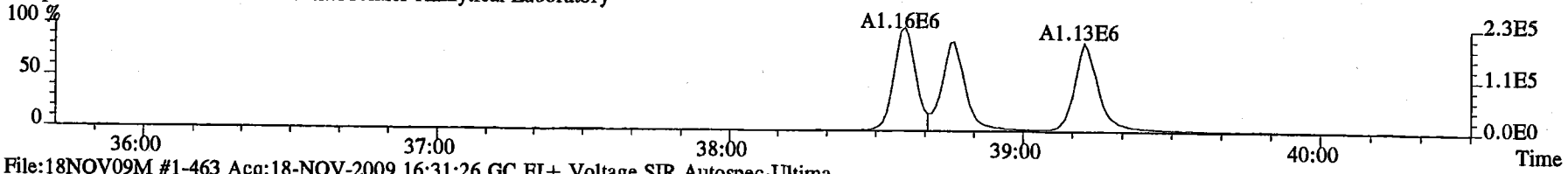
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



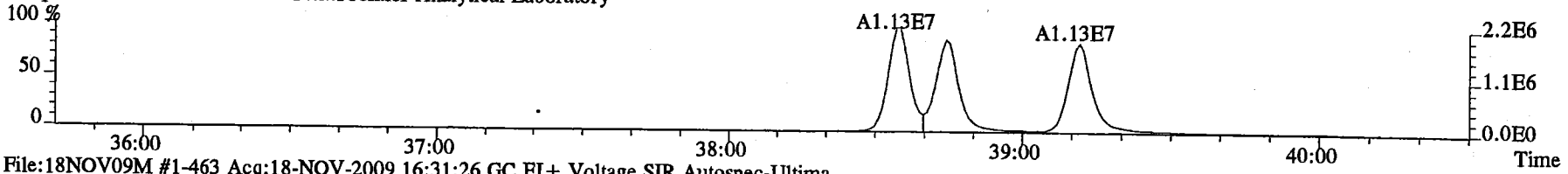
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



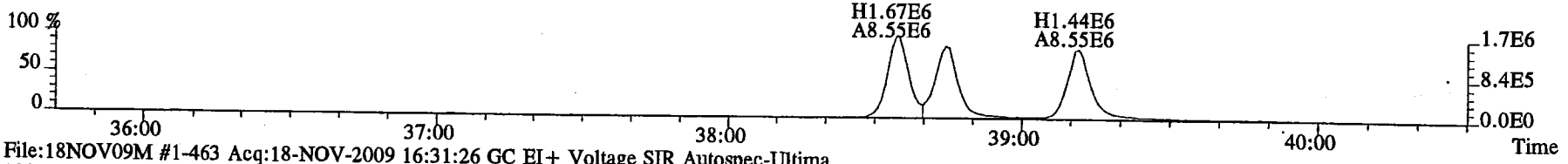
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



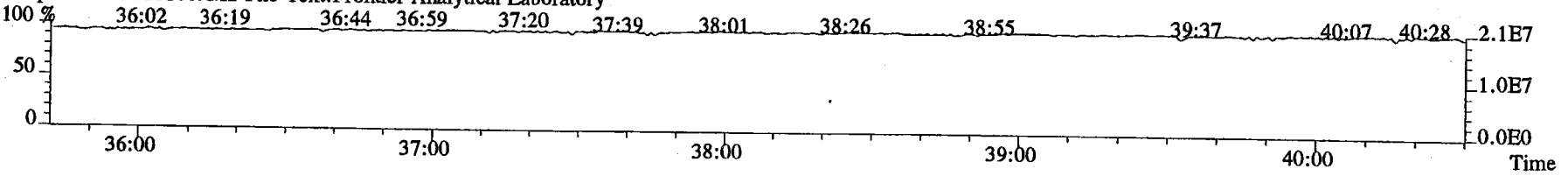
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



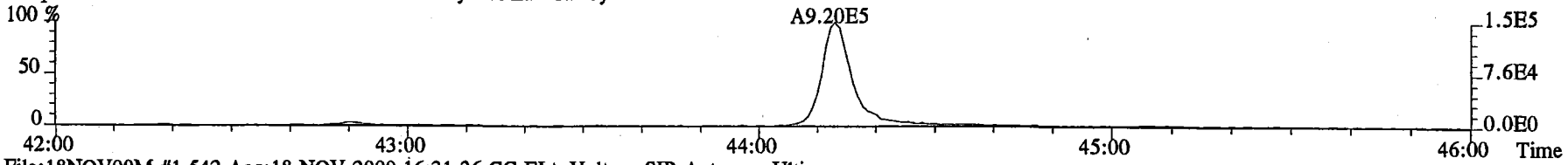
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



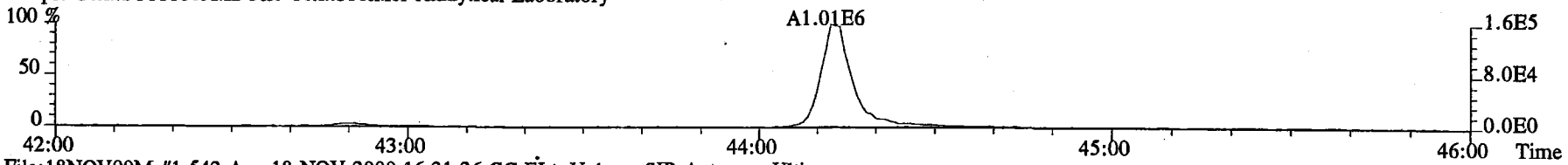
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



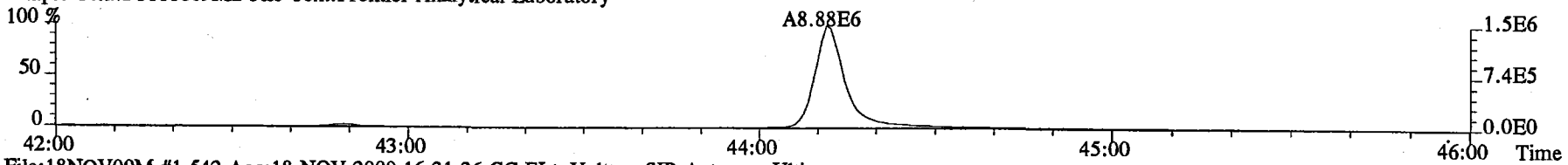
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



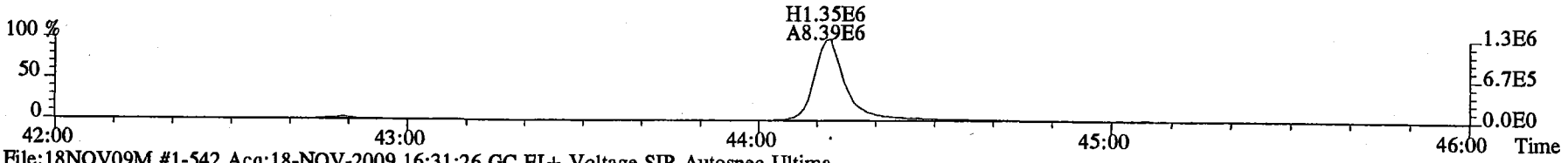
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



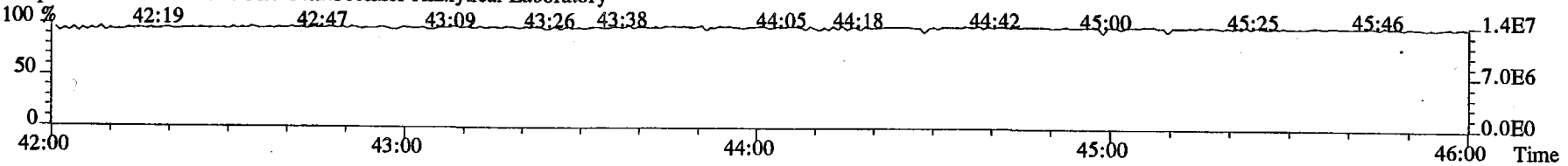
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



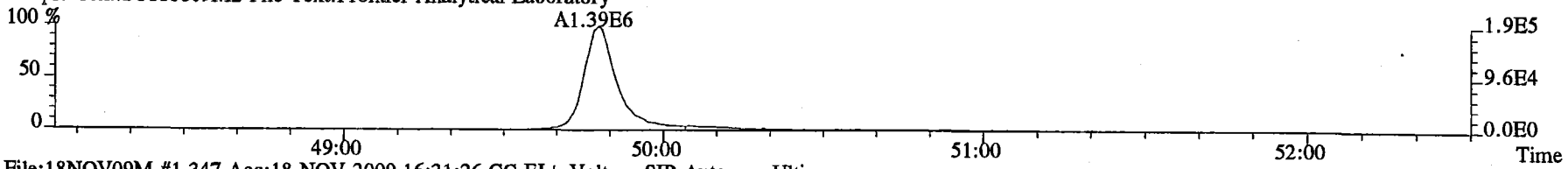
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



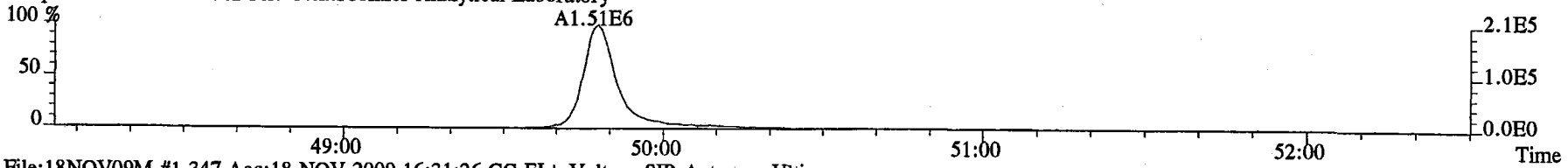
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



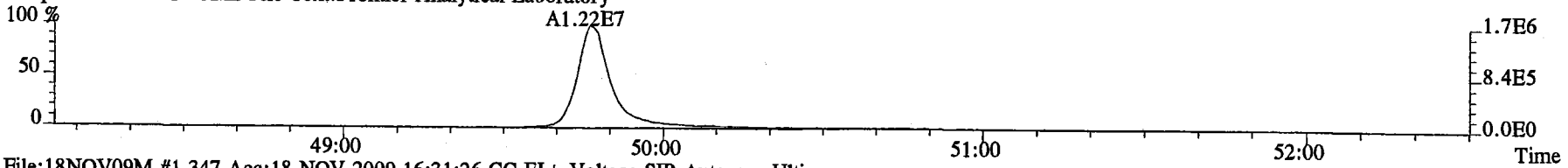
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



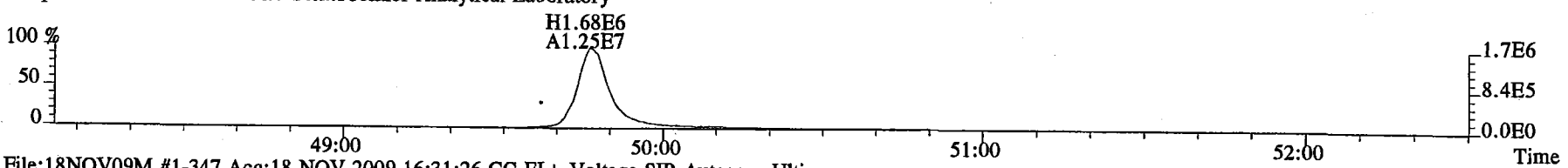
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



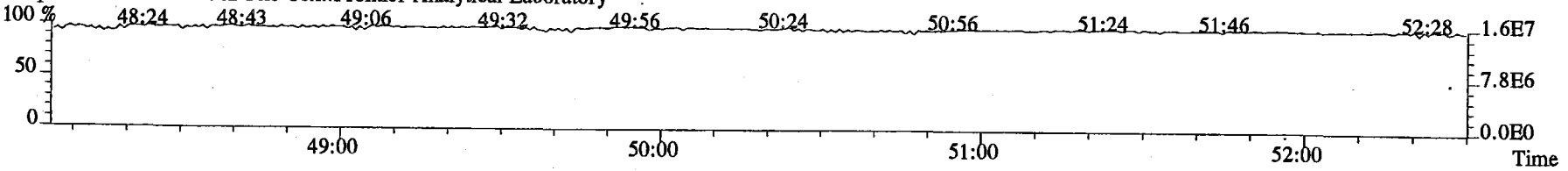
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



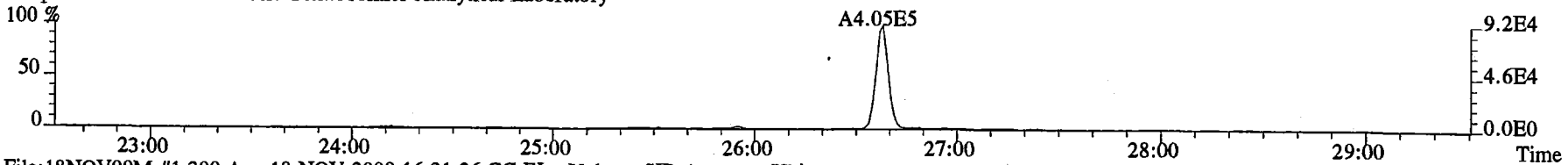
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



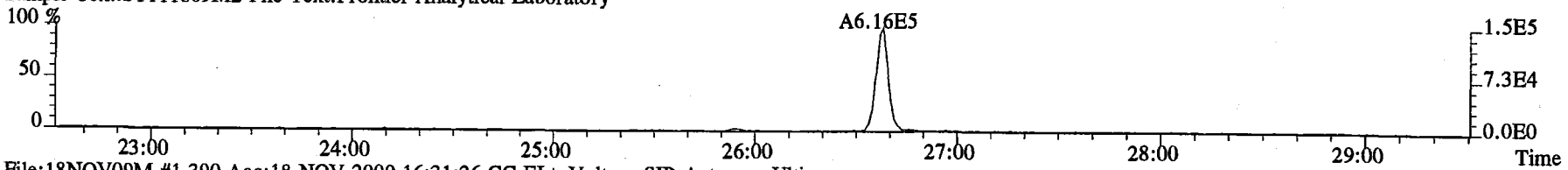
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



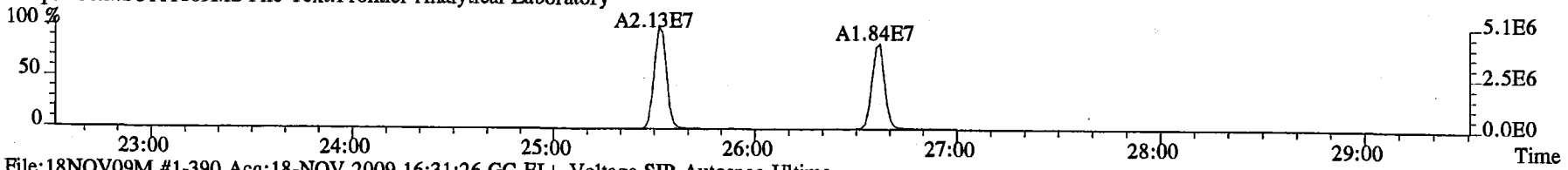
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



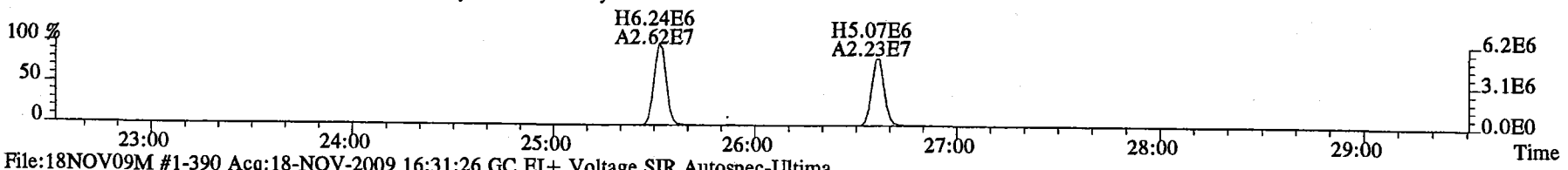
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



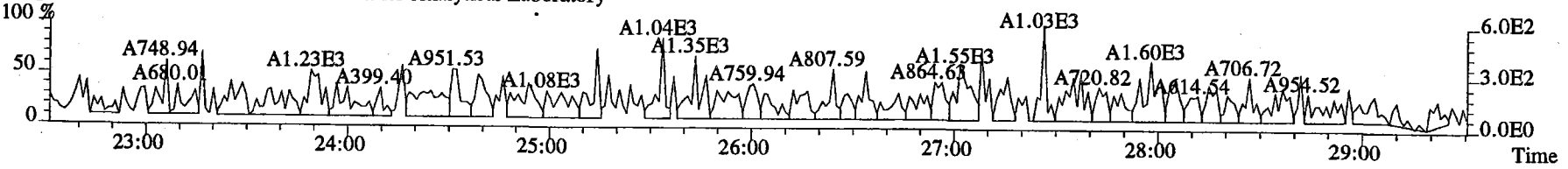
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



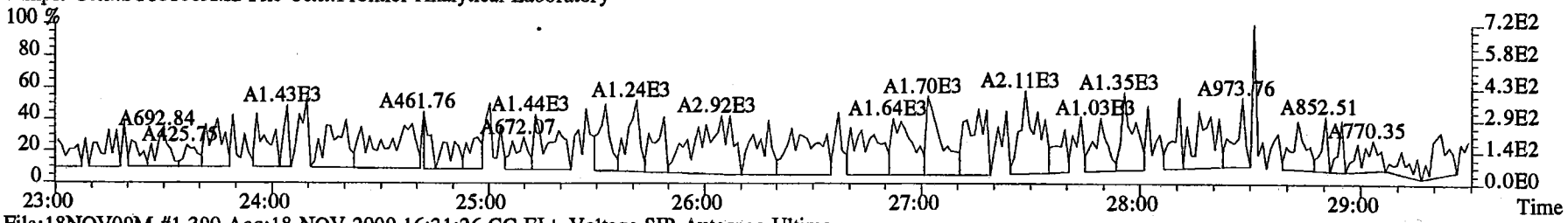
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



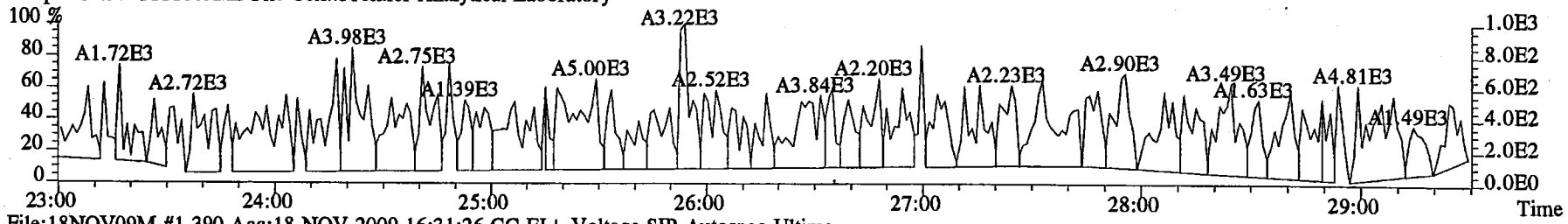
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



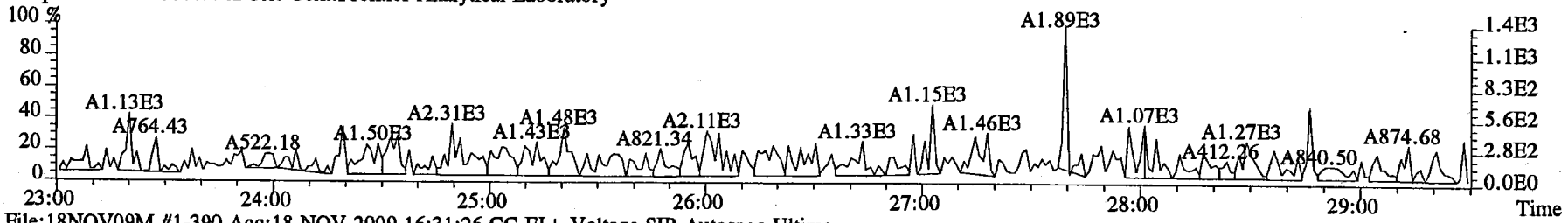
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



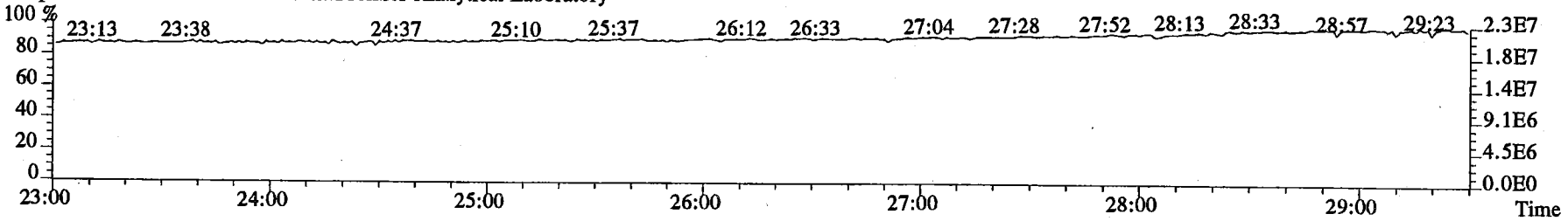
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



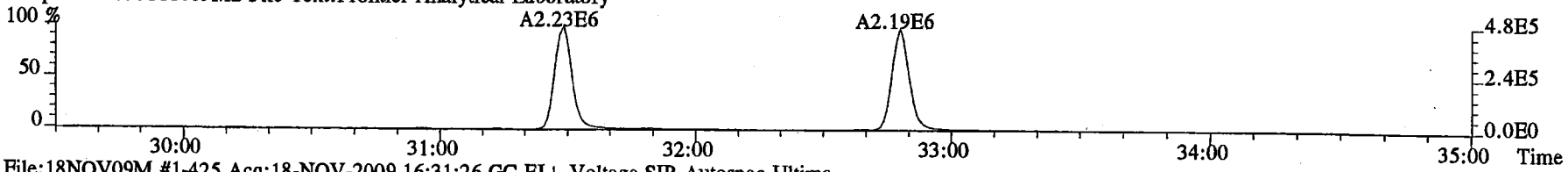
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



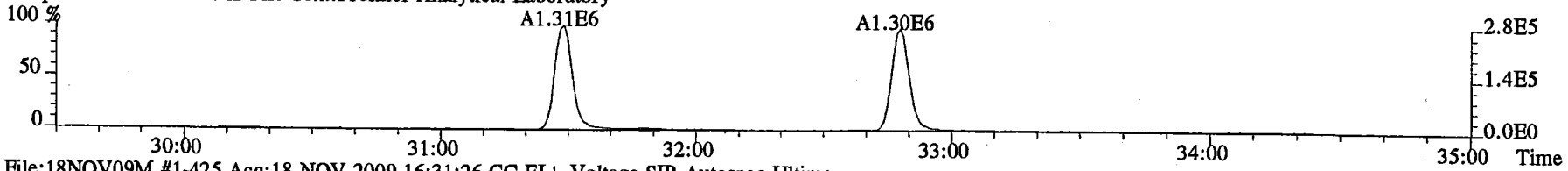
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:4 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



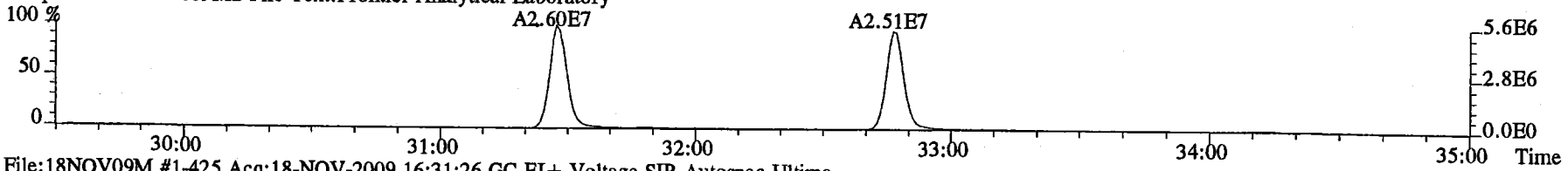
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



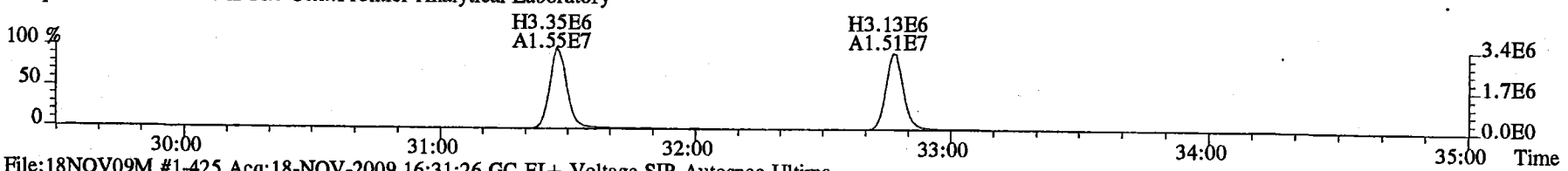
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



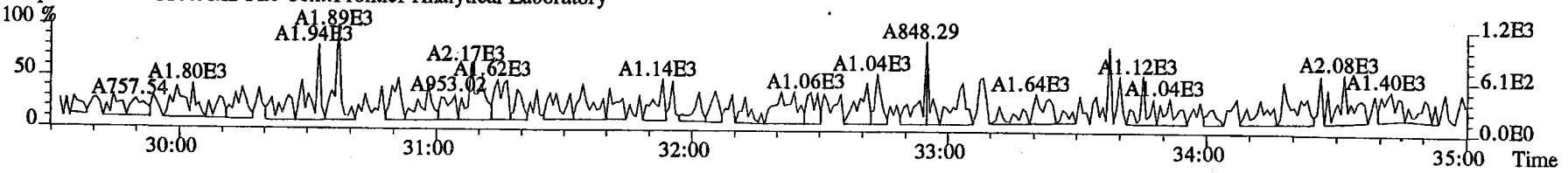
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



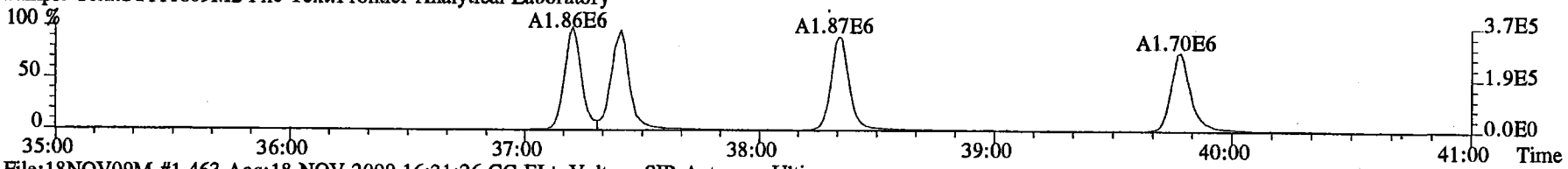
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



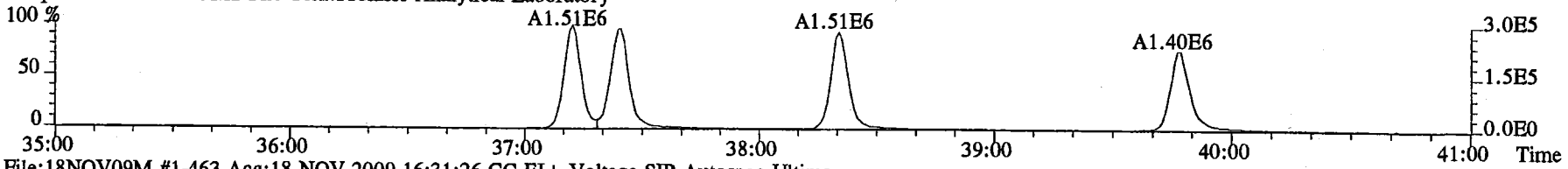
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



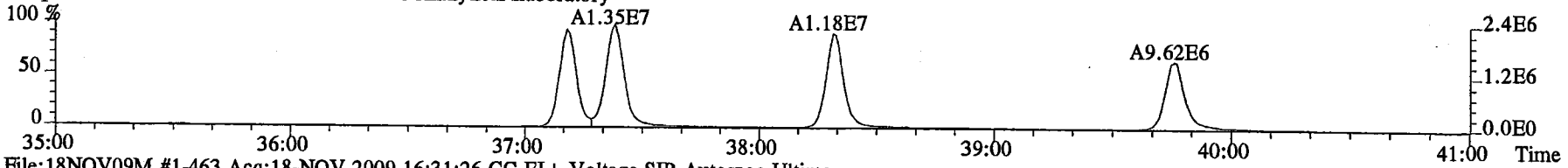
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



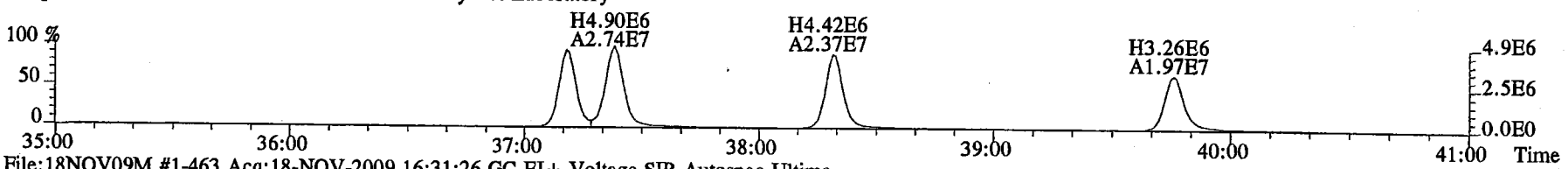
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



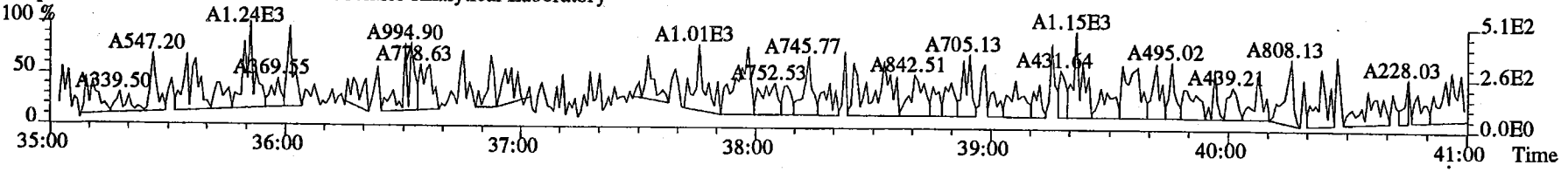
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



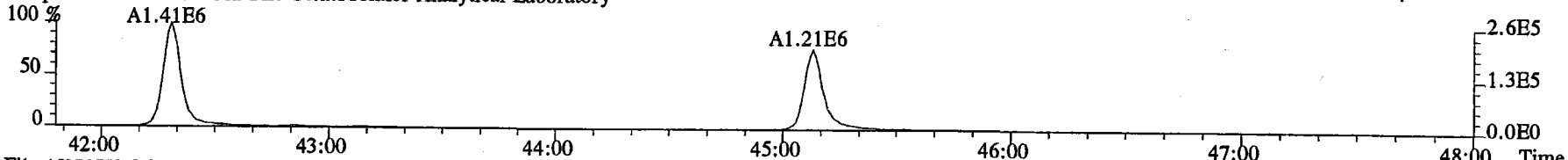
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



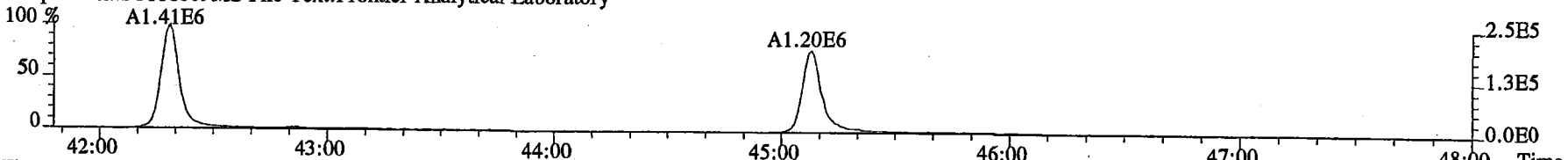
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



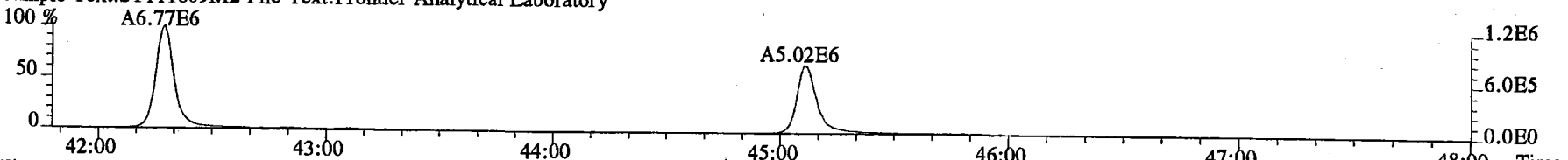
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



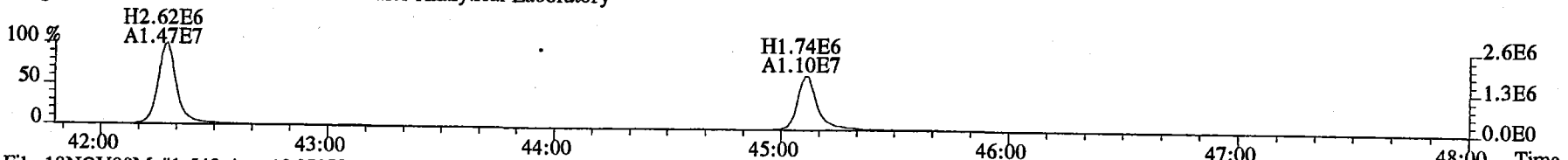
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



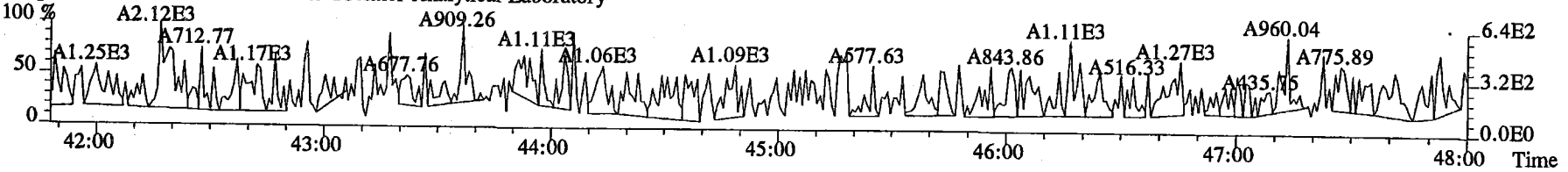
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



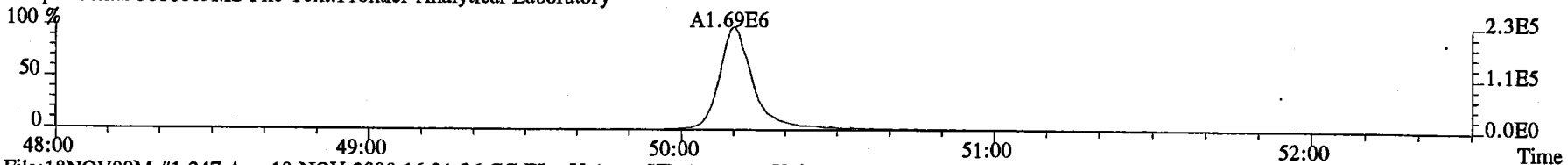
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



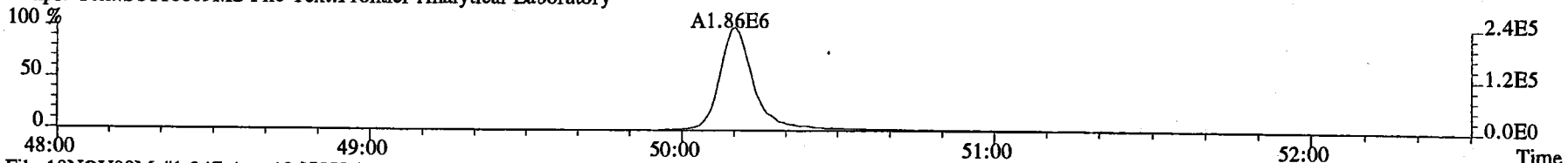
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



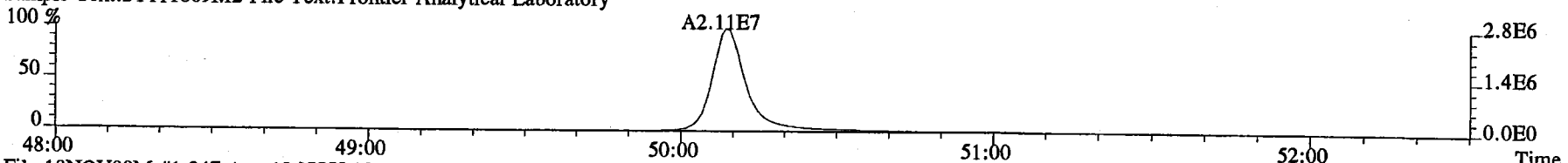
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



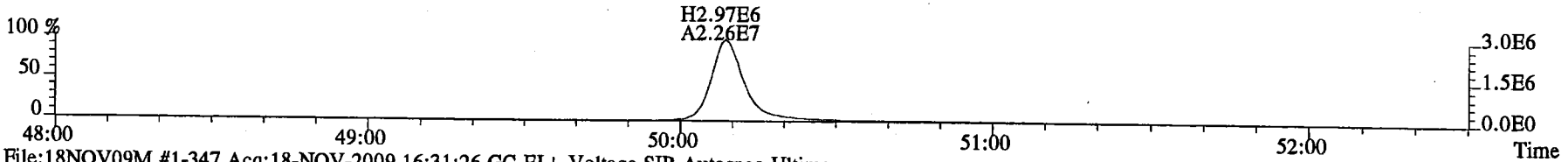
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



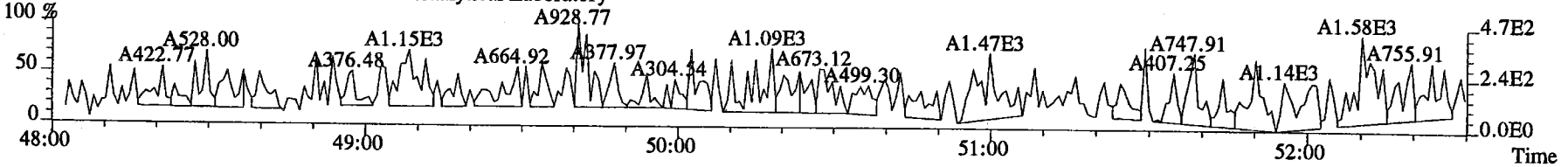
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



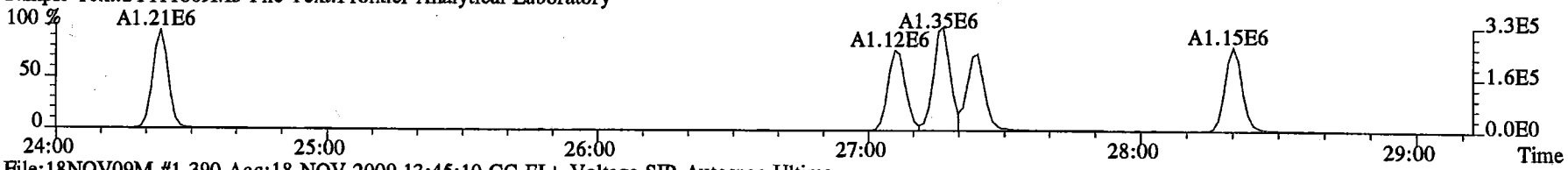
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



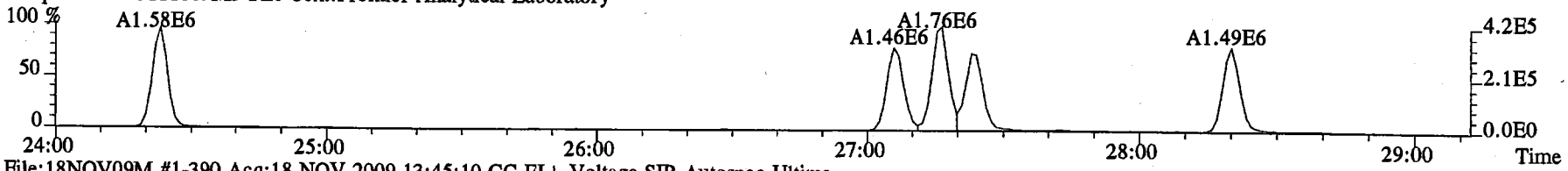
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



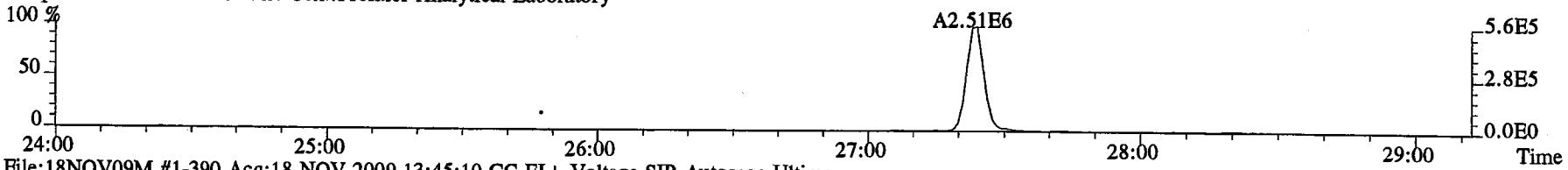
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



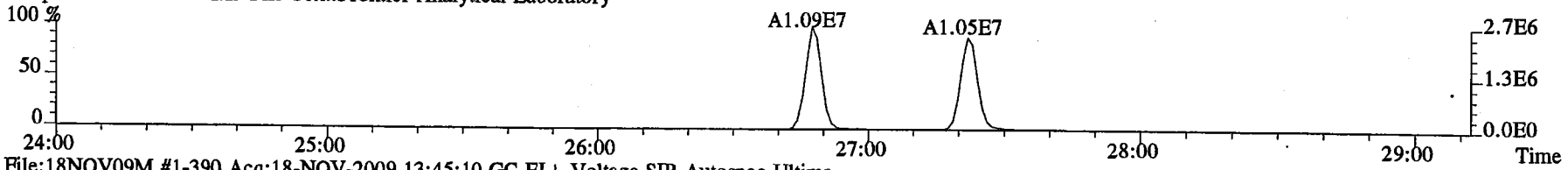
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



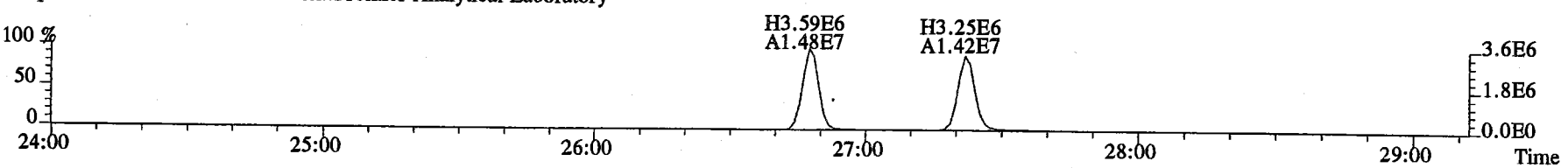
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



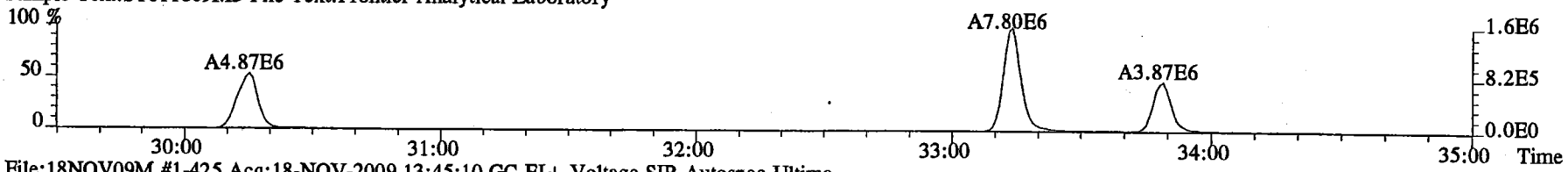
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



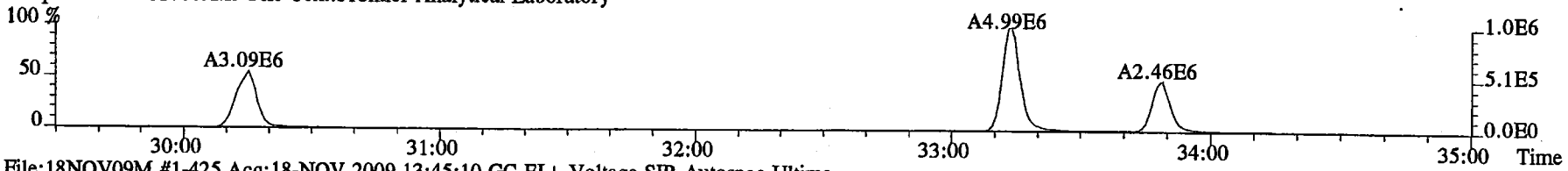
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



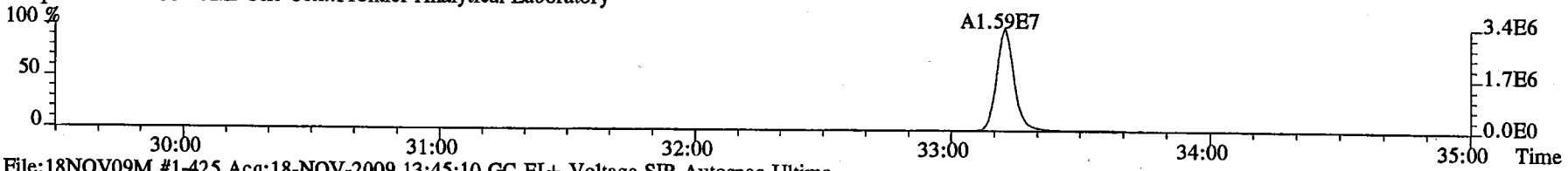
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



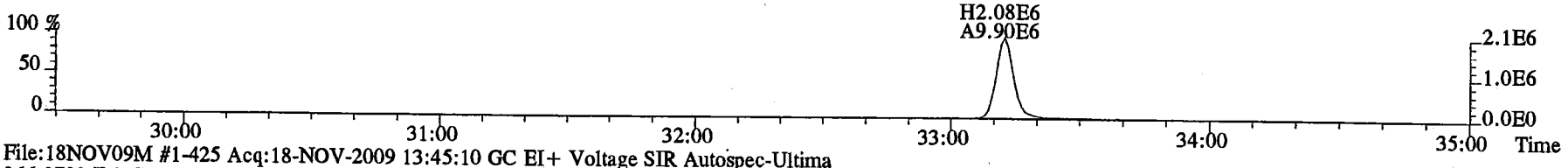
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



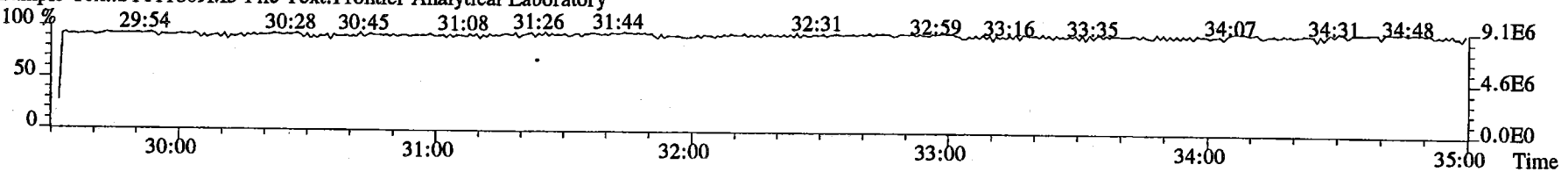
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



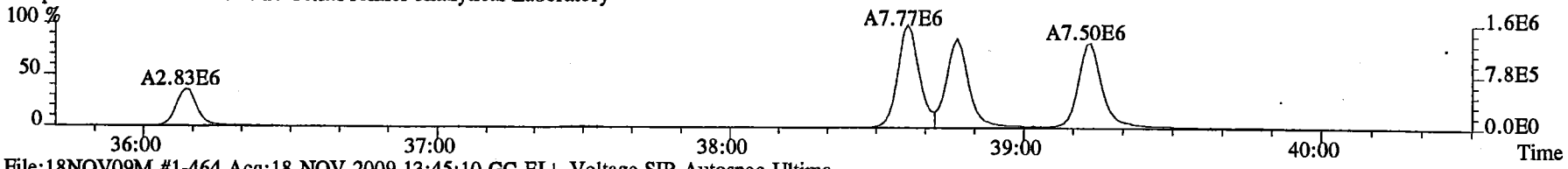
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



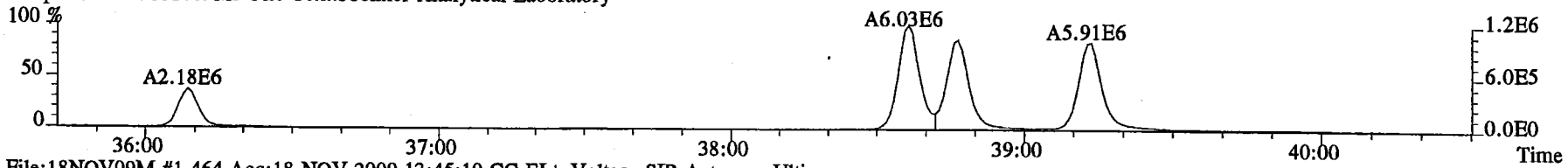
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



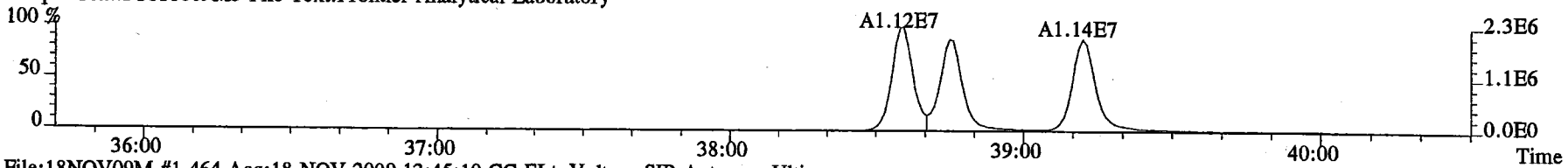
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



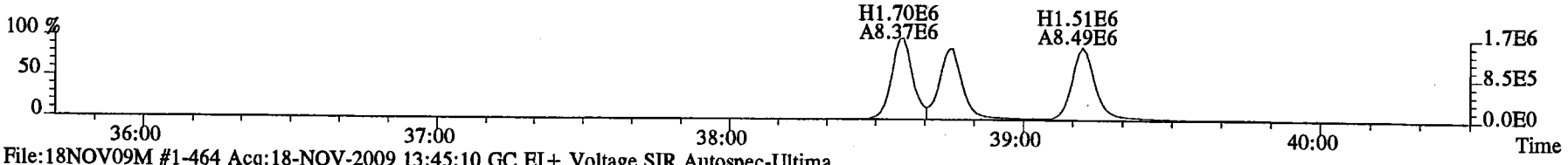
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



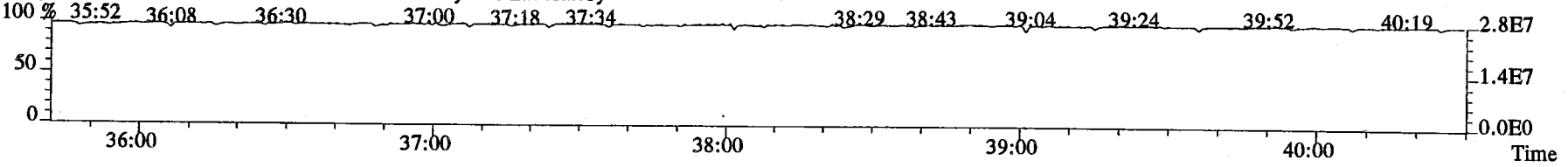
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



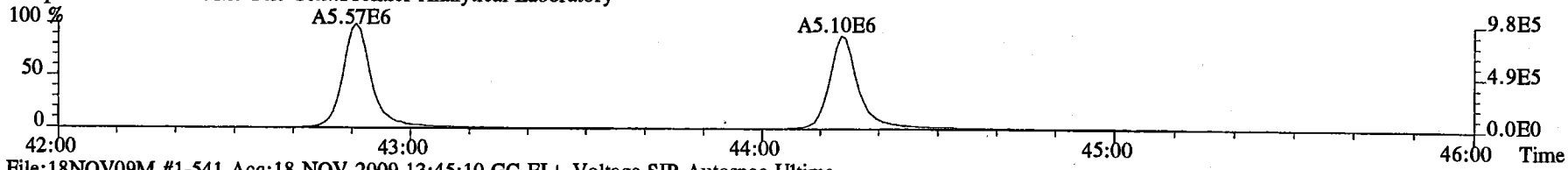
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



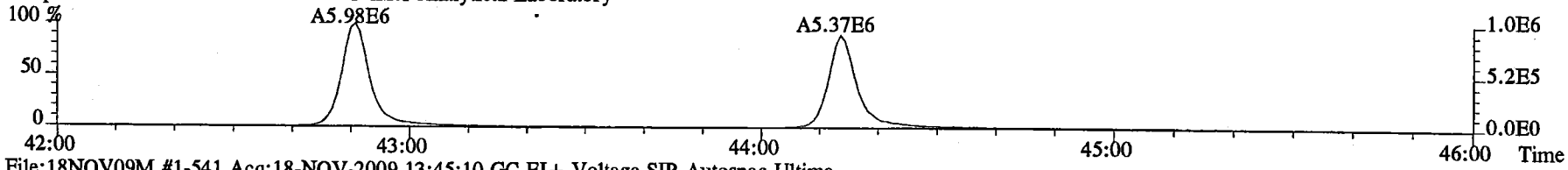
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



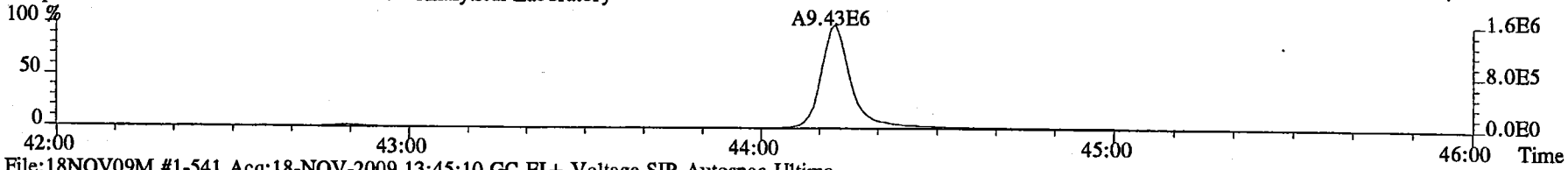
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



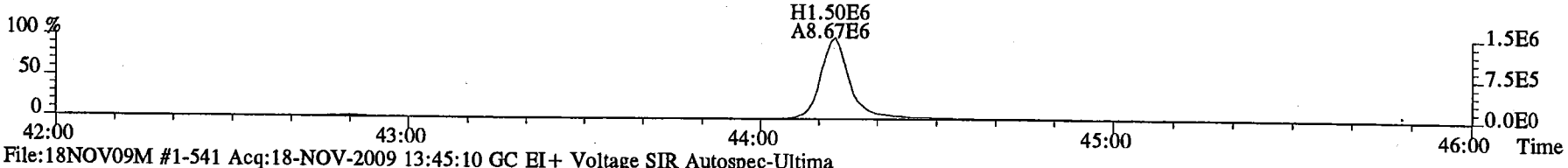
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



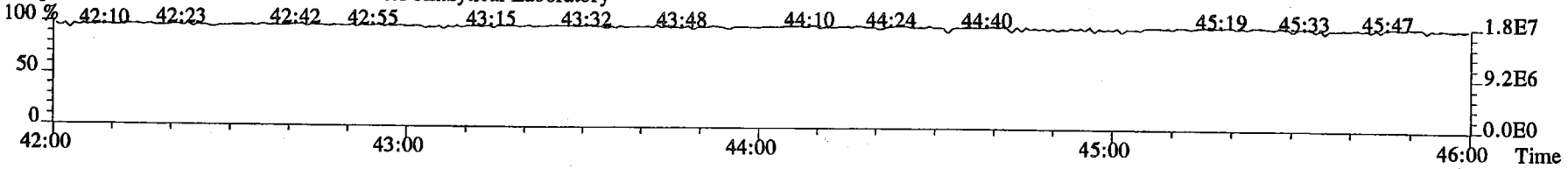
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



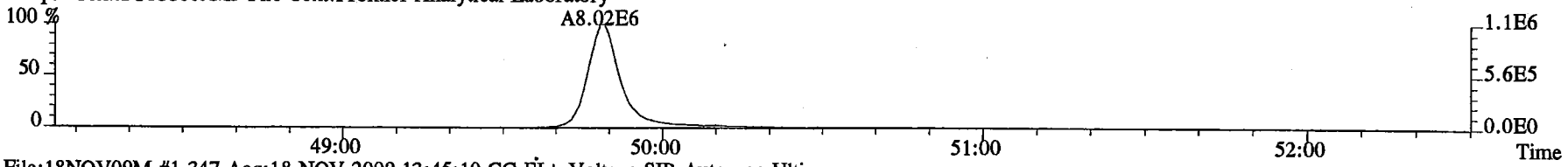
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



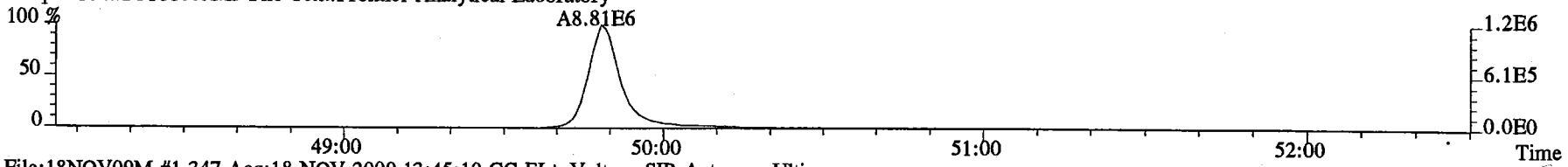
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



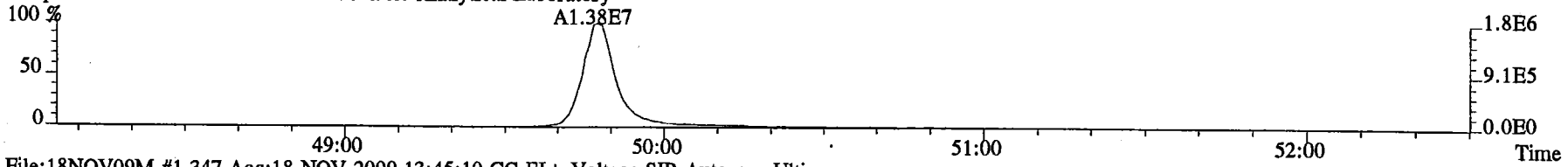
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



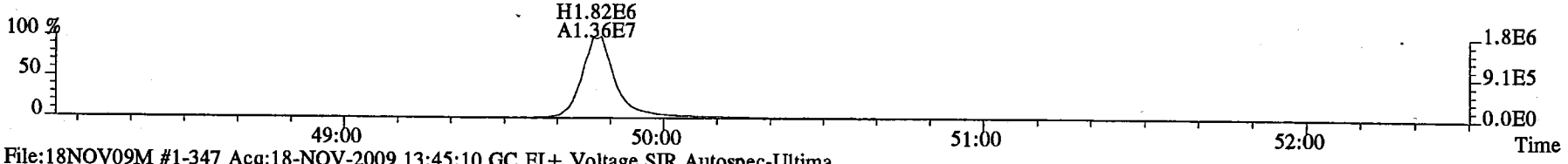
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



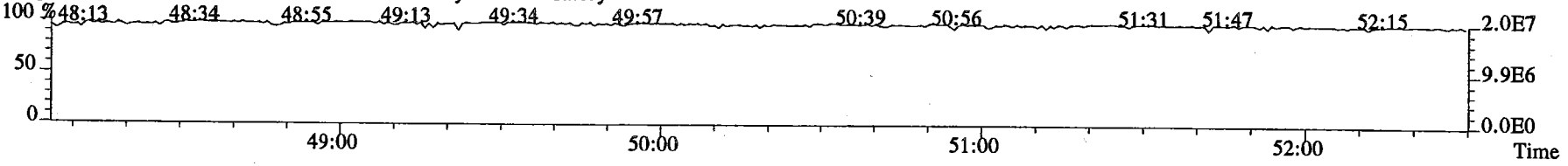
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



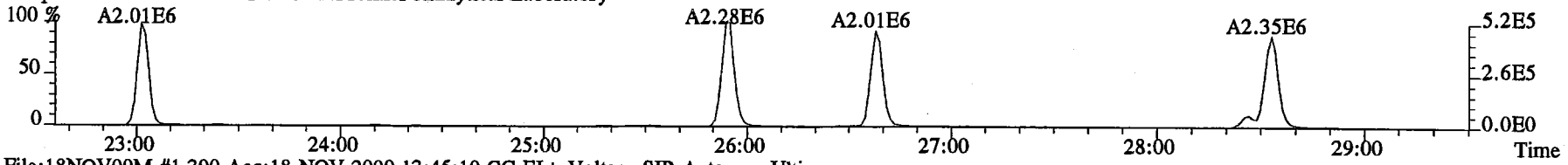
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



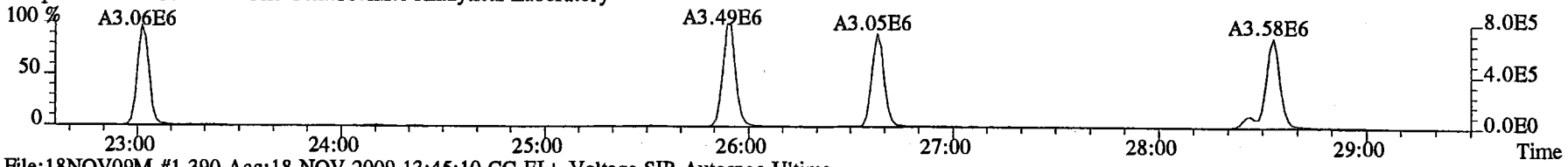
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



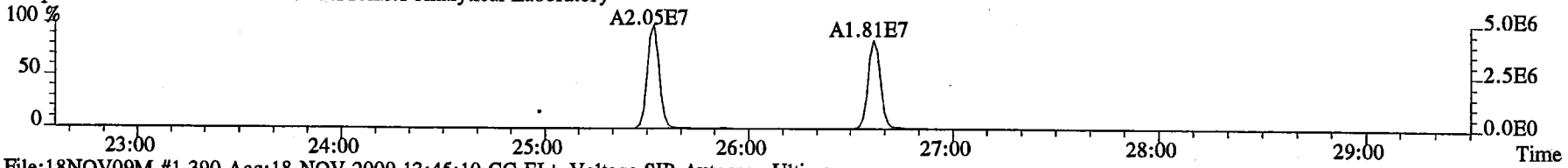
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



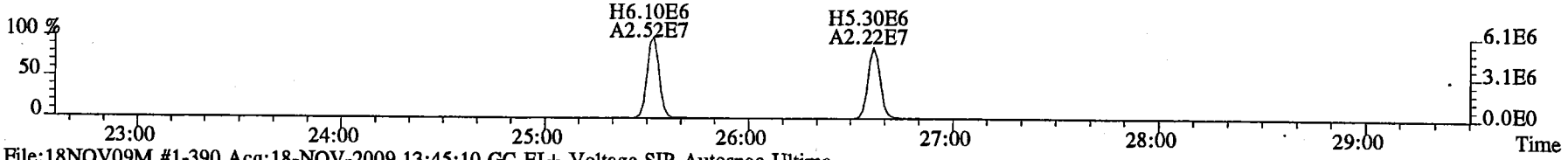
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



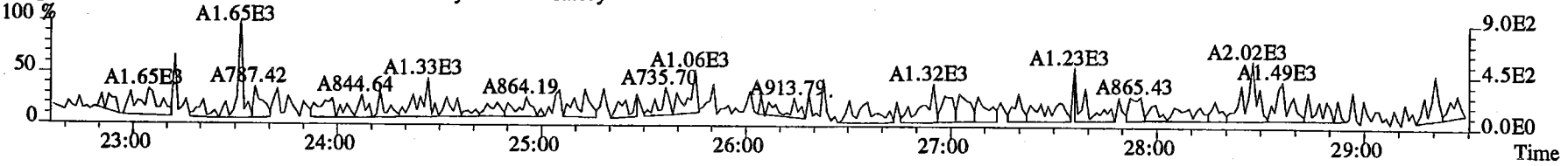
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



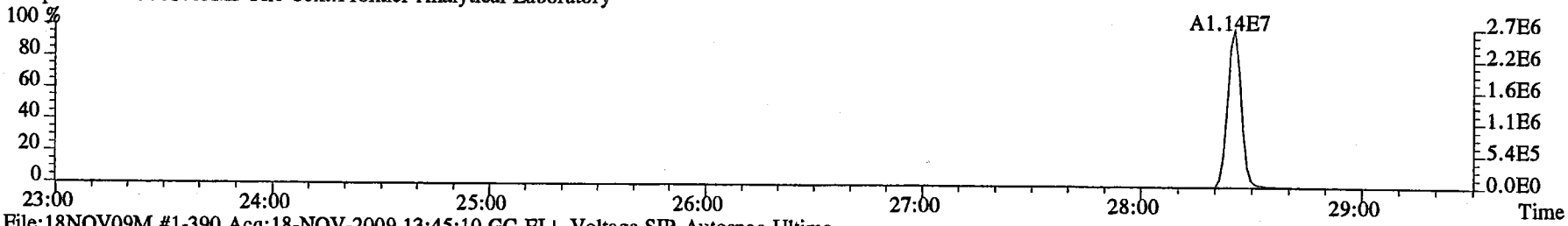
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



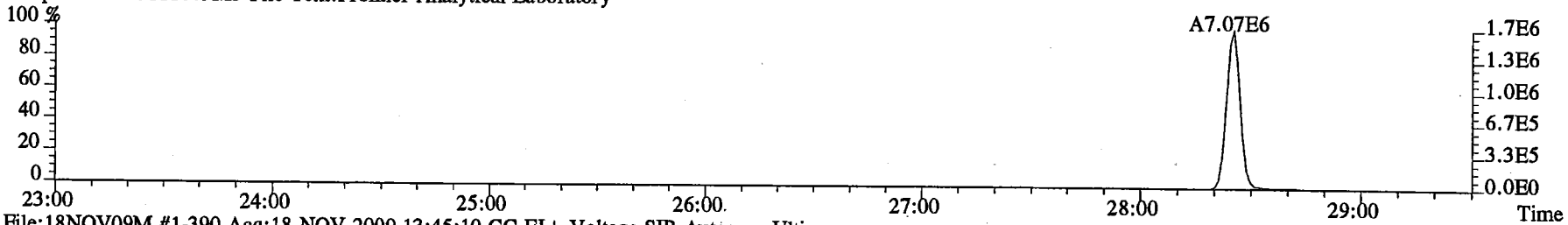
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



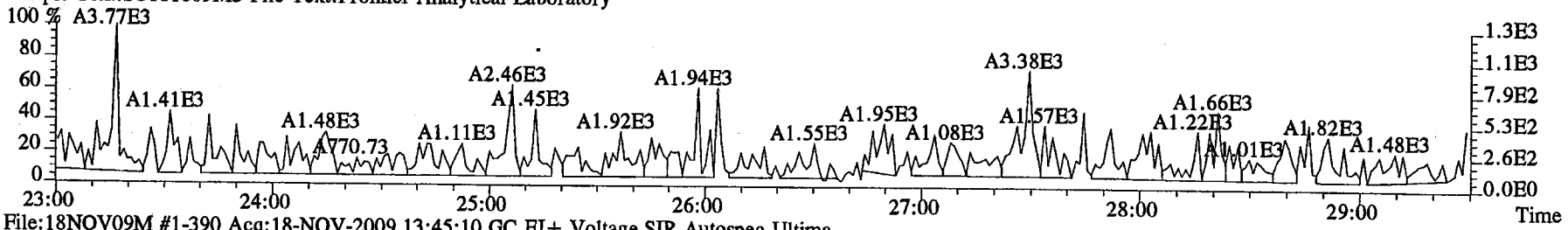
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



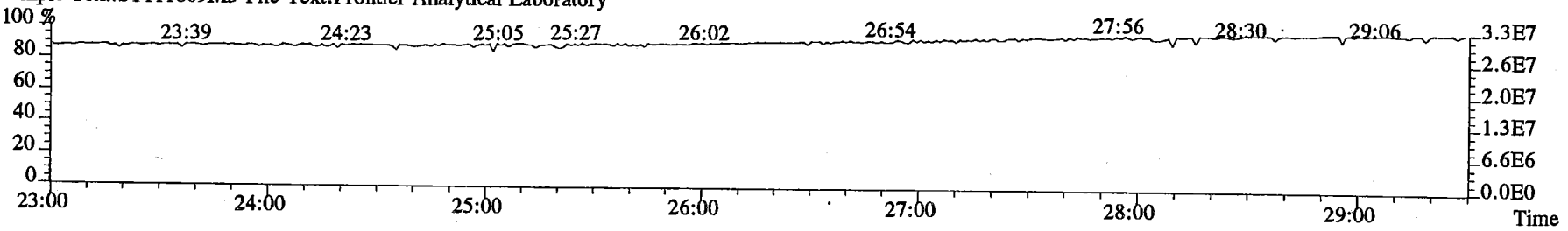
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



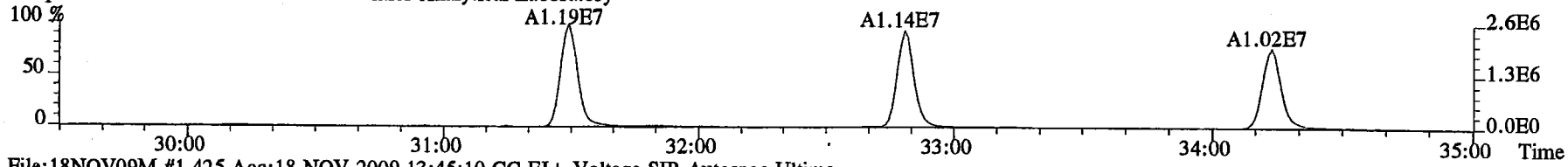
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



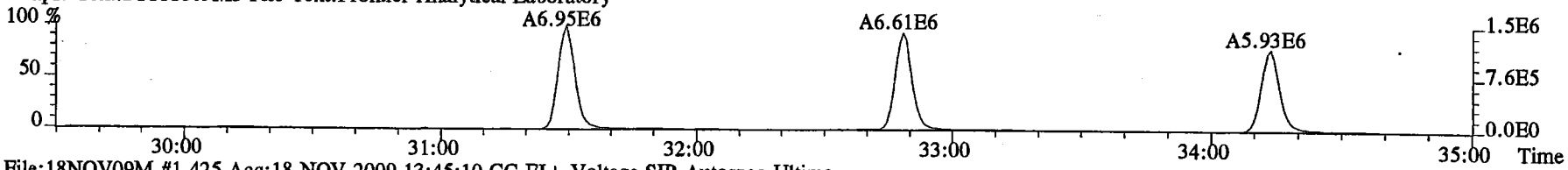
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



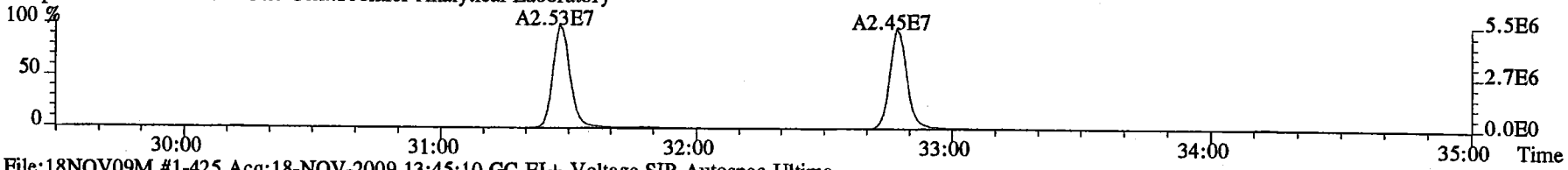
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



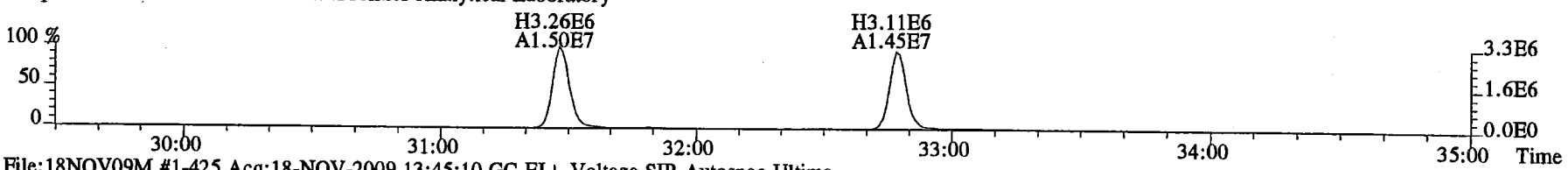
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



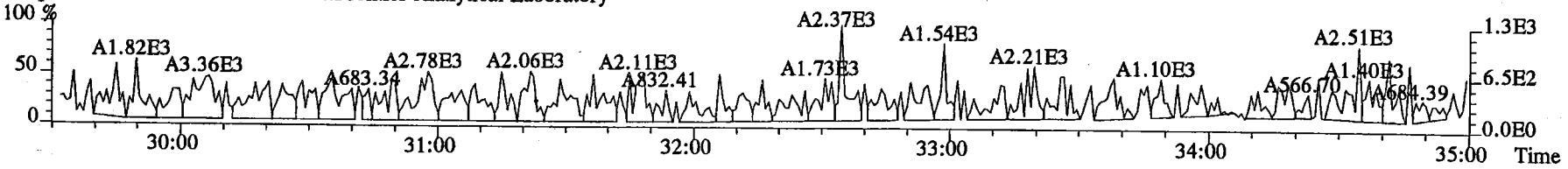
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



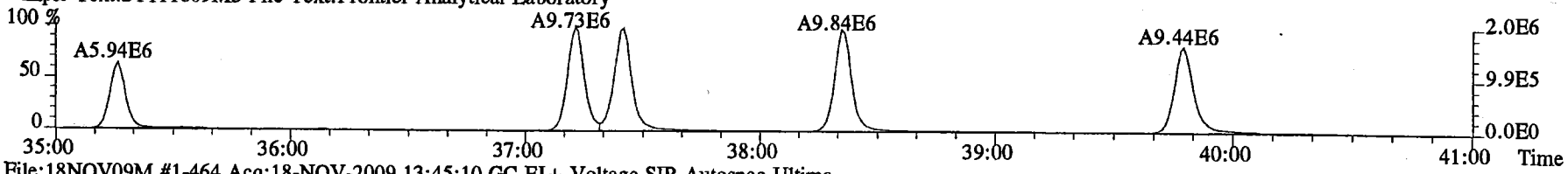
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



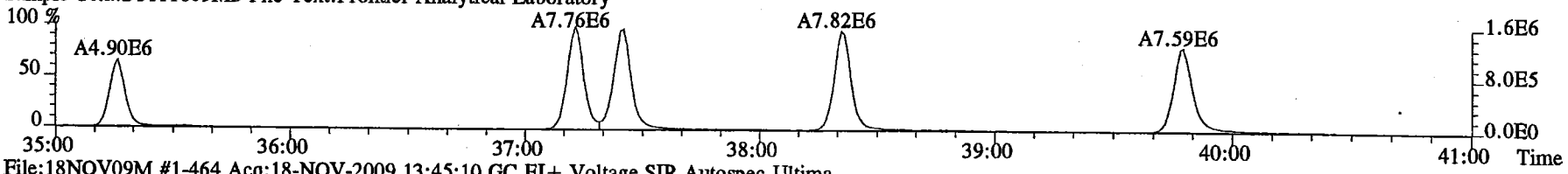
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



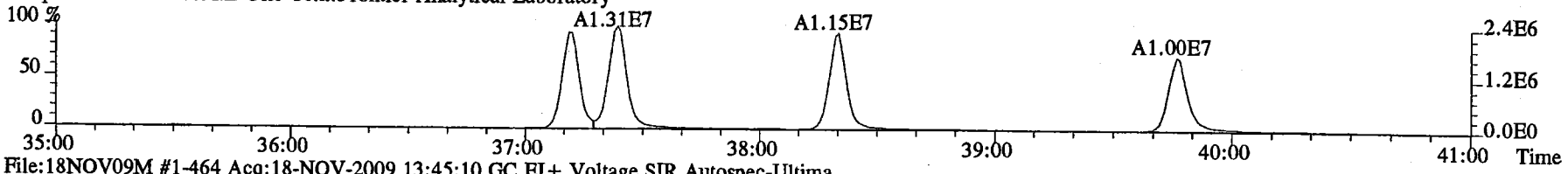
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



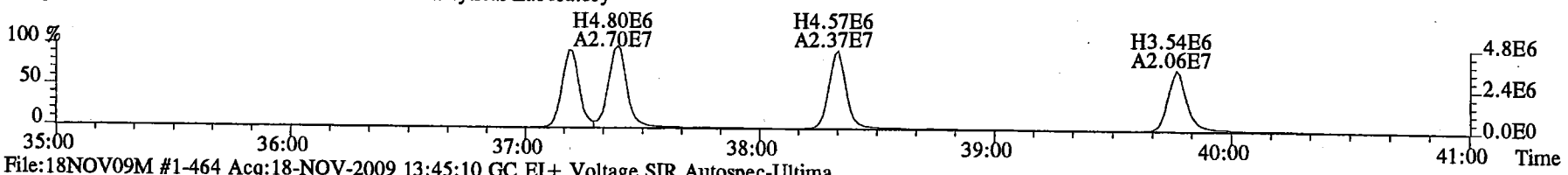
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



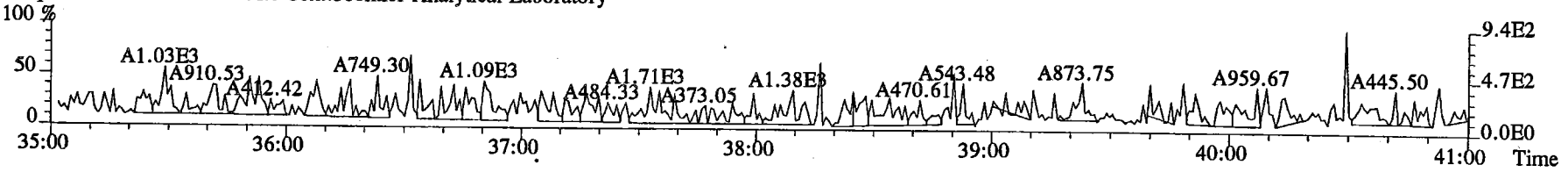
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



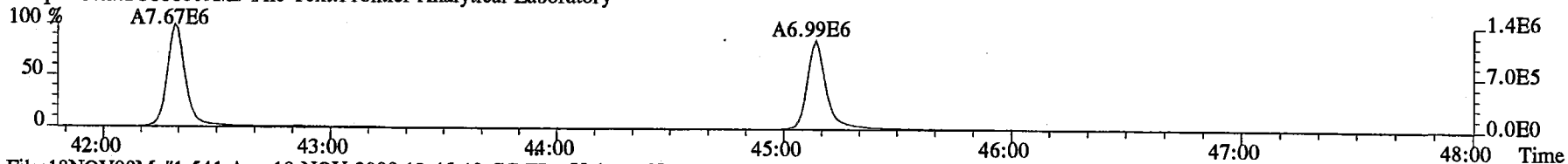
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



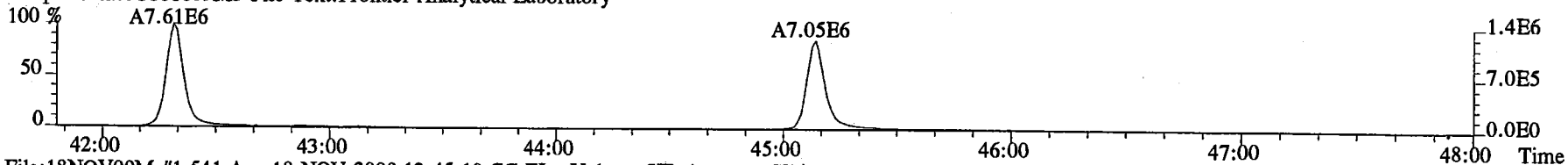
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



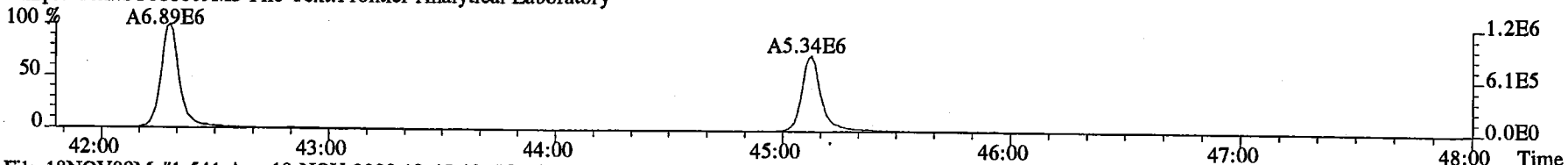
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



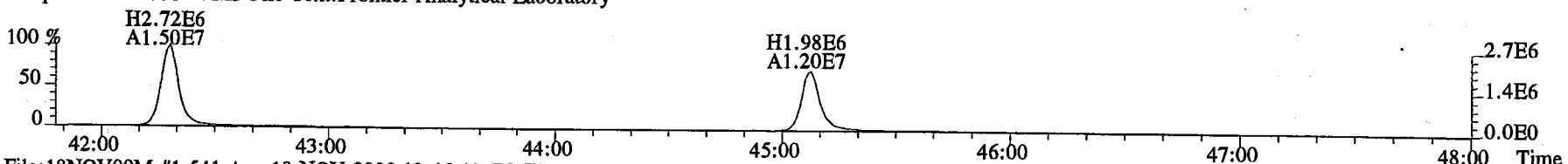
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



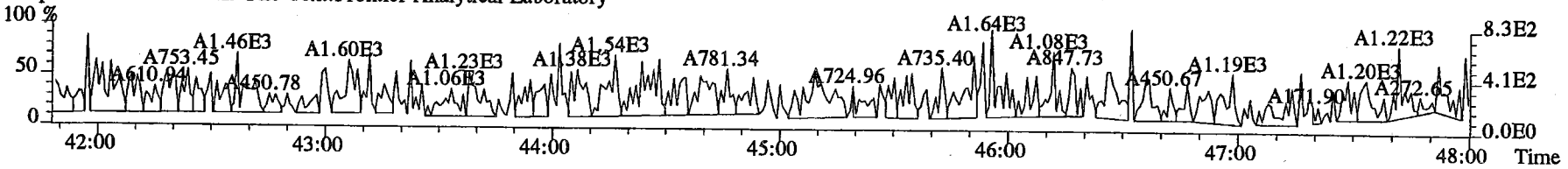
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



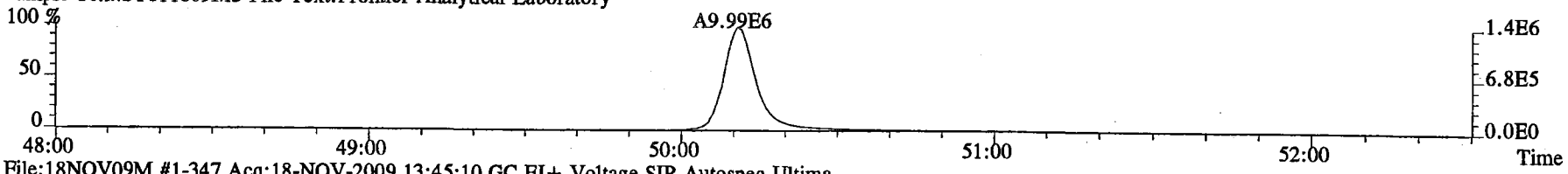
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



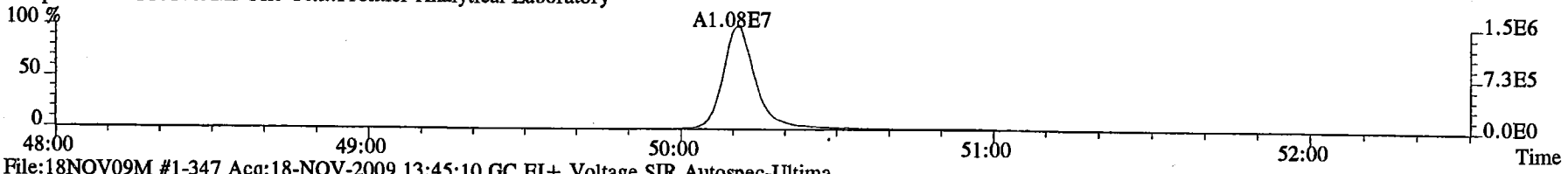
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



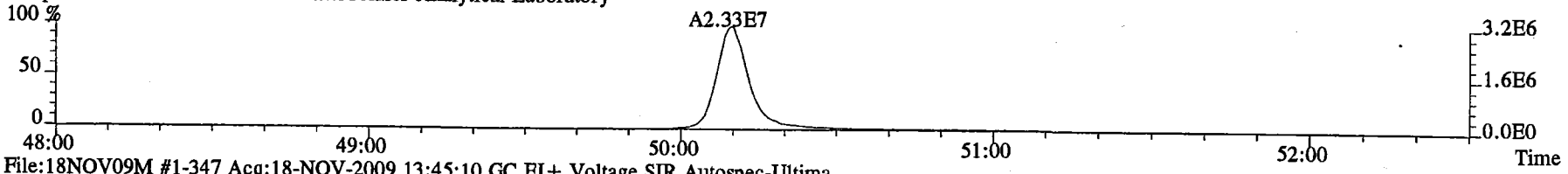
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



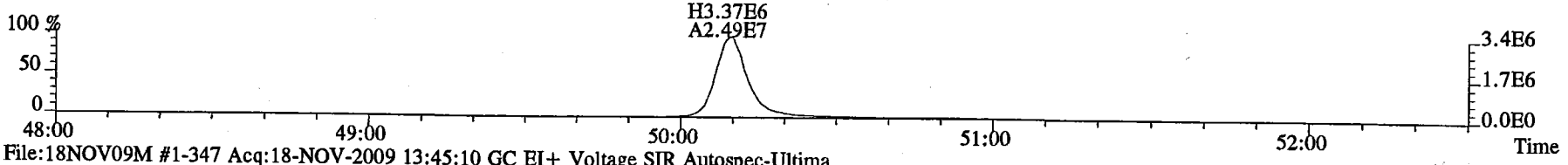
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



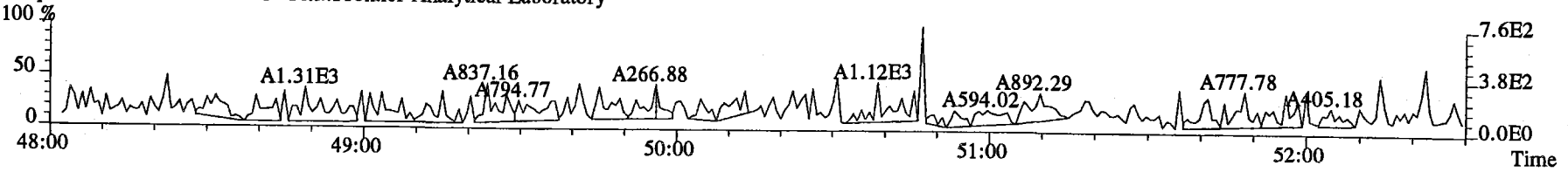
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



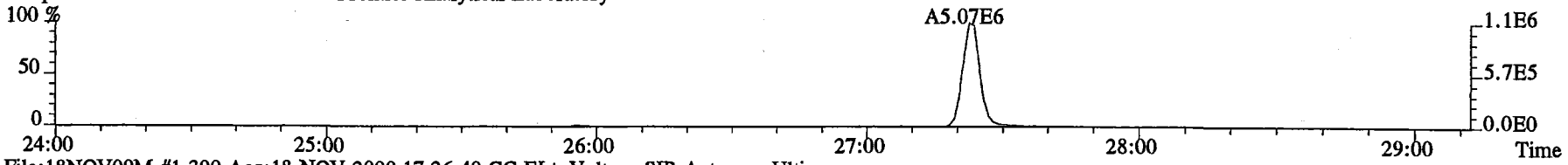
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



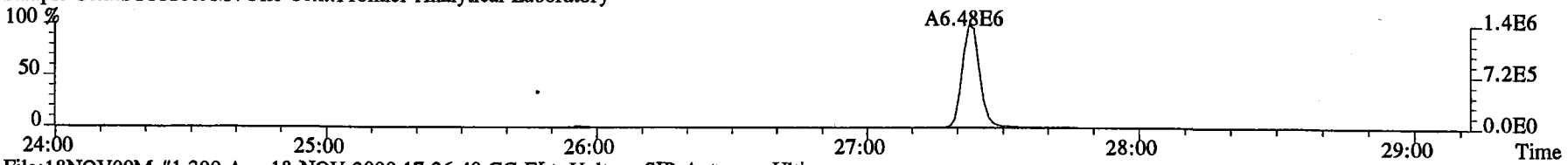
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



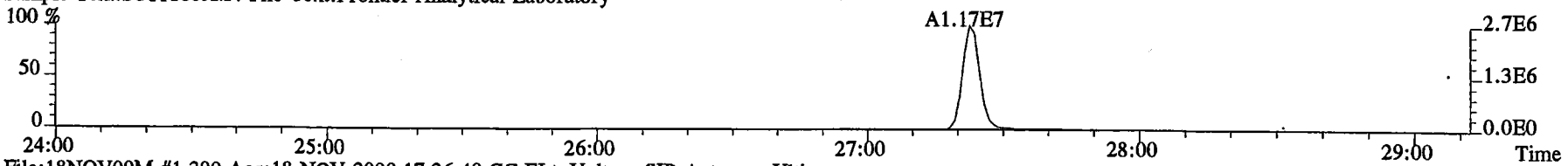
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



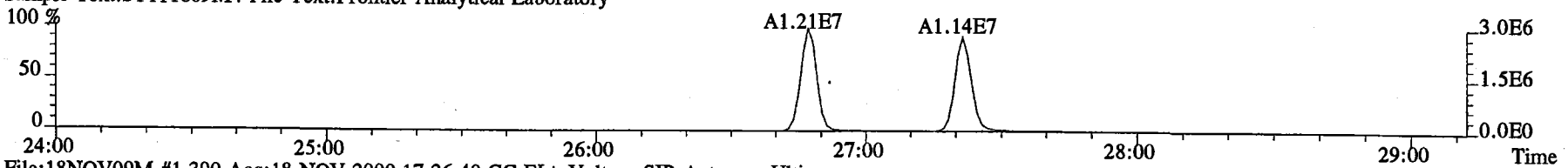
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



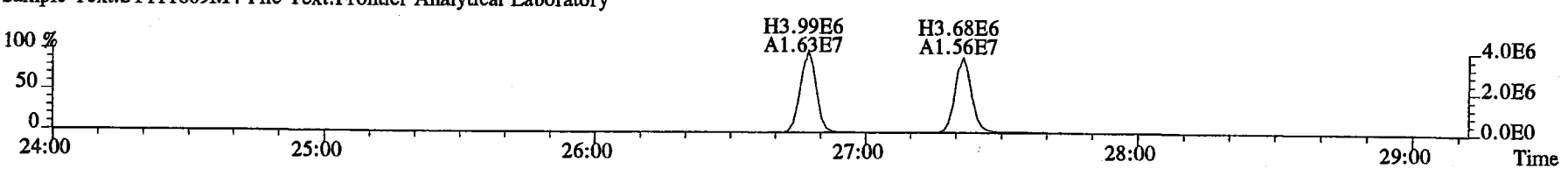
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



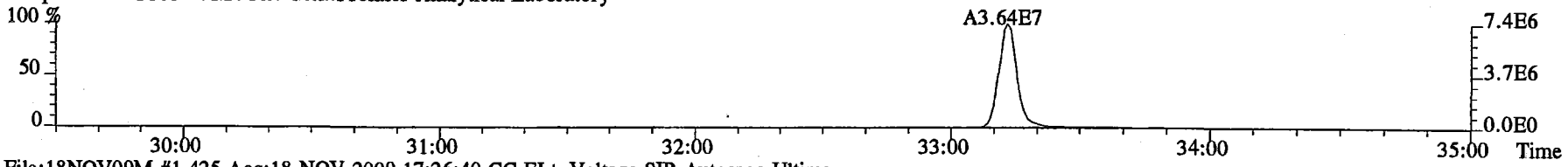
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



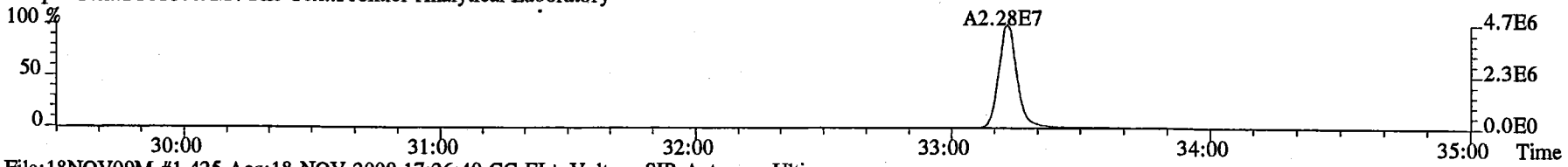
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



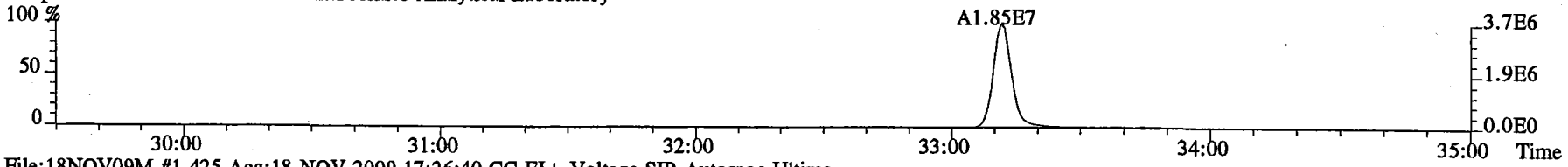
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



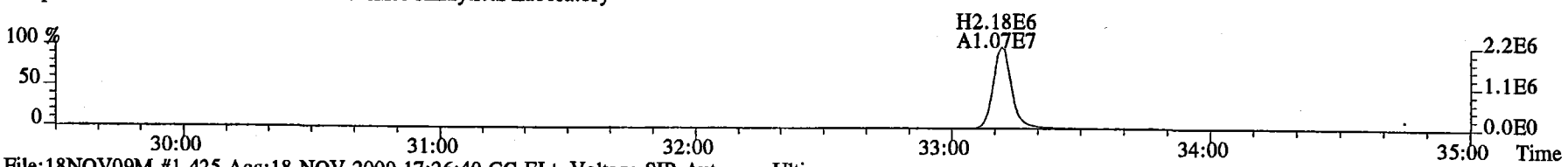
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



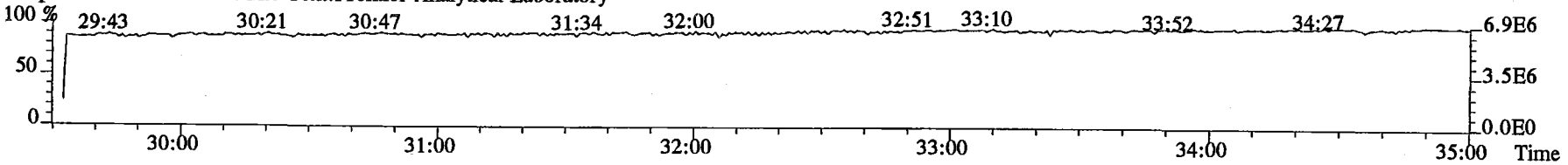
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



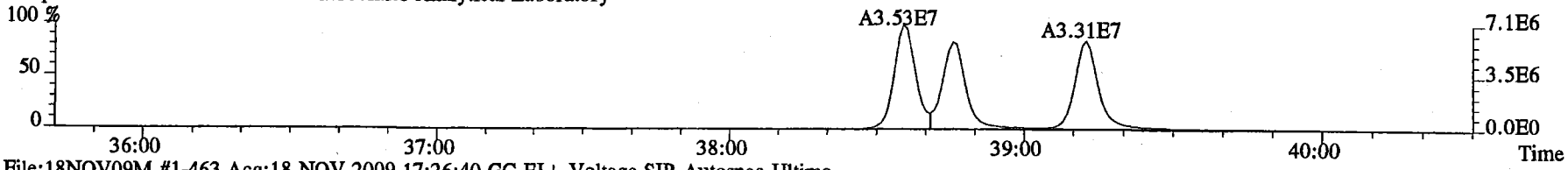
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



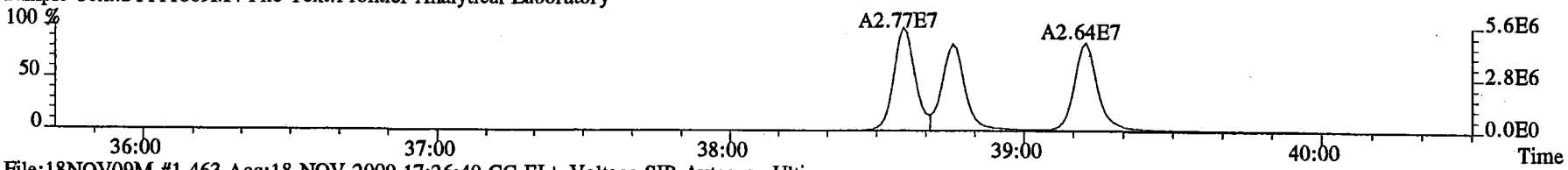
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



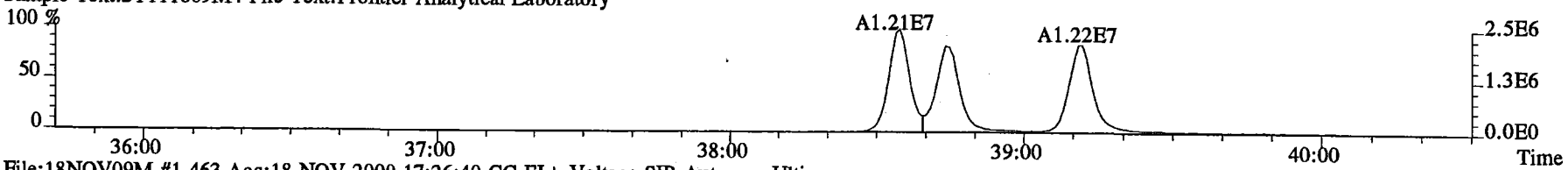
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



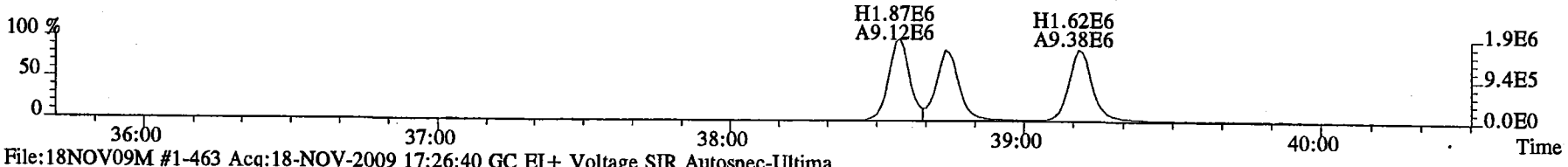
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



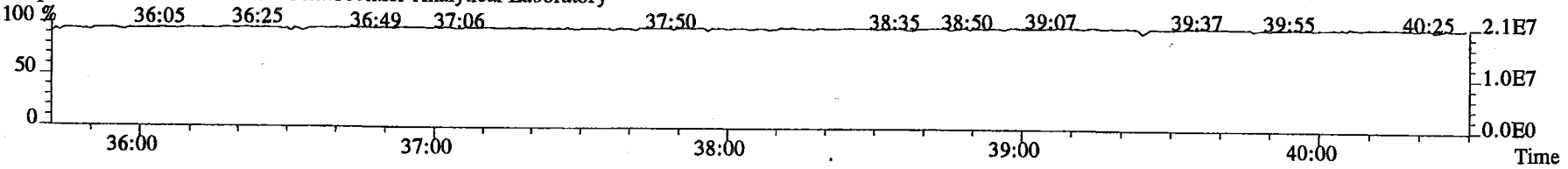
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



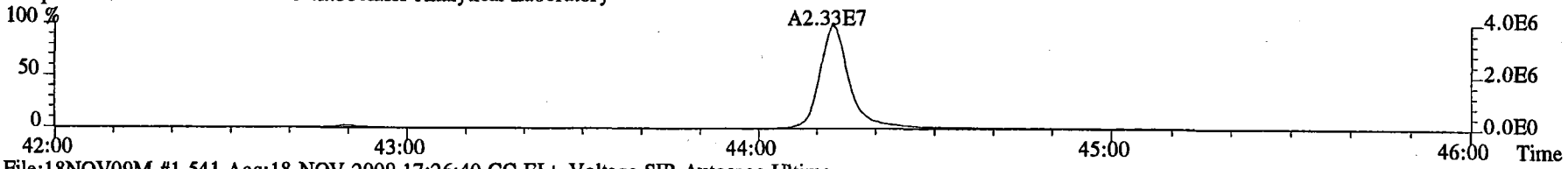
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



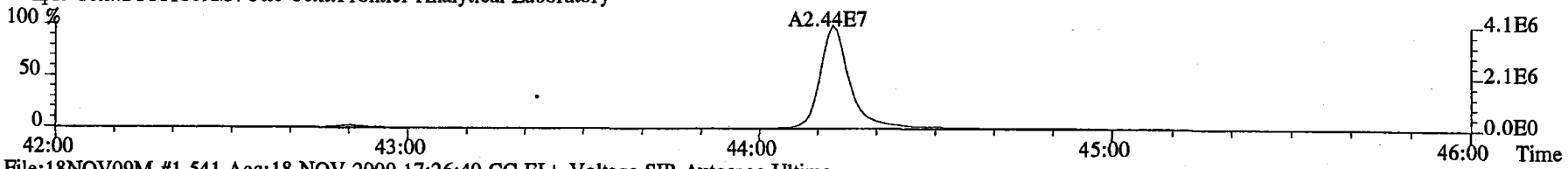
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



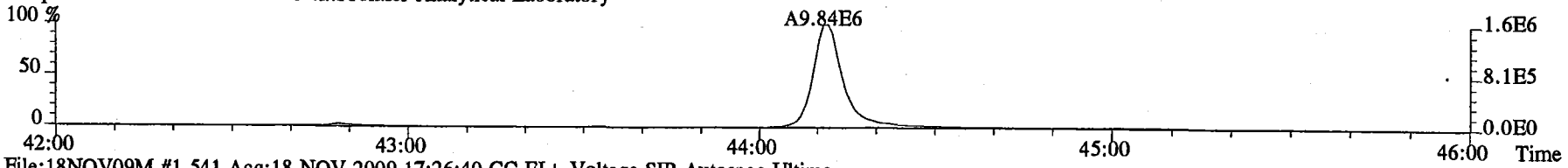
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



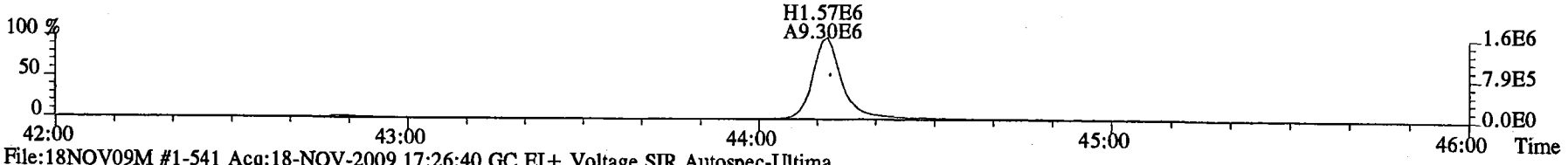
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



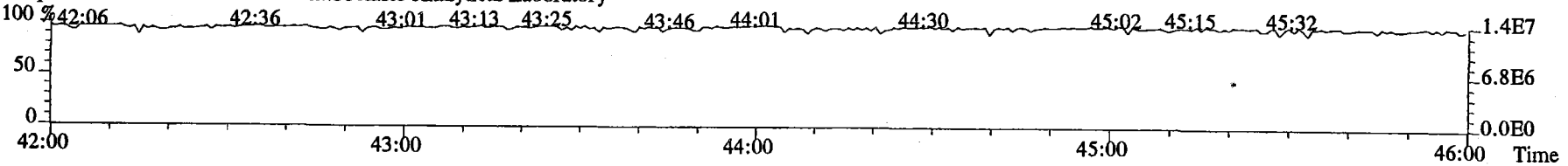
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



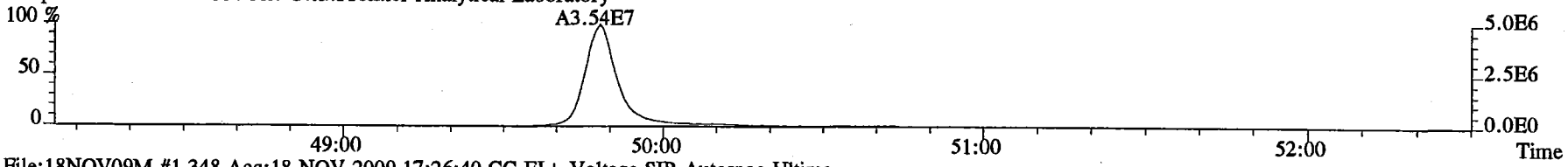
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



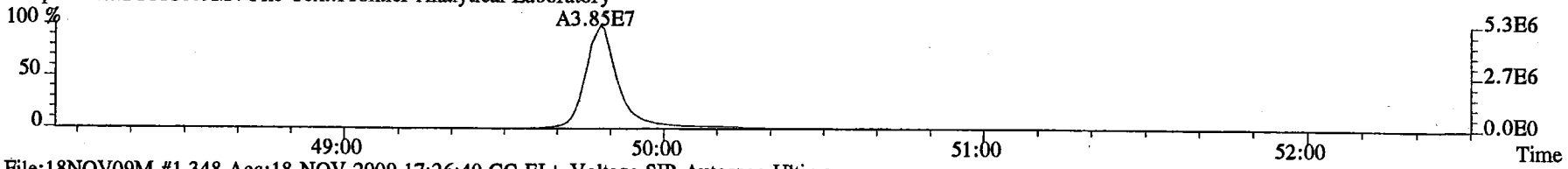
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



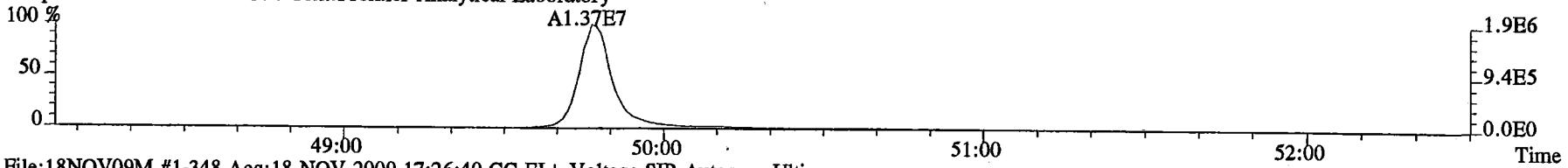
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



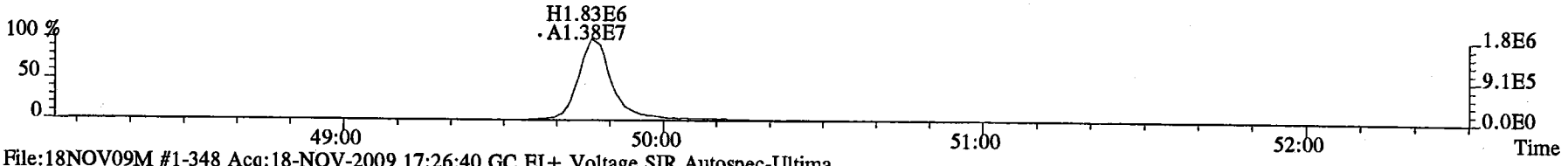
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



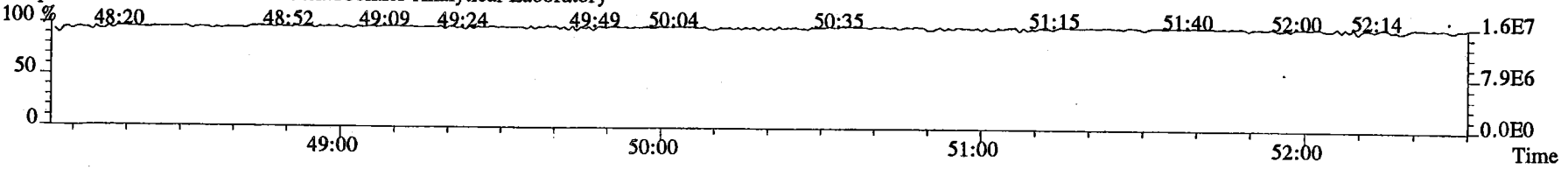
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



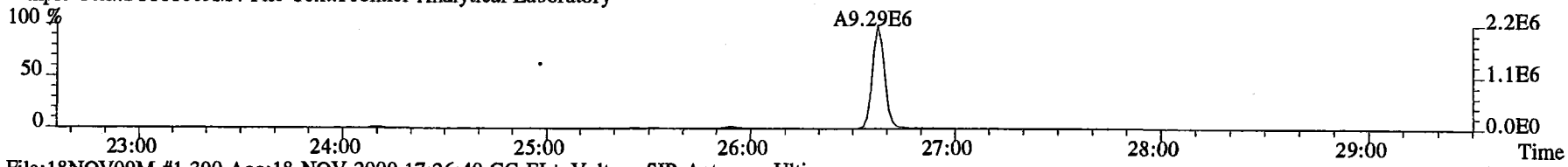
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



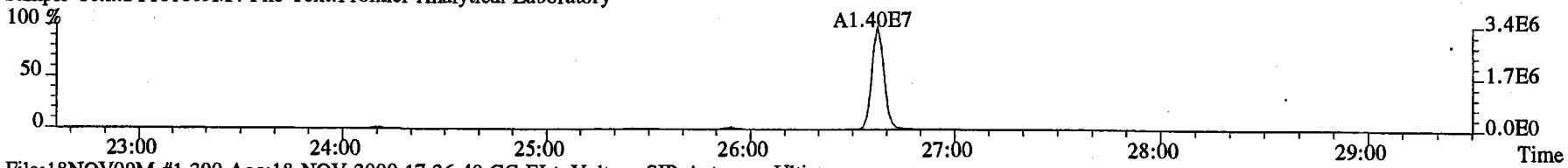
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



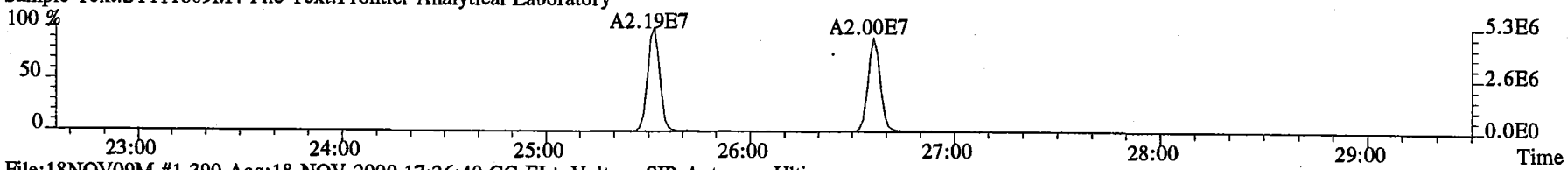
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



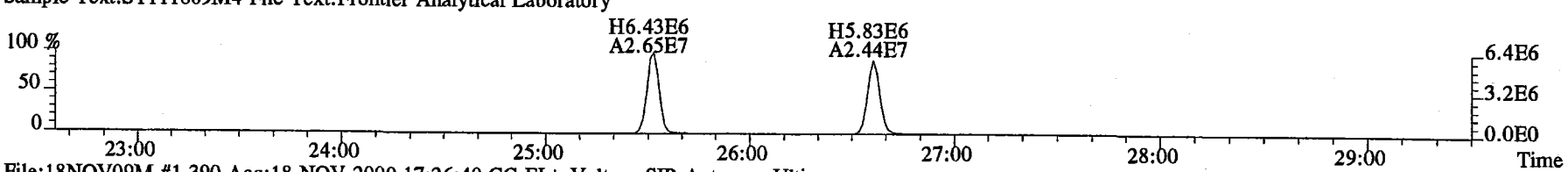
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



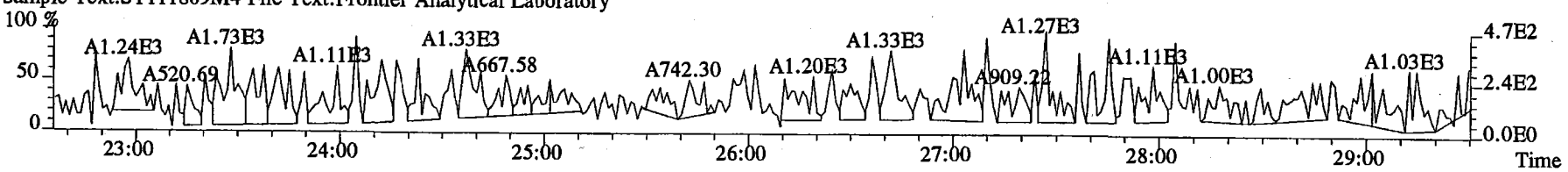
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



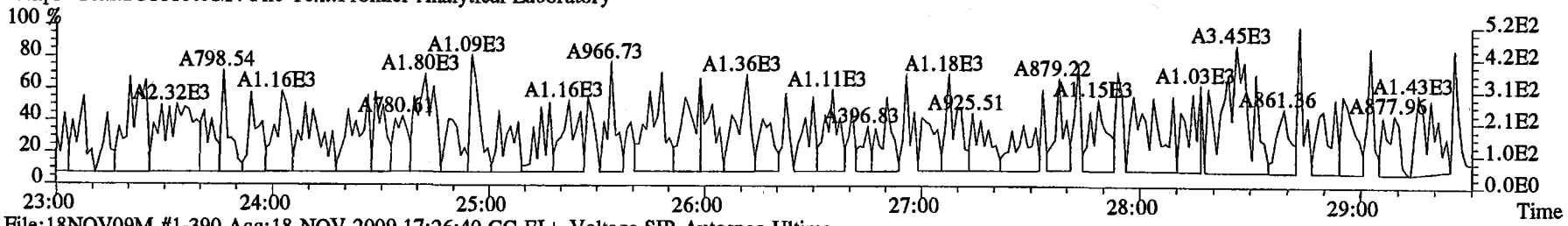
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



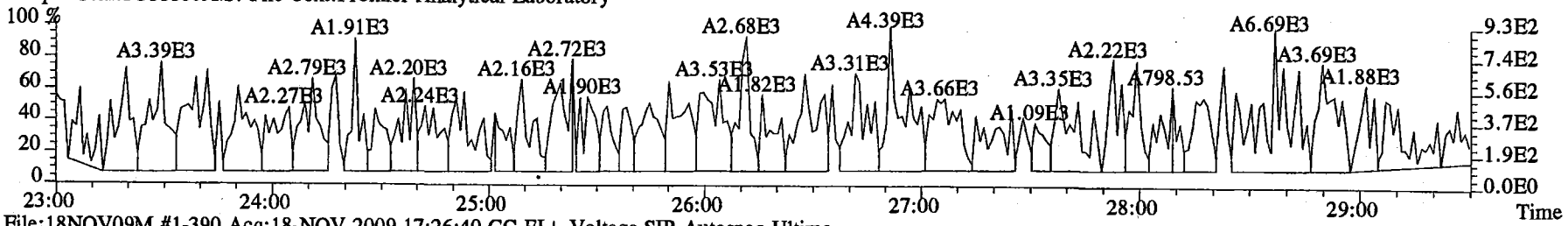
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



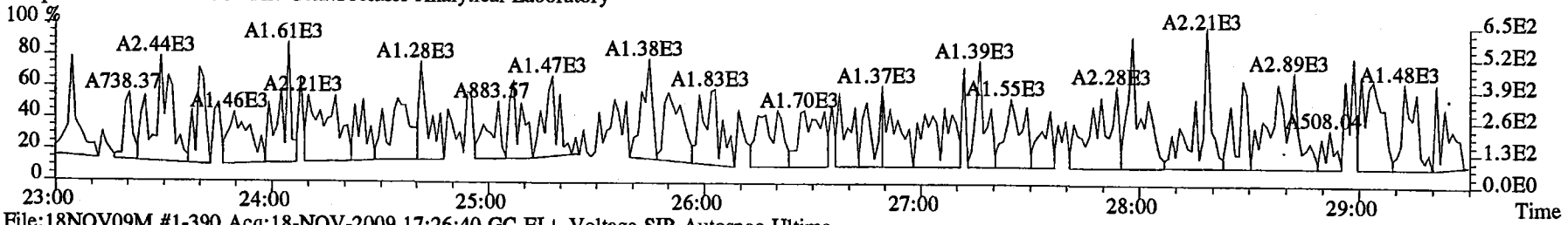
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



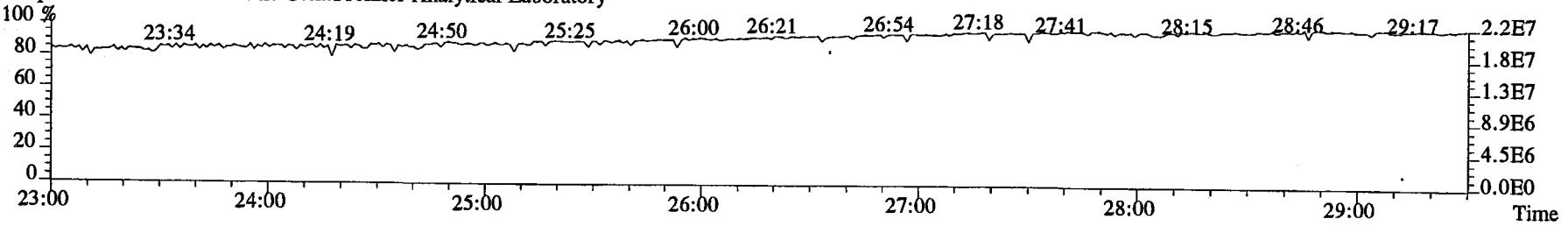
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



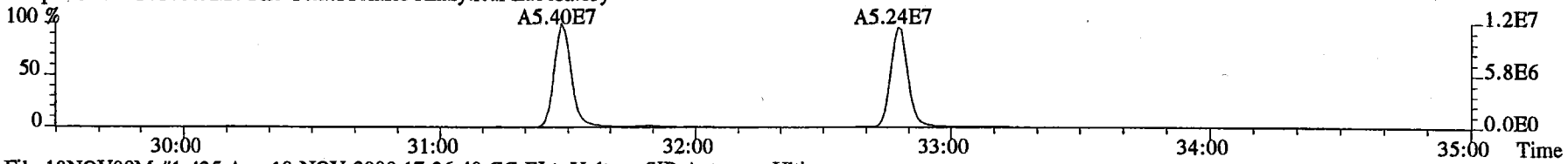
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



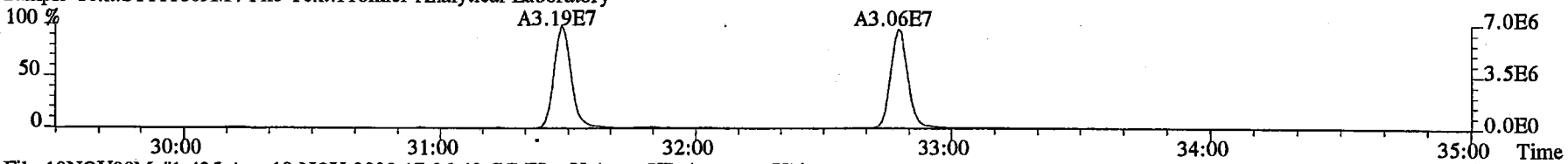
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



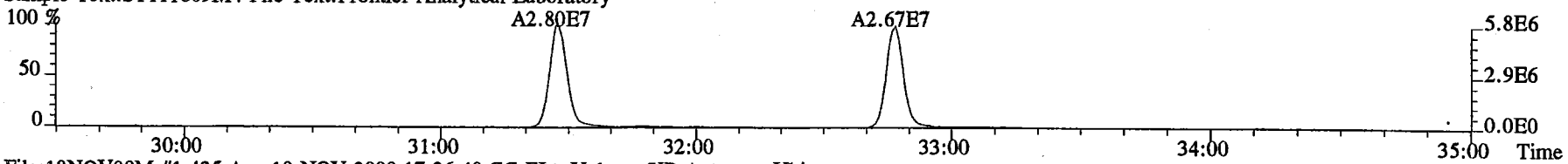
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



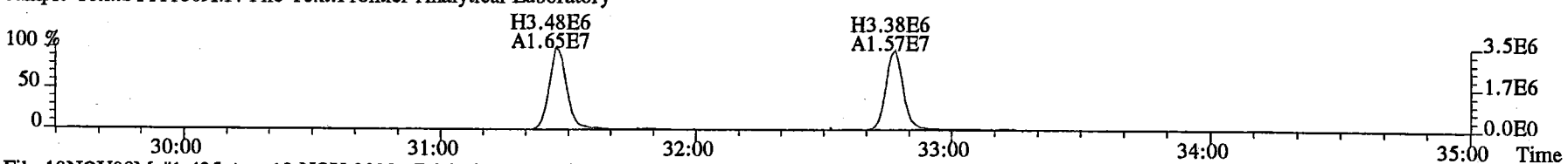
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



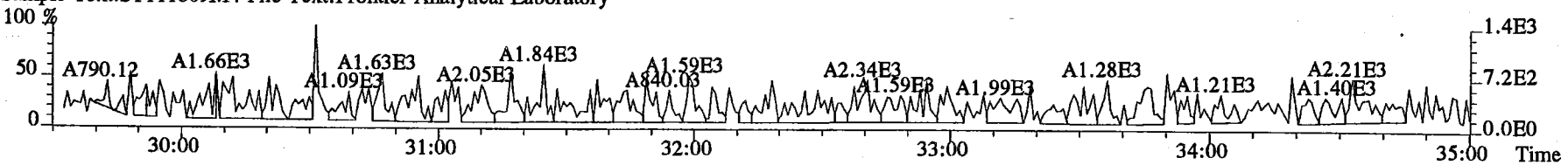
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



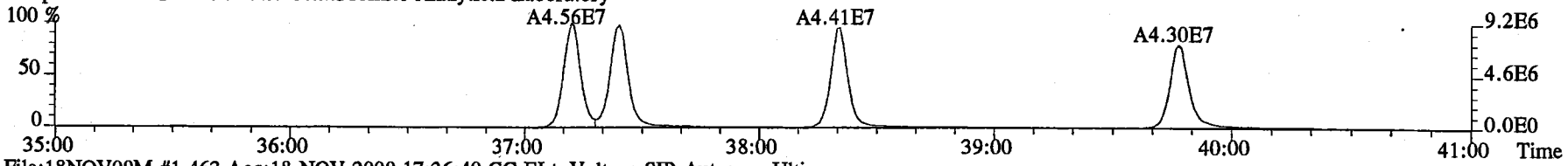
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



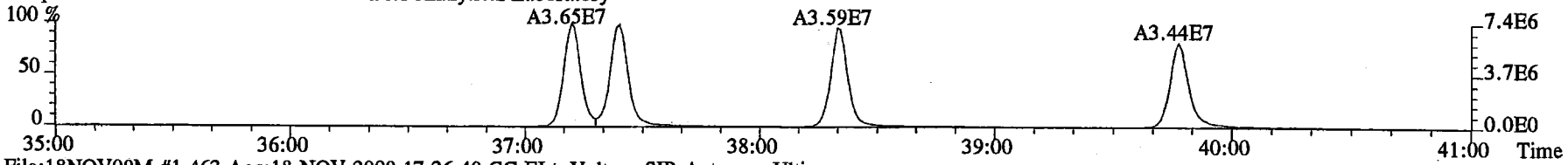
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



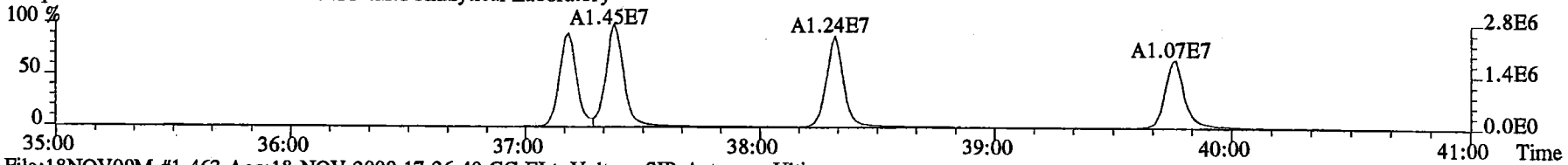
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



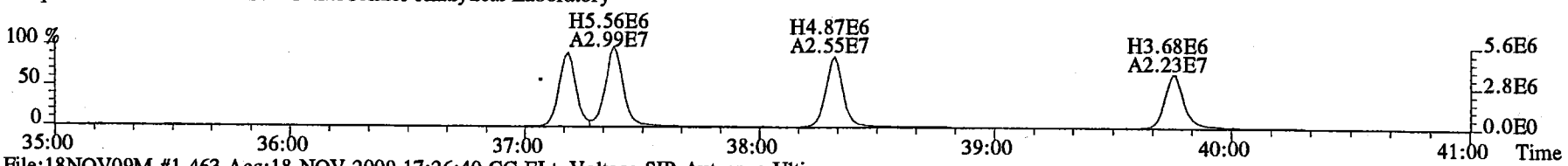
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



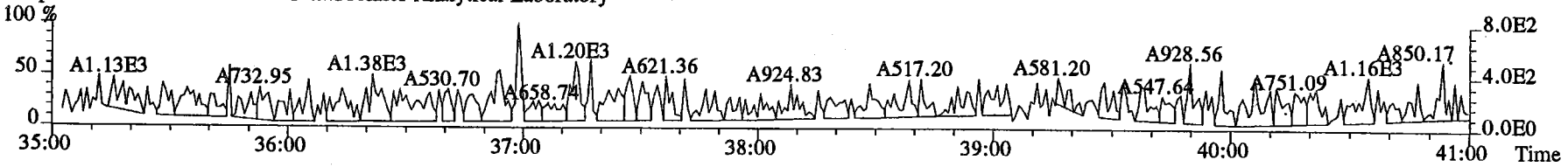
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



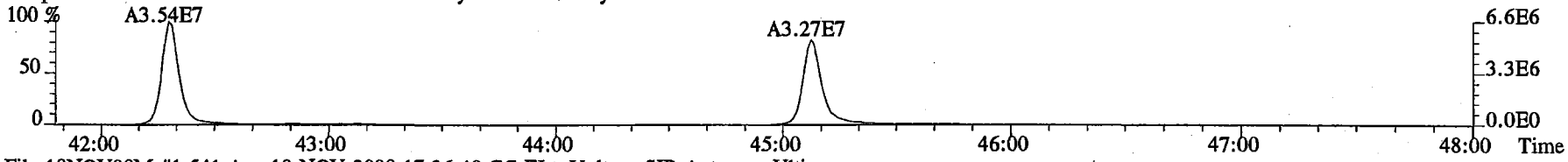
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



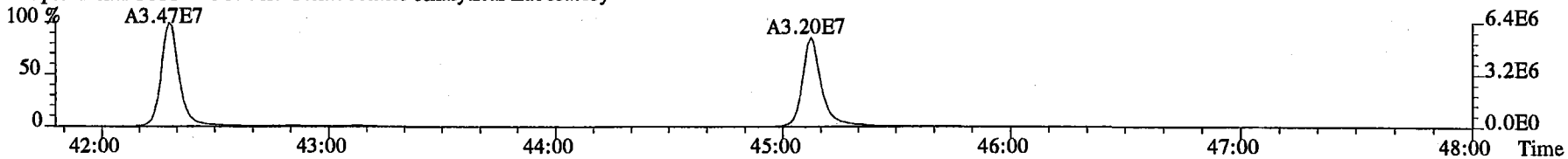
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



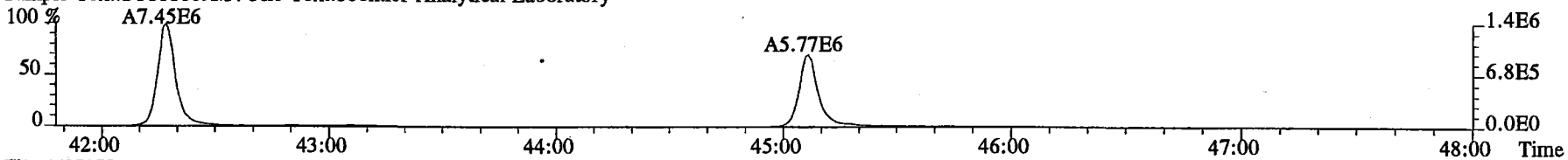
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



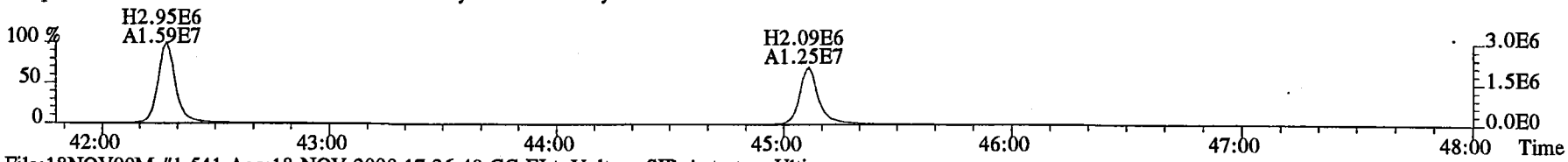
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



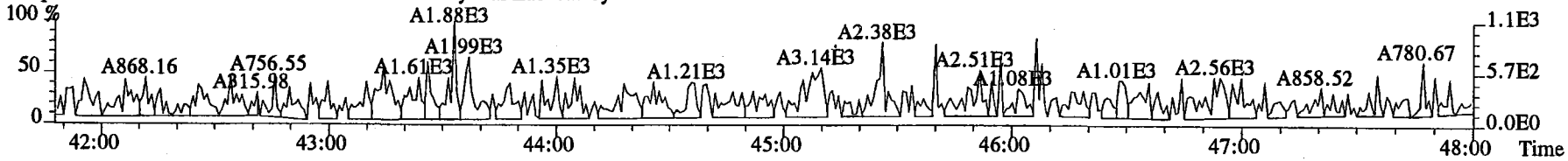
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



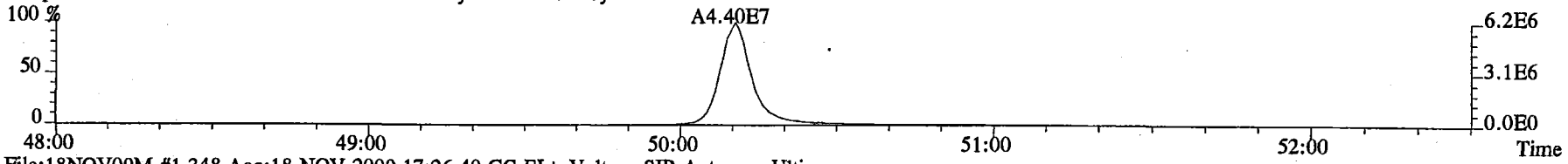
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



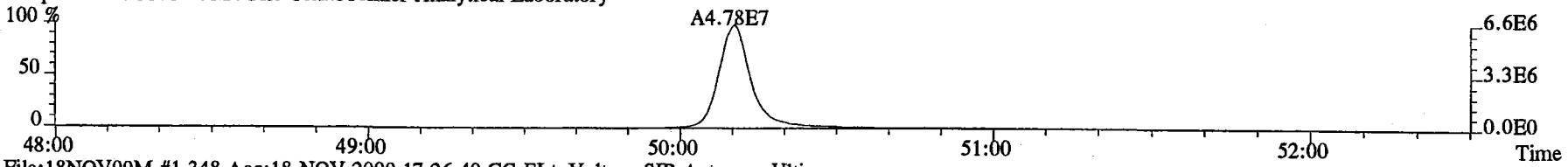
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



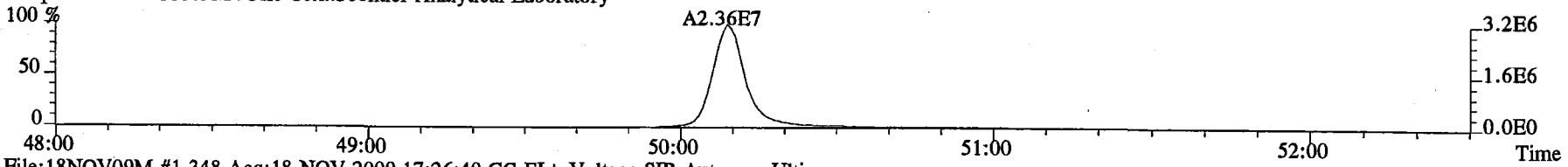
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



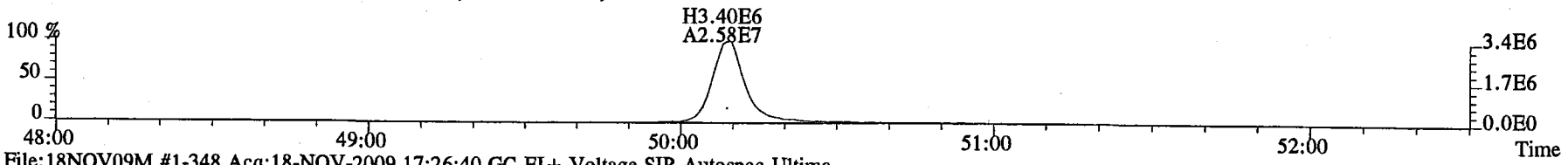
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



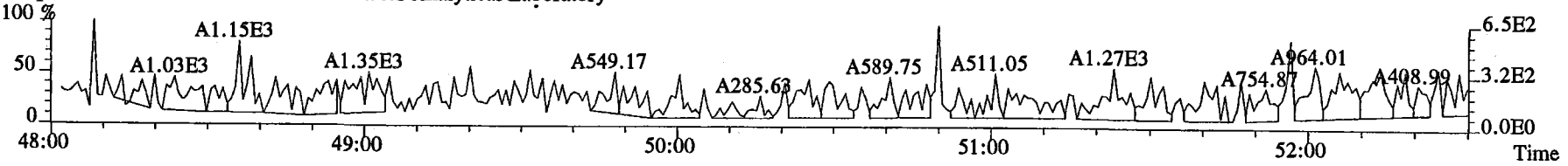
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



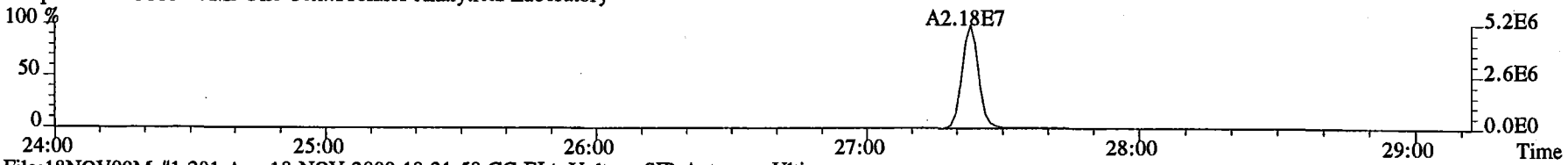
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



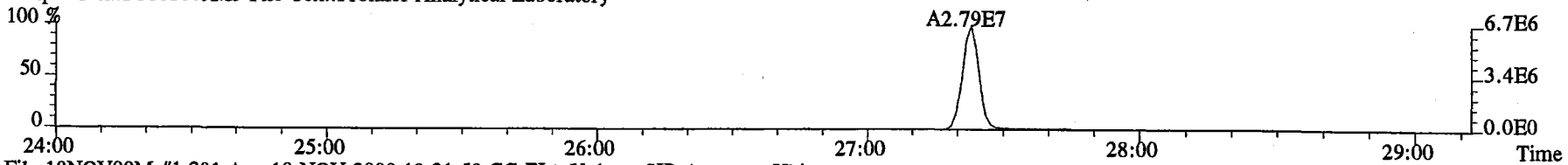
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



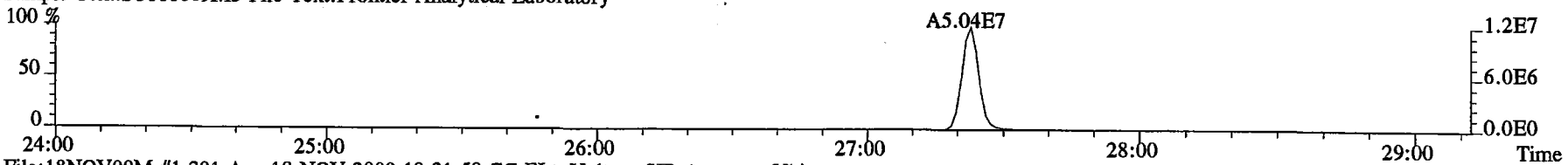
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



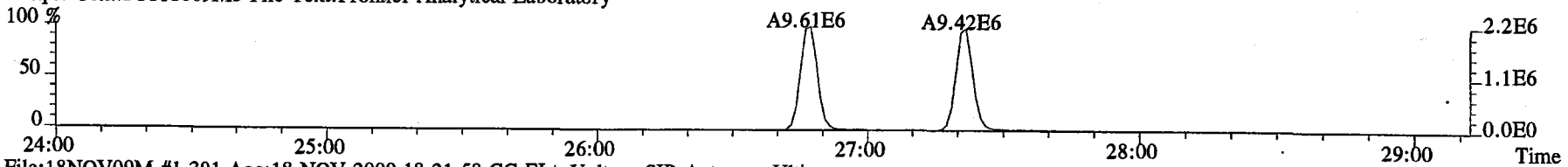
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



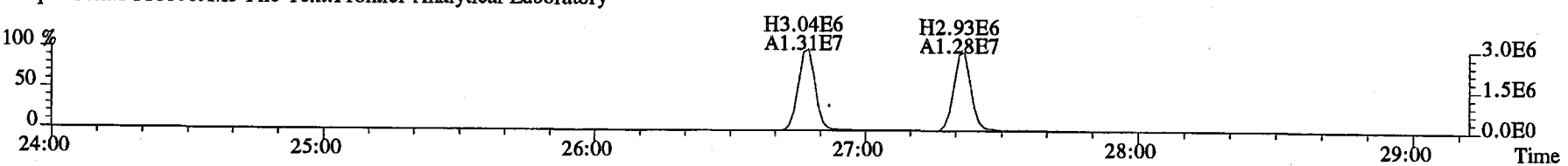
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



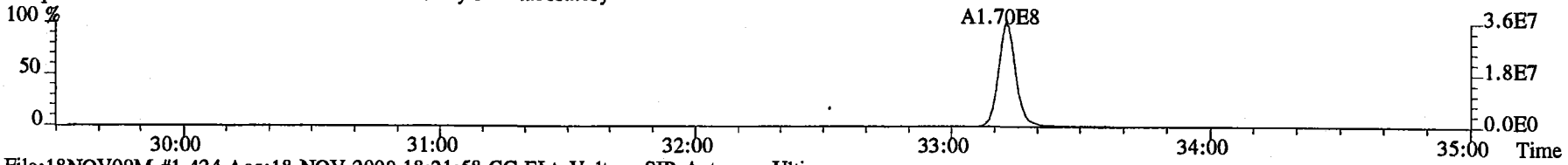
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



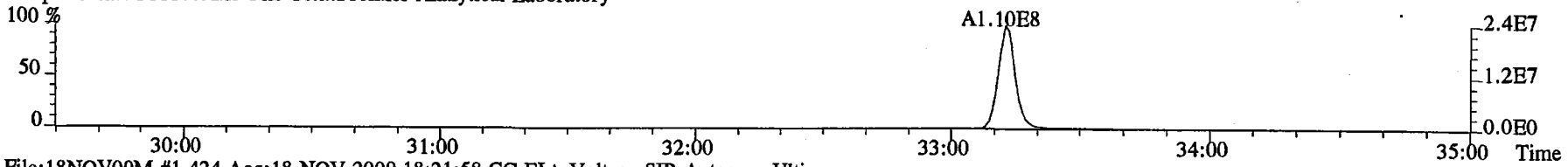
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



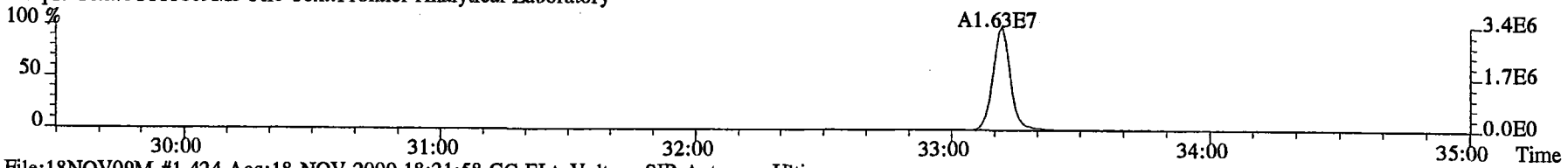
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



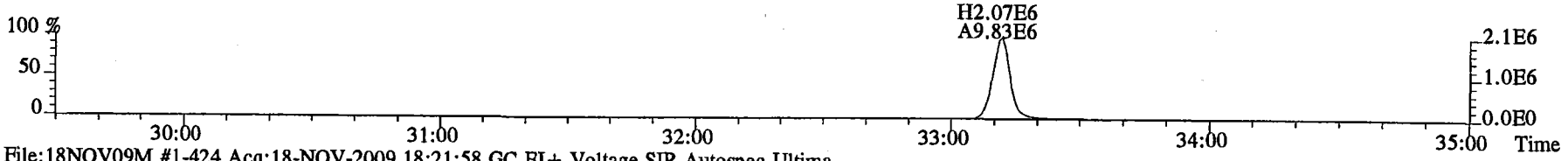
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



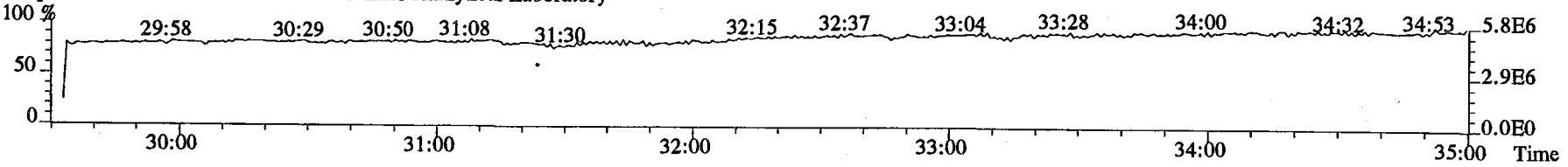
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



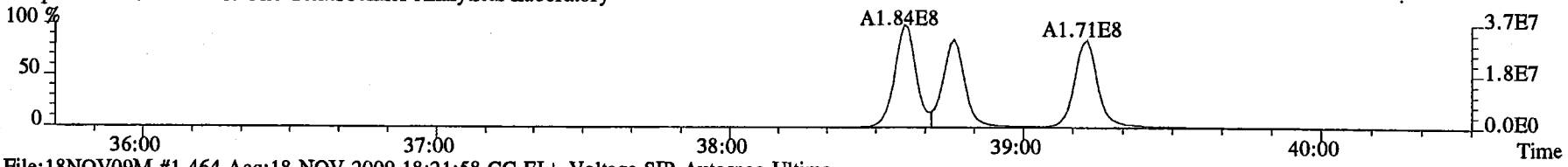
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



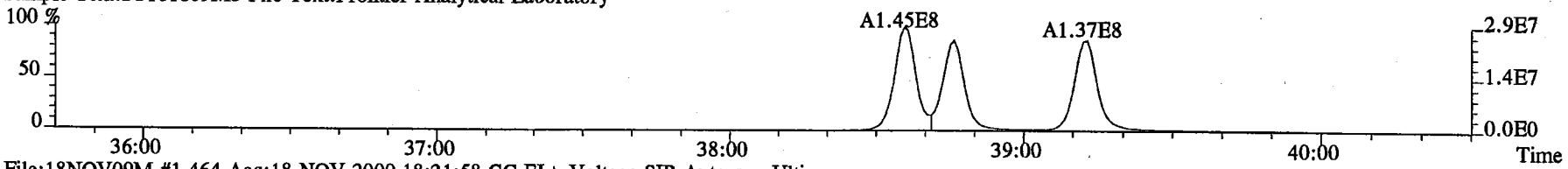
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



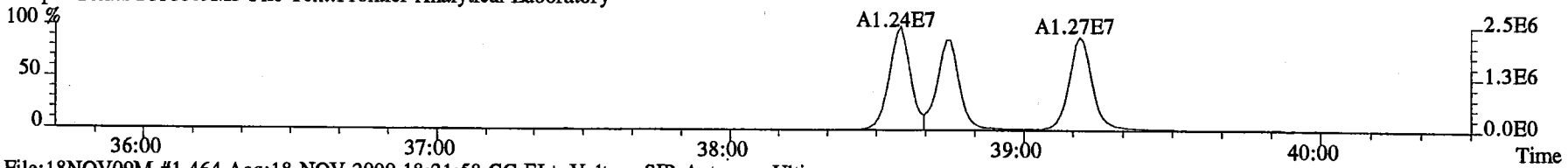
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



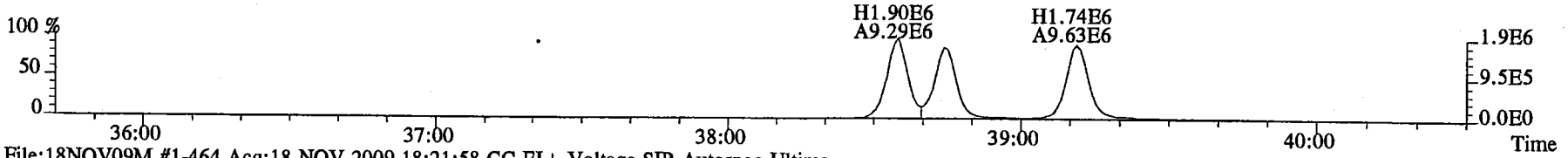
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



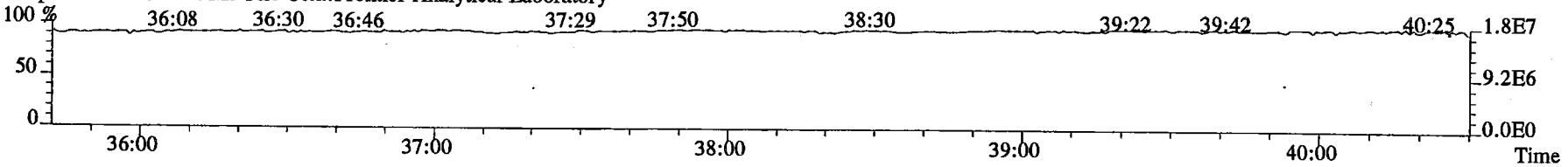
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



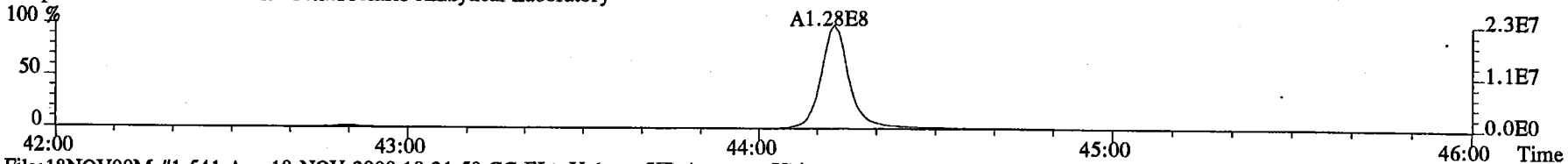
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



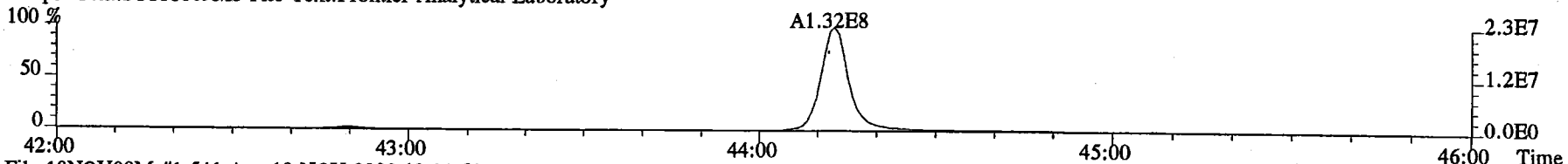
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



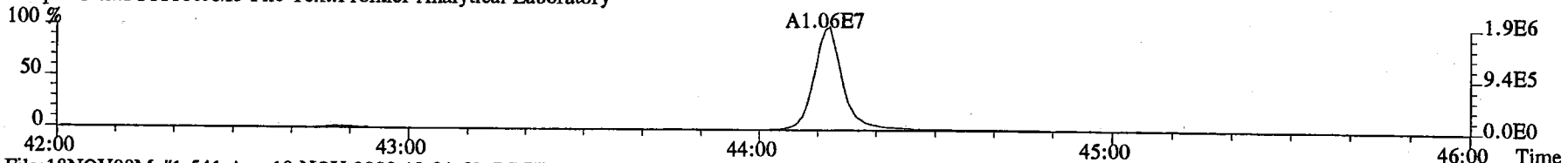
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



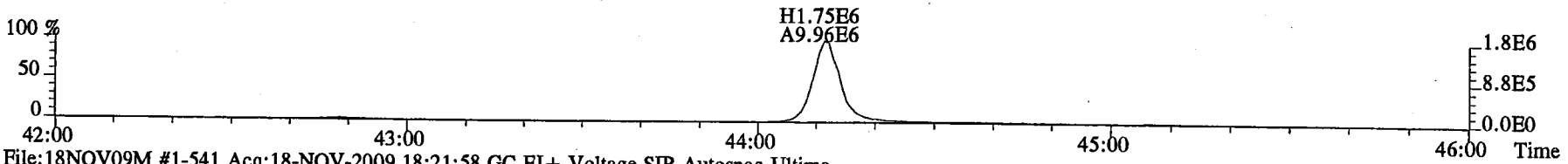
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



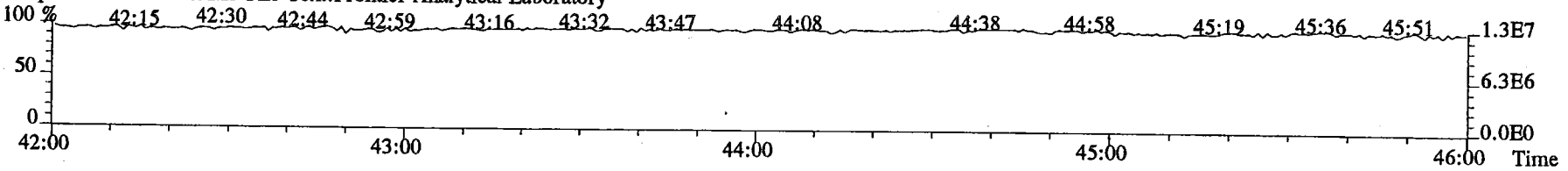
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



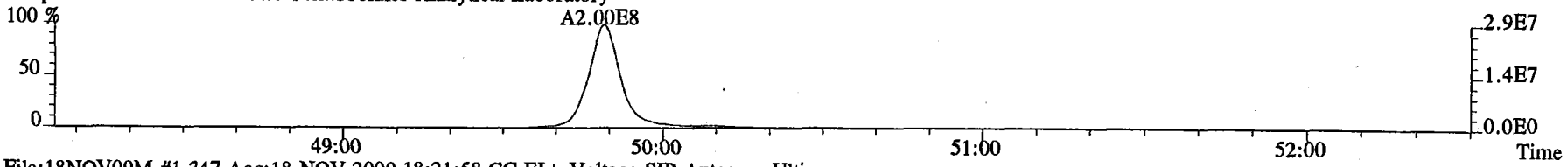
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



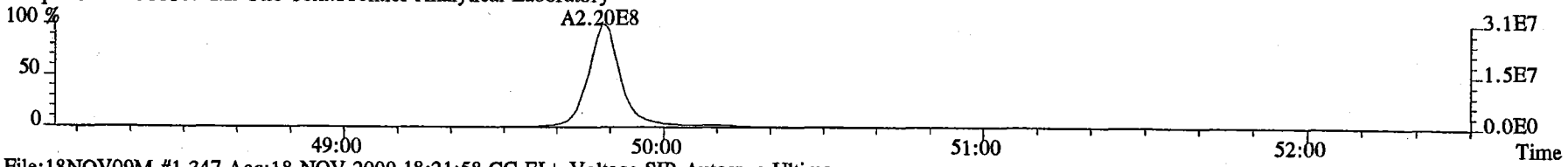
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



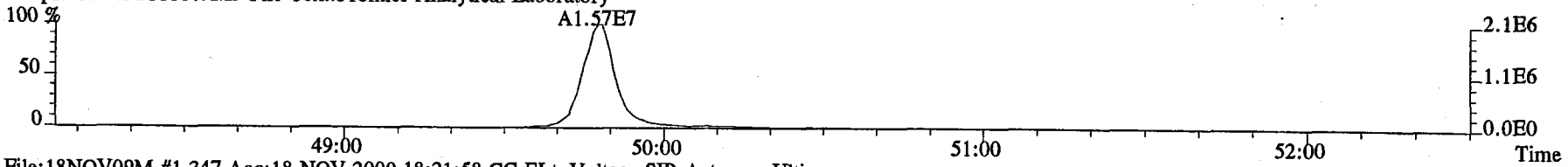
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



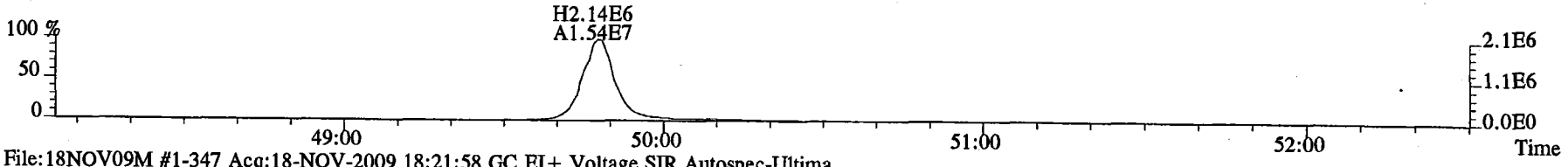
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



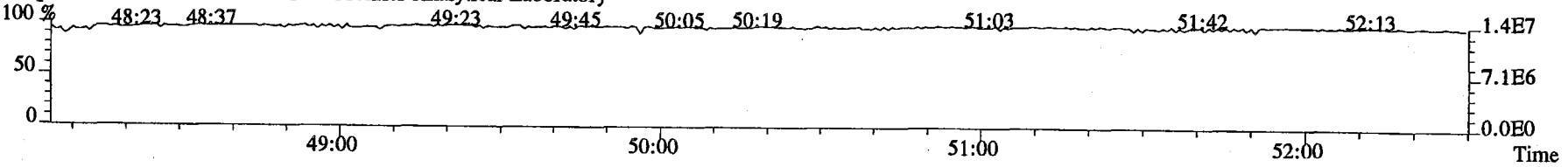
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



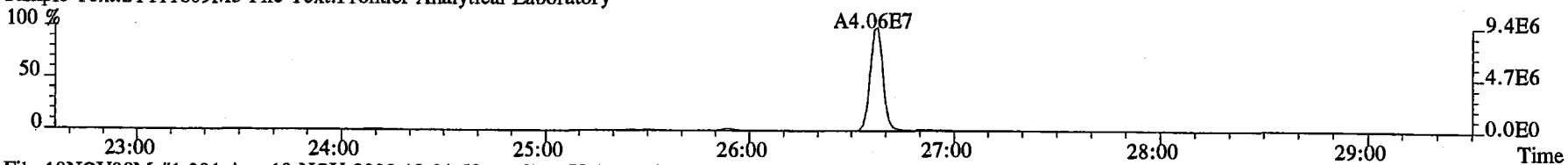
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



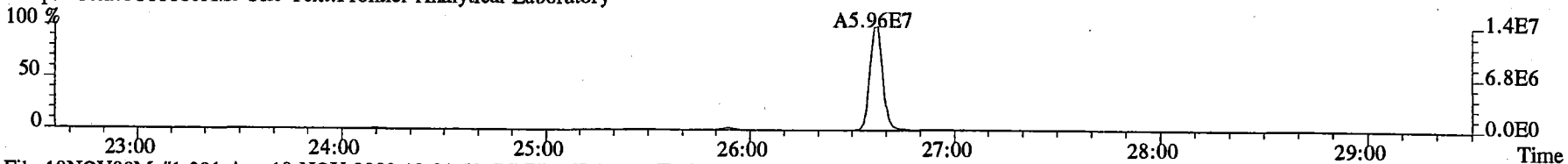
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



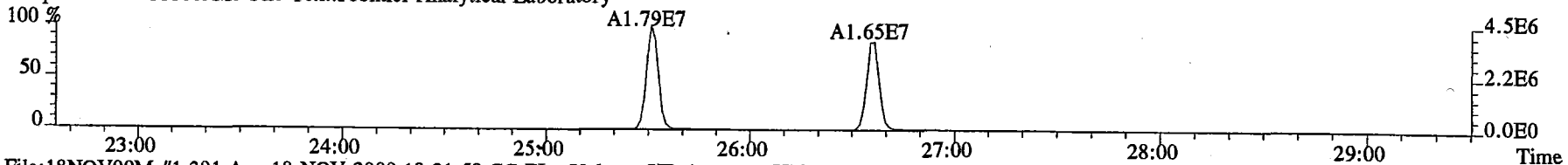
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



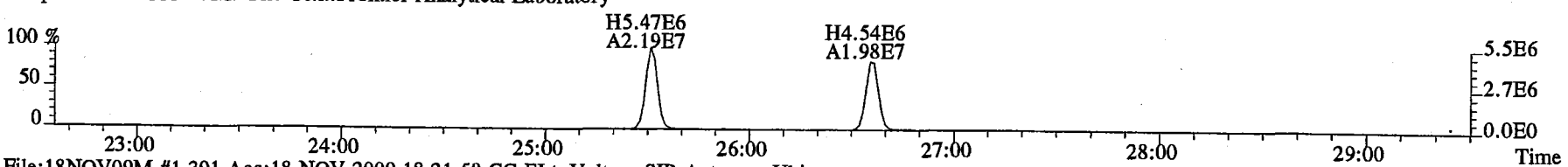
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



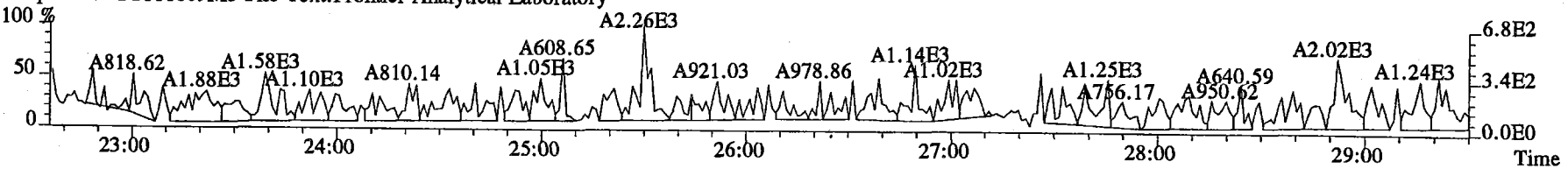
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



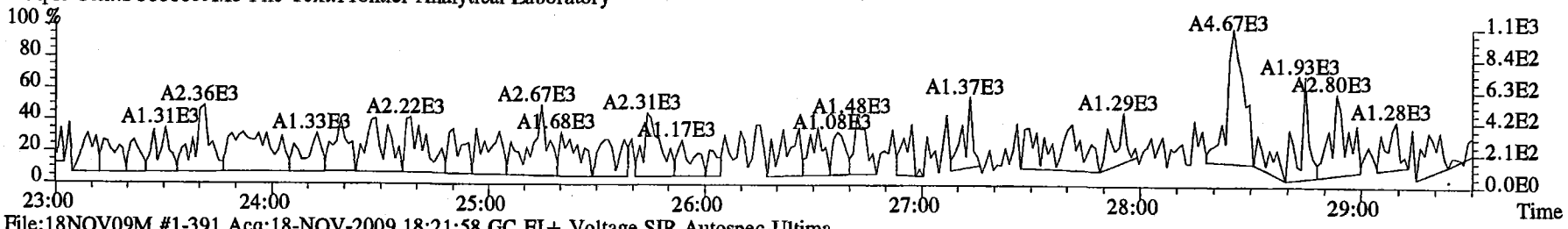
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



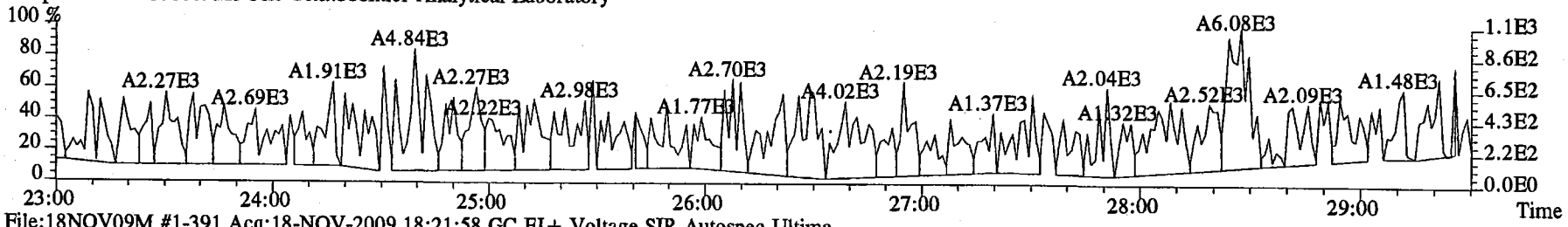
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



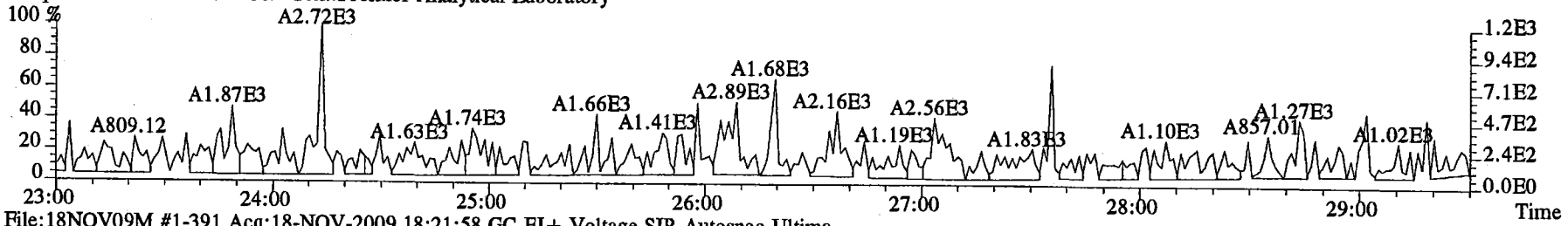
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



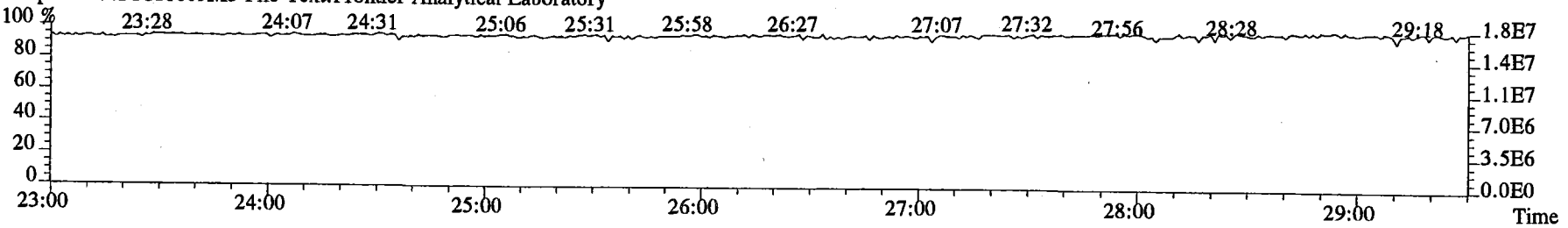
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



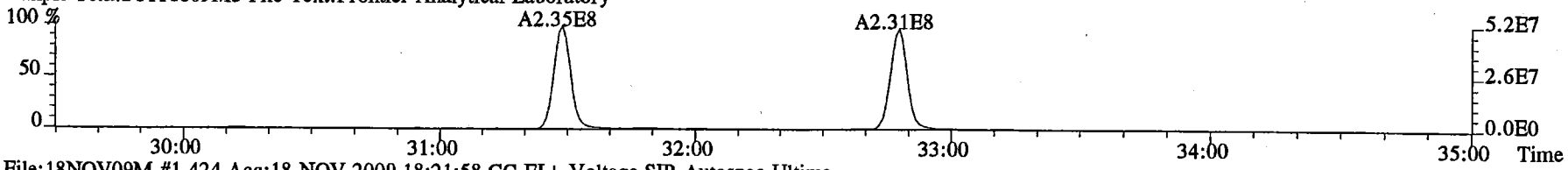
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



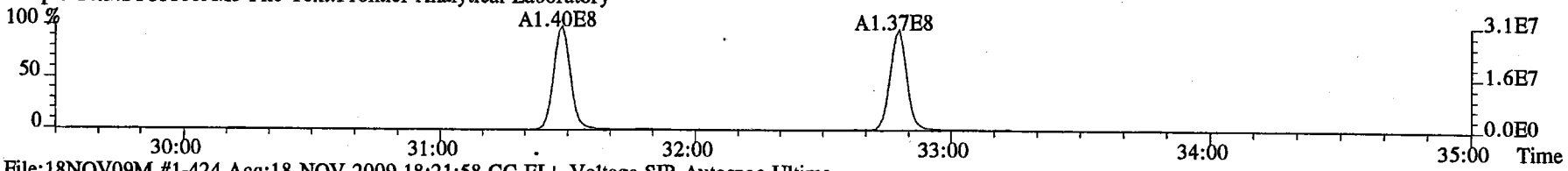
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



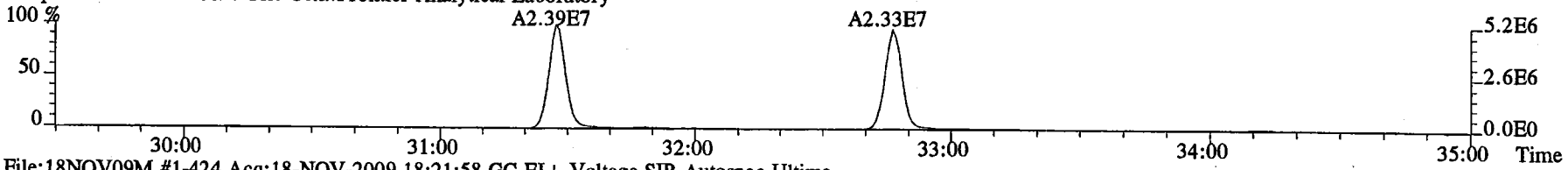
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



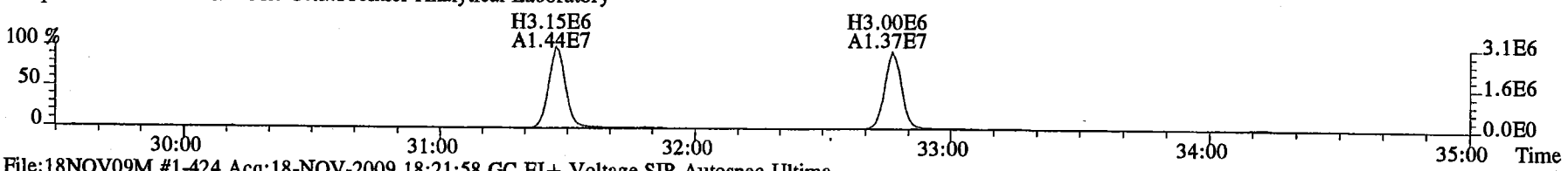
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



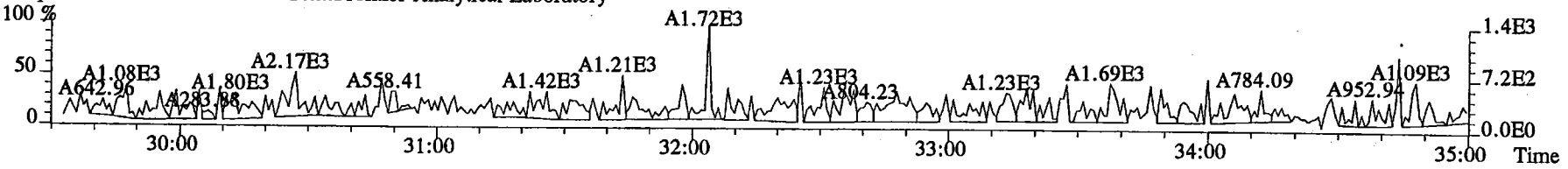
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



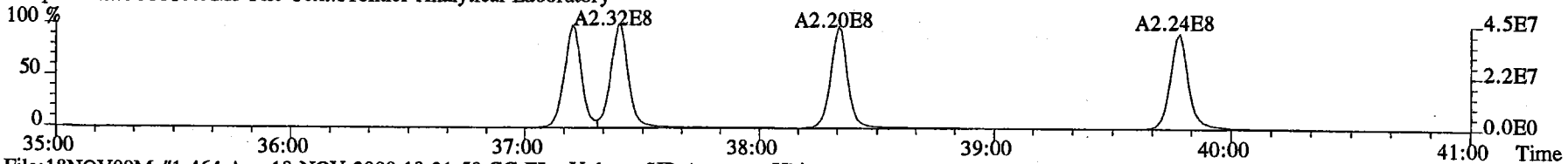
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



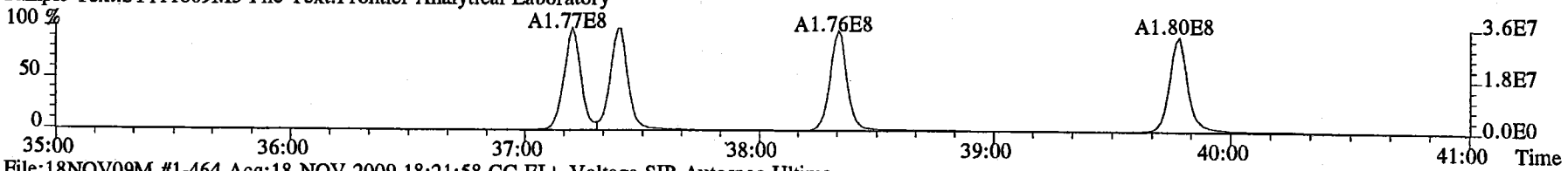
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



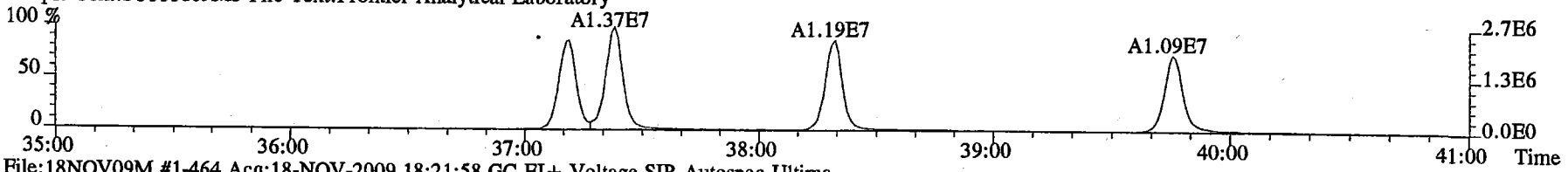
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



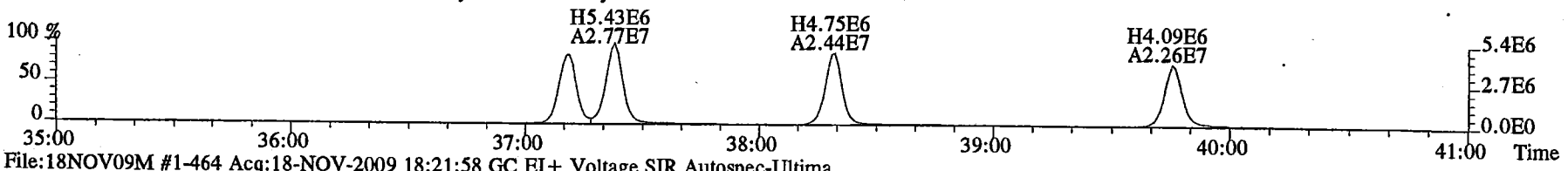
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



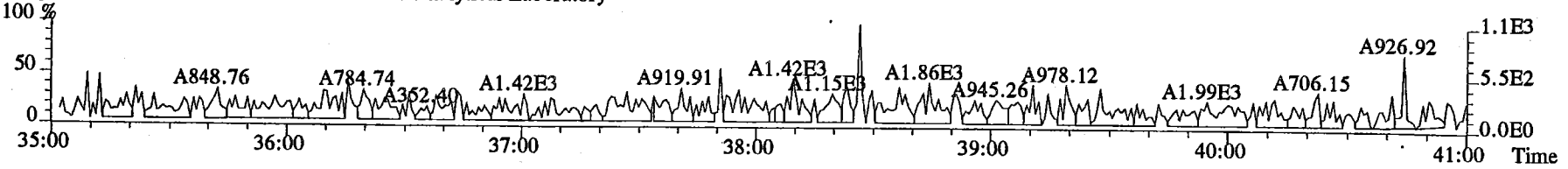
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



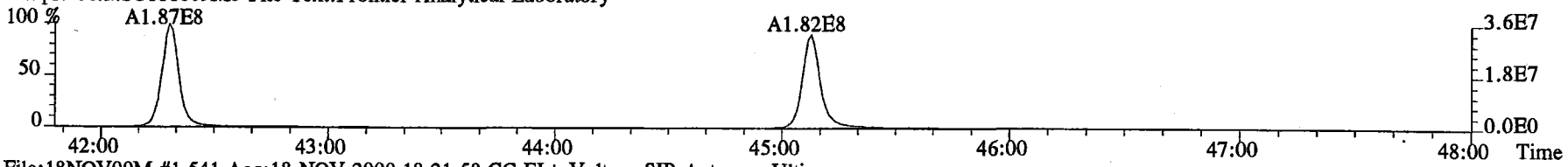
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



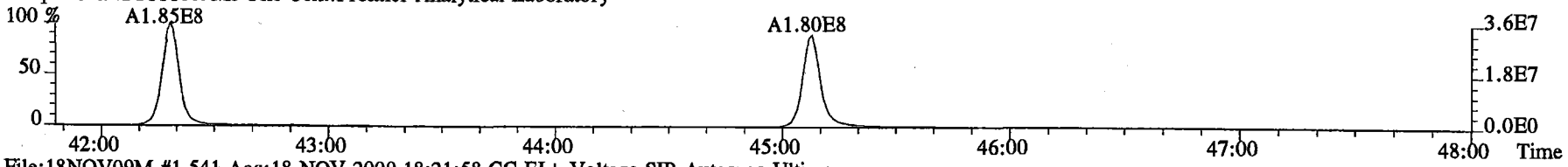
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



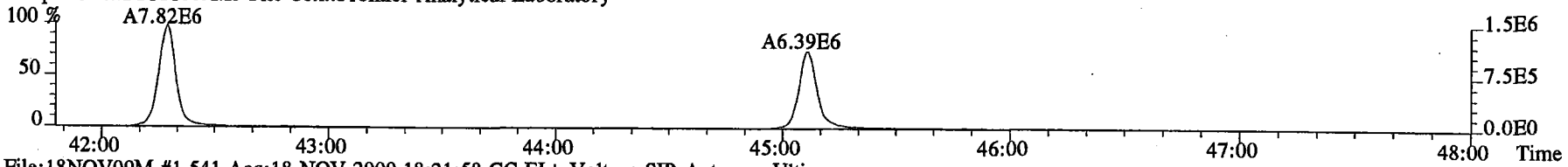
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



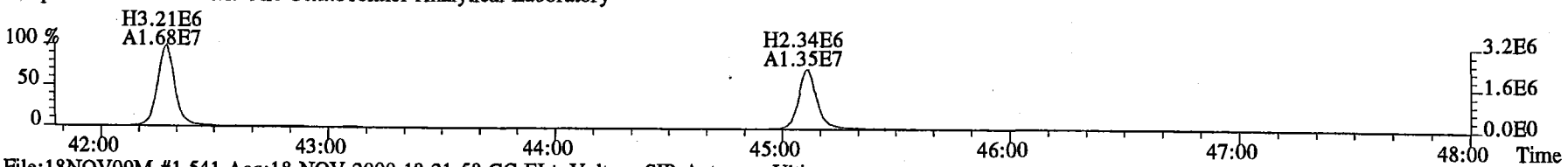
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



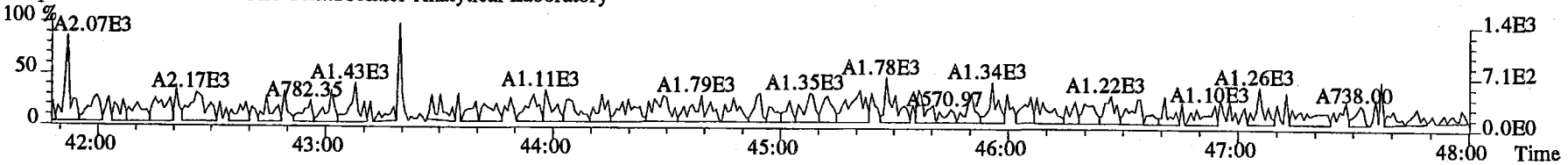
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



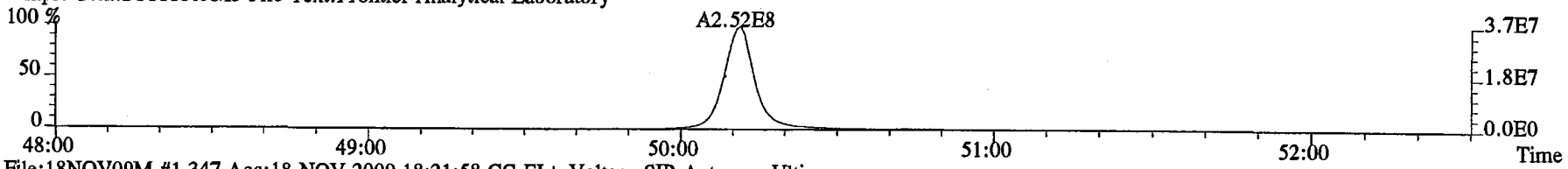
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



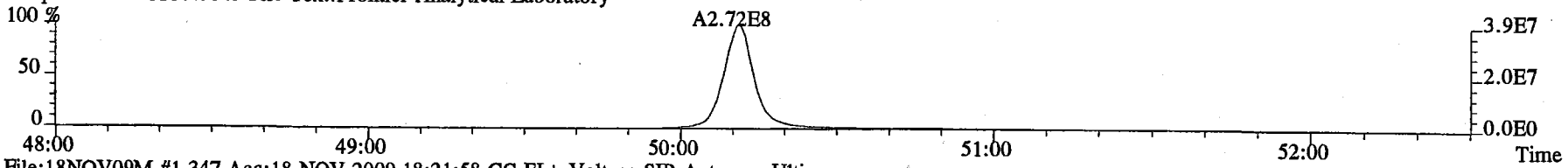
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



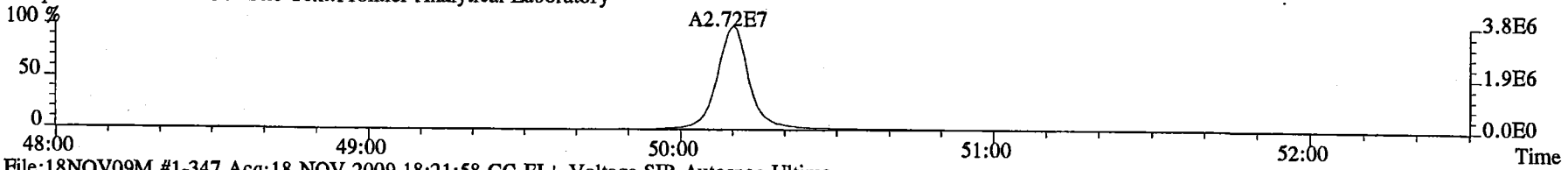
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



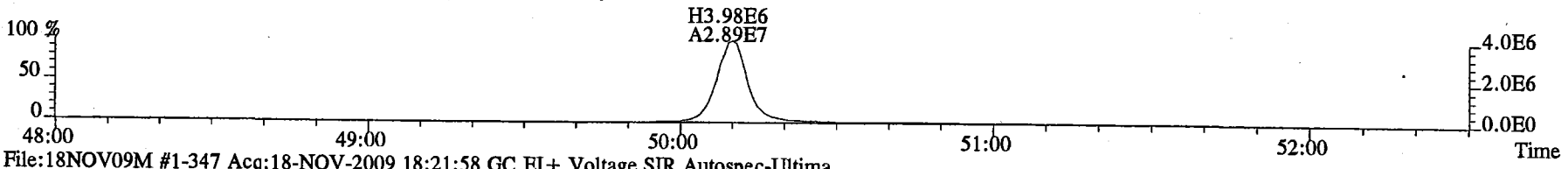
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



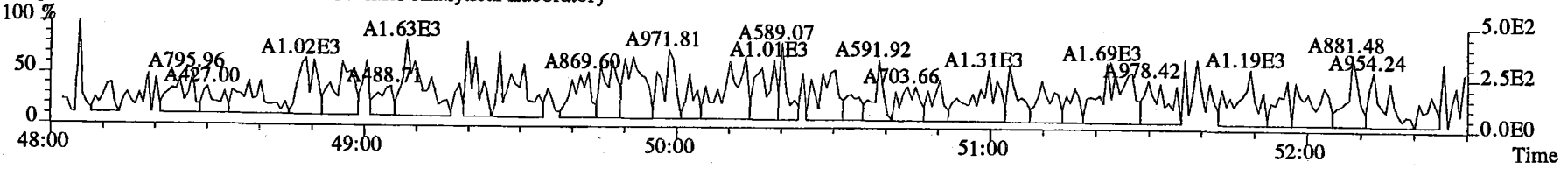
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



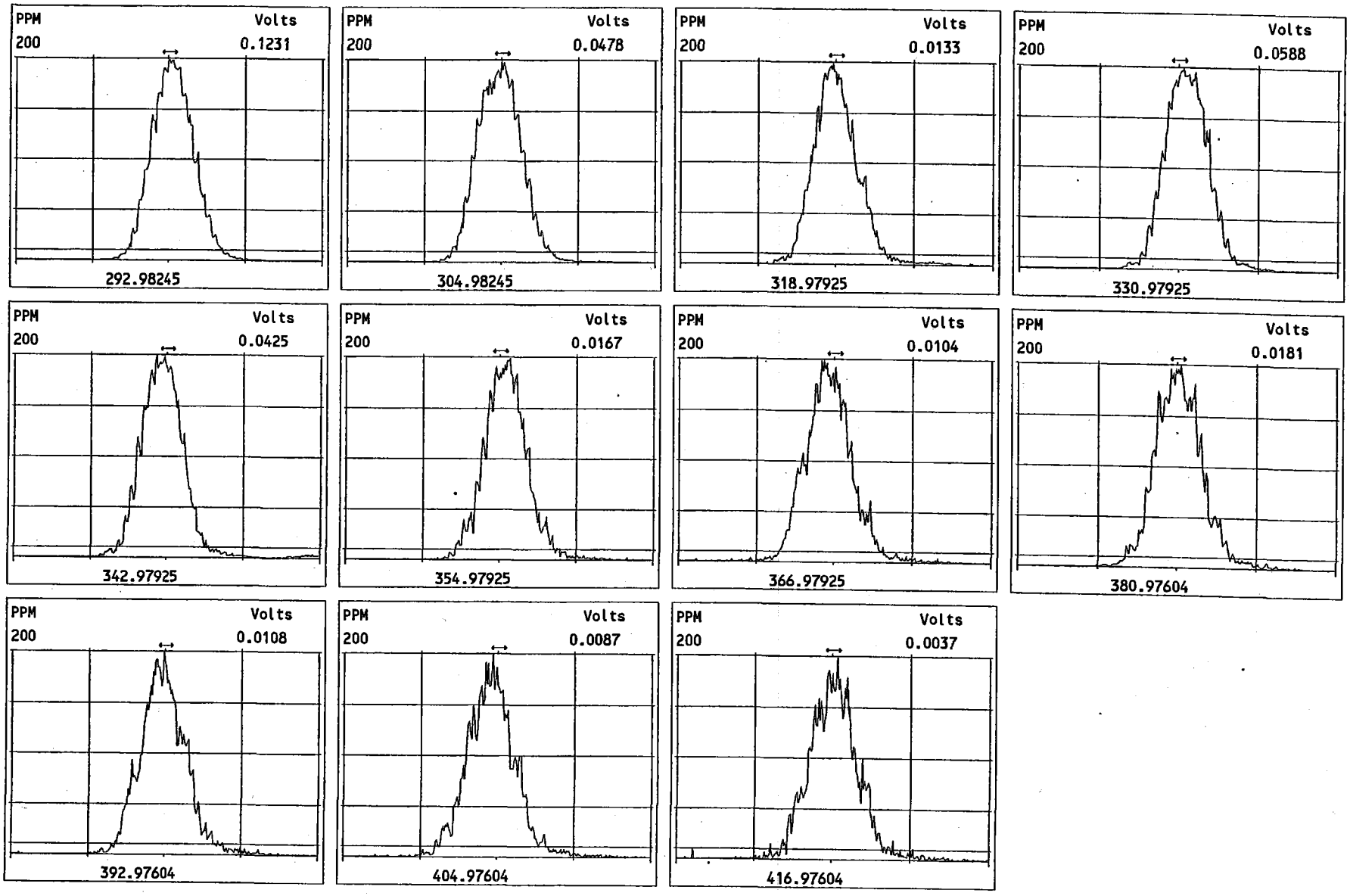
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



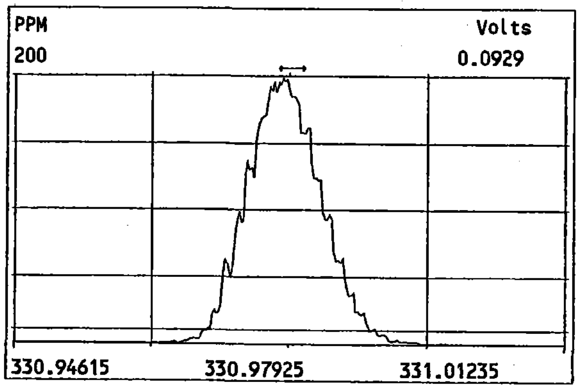
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

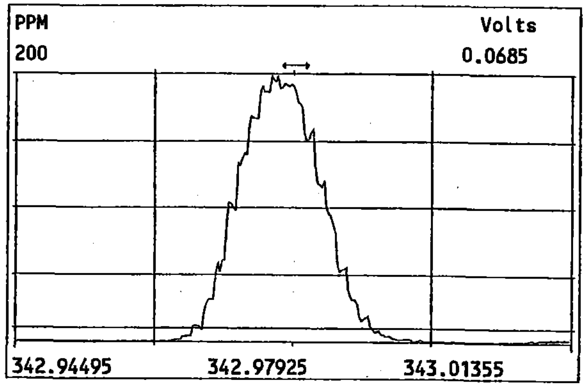


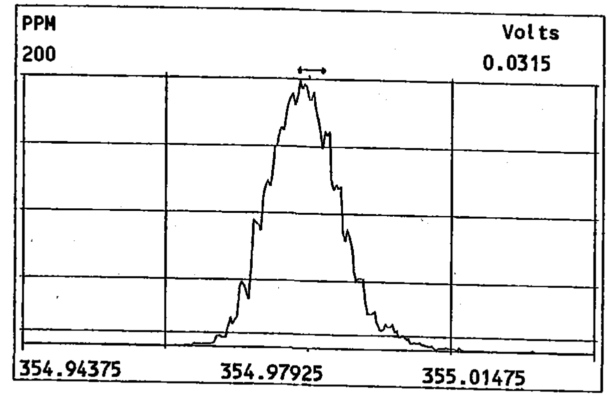
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

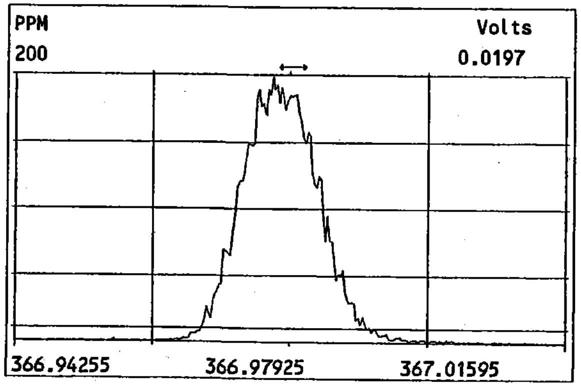


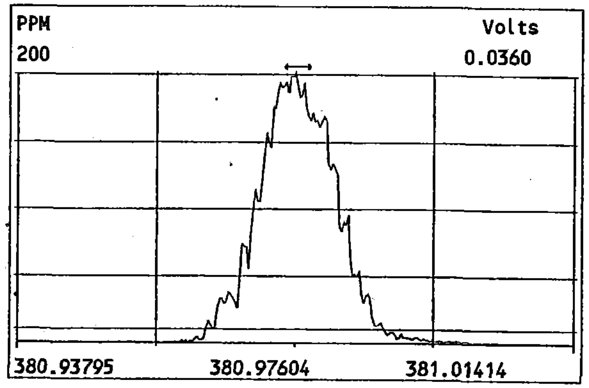
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

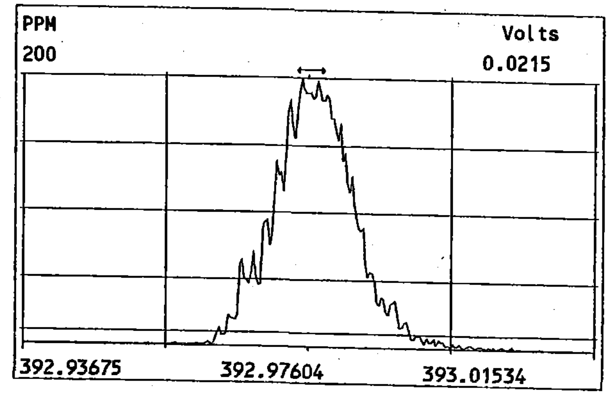


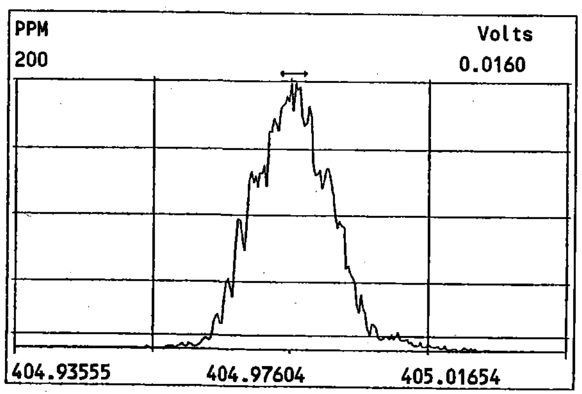


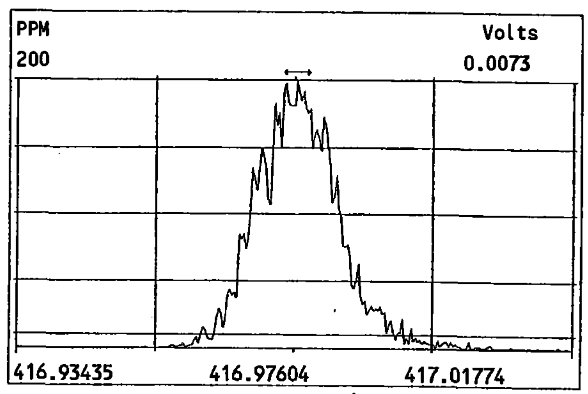




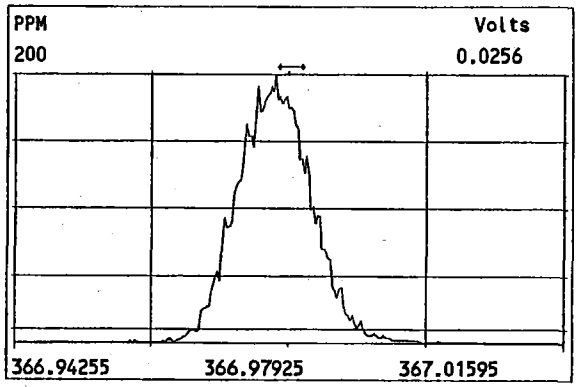


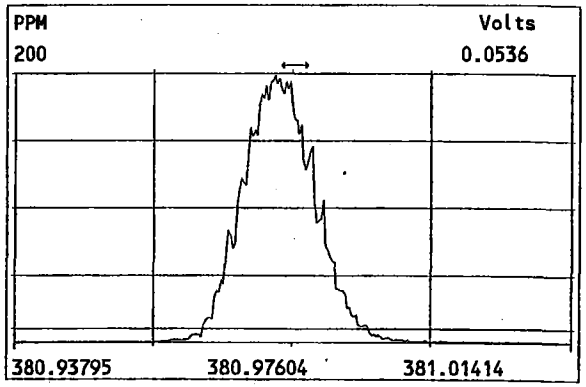


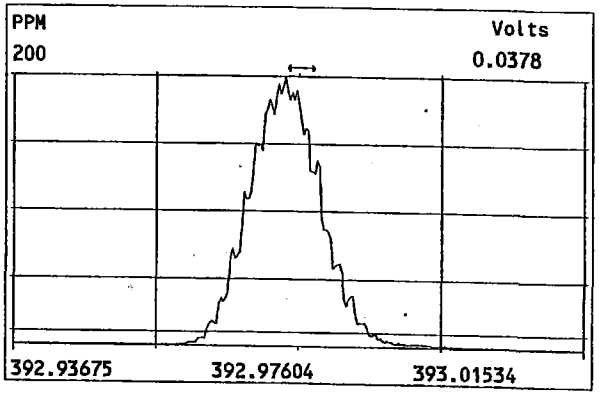


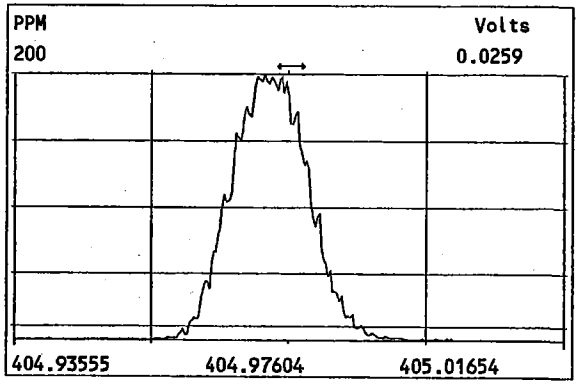


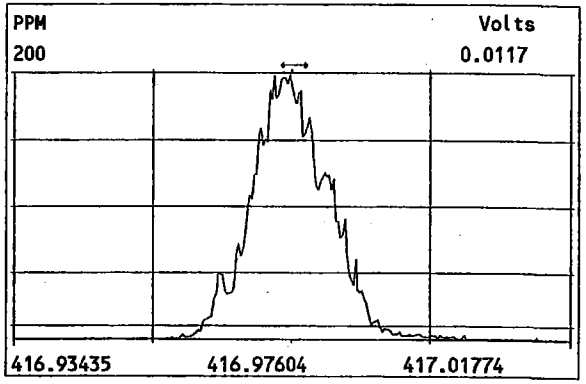
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

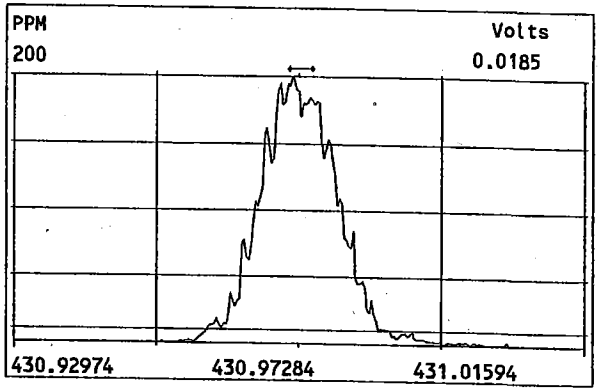


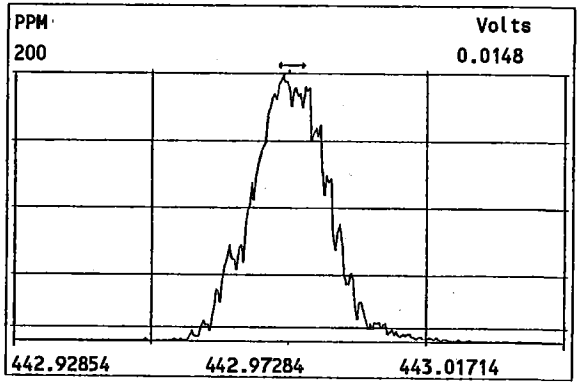


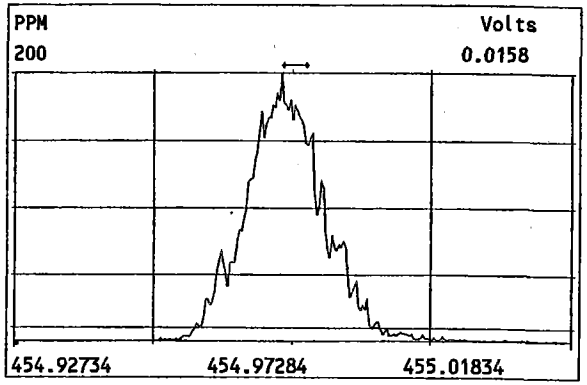




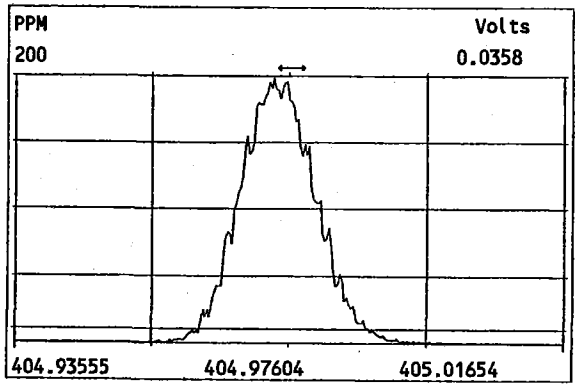


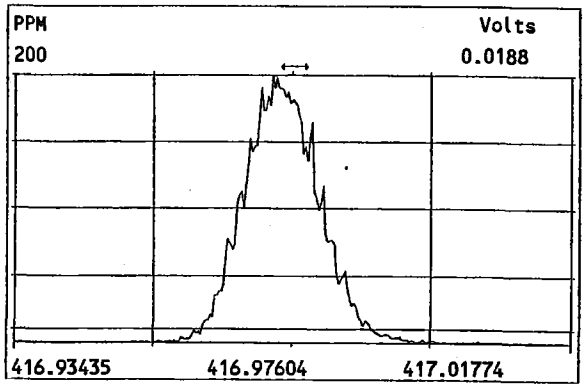


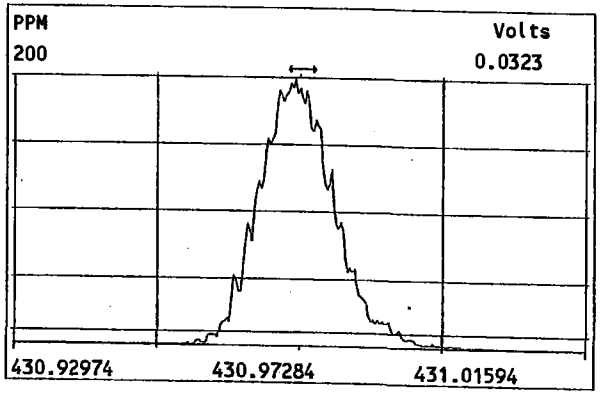


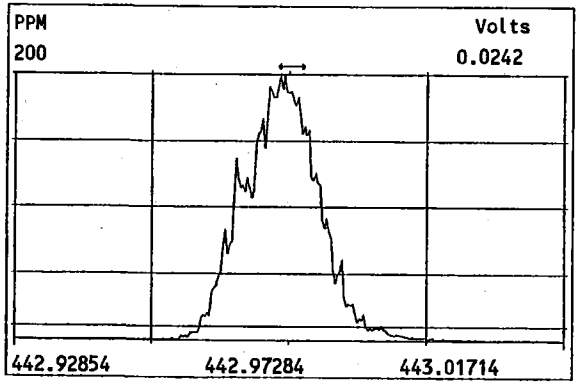


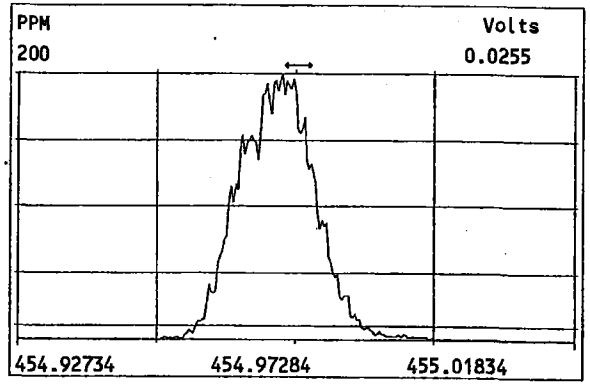
Peak Locate Examination:19-NOV-2009:14:43 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

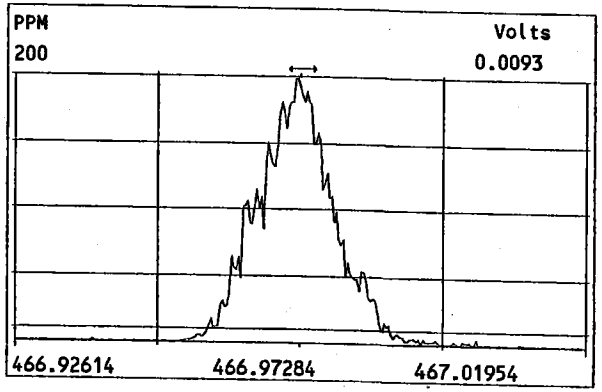


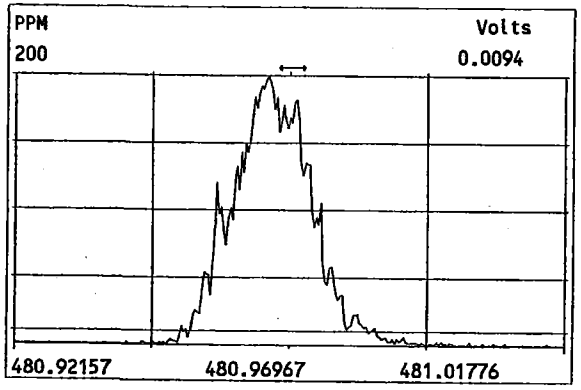




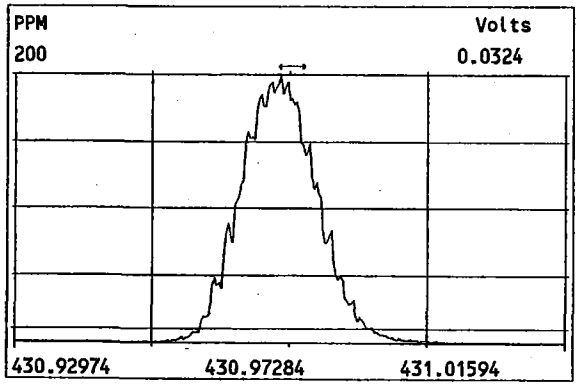


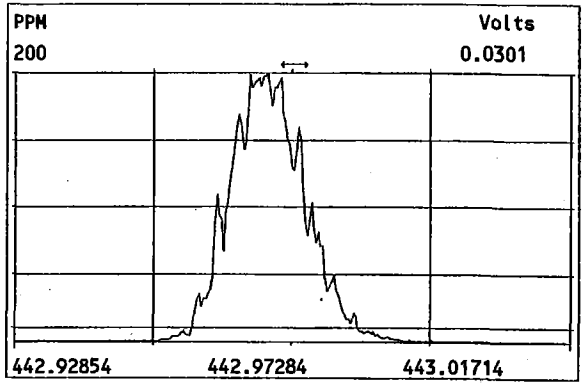


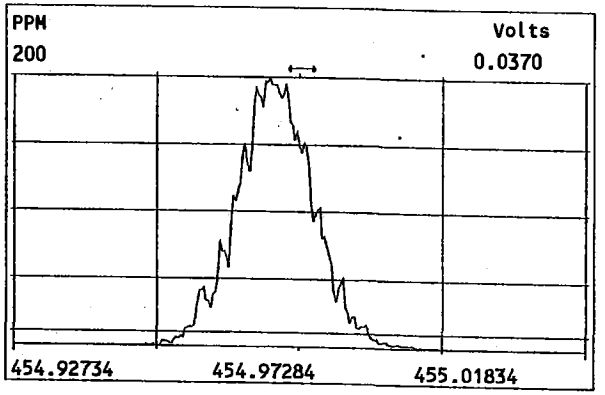


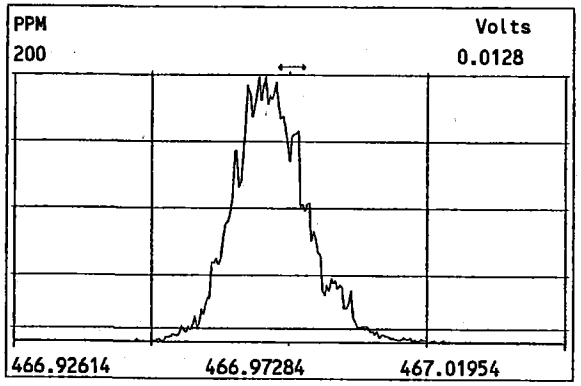


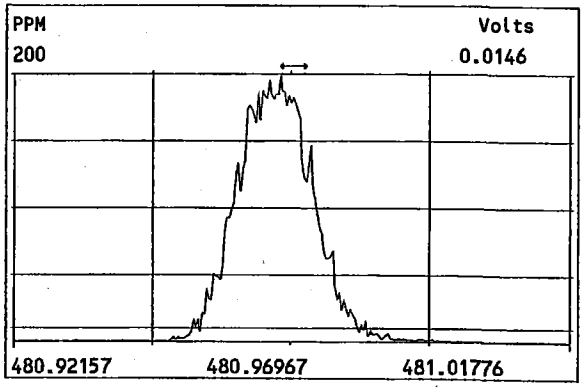
Peak Locate Examination:19-NOV-2009:14:43 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

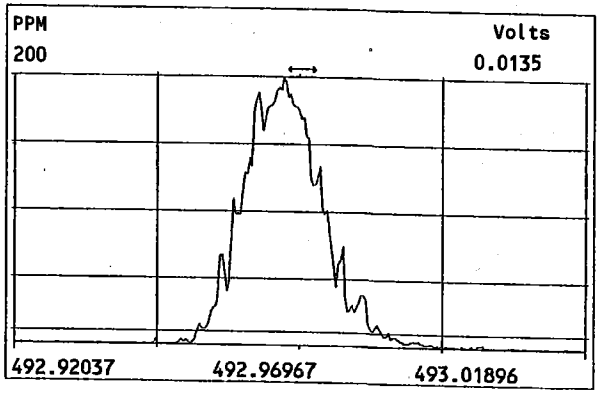


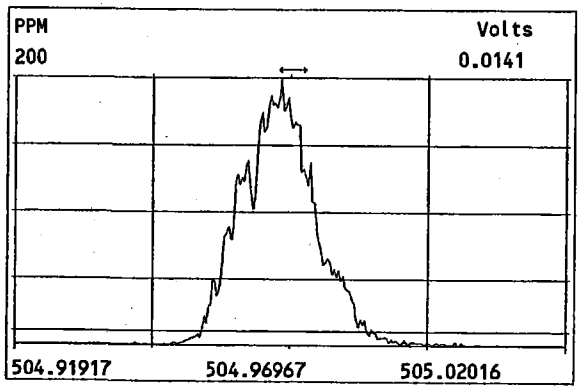


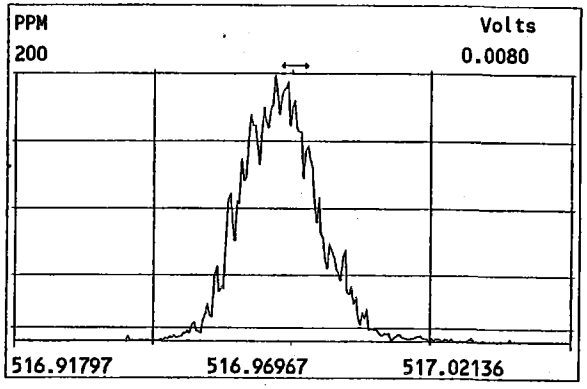












Continuing/Ending Calibration Results

USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 19MAR10M Sam:1 Analysis Date: 19-MAR-10 08:14:42

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	0.81	0.65-0.89	y	11.3	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	y	50.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	48.6	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	49.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	48.4	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.94	0.88-1.20	y	49.0	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	104	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.68	0.65-0.89	y	9.95	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	52.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	50.7	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.8	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	51.5	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	51.3	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05-1.43	y	51.9	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	50.9	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	y	52.1	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	98.5	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: 3/20/10

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 19MAR10M Sam:1 Analysis Date: 19-MAR-10 08:14:42

	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	0.75	0.65-0.89	y	104	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32-1.78	y	91.5	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	99.8	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	101	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	103	72.0 - 138
13C-OCDD	M+2/M+4	0.96	0.76-1.02	y	193	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.83	0.65-0.89	y	104	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.68	1.32-1.78	y	88.6	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	85.4	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	91.8	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	94.9	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	92.8	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.49	0.43-0.59	y	89.0	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.48	0.37-0.51	y	96.6	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.48	0.37-0.51	y	92.0	77.0 - 129
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	179	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					11.6	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: 3/22/10

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: 11/18/09

RT Window Data Filename: 19MAR10M Sam:1 Analysis Date: 19-MAR-10 Time: 08:14:42

DB-5 IS Data Filename: 19MAR10M Sam:1 Analysis Date: 19-MAR-10 Time: 08:14:42

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)	24:25	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)	30:16	1,3,4,6,8-PeCDF (F)	28:27
1,2,3,8,9-PeCDD (L)	33:48	1,2,3,8,9-PeCDF (L)	34:13
1,2,4,6,7,9-HxCDD (F)	36:09	1,2,3,4,6,8-HxCDF (F)	35:16
1,2,3,7,8,9-HxCDD (L)	39:12	1,2,3,7,8,9-HxCDF (L)	39:45
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)	44:12	1,2,3,4,7,8,9-HpCDF (L)	45:06

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

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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

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

Analyst: [signature] Date: 3/22/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 19-MAR-10 08:14:42 CS3 or VER Data Filename: 19MAR10M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.238	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	0.923-1.203
13C-2,3,4,7,8-PeCDF		1.222	0.923-1.303

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

Analyst: _____ Date: 3/22/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 19-MAR-10 08:14:42 CS3 or VER Data Filename: 19MAR10M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-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	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.269	1.032-1.311
13C-OCDF		1.279	1.000-1.311

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

Analyst: _____ Date: 3/22/10

FAL ID: ST031910M1 Filename: 19MAR10M Sam:1 Acquired: 19-MAR-10 08:14:42 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 (90918J) ConCal: ST031910M1 EndCal: ST031910M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 103
WHO 1998 Tox: 128 WHO 2005 Tox: 117

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	3.83e+06	0.81 y	27:25	1.02	11.3		2.50	-	-	*
1,2,3,7,8-PeCDD	1.55e+07	1.58 y	33:14	0.96	50.8		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.47e+07	1.28 y	38:36	1.37	48.6		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.41e+07	1.28 y	38:46	1.34	49.2		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.43e+07	1.26 y	39:12	1.37	48.4		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	1.18e+07	0.94 y	44:12	1.17	49.0		2.50	-	-	*
OCDD	1.82e+07	0.91 y	49:46	1.21	104		2.50	-	-	*
2,3,7,8-TCDF	7.15e+06	0.68 y	26:39	1.29	9.95		2.50	-	-	*
1,2,3,7,8-PeCDF	2.19e+07	1.62 y	31:30	0.89	52.1		2.50	-	-	*
2,3,4,7,8-PeCDF	2.03e+07	1.63 y	32:49	0.91	50.7		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.83e+07	1.25 y	37:12	1.00	51.8		2.50	-	-	*
1,2,3,6,7,8-HxCDF	2.01e+07	1.26 y	37:24	0.92	51.5		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.82e+07	1.26 y	38:19	0.99	51.3		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.70e+07	1.21 y	39:45	1.09	51.9		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.65e+07	1.05 y	42:18	1.36	50.9		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.46e+07	1.02 y	45:06	1.61	52.1		2.50	-	-	*
OCDF	1.96e+07	0.90 y	50:08	0.84	98.5		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	3.33e+07	0.75 y	27:23	0.94	104					104
13C-1,2,3,7,8-PeCDD	3.18e+07	1.61 y	33:13	1.02	91.5					91.5
13C-1,2,3,4,7,8-HxCDD	2.20e+07	1.31 y	38:34	0.98	99.8					99.8
13C-1,2,3,6,7,8-HxCDD	2.13e+07	1.31 y	38:44	0.94	101					101
13C-1,2,3,4,6,7,8-HpCDD	2.07e+07	1.04 y	44:10	0.90	103					103
13C-OCDD	2.88e+07	0.96 y	49:44	0.67	193					96.3
13C-2,3,7,8-TCDF	5.59e+07	0.83 y	26:38	0.88	104					104
13C-1,2,3,7,8-PeCDF	4.73e+07	1.68 y	31:29	0.88	88.6					88.6
13C-2,3,4,7,8-PeCDF	4.42e+07	1.62 y	32:47	0.85	85.4					85.4
13C-1,2,3,4,7,8-HxCDF	3.54e+07	0.48 y	37:11	1.72	91.8					91.8
13C-1,2,3,6,7,8-HxCDF	4.27e+07	0.48 y	37:23	2.00	94.9					94.9
13C-2,3,4,6,7,8-HxCDF	3.61e+07	0.49 y	38:19	1.74	92.8					92.8
13C-1,2,3,7,8,9-HxCDF	3.01e+07	0.49 y	39:45	1.51	89.0					89.0
13C-1,2,3,4,6,7,8-HpCDF	2.38e+07	0.48 y	42:17	1.10	96.6					96.6
13C-1,2,3,4,7,8,9-HpCDF	1.75e+07	0.48 y	45:05	0.85	92.0					92.0
13C-OCDF	4.72e+07	0.90 y	50:07	1.17	179					89.6
37Cl-2,3,7,8-TCDD	3.83e+06		27:25	0.97	11.6					116
13C-1,2,3,4-TCDD	3.41e+07	0.74 y	26:49	-	130					
13C-1,2,3,4-TCDF	6.09e+07	0.82 y	25:34	-	132					
13C-1,2,3,7,8,9-HxCDD	2.24e+07	1.30 y	39:11	-	109					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	2.09e+07		23:46	1.02	61.7	2.50	-	-	*		16
Total Penta-Dioxins	3.44e+07		30:16	0.96	113	2.50	-	-	*		11
Total Hexa-Dioxins	5.01e+07		36:09	1.36	170	2.50	-	-	*		17
Total Hepta-Dioxins	2.59e+07		42:49	1.17	107	2.50	-	-	*		24
Total Tetra-Furans	2.92e+07		23:04	1.29	40.7	2.50	-	-	*		20
1st Fn. Tot Penta-Furans	2.32e+07		28:27	0.90	56.5	2.50	-	-	*	PeCDF	1
Total Penta-Furans	6.07e+07		30:02	0.90	148	2.50	-	-	*	204	19
Total Hexa-Furans	8.69e+07		35:16	0.99	243	2.50	-	-	*		20
Total Hepta-Furans	3.18e+07		42:18	1.47	105	2.50	-	-	*		6

Analyst: _____ Date: 3/22/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:19MAR10M Instrument: FAL3 GC: DB5 Experiment:PCDD

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
19MAR10M	1	ST031910M1	1613 CS3 (90918J)	19-MAR-10 08:14:42	ST031910M1	ST031910M2	TC
19MAR10M	2	1964-001-0001-OPR	OPR	19-MAR-10 09:19:40	ST031910M1	ST031910M2	TC
19MAR10M	3	1964-001-0001-MB	Method Blank	19-MAR-10 10:15:48	ST031910M1	ST031910M2	TC
19MAR10M	4	6025-001-0001-SA	EFF	19-MAR-10 11:11:11	ST031910M1	ST031910M2	TC
19MAR10M	5	6026-001-0001-SA	R-1	19-MAR-10 12:06:34	ST031910M1	ST031910M2	TC
19MAR10M	6	6026-002-0001-SA	R-2	19-MAR-10 13:01:52	ST031910M1	ST031910M2	TC
19MAR10M	7	6030-001-0001-SA	CB31A031010COMP	19-MAR-10 13:57:11	ST031910M1	ST031910M2	TC
19MAR10M	8	6030-002-0001-SA	CB4857031010COMP	19-MAR-10 14:52:34	ST031910M1	ST031910M2	TC
19MAR10M	9	6030-003-0001-SA	CB1031010COMP	19-MAR-10 15:47:53	ST031910M1	ST031910M2	TC
19MAR10M	10	6030-004-0001-SA	CB101031010COMP	19-MAR-10 16:43:15	ST031910M1	ST031910M2	TC
19MAR10M	11	6030-003-0001-SA	CB1031010COMP	19-MAR-10 17:38:38	ST031910M1	ST031910M2	TC
19MAR10M	12	ST031910M2	1613 CS3 (90918J)	19-MAR-10 18:34:01	ST031910M2	ST031910M3	TC
19MAR10M	13	1966-001-0001-OPR	OPR	19-MAR-10 19:29:20	ST031910M2	ST031910M3	TC
19MAR10M	14	1966-001-0001-MB	Method Blank	19-MAR-10 20:24:43	ST031910M2	ST031910M3	TC
19MAR10M	15	6016-001-0001-SA	MW-107A-FB-GMW-01A	19-MAR-10 21:20:02	ST031910M2	ST031910M3	TC
19MAR10M	16	6016-002-0001-SA	MW-107A-RB-GMW-01A	19-MAR-10 22:15:23	ST031910M2	ST031910M3	TC
19MAR10M	17	6016-003-0001-SA	MW-101A	19-MAR-10 23:10:42	ST031910M2	ST031910M3	TC
19MAR10M	18	6016-004-0001-SA	DUP-030510	20-MAR-10 00:06:00	ST031910M2	ST031910M3	TC
19MAR10M	19	6016-005-0001-SA	MW-107A	20-MAR-10 01:01:18	ST031910M2	ST031910M3	TC
19MAR10M	20	6016-003-0002-MS	MW-101A	20-MAR-10 01:56:37	ST031910M2	ST031910M3	TC
19MAR10M	21	6016-003-0002-MSD	MW-101A	20-MAR-10 02:51:56	ST031910M2	ST031910M3	TC
19MAR10M	22	SB031910M2	Solvent Blank	20-MAR-10 03:47:15	ST031910M2	ST031910M3	TC
19MAR10M	23	ST031910M3	1613 CS3 (90918J)	20-MAR-10 04:42:38	ST031910M2	ST031910M3	TC

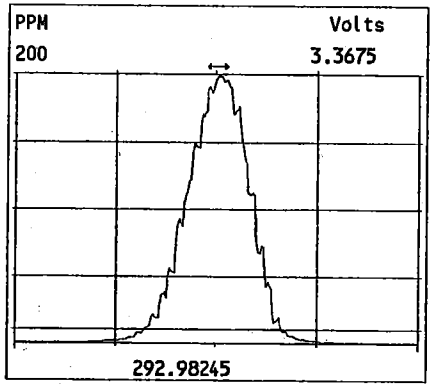
Area SPL allowed

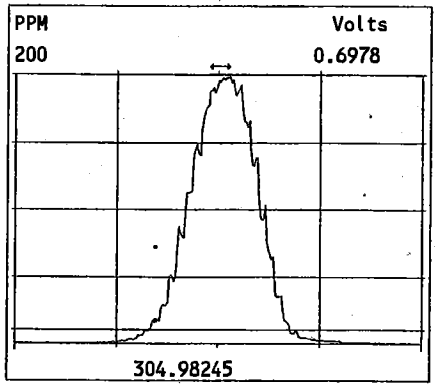
3/22/10

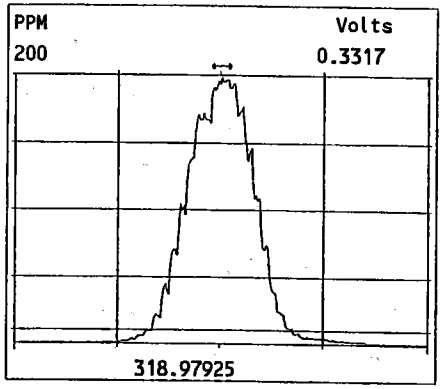
Data Backed Up:_____

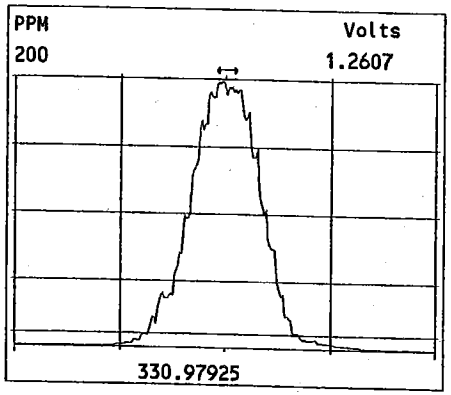
Date:_____

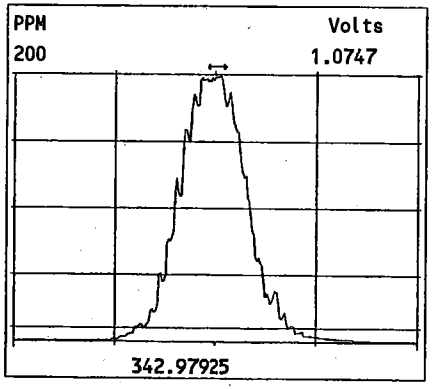
Peak Locate Examination:19-MAR-2010:08:12 File:19MAR10M
Experiment:PCDD Function:1 Reference:PFK

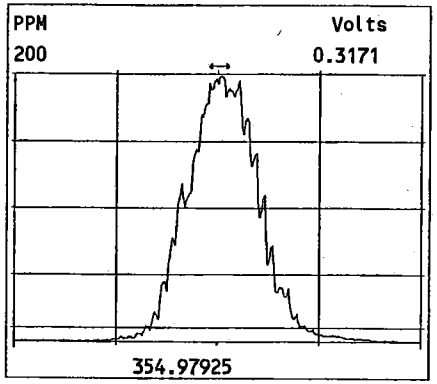


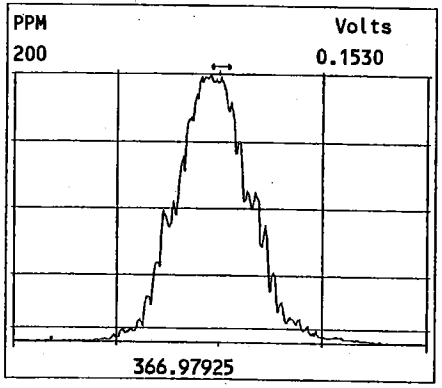


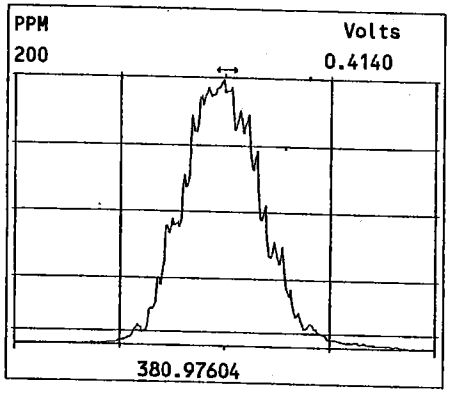


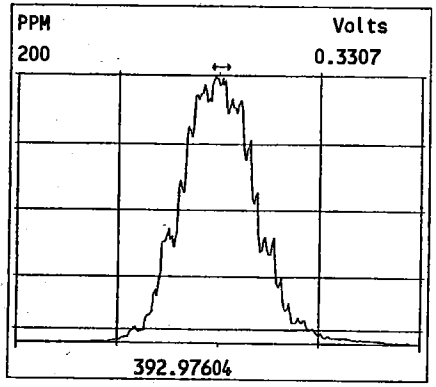


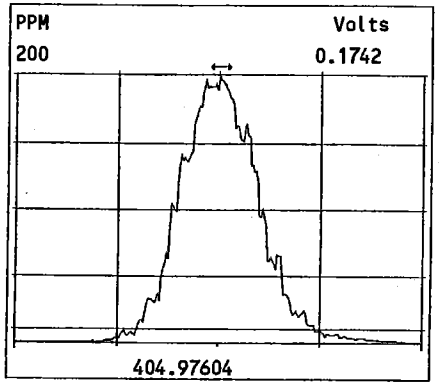


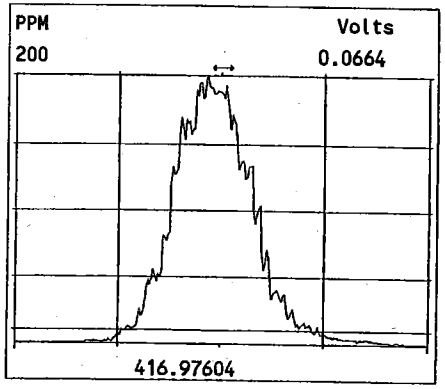






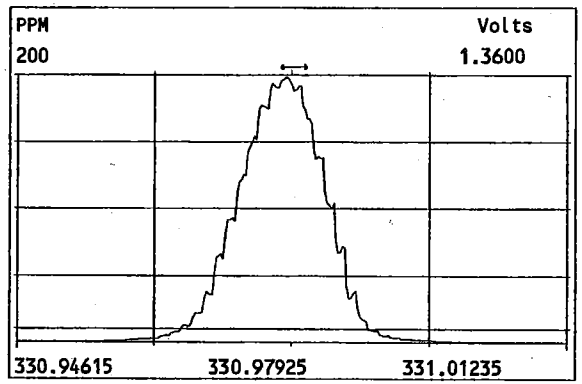


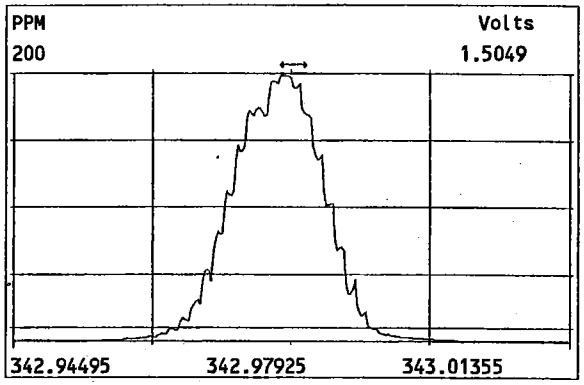


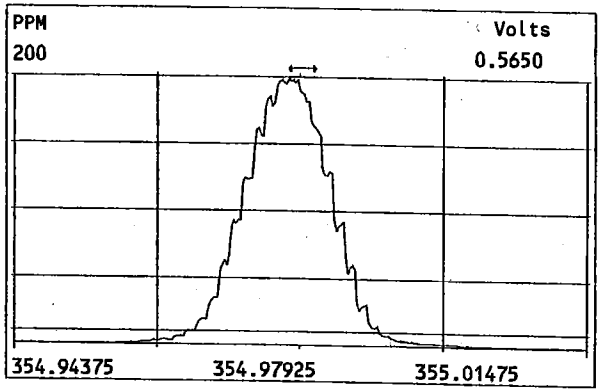


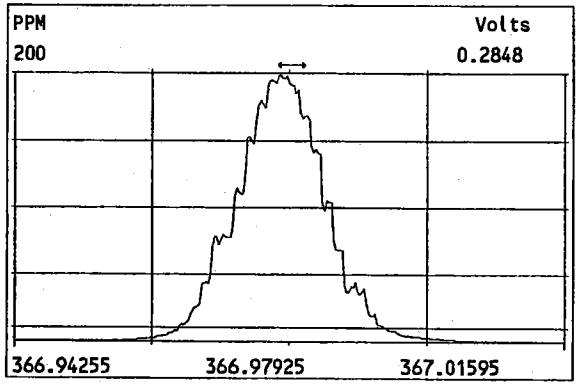
Peak Locate Examination:19-MAR-2010:08:13 File:19MAR10M

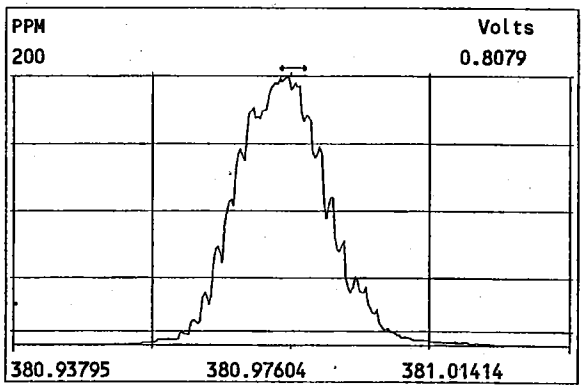
Experiment:PCDD Function:2 Reference:PFK

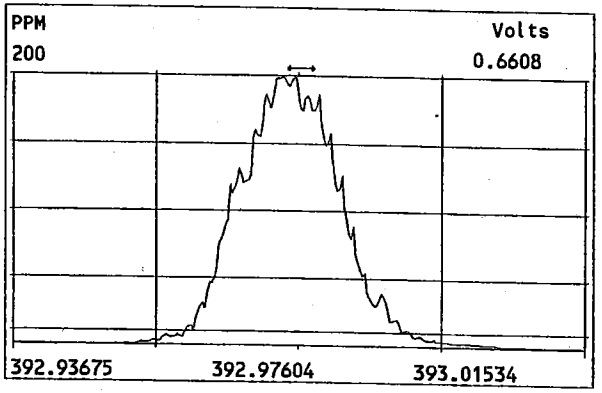


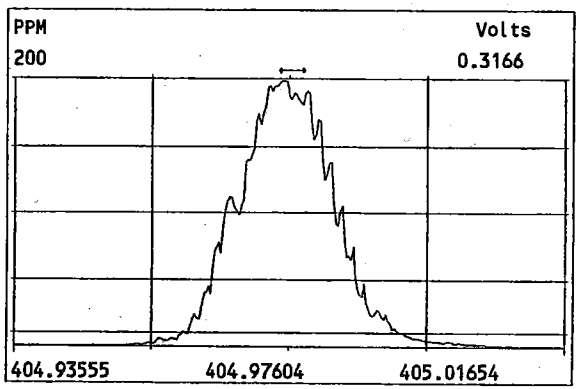


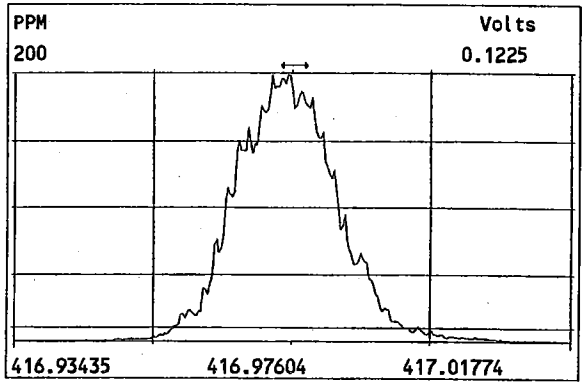




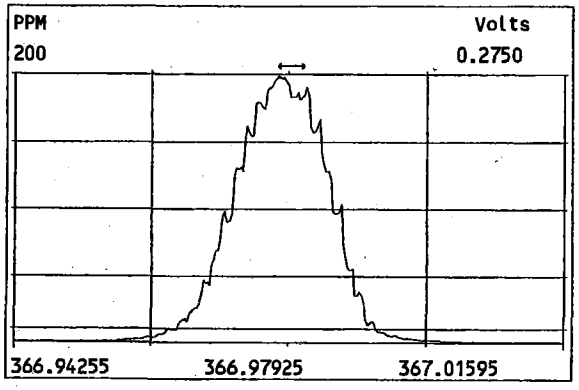


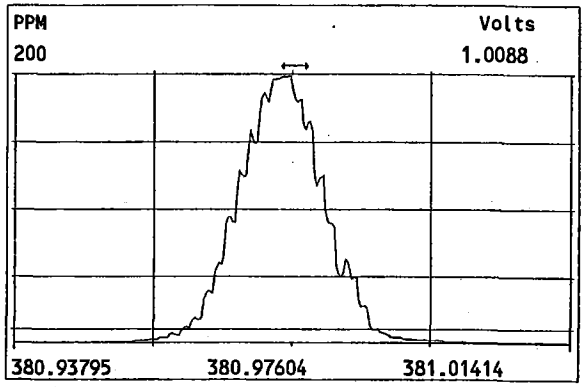


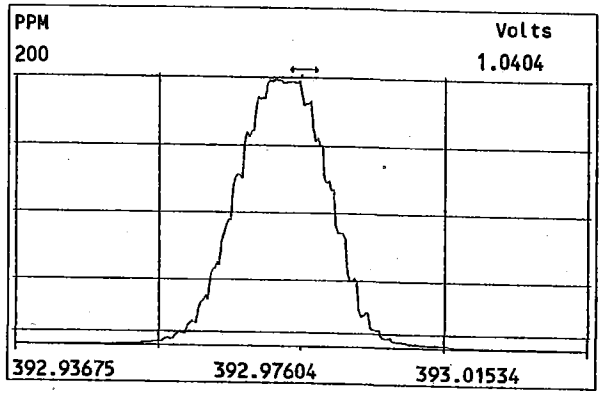


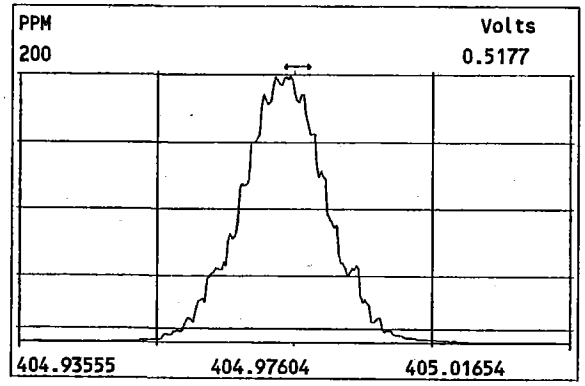


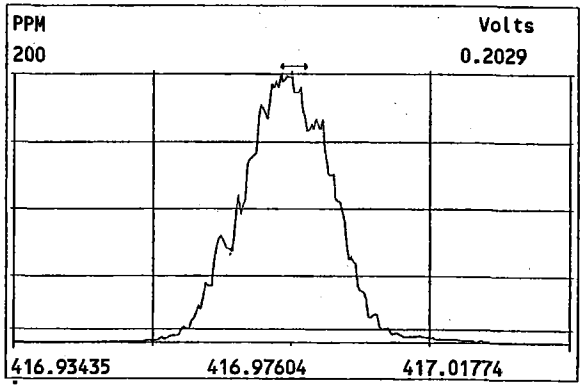
Peak Locate Examination:19-MAR-2010:08:13 File:19MAR10M
Experiment:PCDD Function:3 Reference:PFK

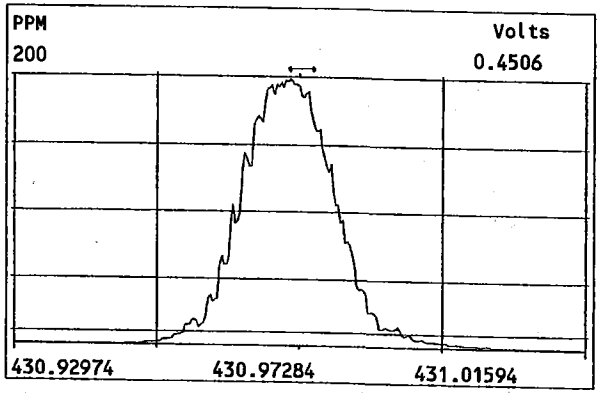


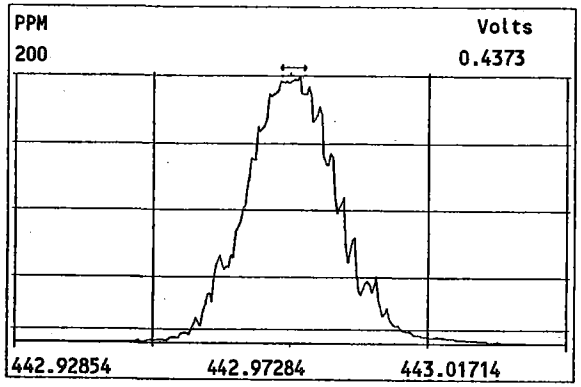


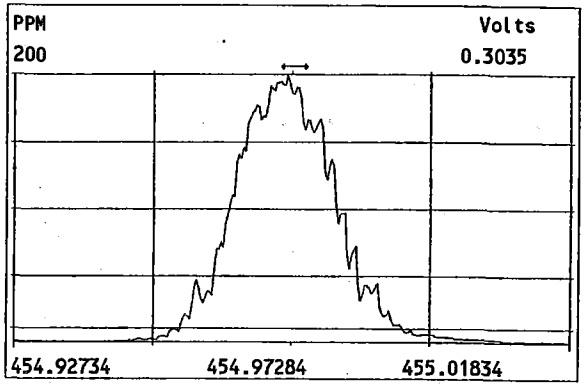






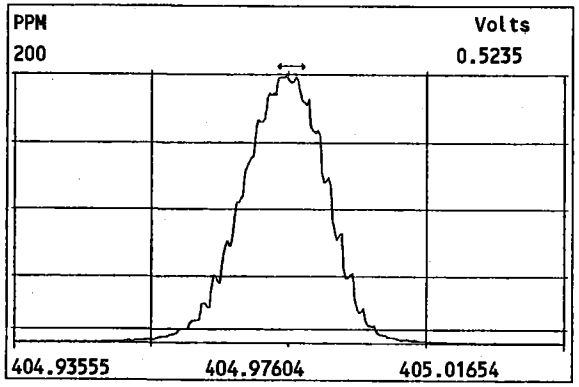


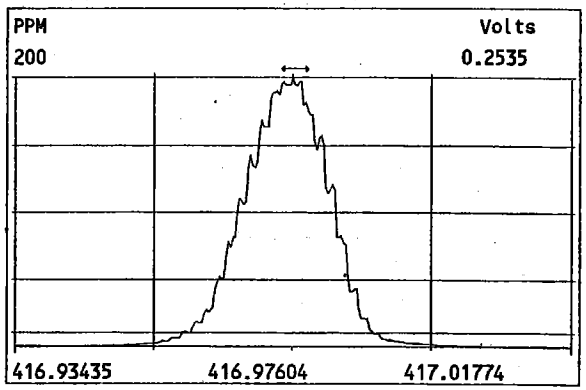


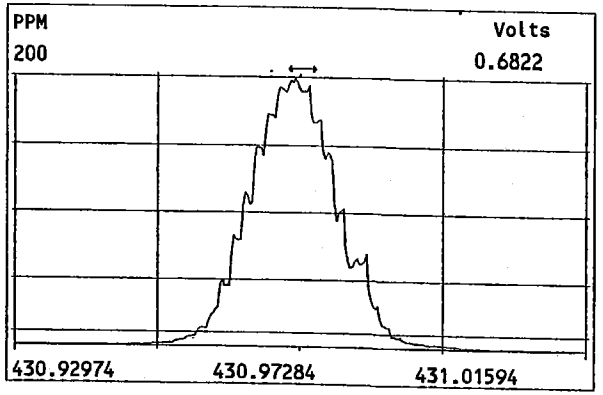


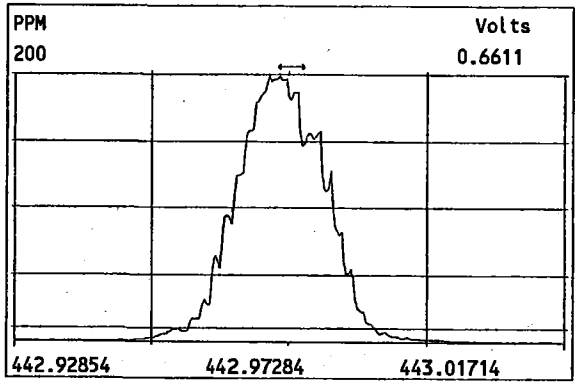
Peak Locate Examination:19-MAR-2010:08:14 File:19MAR10M

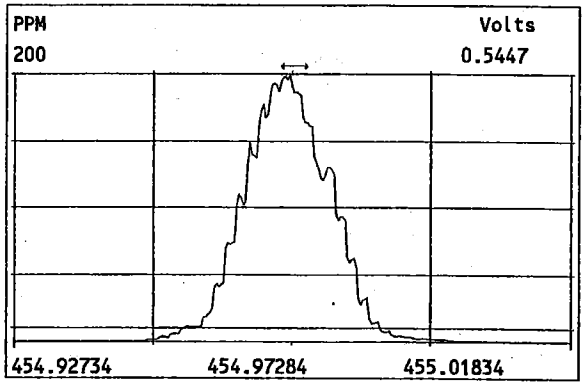
Experiment:PCDD Function:4 Reference:PFK

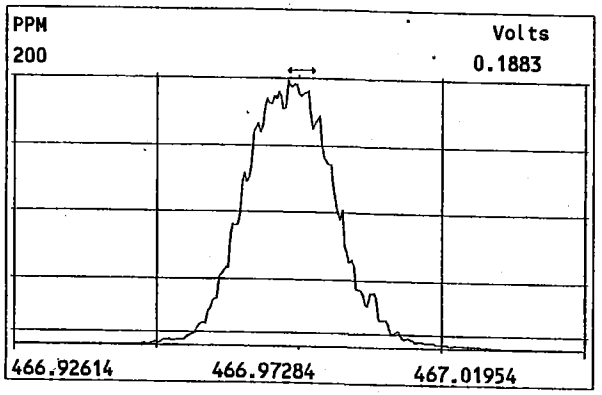


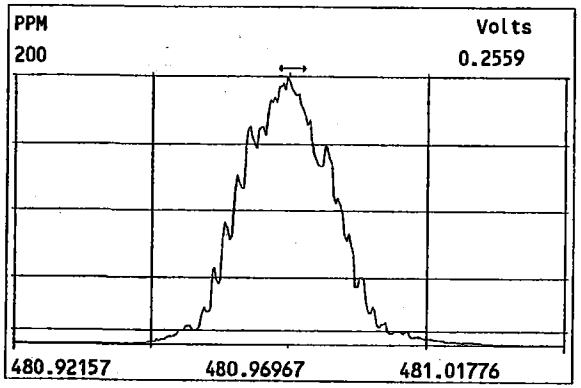






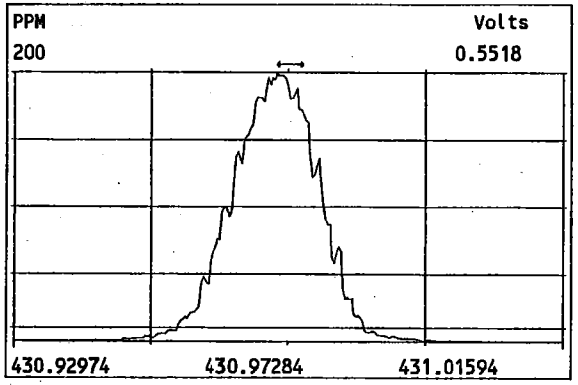


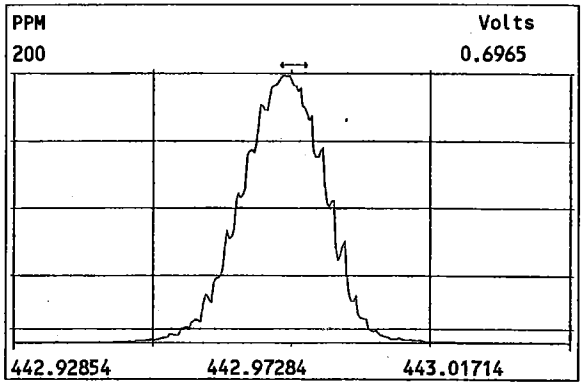


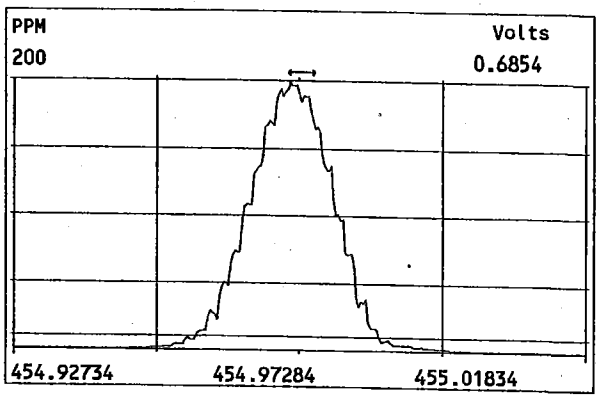


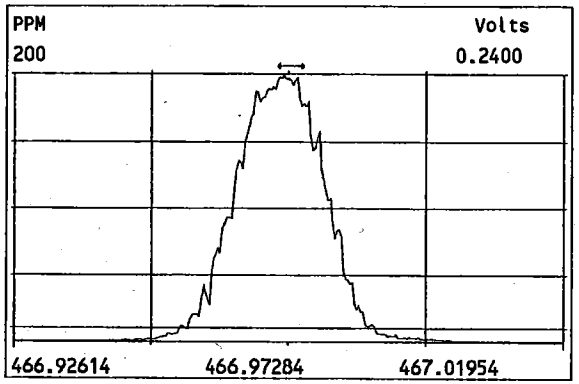
Peak Locate Examination:19-MAR-2010:08:14 File:19MAR10M

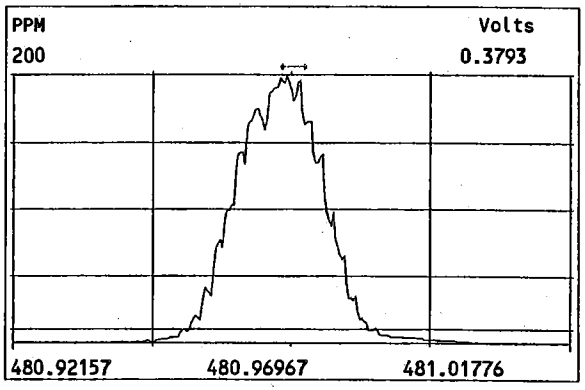
Experiment:PCDD Function:5 Reference:PFK

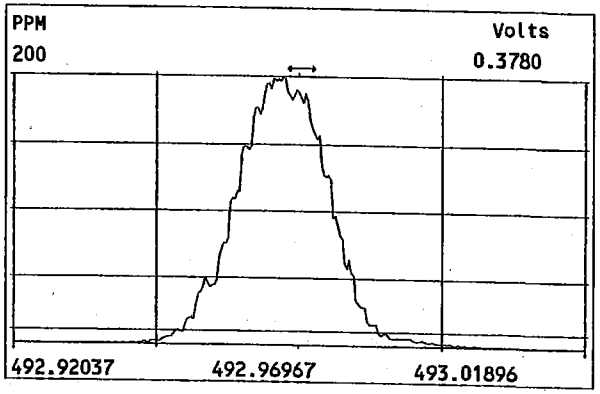


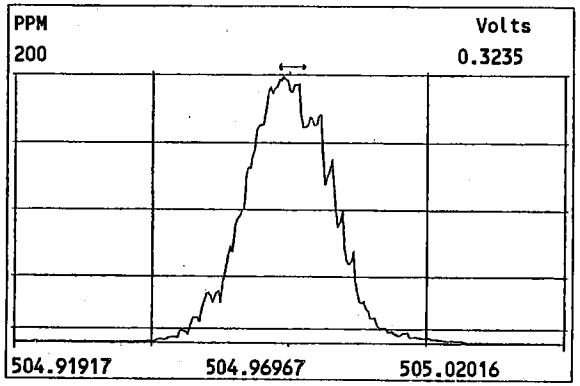


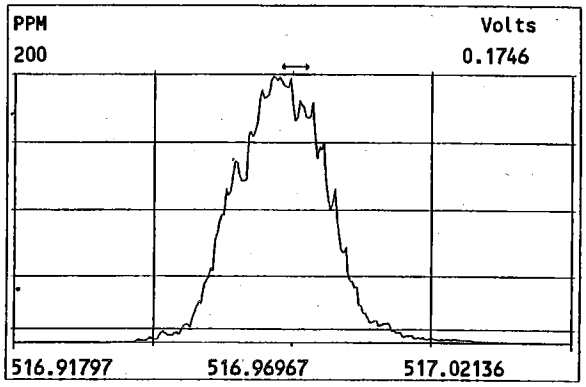




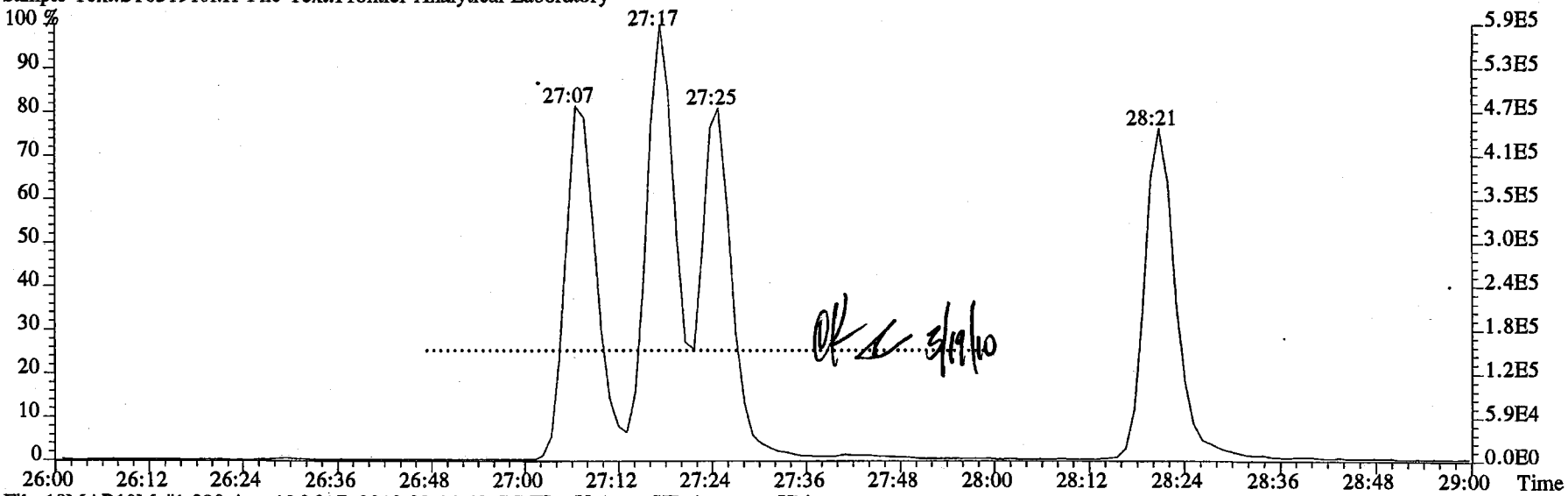




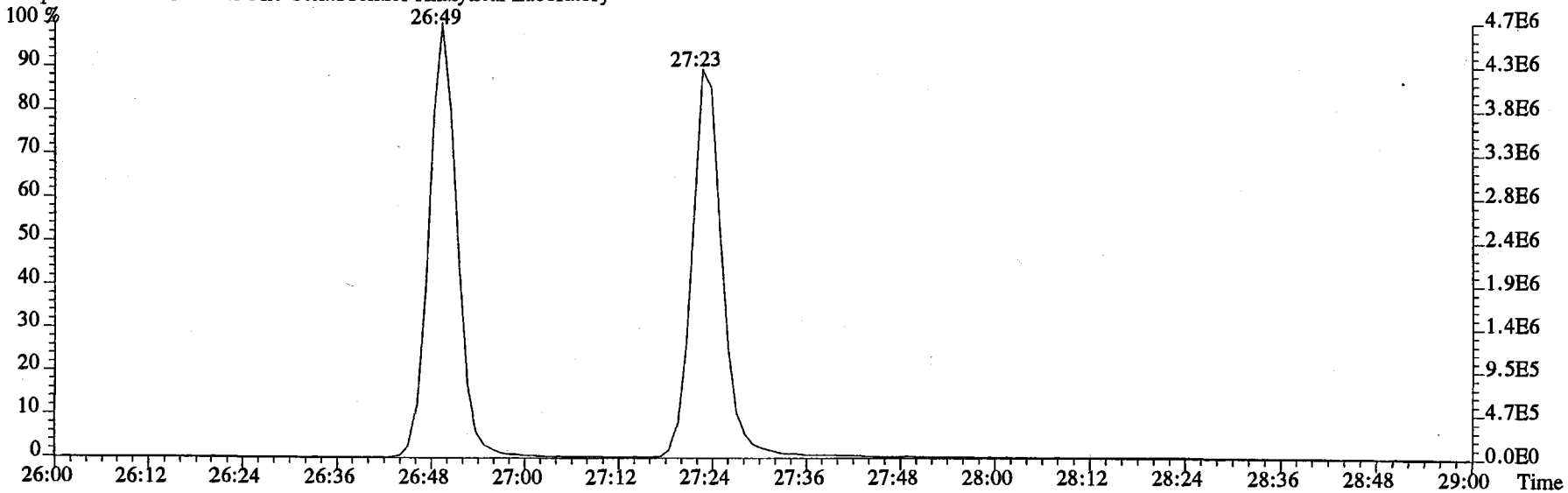




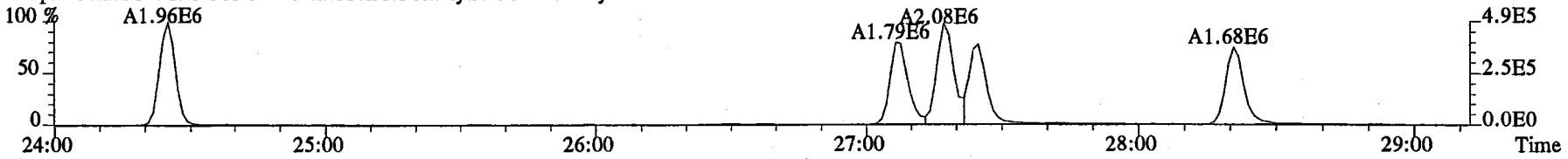
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
321.8936 Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



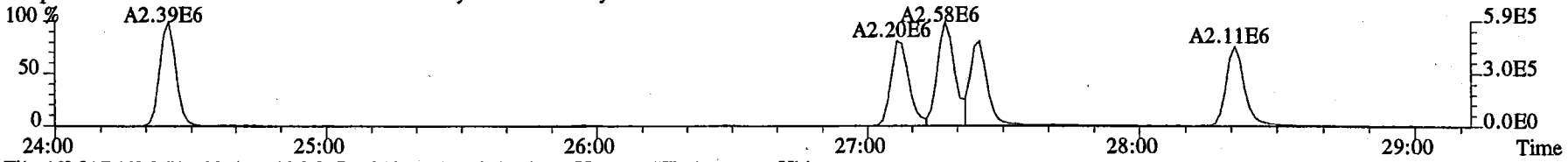
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



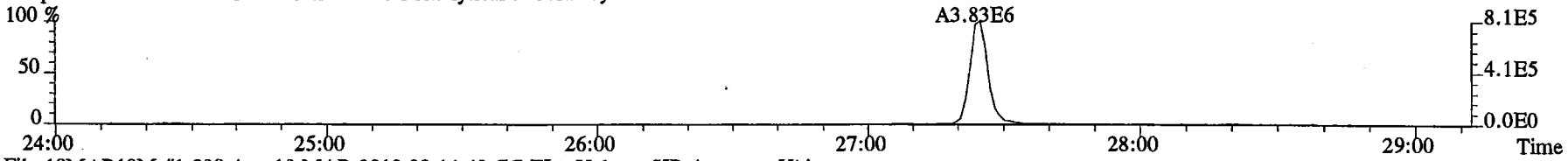
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



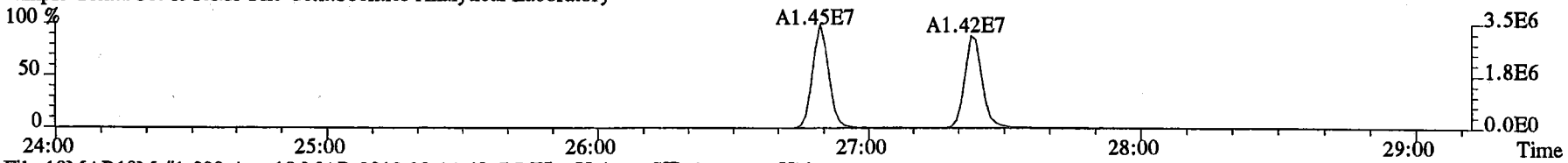
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



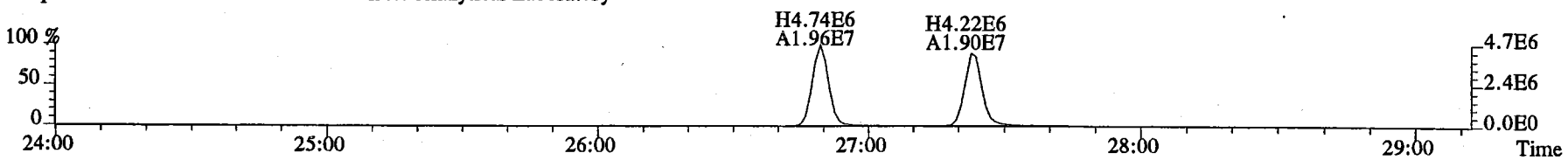
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



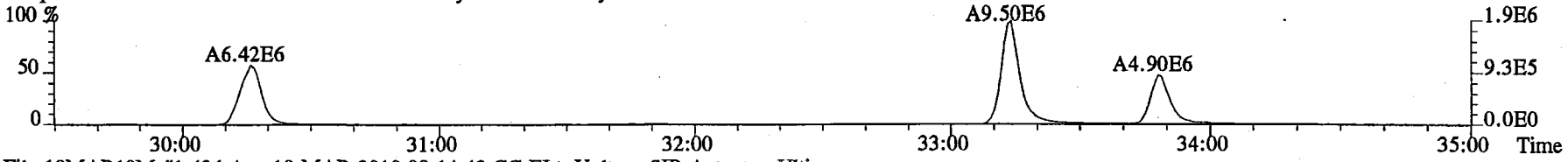
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



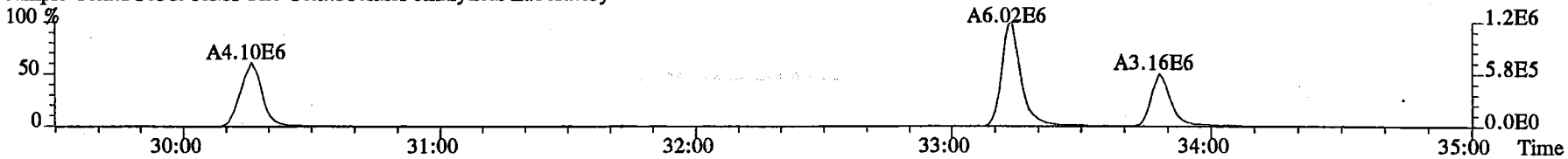
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



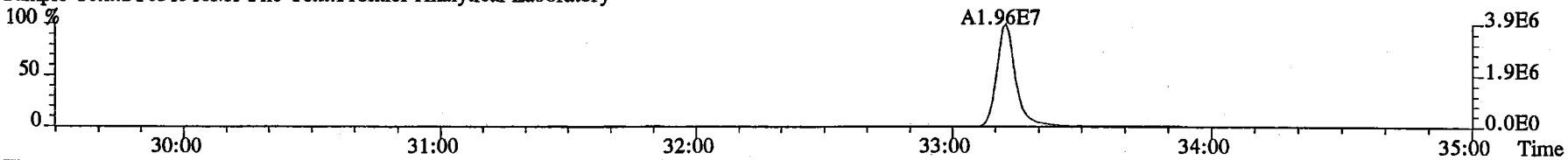
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



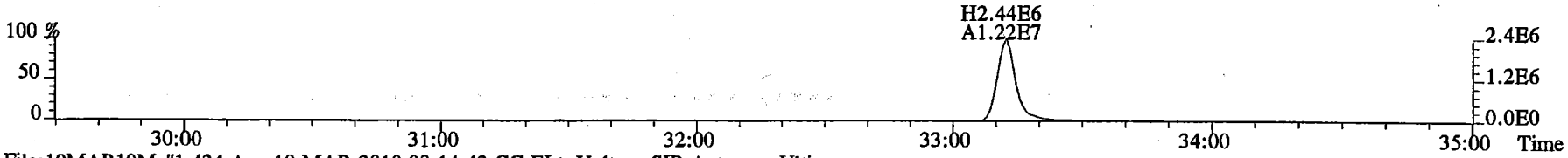
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



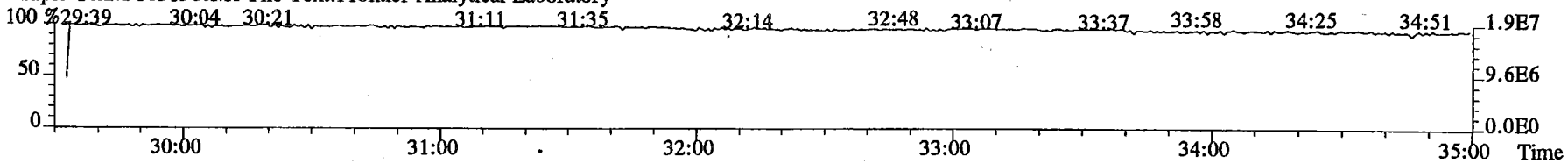
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



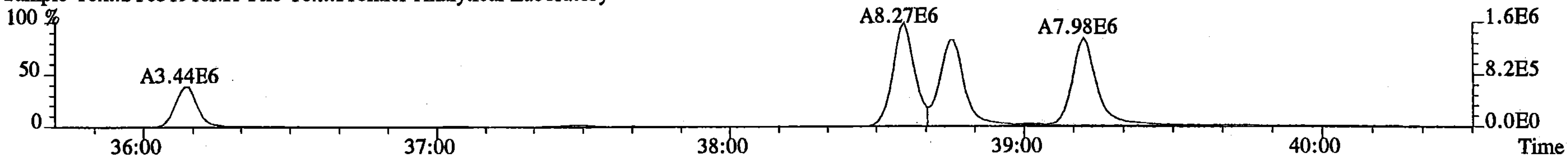
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



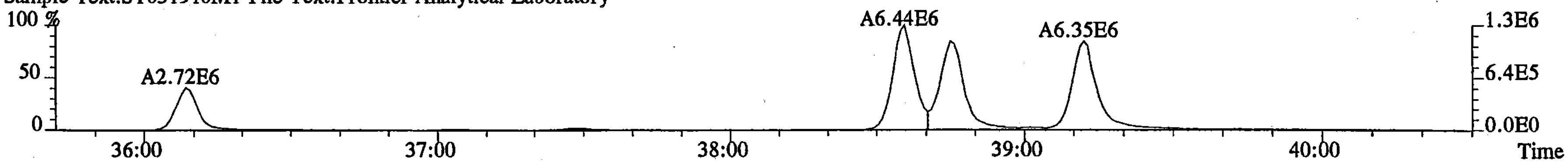
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



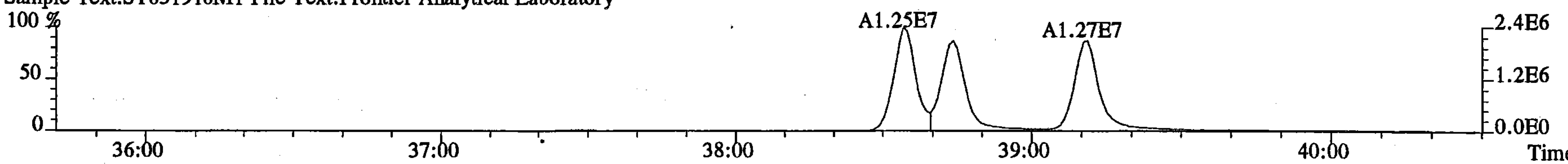
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



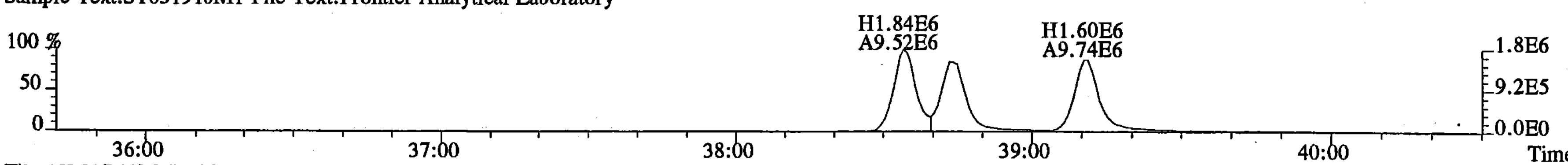
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



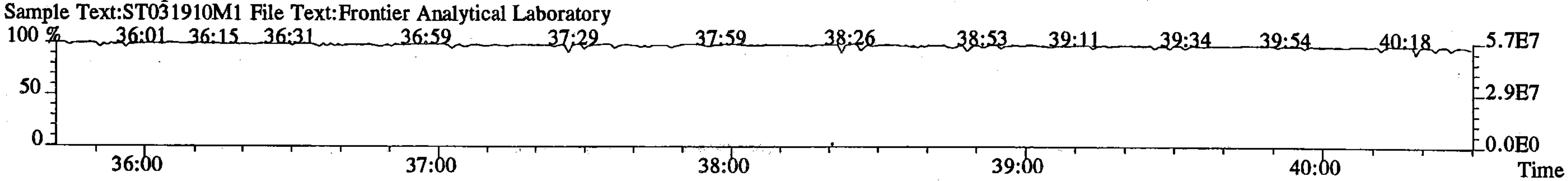
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



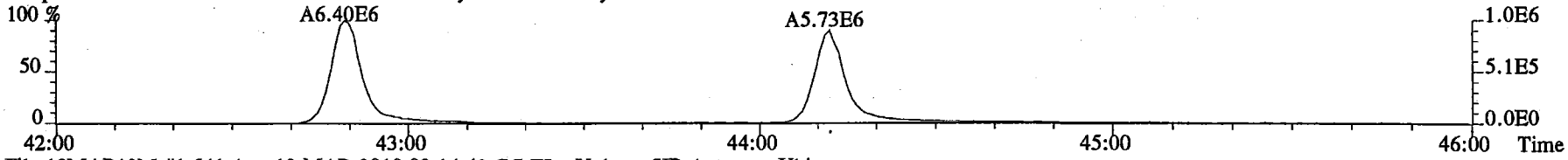
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



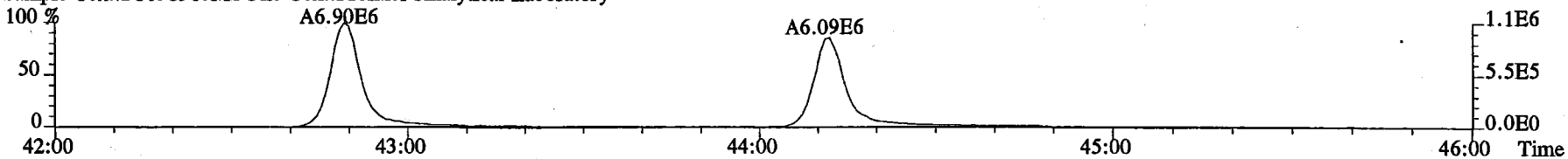
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



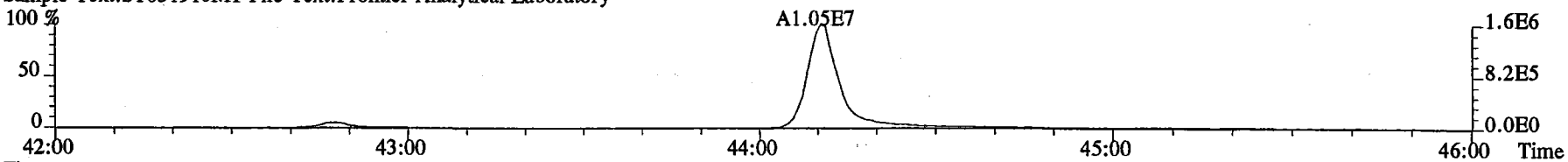
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



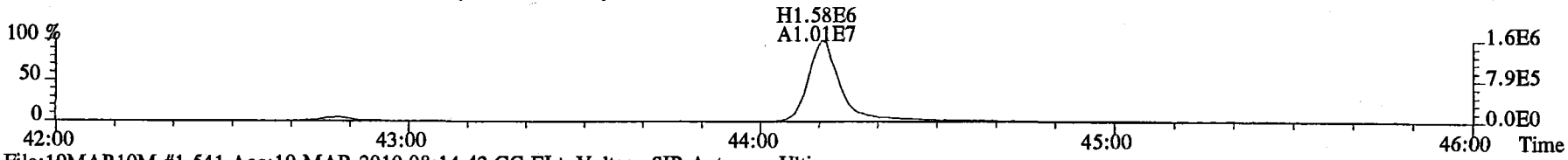
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



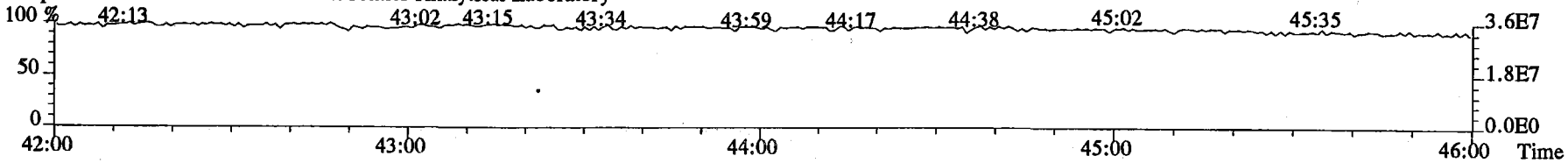
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



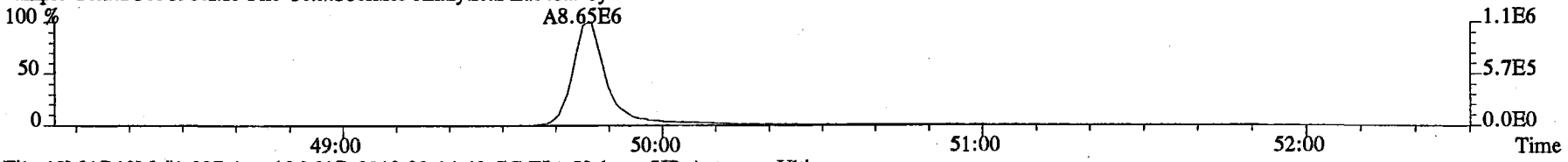
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory

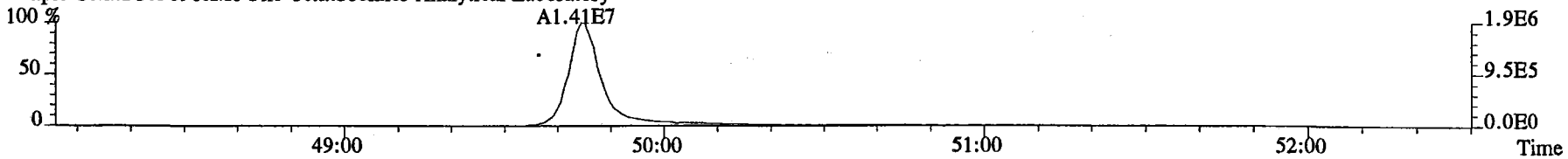


File:19MAR10M #1-297 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory

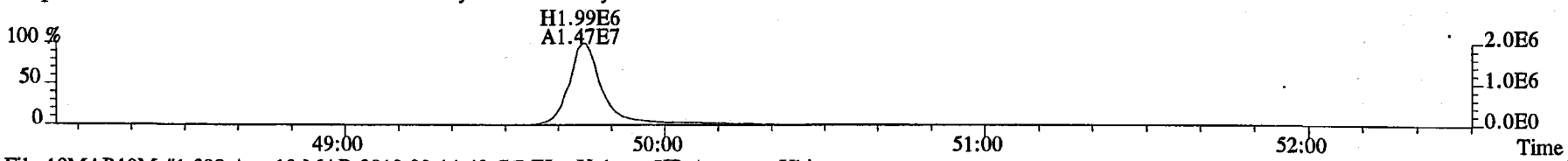


File:19MAR10M #1-297 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory

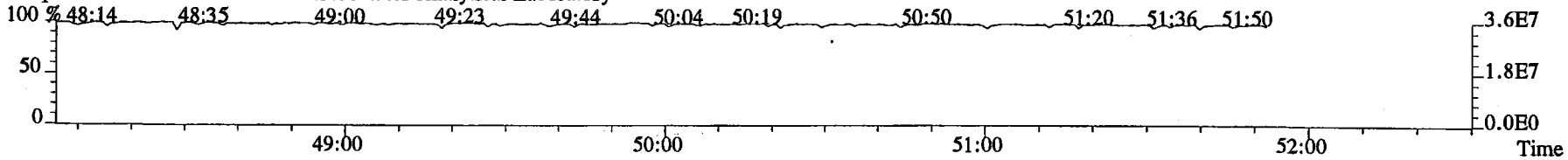
File:19MAR10M #1-298 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



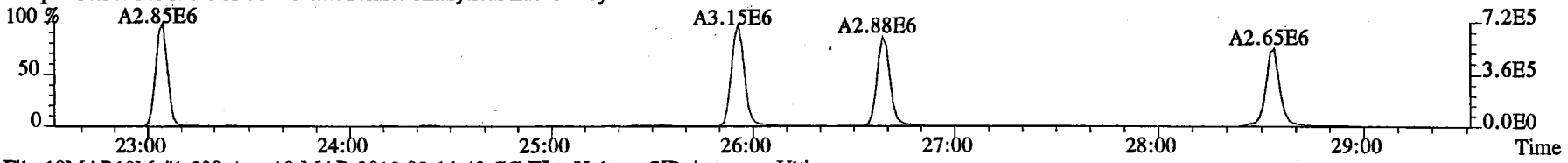
File:19MAR10M #1-298 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



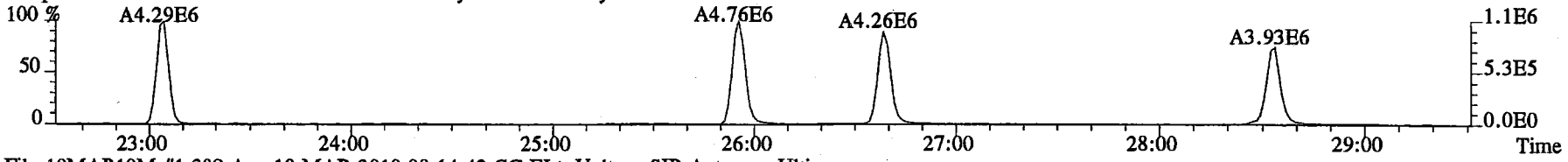
File:19MAR10M #1-298 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



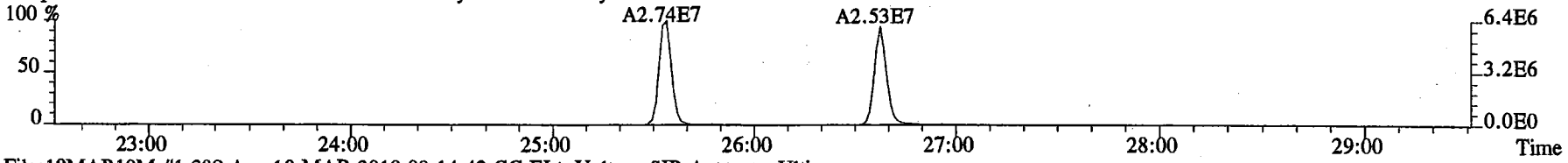
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



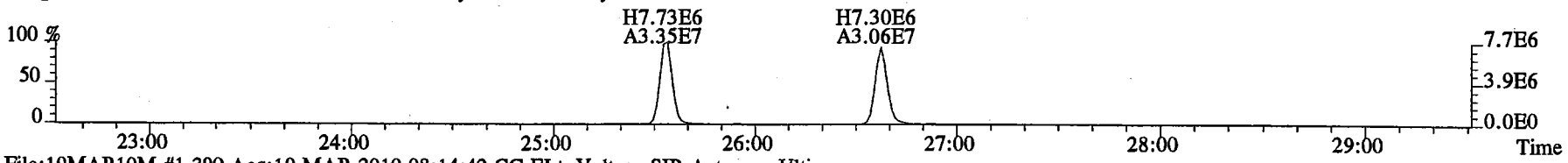
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



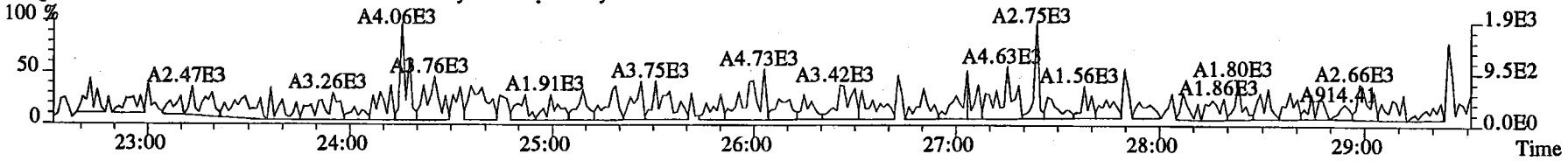
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



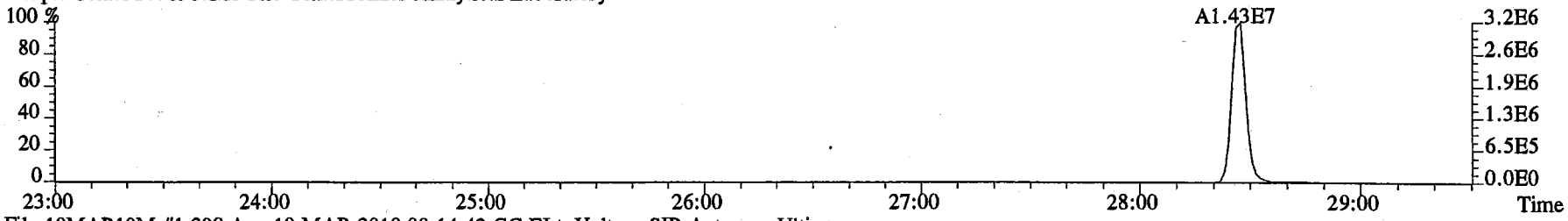
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



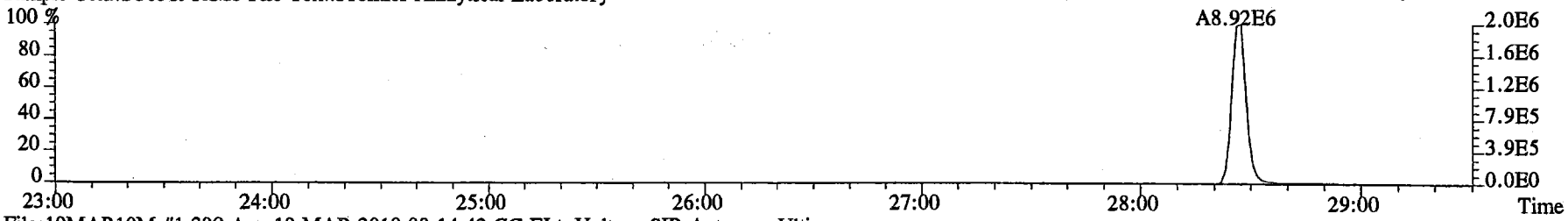
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



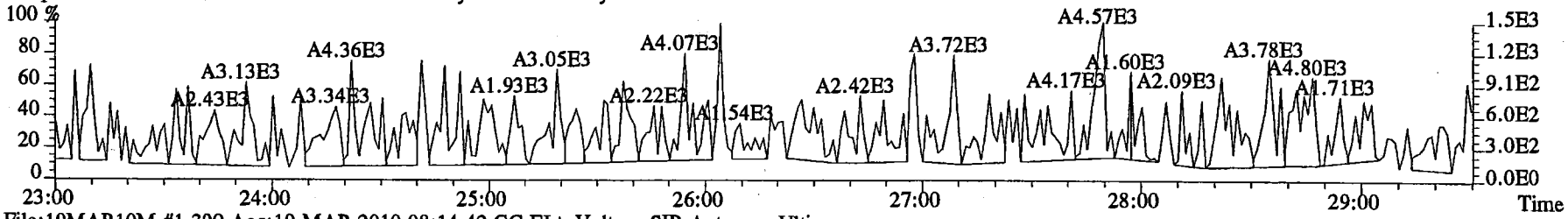
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



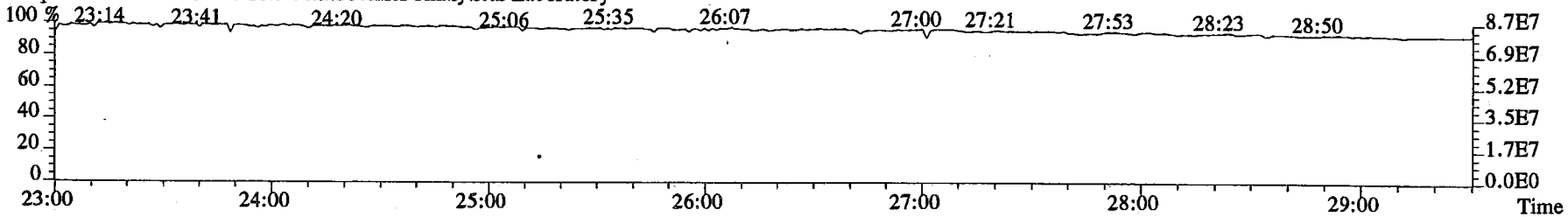
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



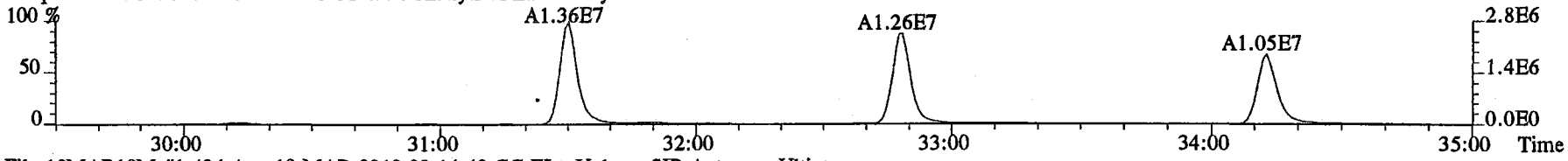
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



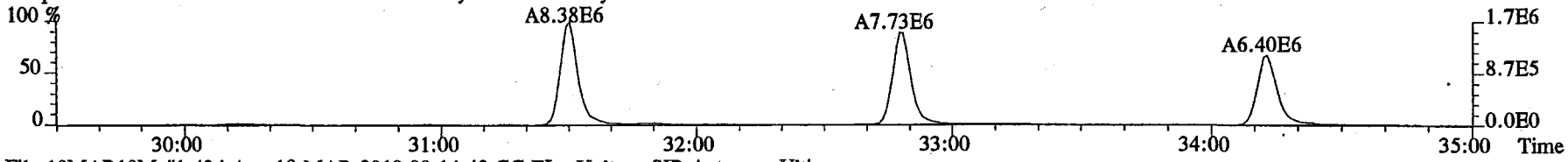
File:19MAR10M #1-390 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



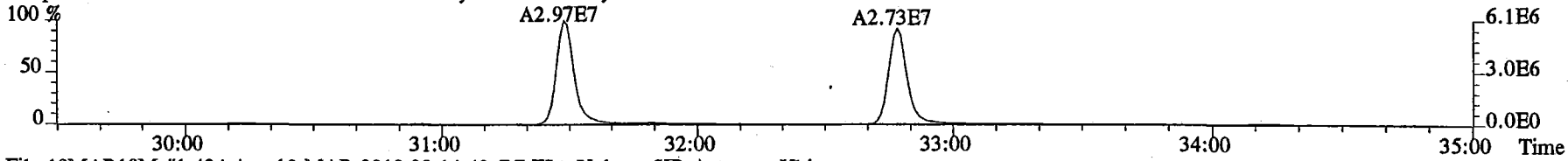
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



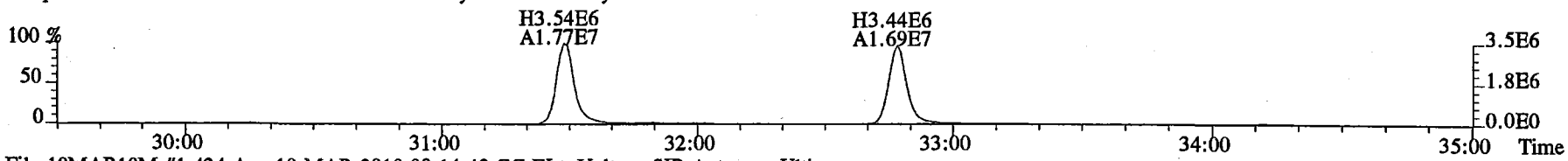
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



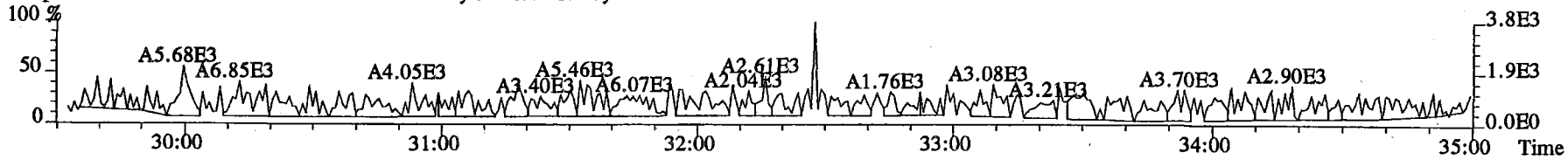
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



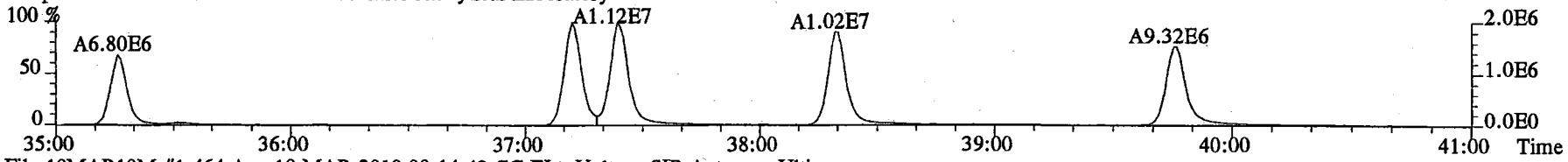
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



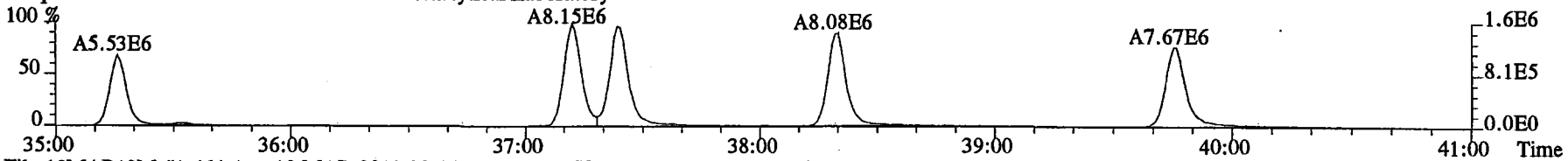
File:19MAR10M #1-424 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



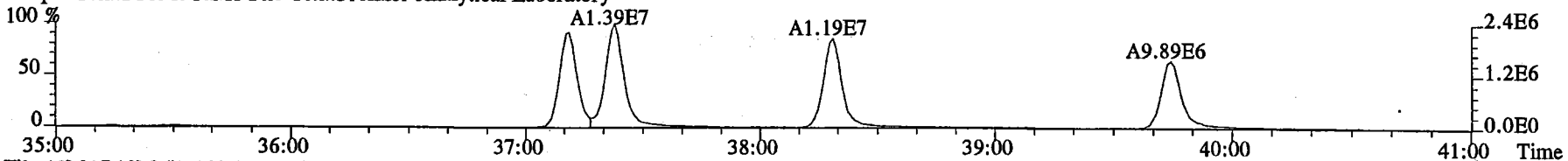
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



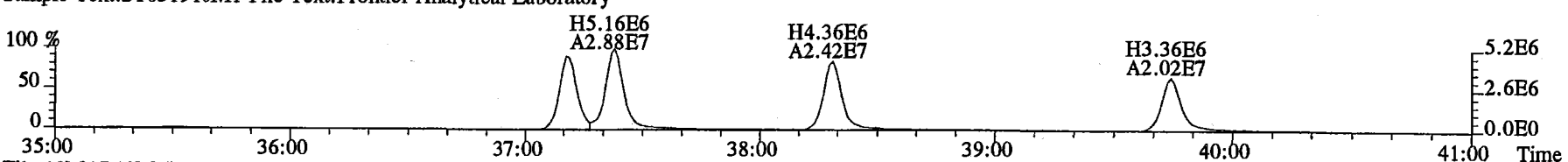
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



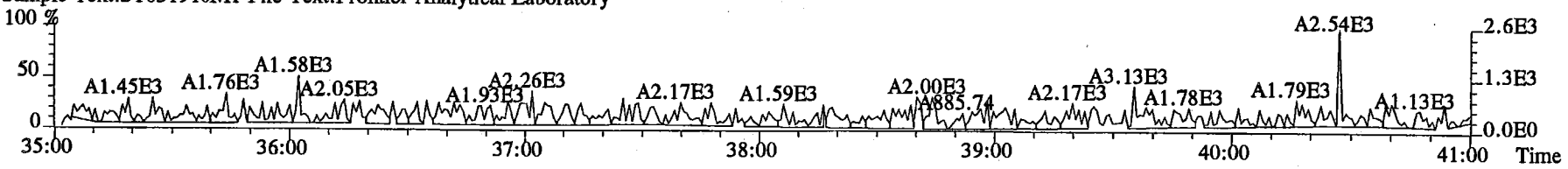
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



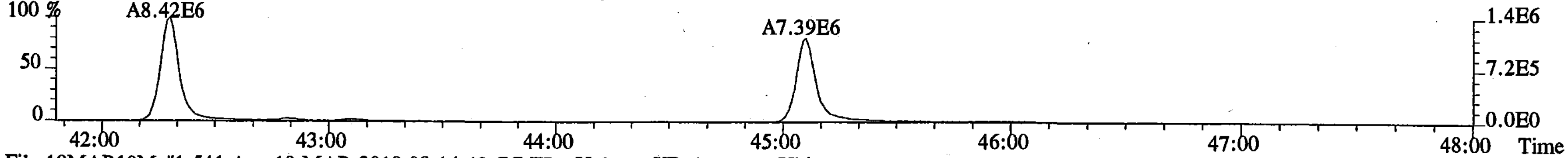
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



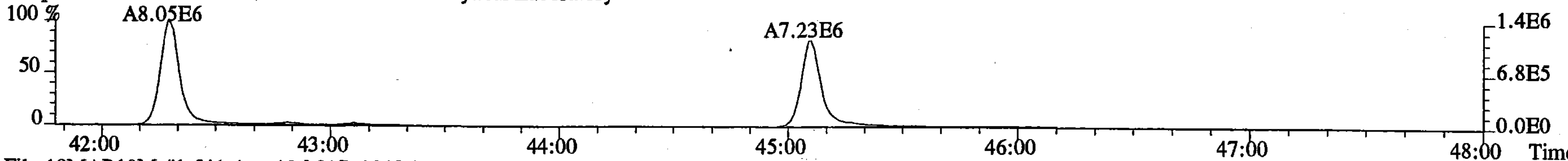
File:19MAR10M #1-464 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



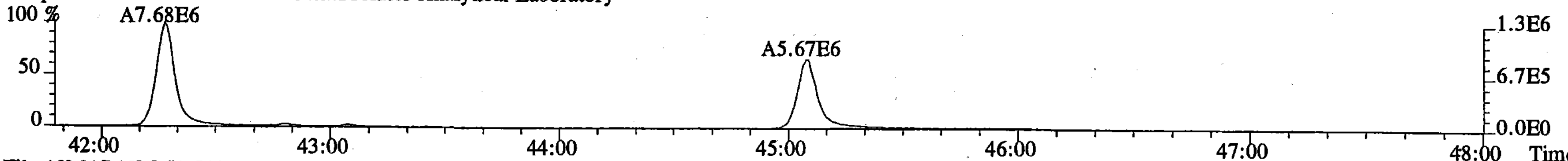
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



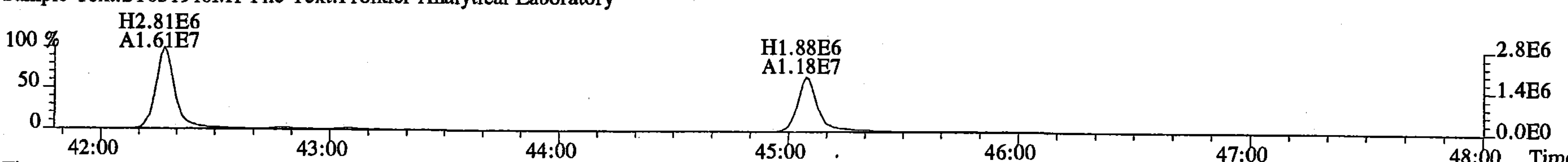
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



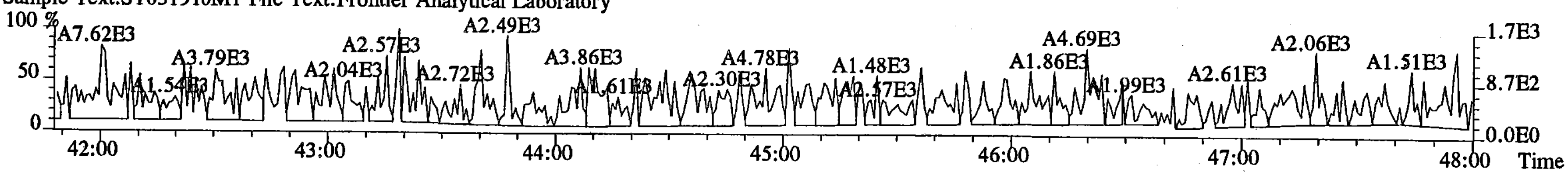
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



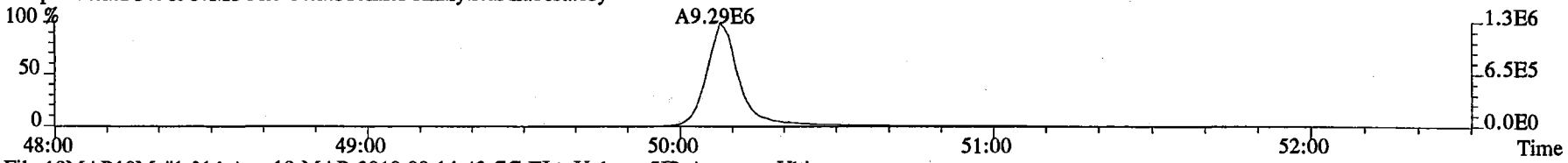
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



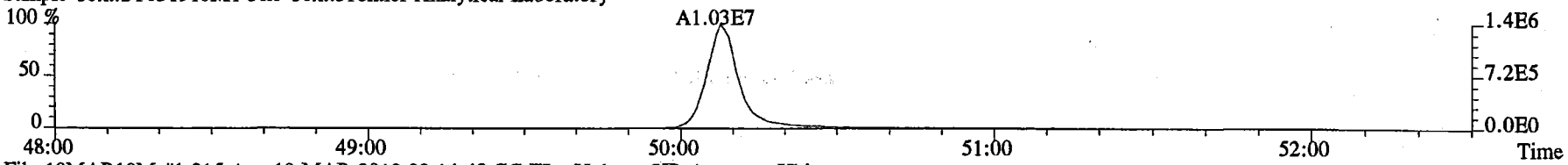
File:19MAR10M #1-541 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



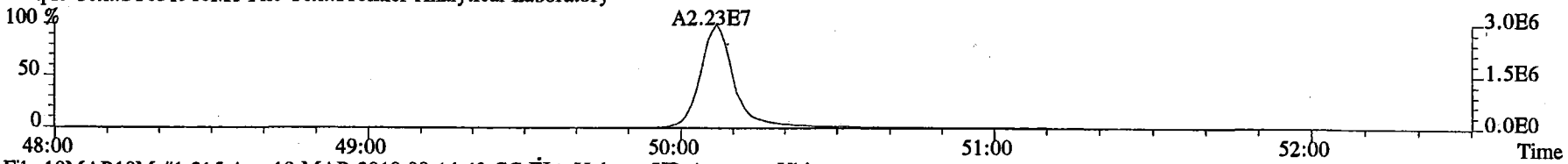
File:19MAR10M #1-314 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



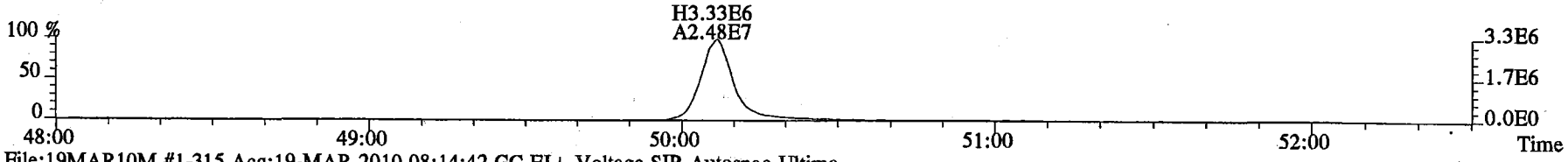
File:19MAR10M #1-314 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



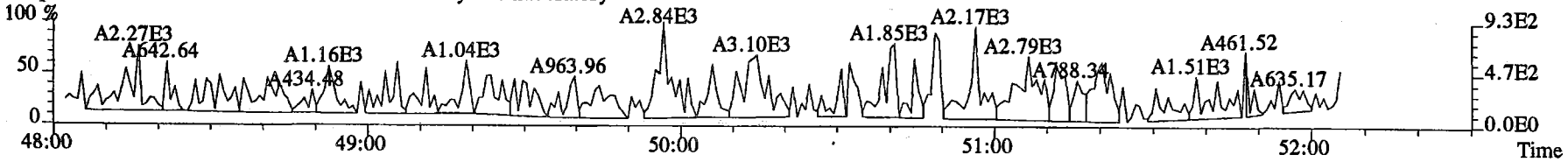
File:19MAR10M #1-315 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



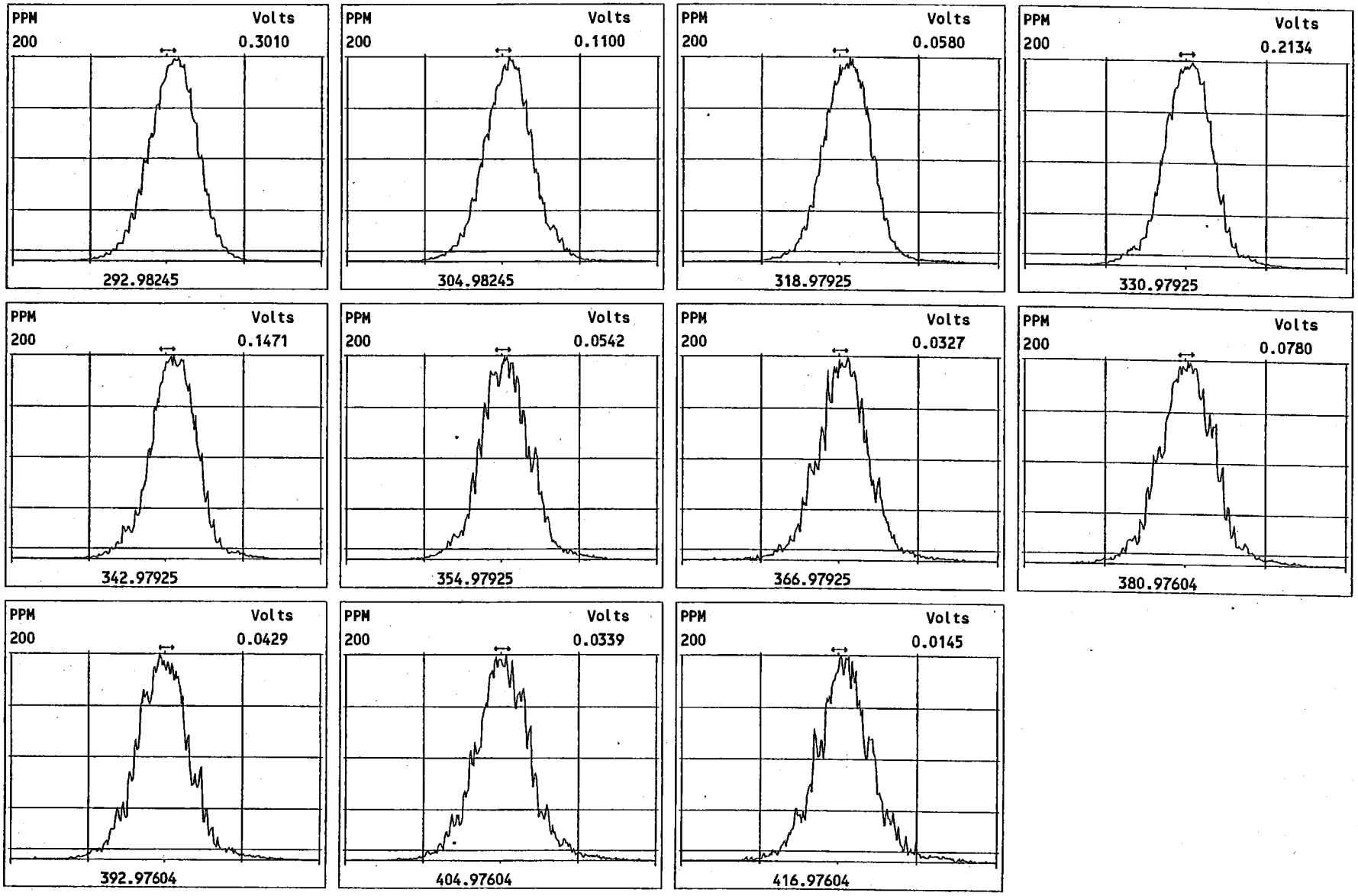
File:19MAR10M #1-315 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory



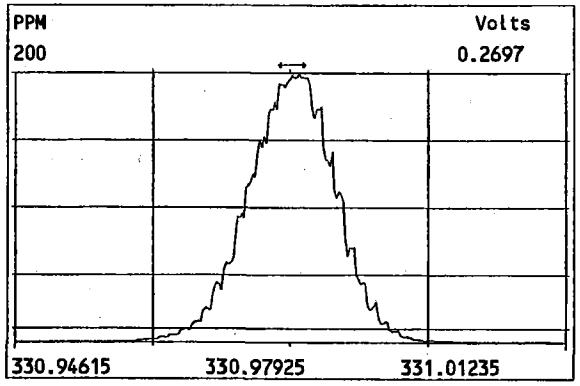
File:19MAR10M #1-315 Acq:19-MAR-2010 08:14:42 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M1 File Text:Frontier Analytical Laboratory

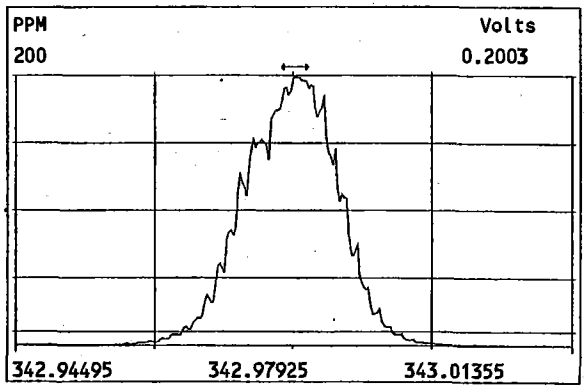


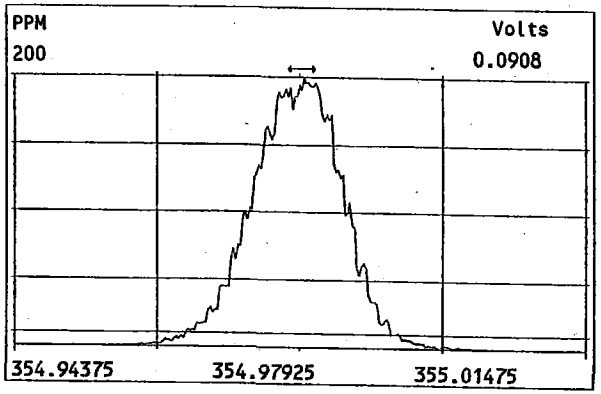
Peak Locate Examination:20-MAR-2010:05:42 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

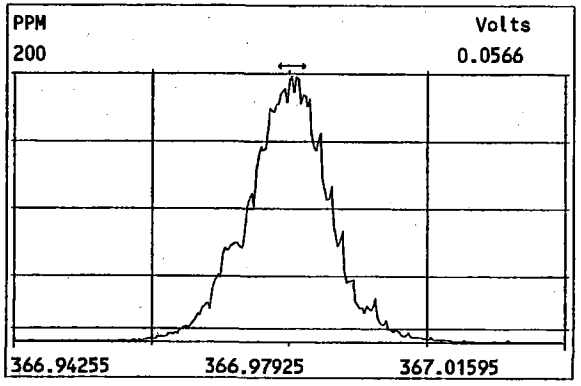


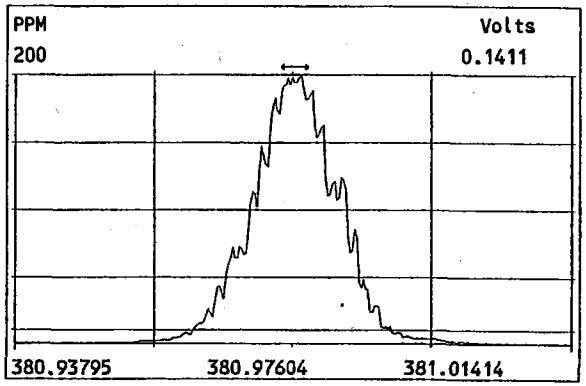
Peak Locate Examination:20-MAR-2010:05:44 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

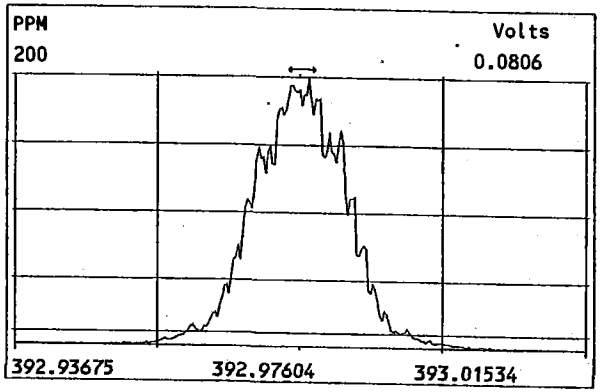


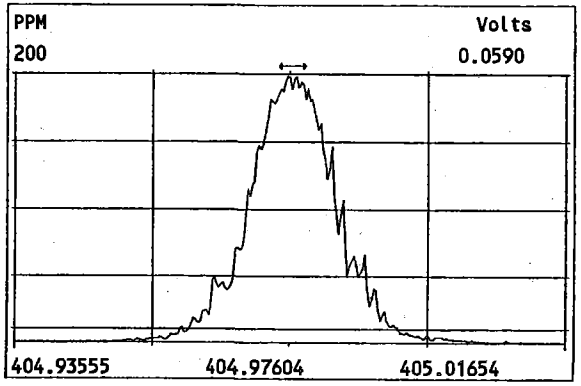


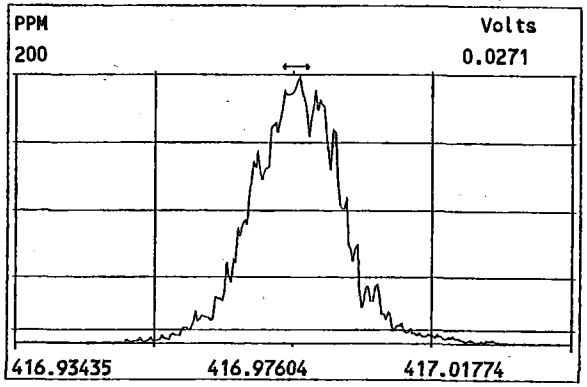




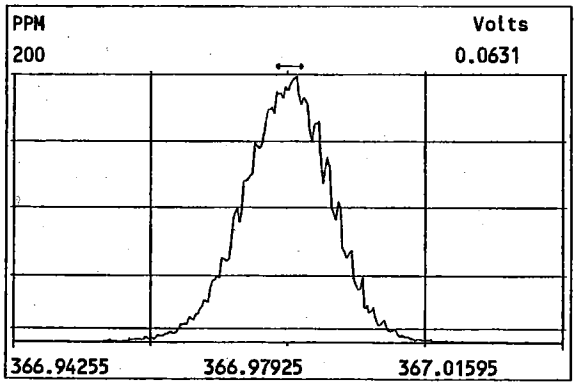


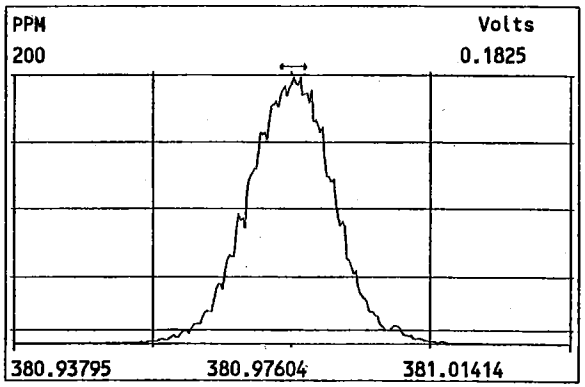


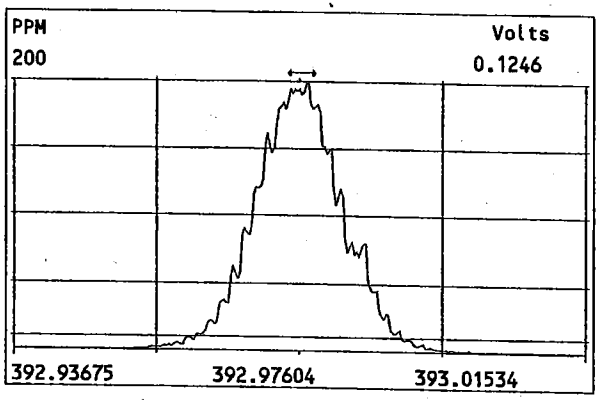


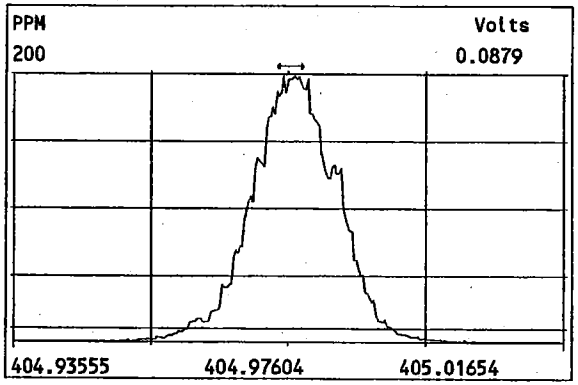


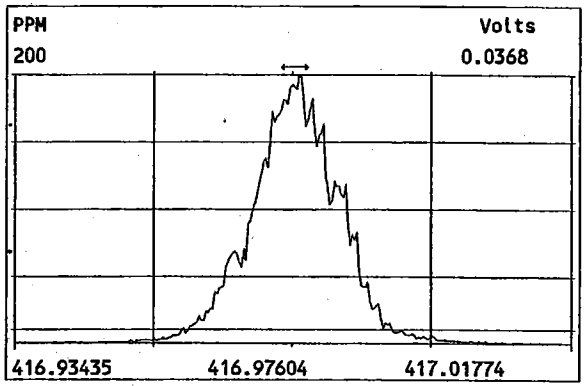
Peak Locate Examination:20-MAR-2010:05:46 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

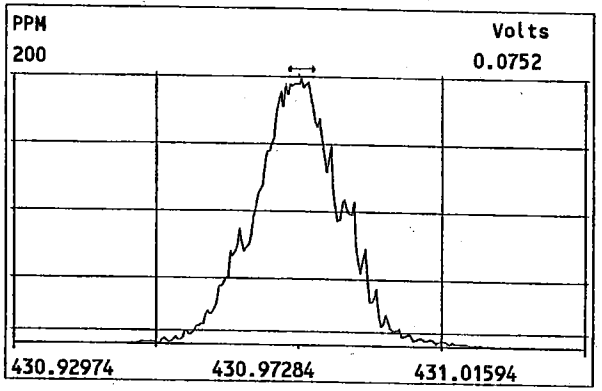


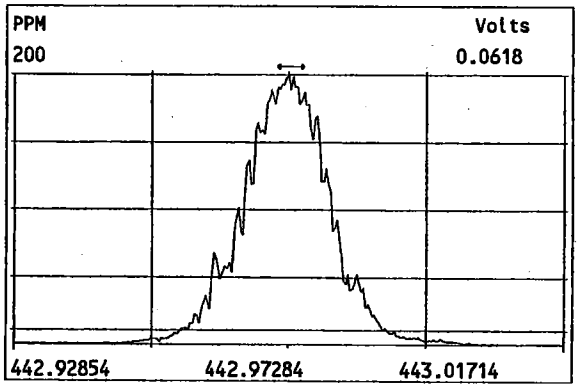


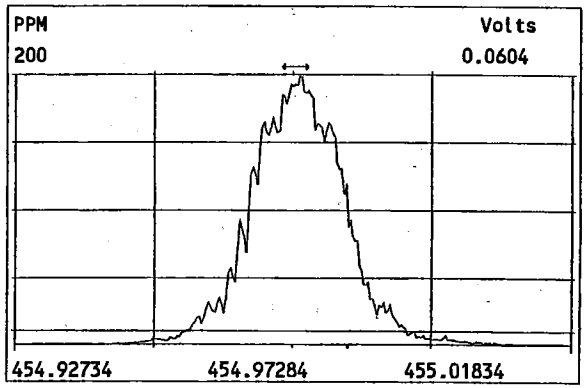






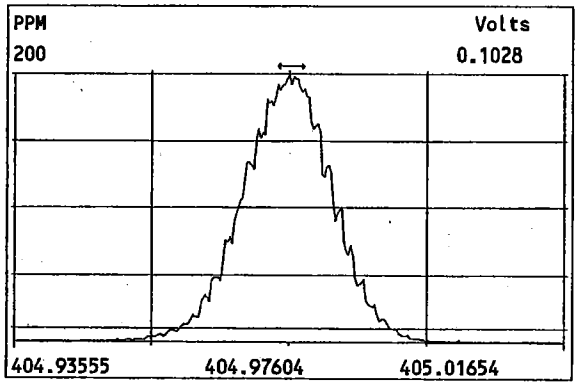


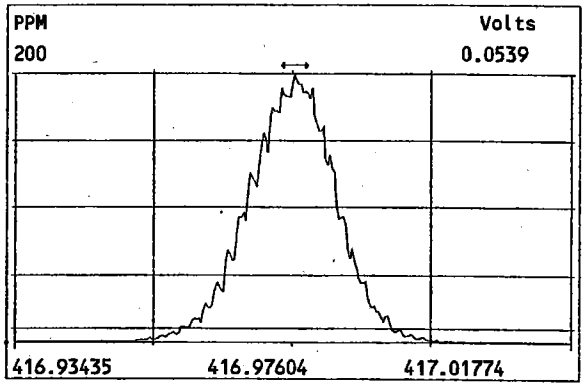


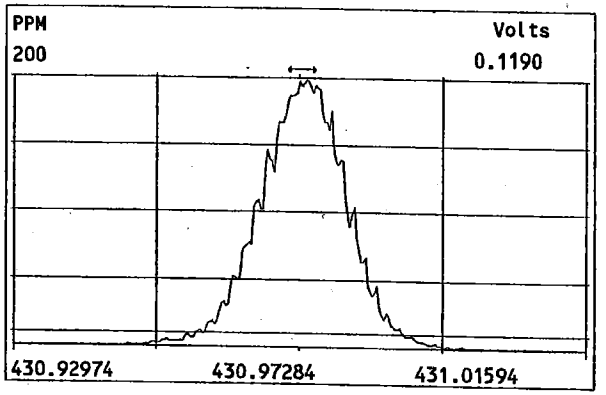


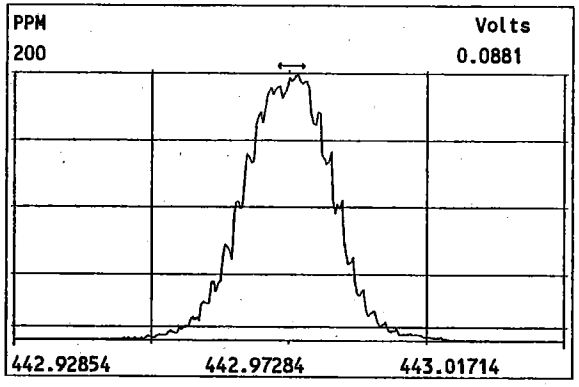
Peak Locate Examination:20-MAR-2010:05:48 File:19MAR10M_RES_CHECK

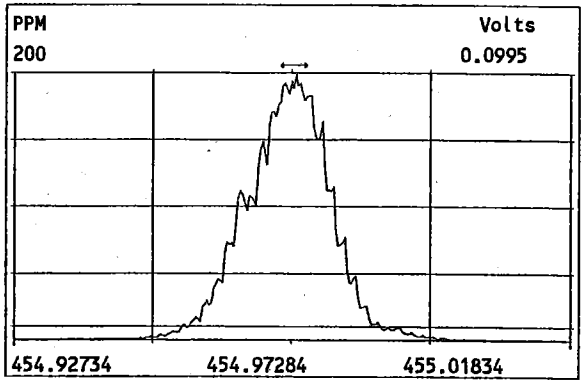
Experiment:PCDD Function:4 Reference:PFK

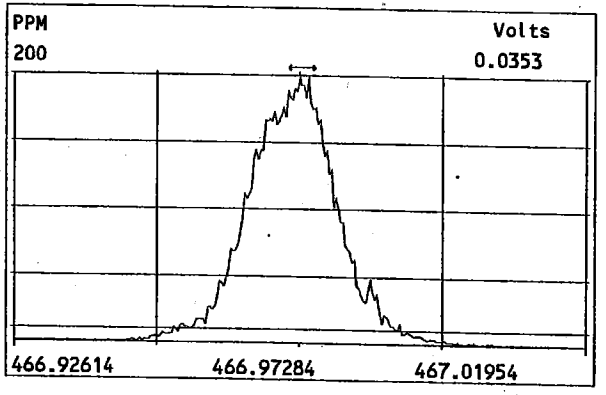


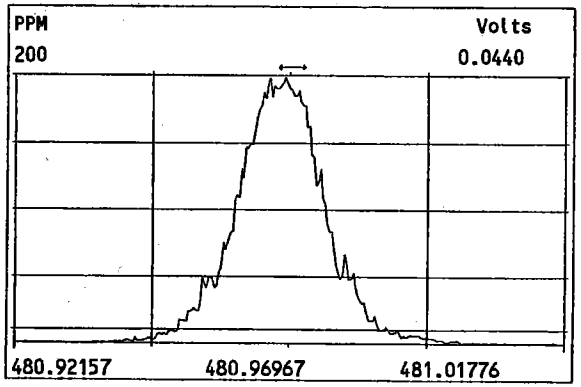




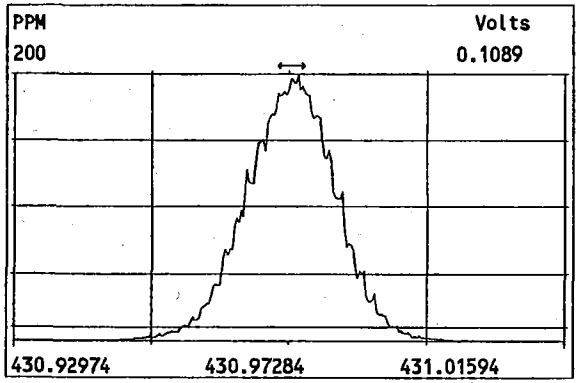


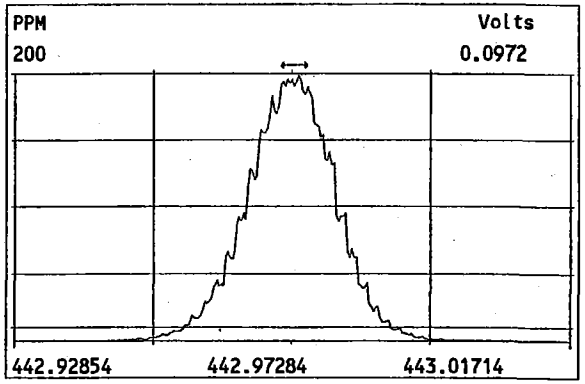


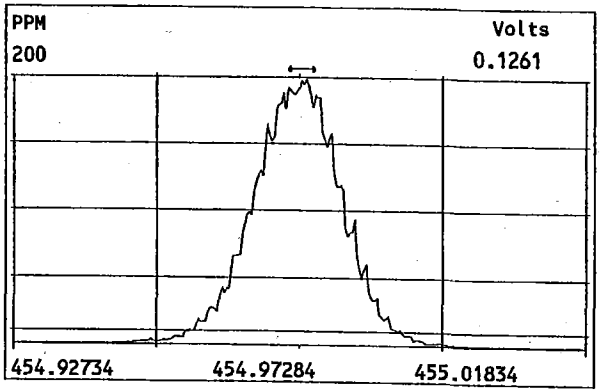


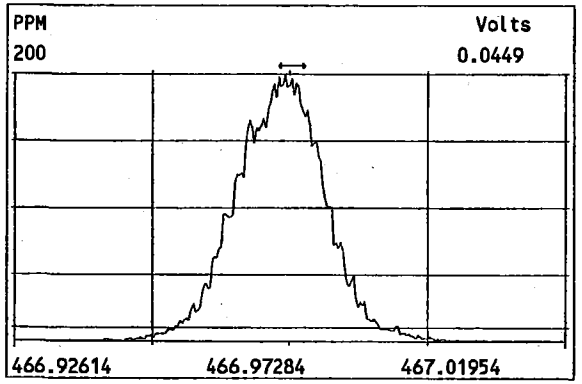


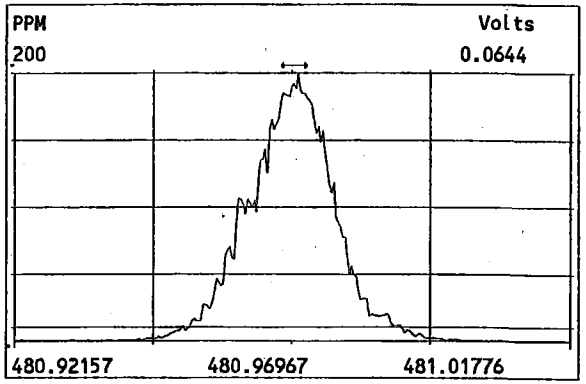
Peak Locate Examination:20-MAR-2010:05:50 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

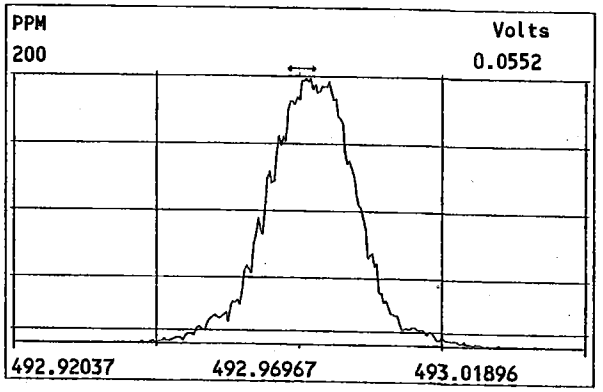


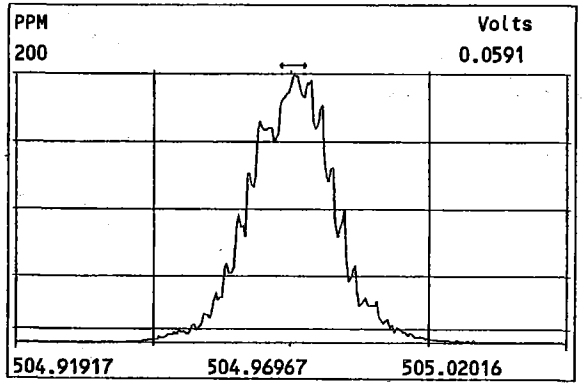


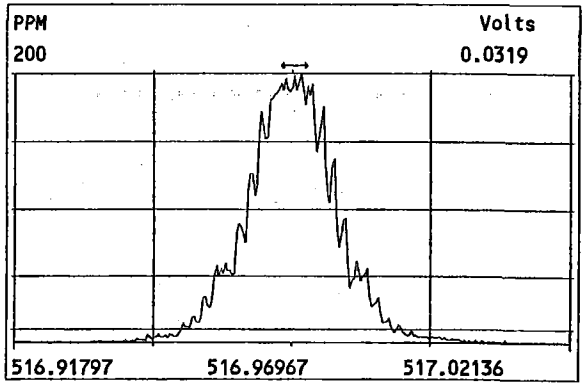












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 19MAR10M Sam:12 Analysis Date: 19-MAR-10 18:34:01

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	0.81	0.65-0.89	y	11.4	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	53.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	50.1	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	51.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05-1.43	y	50.8	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.90	0.88-1.20	y	48.5	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	103	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.66	0.65-0.89	y	9.70	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.64	1.32-1.78	y	53.0	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	52.0	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	51.9	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	52.0	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	52.0	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88-1.20	y	49.5	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.0	43.0 - 58.0
OCDF	M+2/M+4	0.88	0.76-1.02	y	95.6	63.0 - 159

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

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

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

Analyst: _____ Date: 3/20/10

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 19MAR10M Sam:12 Analysis Date: 19-MAR-10 18:34:01

	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	0.73	0.65-0.89	y	104	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32-1.78	y	86.0	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.33	1.05-1.43	y	103	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.32	1.05-1.43	y	98.7	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	98.1	72.0 - 138
13C-OCDD	M+2/M+4	0.95	0.76-1.02	y	188	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.81	0.65-0.89	y	104	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.65	1.32-1.78	y	91.1	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.66	1.32-1.78	y	85.6	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.47	0.43-0.59	y	99.8	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.47	0.43-0.59	y	96.6	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.47	0.43-0.59	y	91.5	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.47	0.43-0.59	y	89.4	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.48	0.37-0.51	y	92.8	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.50	0.37-0.51	y	88.0	77.0 - 129
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	166	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					11.6	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: 3/22/10

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: 11/18/09

RT Window Data Filename: 19MAR10M Sam:12 Analysis Date: 19-MAR-10 Time: 18:34:01

DB-5 IS Data Filename: 19MAR10M Sam:12 Analysis Date: 19-MAR-10 Time: 18:34:01

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)	28:20	1,2,8,9-TCDF (L)	28:32
1,2,4,7,9-PeCDD (F)	30:16	1,3,4,6,8-PeCDF (F)	28:26
1,2,3,8,9-PeCDD (L)	33:48	1,2,3,8,9-PeCDF (L)	34:12
1,2,4,6,7,9-HxCDD (F)	36:08	1,2,3,4,6,8-HxCDF (F)	35:16
1,2,3,7,8,9-HxCDD (L)	39:12	1,2,3,7,8,9-HxCDF (L)	39:46
1,2,3,4,6,7,9-HpCDD (F)	42:50	1,2,3,4,6,7,8-HpCDF (F)	42:18
1,2,3,4,6,7,8-HpCDD (L)	44:12	1,2,3,4,7,8,9-HpCDF (L)	45:06

(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: C Date: 3/22/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 19-MAR-10 18:34:01 CS3 or VER Data Filename: 19MAR10M Sam:12

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.002	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.238	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	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: 3/22/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 19-MAR-10 18:34:01 CS3 or VER Data Filename: 19MAR10M Sam:12

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	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		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.270	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: 3/22/10

FAL ID: ST031910M2 Filename: 19MAR10M Sam:12 Acquired: 19-MAR-10 18:34:01 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 (90918J) ConCal: ST031910M2 EndCal: ST031910M3
Results: 6026 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 105
WHO 1998 Tox: 131 WHO 2005 Tox: 120

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	3.26e+06	0.81 y	27:24	1.02	11.4		2.50	-	-	*
1,2,3,7,8-PeCDD	1.28e+07	1.59 y	33:13	0.96	53.0		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.22e+07	1.31 y	38:35	1.37	50.1		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.11e+07	1.31 y	38:45	1.34	51.2		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.17e+07	1.29 y	39:12	1.37	50.8		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	8.72e+06	0.90 y	44:12	1.17	48.5		2.50	-	-	*
OCDD	1.36e+07	0.91 y	49:46	1.21	103		2.50	-	-	*
2,3,7,8-TCDF	5.90e+06	0.66 y	26:37	1.29	9.70		2.50	-	-	*
1,2,3,7,8-PeCDF	1.96e+07	1.64 y	31:29	0.89	53.0		2.50	-	-	*
2,3,4,7,8-PeCDF	1.78e+07	1.61 y	32:47	0.91	52.0		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.55e+07	1.22 y	37:12	1.00	51.9		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.61e+07	1.23 y	37:23	0.92	52.0		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.42e+07	1.22 y	38:20	0.99	52.0		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.32e+07	1.25 y	39:46	1.09	51.6		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.20e+07	1.02 y	42:18	1.36	49.5		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.04e+07	1.03 y	45:06	1.61	50.0		2.50	-	-	*
OCDF	1.37e+07	0.88 y	50:08	0.84	95.6		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.82e+07	0.73 y	27:21	0.94	104					104
13C-1,2,3,7,8-PeCDD	2.52e+07	1.55 y	33:11	1.02	86.0					86.0
13C-1,2,3,4,7,8-HxCDD	1.77e+07	1.33 y	38:34	0.98	103					103
13C-1,2,3,6,7,8-HxCDD	1.61e+07	1.32 y	38:44	0.94	98.7					98.7
13C-1,2,3,4,6,7,8-HpCDD	1.54e+07	1.06 y	44:10	0.90	98.1					98.1
13C-OCDD	2.18e+07	0.95 y	49:45	0.67	188					93.8
13C-2,3,7,8-TCDF	4.73e+07	0.81 y	26:36	0.88	104					104
13C-1,2,3,7,8-PeCDF	4.16e+07	1.65 y	31:28	0.88	91.1					91.1
13C-2,3,4,7,8-PeCDF	3.78e+07	1.66 y	32:47	0.85	85.6					85.6
13C-1,2,3,4,7,8-HxCDF	2.99e+07	0.47 y	37:11	1.72	99.8					99.8
13C-1,2,3,6,7,8-HxCDF	3.37e+07	0.47 y	37:23	2.00	96.6					96.6
13C-2,3,4,6,7,8-HxCDF	2.77e+07	0.47 y	38:18	1.74	91.5					91.5
13C-1,2,3,7,8,9-HxCDF	2.35e+07	0.47 y	39:44	1.51	89.4					89.4
13C-1,2,3,4,6,7,8-HpCDF	1.78e+07	0.48 y	42:16	1.10	92.8					92.8
13C-1,2,3,4,7,8,9-HpCDF	1.30e+07	0.50 y	45:05	0.85	88.0					88.0
13C-OCDF	3.40e+07	0.90 y	50:07	1.17	166					83.0
37Cl-2,3,7,8-TCDD	3.24e+06		27:22	0.97	11.6					116
13C-1,2,3,4-TCDD	2.88e+07	0.74 y	26:48	-	110					
13C-1,2,3,4-TCDF	5.20e+07	0.81 y	25:32	-	113					
13C-1,2,3,7,8,9-HxCDD	1.74e+07	1.30 y	39:11	-	85.0					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.79e+07		24:23	1.02	62.4	2.50	-	-	*		18
Total Penta-Dioxins	2.89e+07		30:16	0.96	119	2.50	-	-	*		9
Total Hexa-Dioxins	4.06e+07		36:08	1.36	176	2.50	-	-	*		14
Total Hepta-Dioxins	1.87e+07		42:50	1.17	104	2.50	-	-	*		21
Total Tetra-Furans	2.38e+07		23:02	1.29	39.2	2.50	-	-	*		19
1st Fn. Tot Penta-Furans	1.92e+07		28:26	0.90	53.9	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.32e+07		30:00	0.90	150	2.50	-	-	*	203	14
Total Hexa-Furans	7.02e+07		35:16	0.99	247	2.50	-	-	*		13
Total Hepta-Furans	2.31e+07		42:18	1.47	102	2.50	-	-	*		23

Analyst: _____ Date: 3/22/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:19MAR10M Instrument: FAL3 GC: DB5 Experiment:PCDD

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
19MAR10M	1	ST031910M1	1613 CS3 (90918J)	19-MAR-10 08:14:42	ST031910M1	ST031910M2	TC
19MAR10M	2	1964-001-0001-OPR	OPR	19-MAR-10 09:19:40	ST031910M1	ST031910M2	TC
19MAR10M	3	1964-001-0001-MB	Method Blank	19-MAR-10 10:15:48	ST031910M1	ST031910M2	TC
19MAR10M	4	6025-001-0001-SA	EFF	19-MAR-10 11:11:11	ST031910M1	ST031910M2	TC
19MAR10M	5	6026-001-0001-SA	R-1	19-MAR-10 12:06:34	ST031910M1	ST031910M2	TC
19MAR10M	6	6026-002-0001-SA	R-2	19-MAR-10 13:01:52	ST031910M1	ST031910M2	TC
19MAR10M	7	6030-001-0001-SA	CB31A031010COMP	19-MAR-10 13:57:11	ST031910M1	ST031910M2	TC
19MAR10M	8	6030-002-0001-SA	CB4857031010COMP	19-MAR-10 14:52:34	ST031910M1	ST031910M2	TC
19MAR10M	9	6030-003-0001-SA	CB1031010COMP	19-MAR-10 15:47:53	ST031910M1	ST031910M2	TC
19MAR10M	10	6030-004-0001-SA	CB101031010COMP	19-MAR-10 16:43:15	ST031910M1	ST031910M2	TC
19MAR10M	11	6030-003-0001-SA	CB1031010COMP	19-MAR-10 17:38:38	ST031910M1	ST031910M2	TC
19MAR10M	12	ST031910M2	1613 CS3 (90918J)	19-MAR-10 18:34:01	ST031910M2	ST031910M3	TC
19MAR10M	13	1966-001-0001-OPR	OPR	19-MAR-10 19:29:20	ST031910M2	ST031910M3	TC
19MAR10M	14	1966-001-0001-MB	Method Blank	19-MAR-10 20:24:43	ST031910M2	ST031910M3	TC
19MAR10M	15	6016-001-0001-SA	MW-107A-FB-GMW-01A	19-MAR-10 21:20:02	ST031910M2	ST031910M3	TC
19MAR10M	16	6016-002-0001-SA	MW-107A-RB-GMW-01A	19-MAR-10 22:15:23	ST031910M2	ST031910M3	TC
19MAR10M.	17	6016-003-0001-SA	MW-101A	19-MAR-10 23:10:42	ST031910M2	ST031910M3	TC
19MAR10M	18	6016-004-0001-SA	DUP-030510	20-MAR-10 00:06:00	ST031910M2	ST031910M3	TC
19MAR10M	19	6016-005-0001-SA	MW-107A	20-MAR-10 01:01:18	ST031910M2	ST031910M3	TC
19MAR10M	20	6016-003-0002-MS	MW-101A	20-MAR-10 01:56:37	ST031910M2	ST031910M3	TC
19MAR10M	21	6016-003-0002-MSD	MW-101A	20-MAR-10 02:51:56	ST031910M2	ST031910M3	TC
19MAR10M	22	SB031910M2	Solvent Blank	20-MAR-10 03:47:15	ST031910M2	ST031910M3	TC
19MAR10M	23	ST031910M3	1613 CS3 (90918J)	20-MAR-10 04:42:38	ST031910M2	ST031910M3	TC

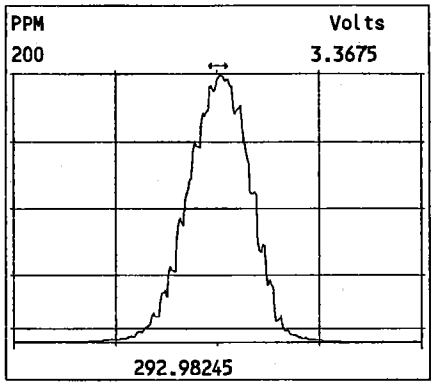
Arcing - SPL moved

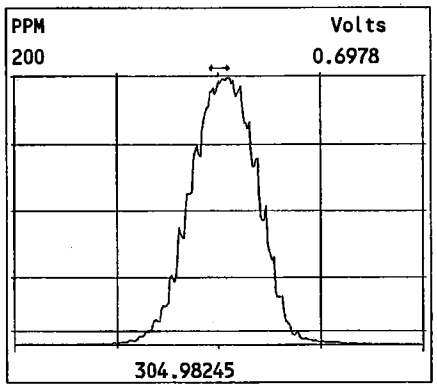
TC 3/22/10

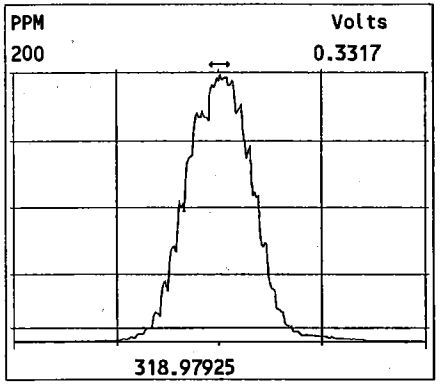
Data Backed Up:_____

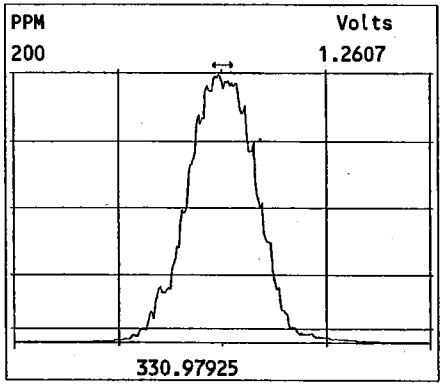
Date:_____

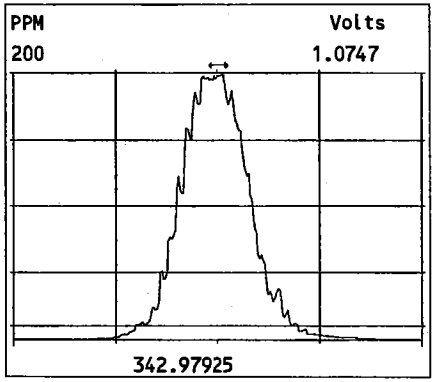
Peak Locate Examination:19-MAR-2010:08:12 File:19MAR10M
Experiment:PCDD Function:1 Reference:PFK

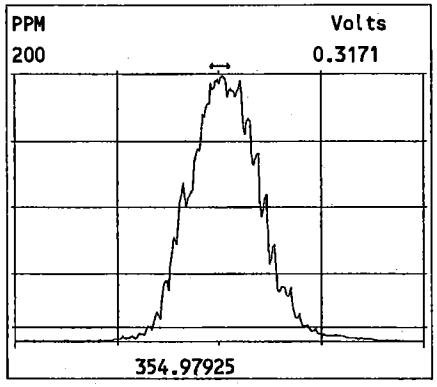


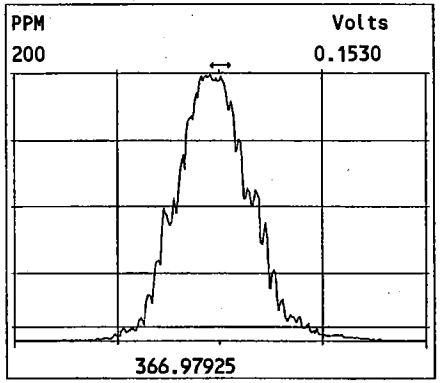


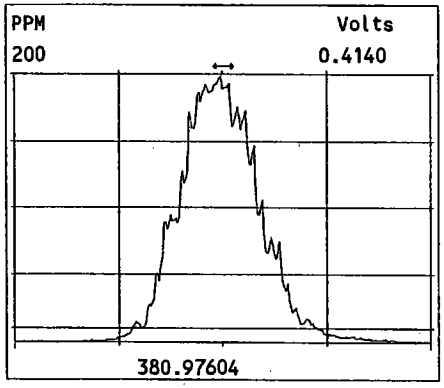


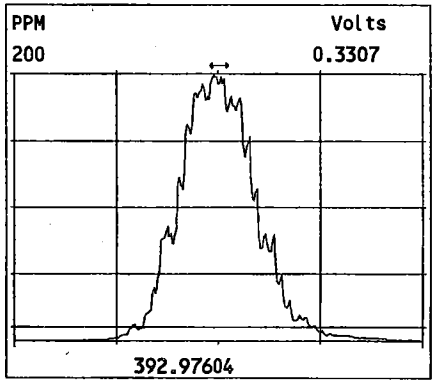


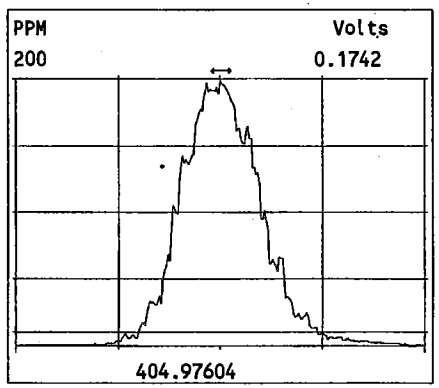


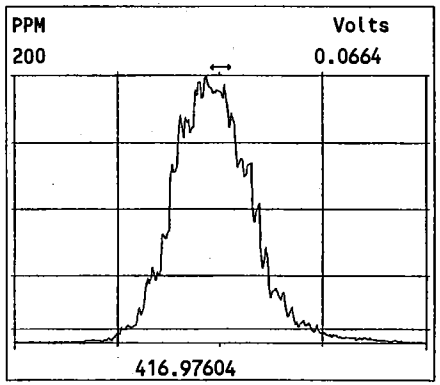




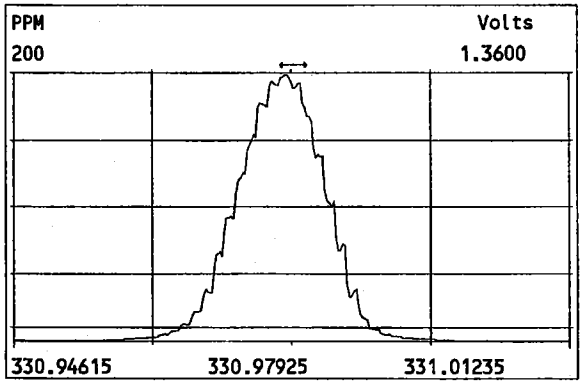


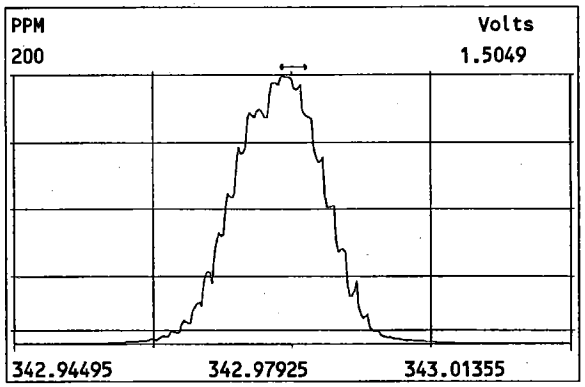


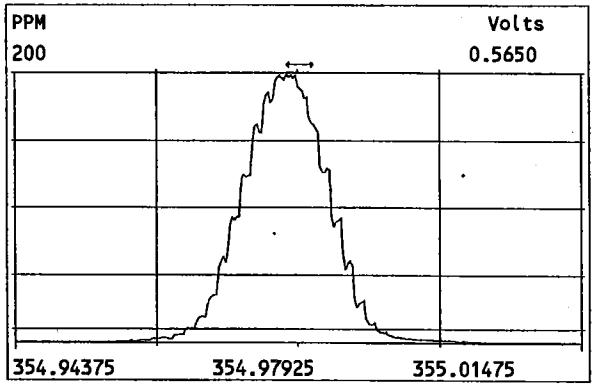


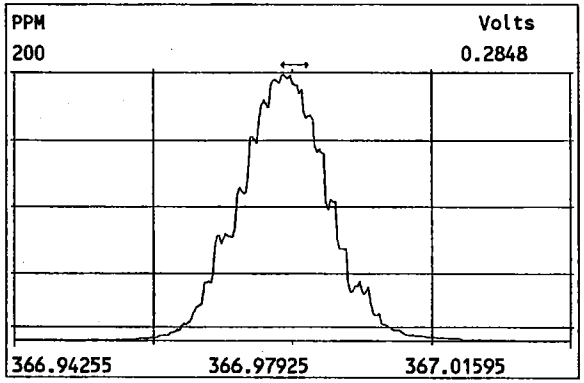


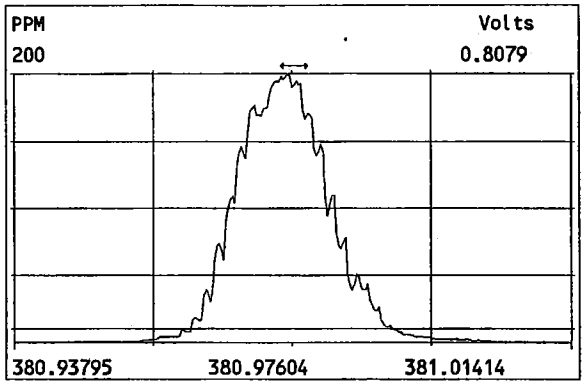
Peak Locate Examination:19-MAR-2010:08:13 File:19MAR10M
Experiment:PCDD Function:2 Reference:PFK

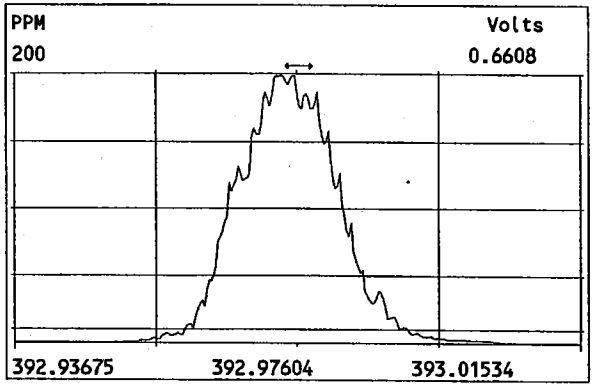


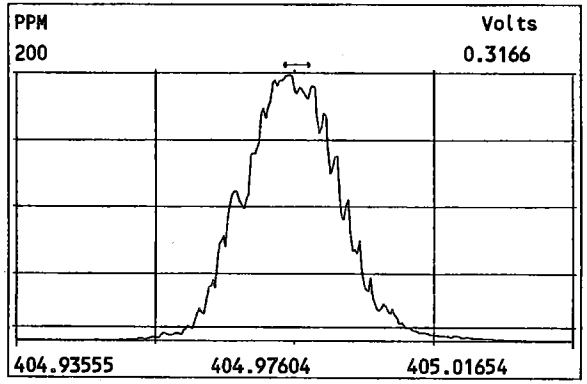


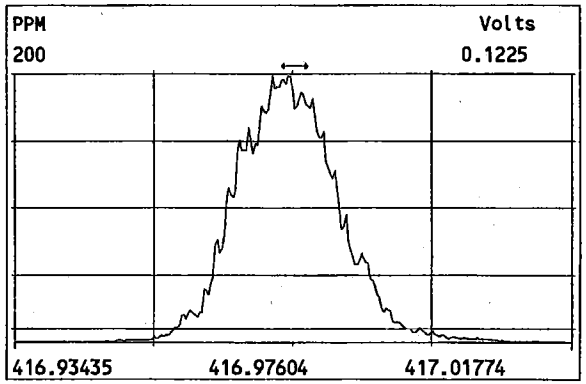




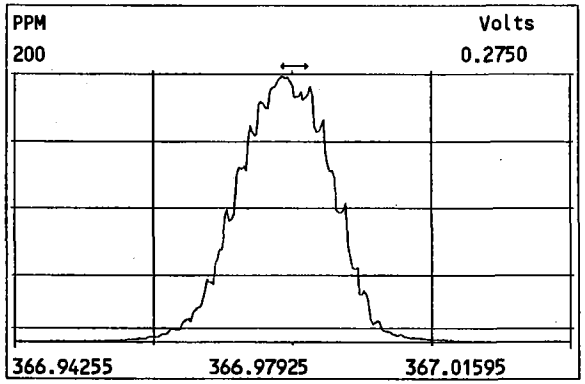


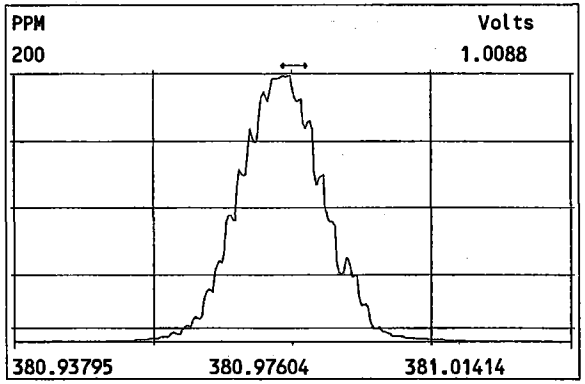


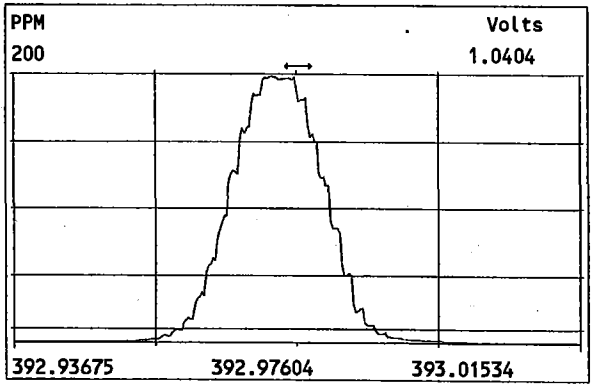


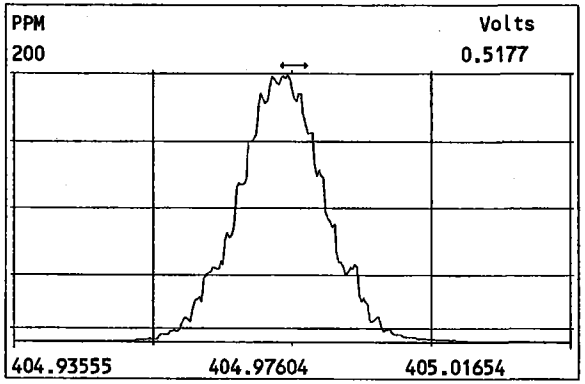


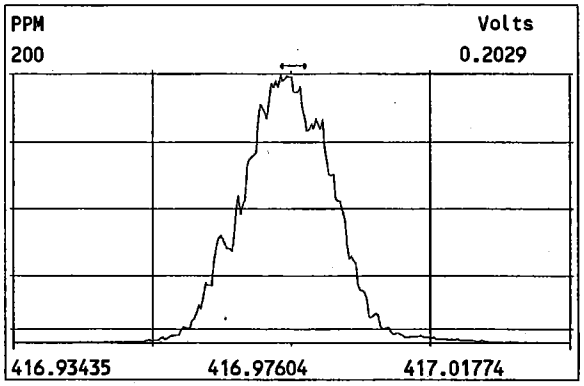
Peak Locate Examination:19-MAR-2010:08:13 File:19MAR10M
Experiment:PCDD Function:3 Reference:PFK

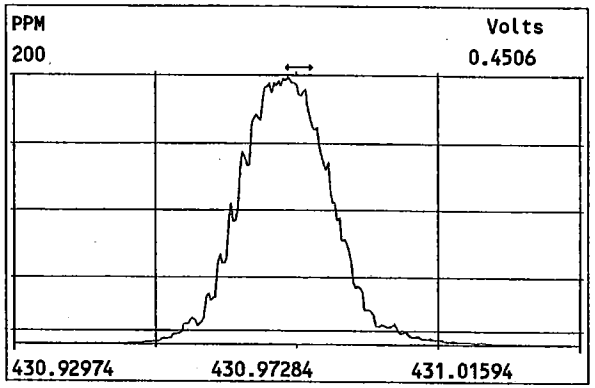


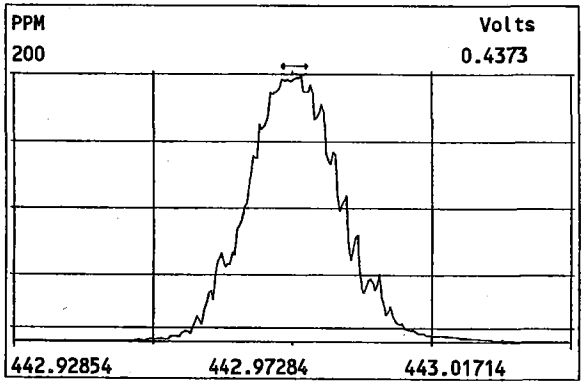


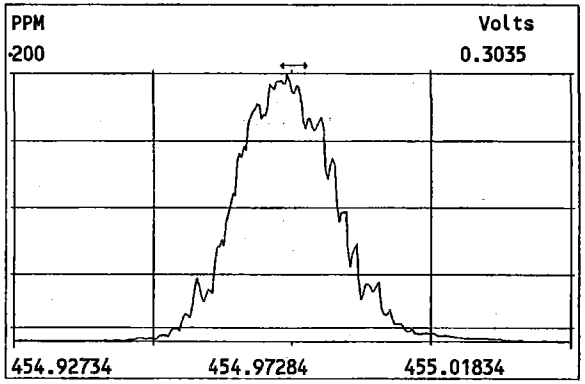




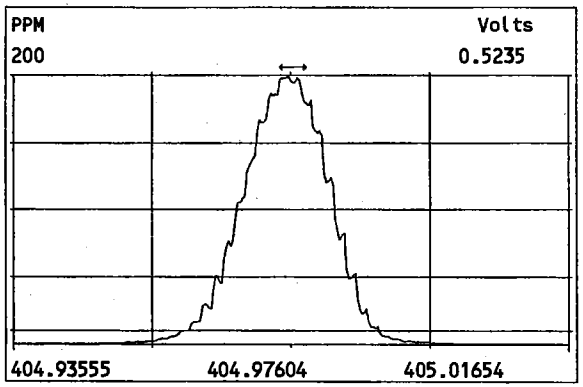


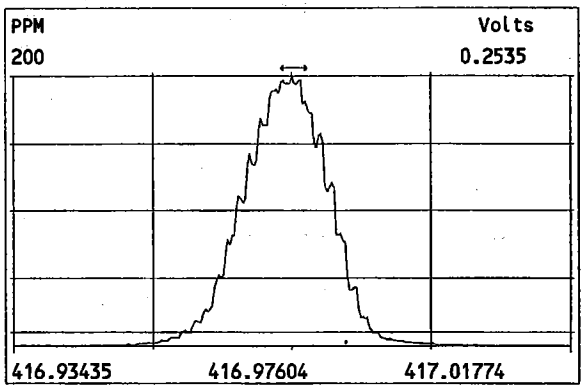


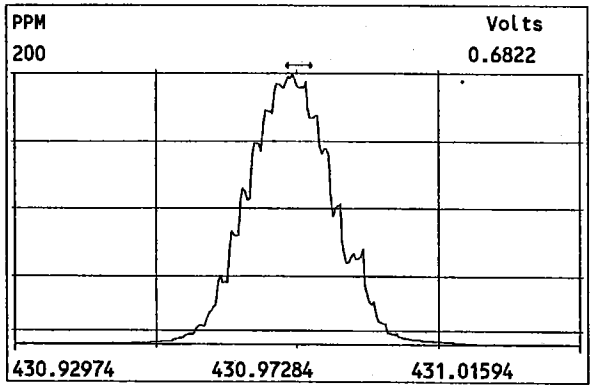


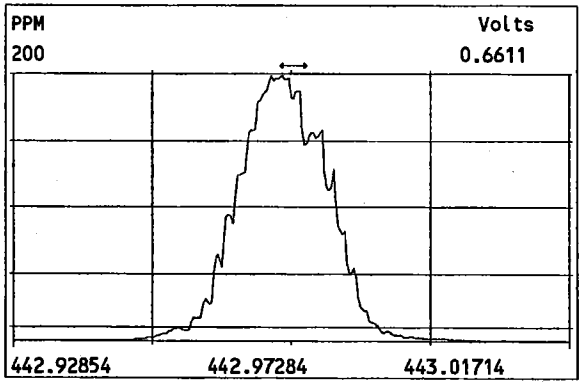


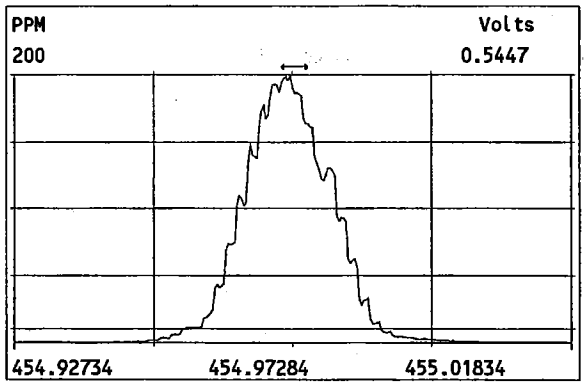
Peak Locate Examination:19-MAR-2010:08:14 File:19MAR10M
Experiment:PCDD Function:4 Reference:PFK

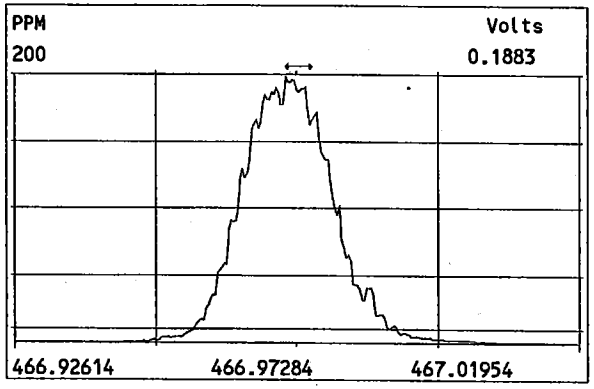


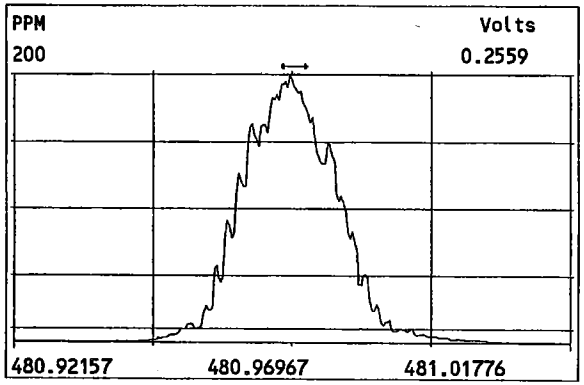






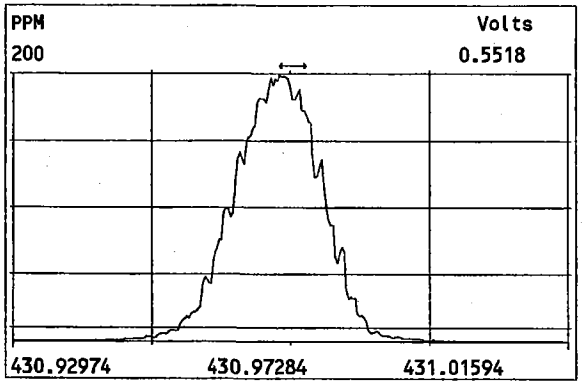


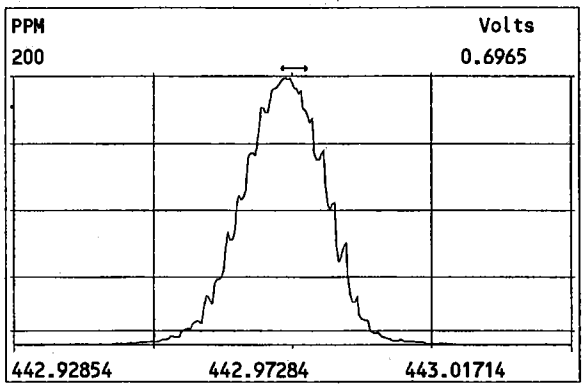


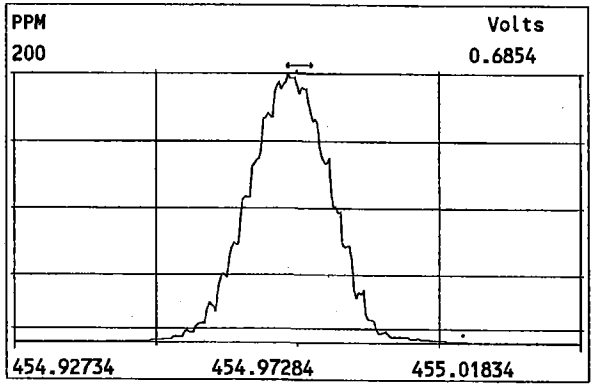


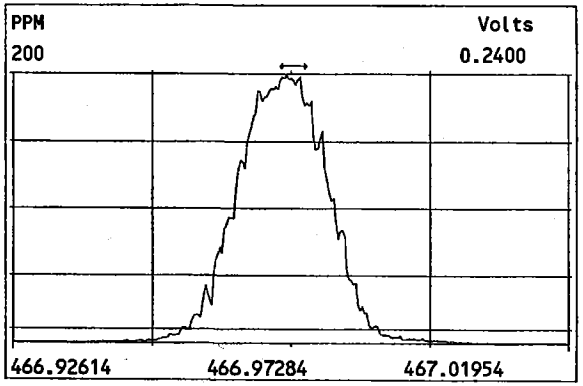
Peak Locate Examination:19-MAR-2010:08:14 File:19MAR10M

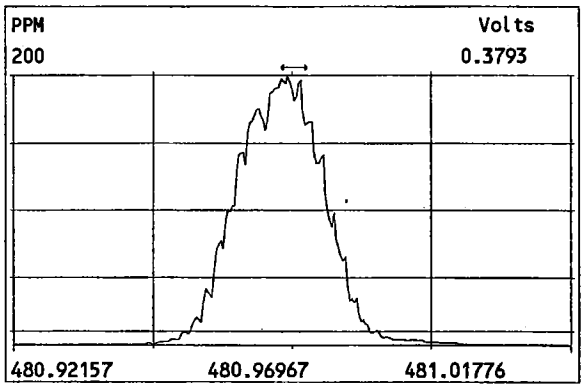
Experiment:PCDD Function:5 Reference:PFK

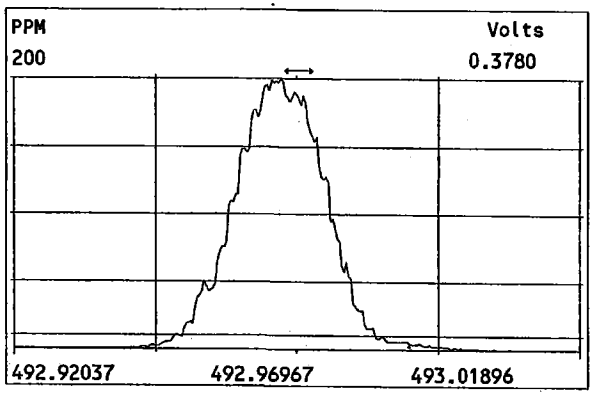


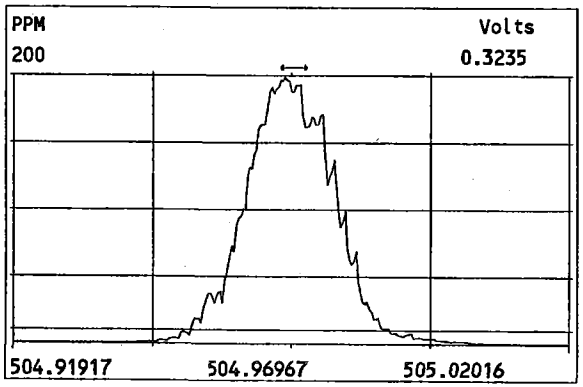


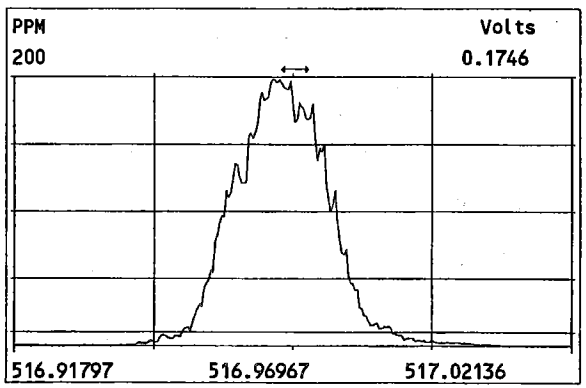




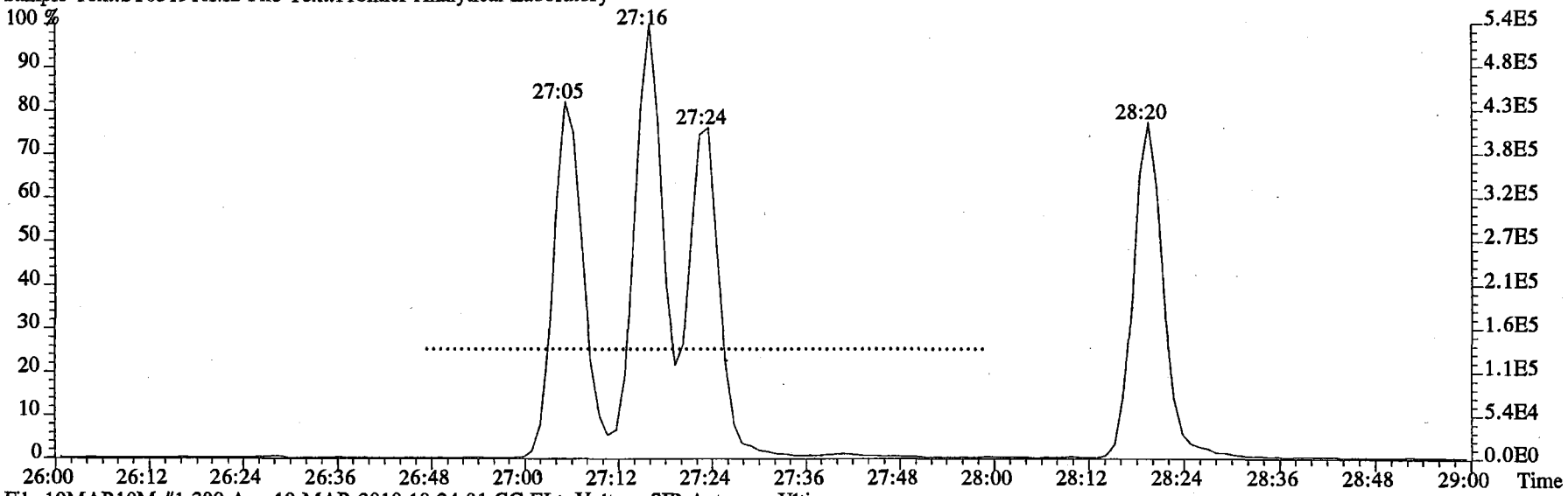




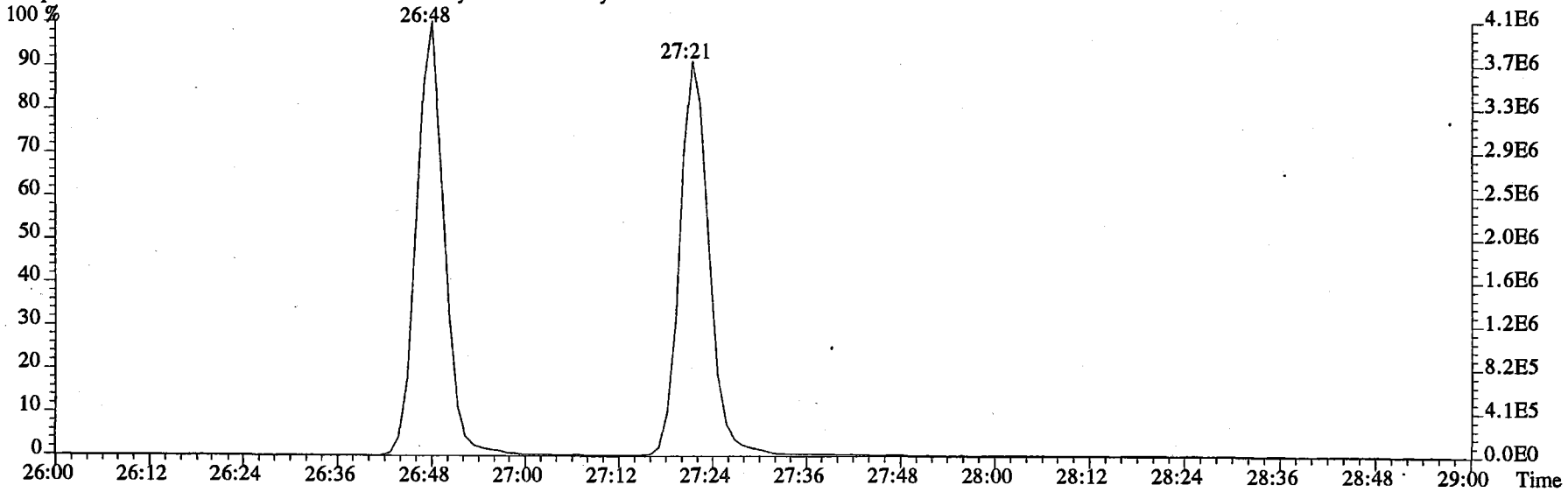




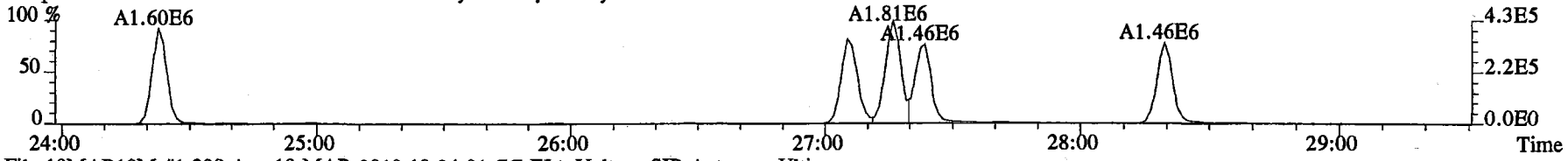
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:12 Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



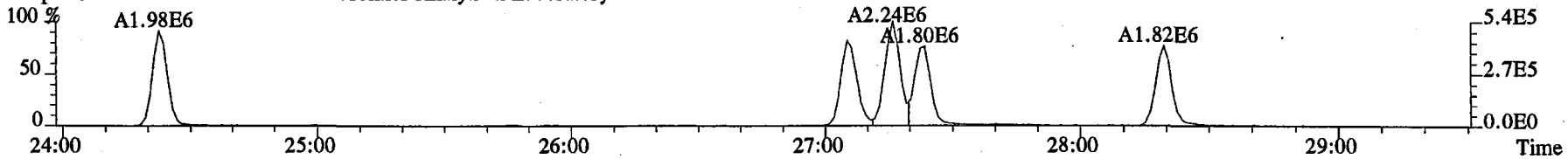
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:12 Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



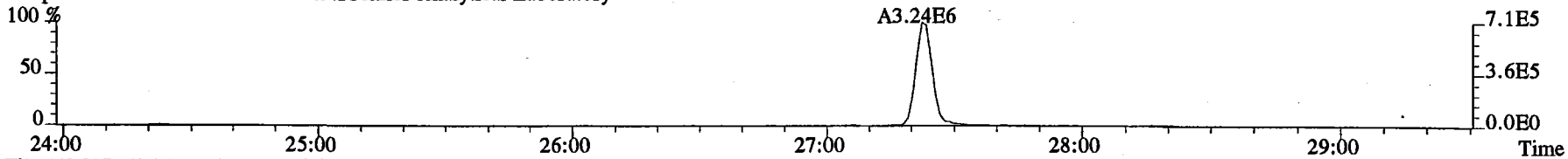
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



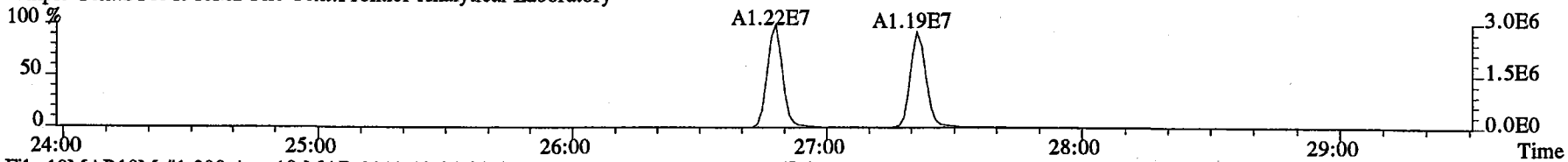
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



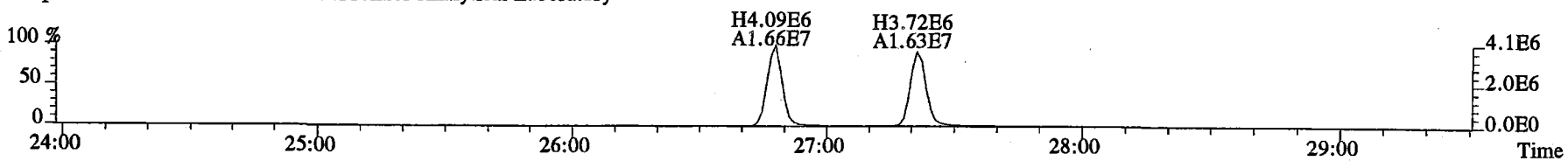
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



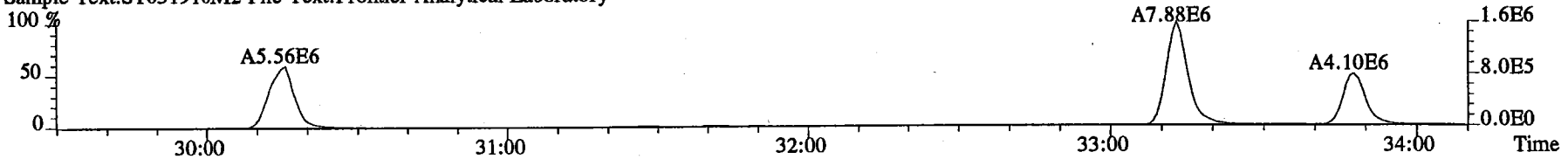
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



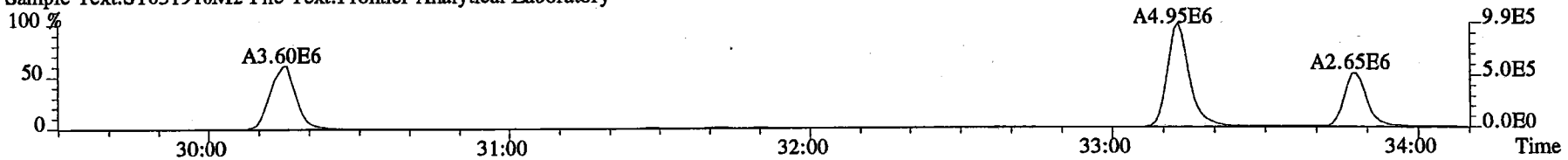
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



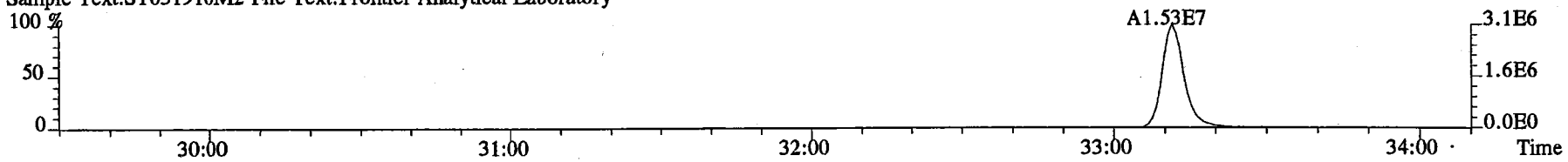
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



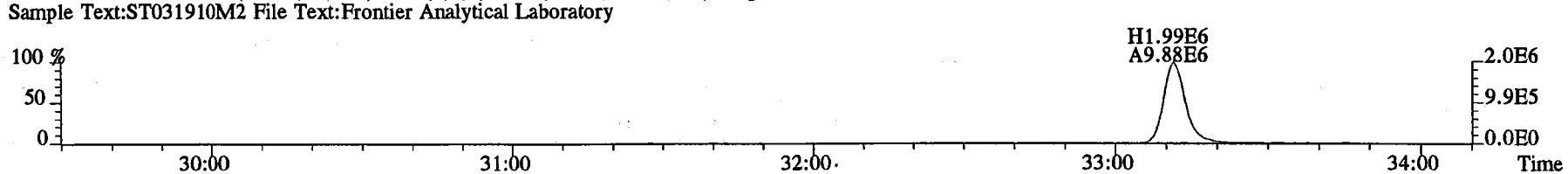
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



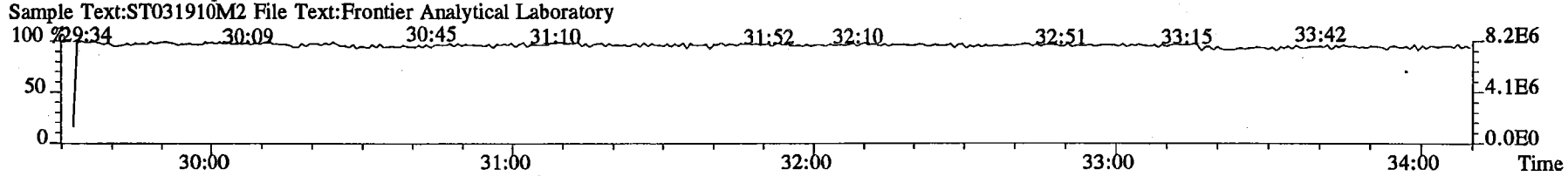
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



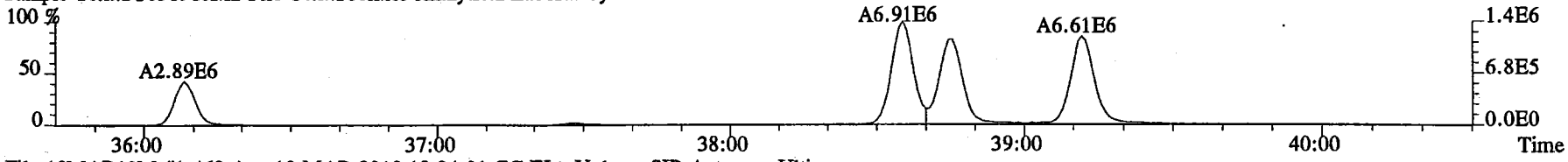
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



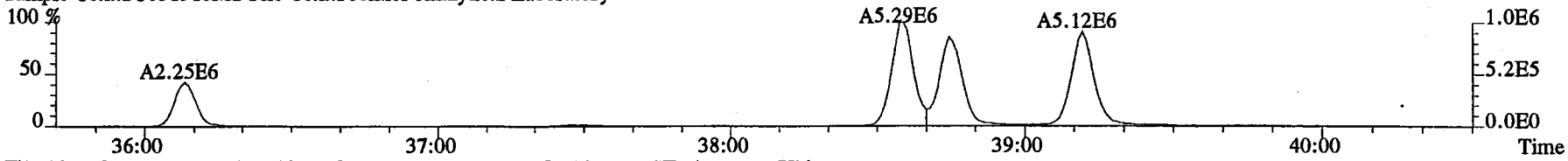
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:12 F:2 Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



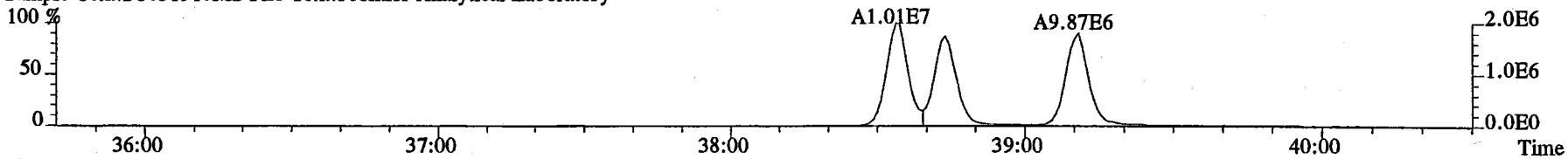
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



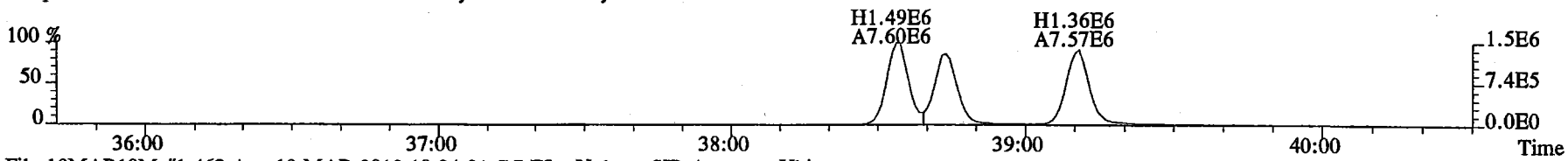
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



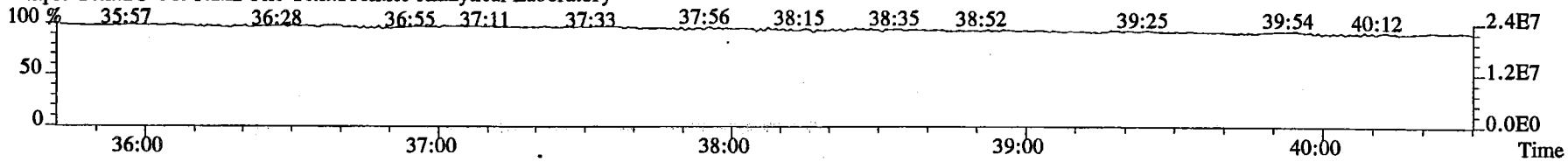
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



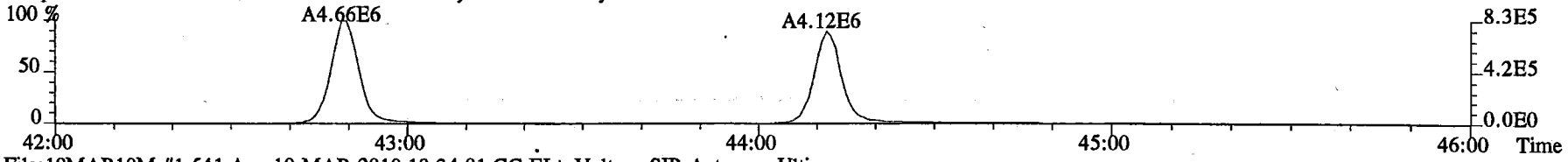
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



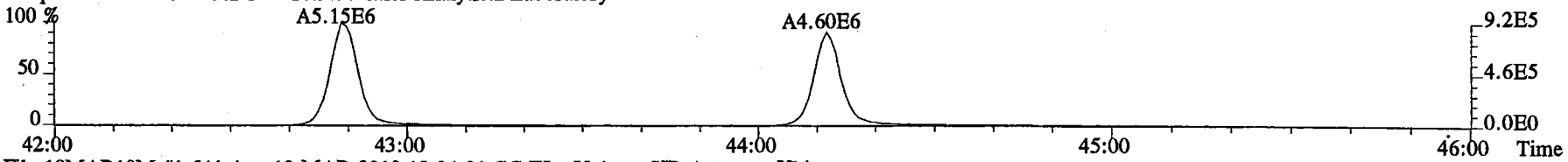
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:12 F:3 Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



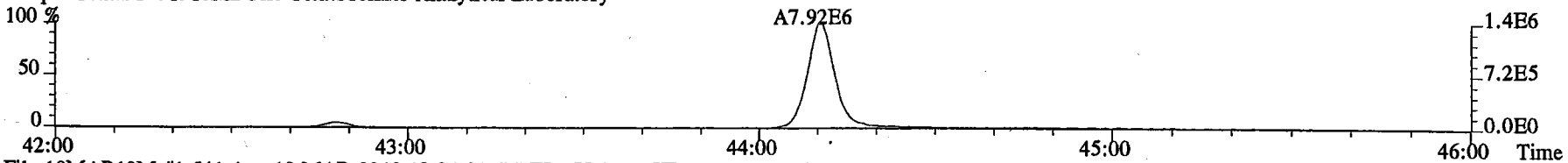
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



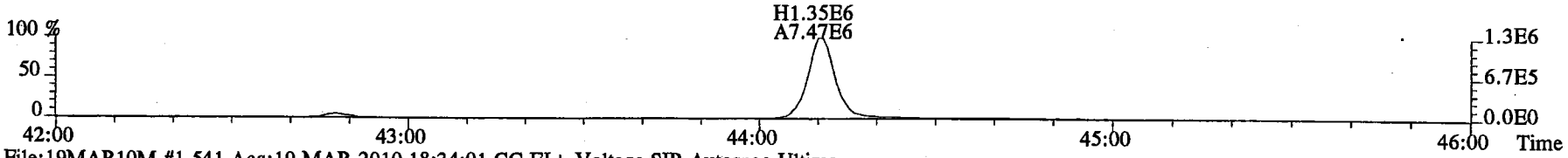
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



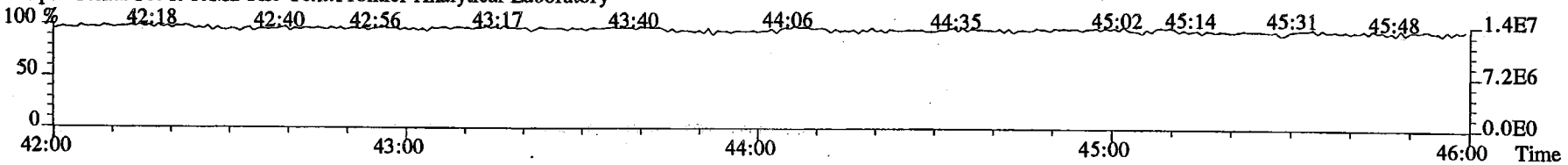
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



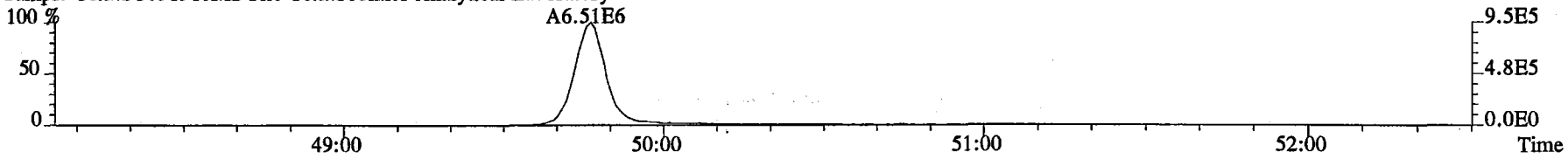
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



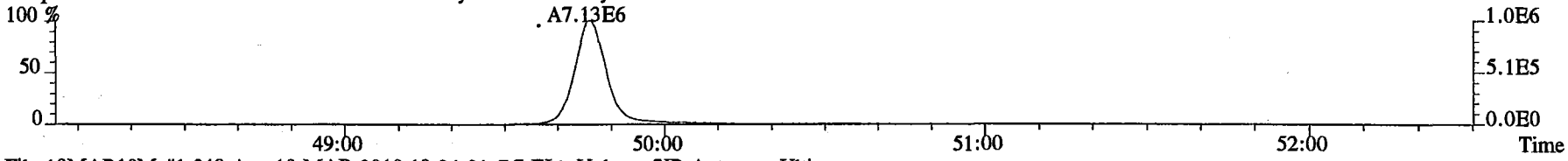
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:12 F:4 Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



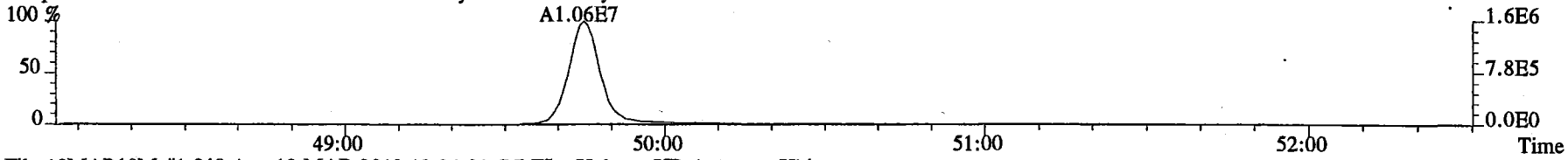
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



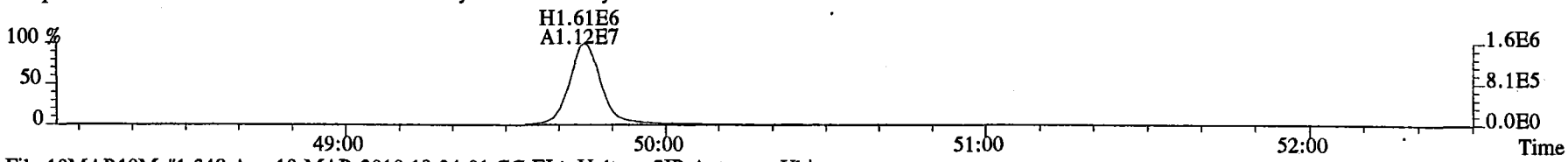
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



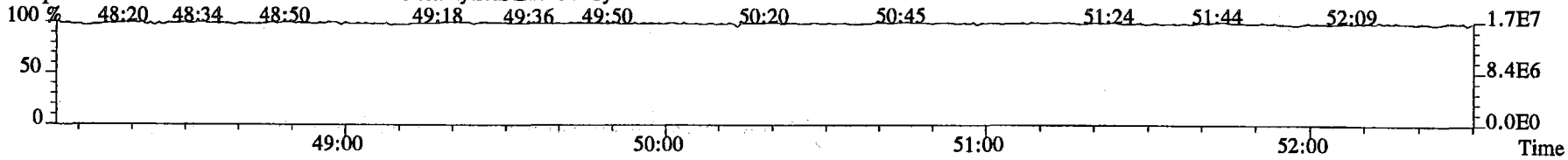
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



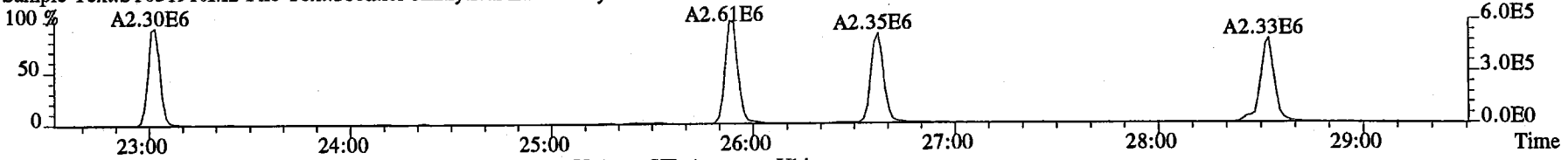
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



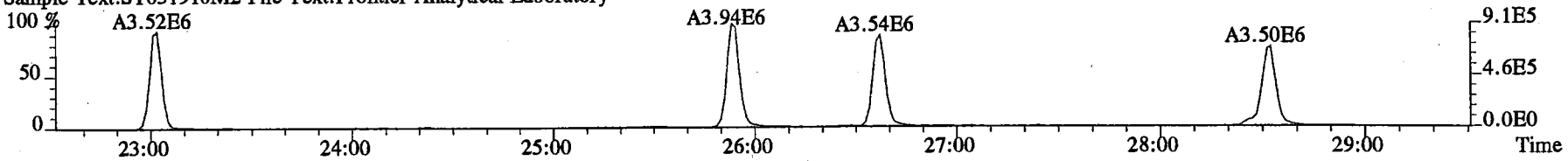
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:12 F:5 Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



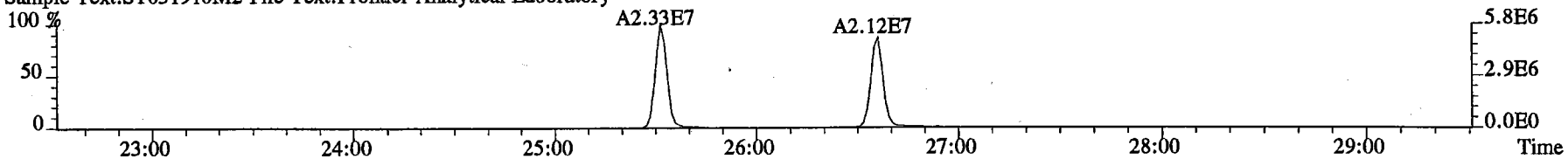
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



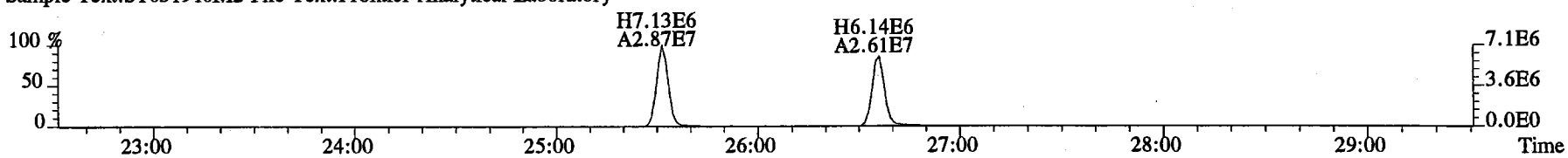
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



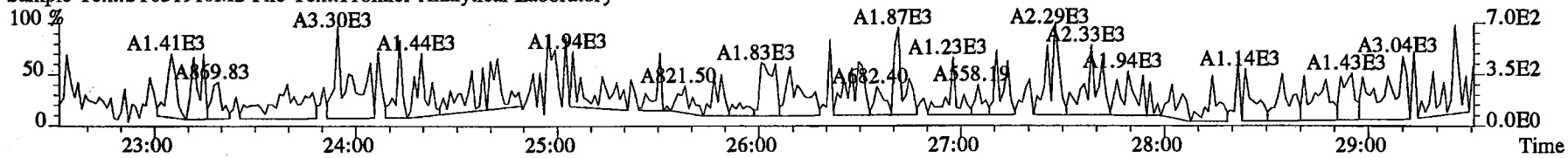
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



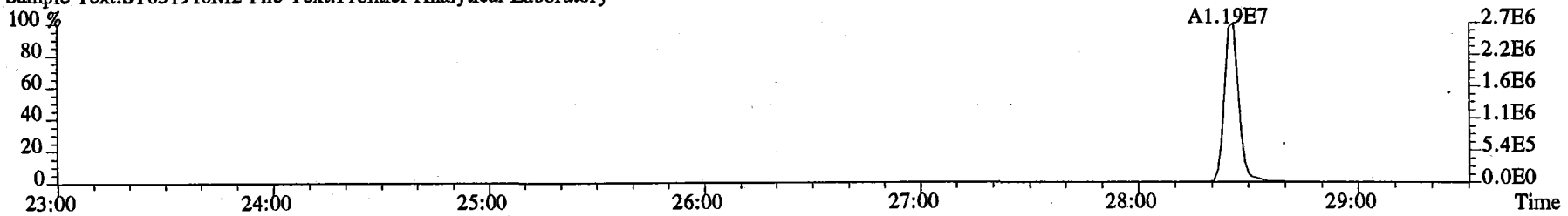
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



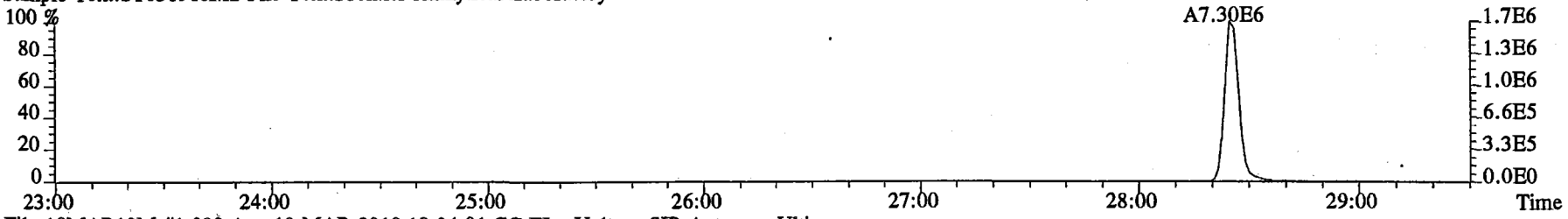
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



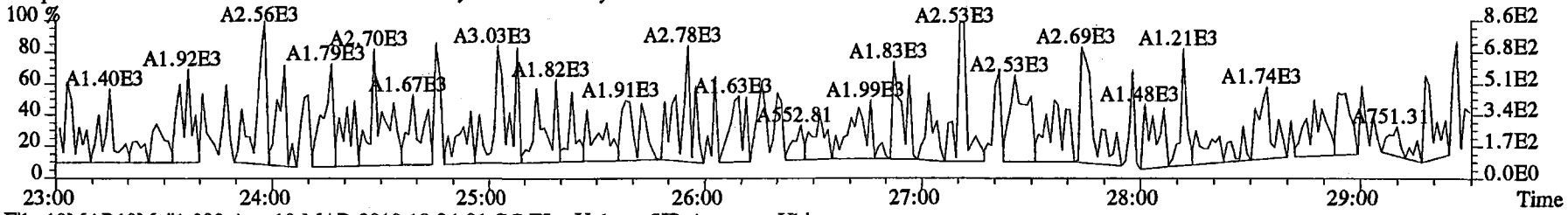
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



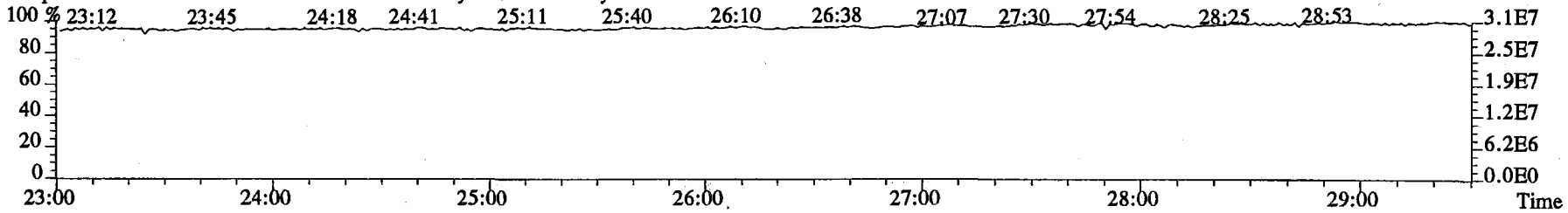
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



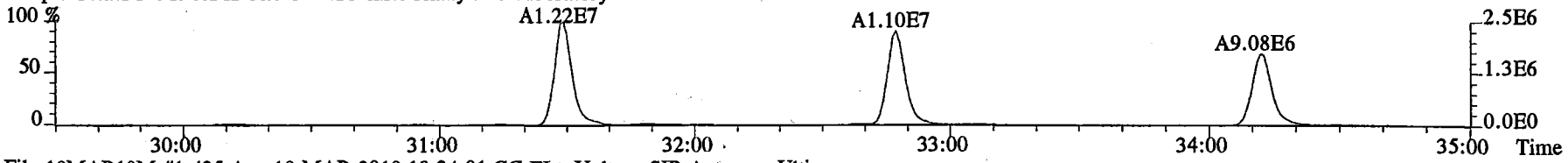
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



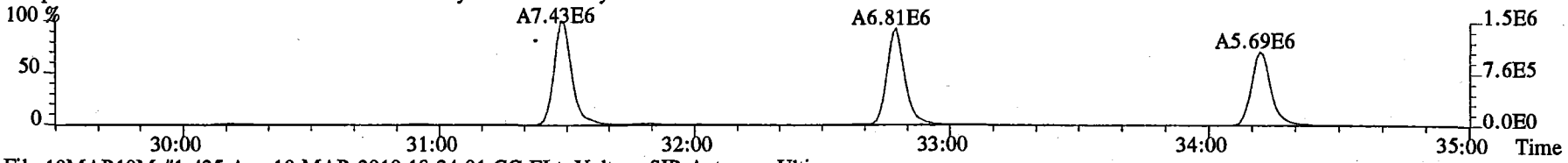
File:19MAR10M #1-390 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:12 Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



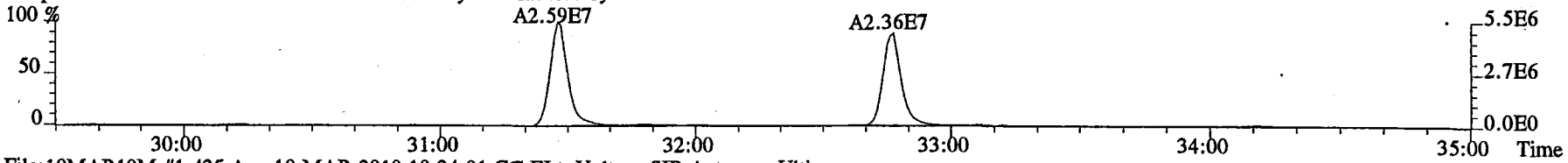
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



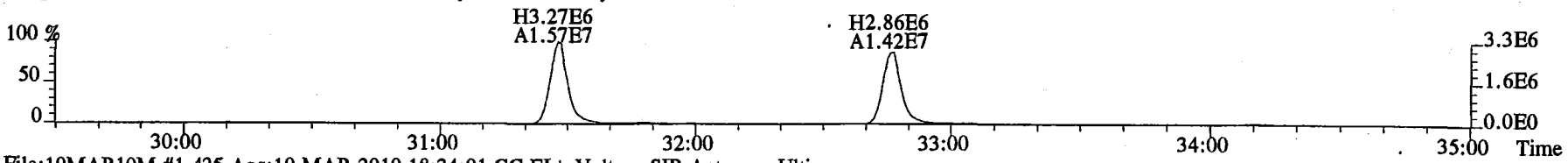
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



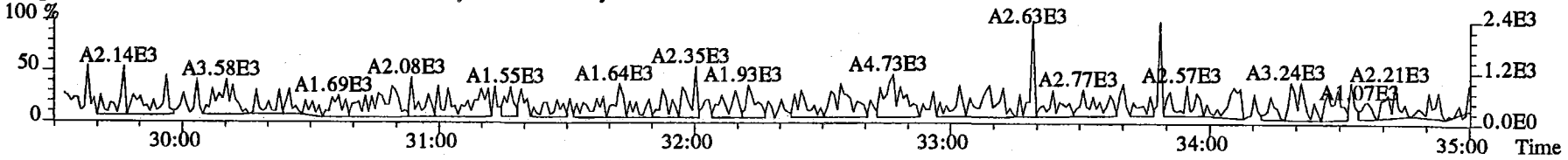
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



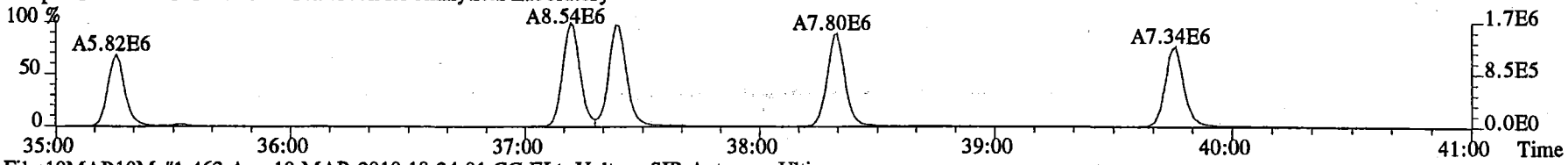
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



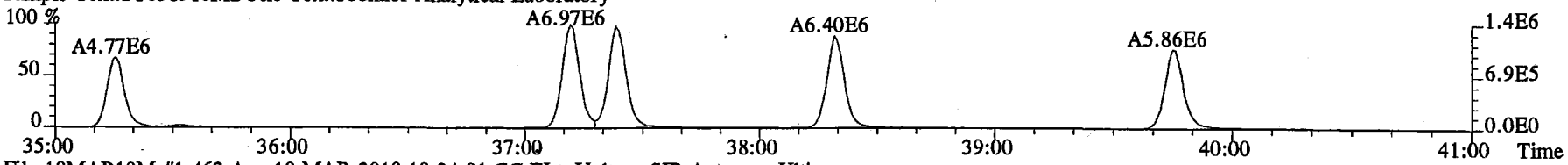
File:19MAR10M #1-425 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



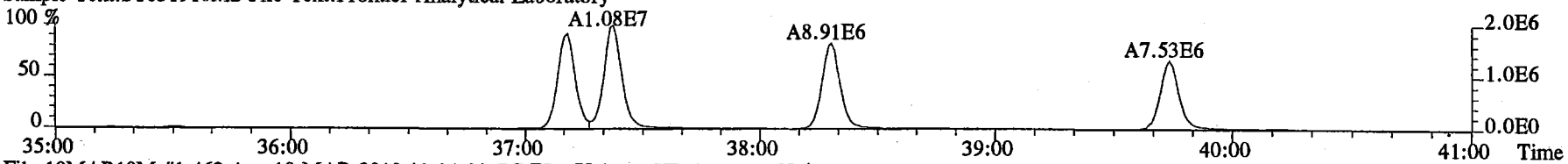
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



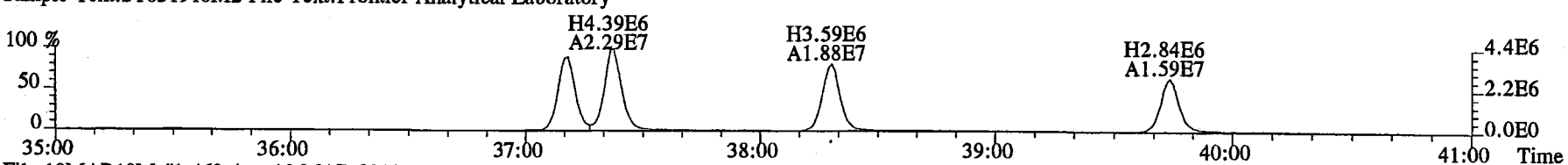
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



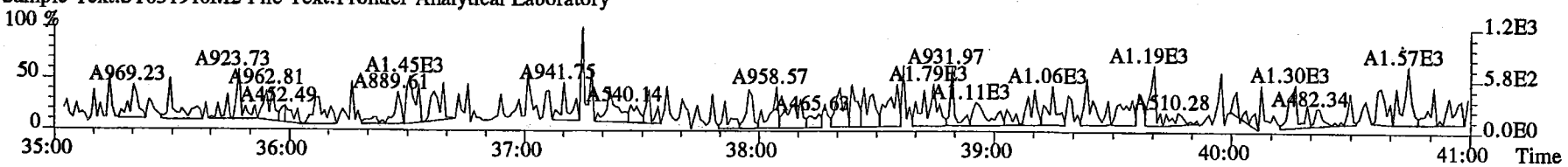
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



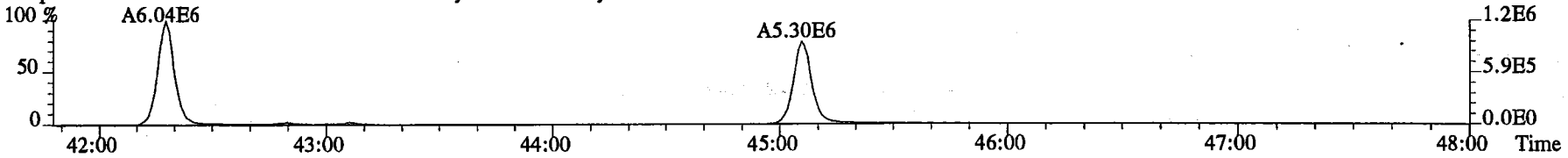
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



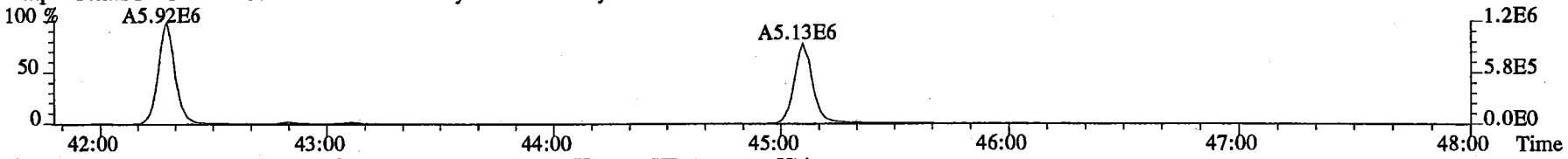
File:19MAR10M #1-463 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



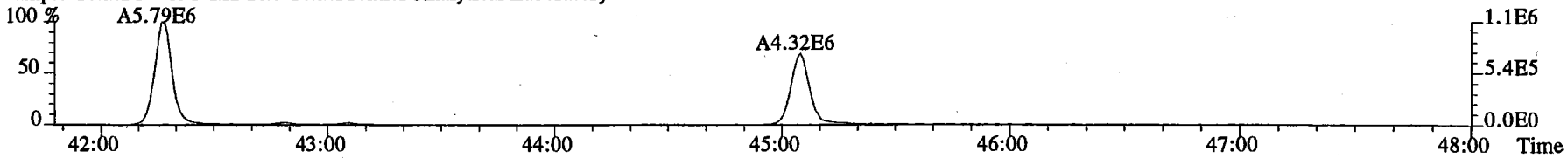
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



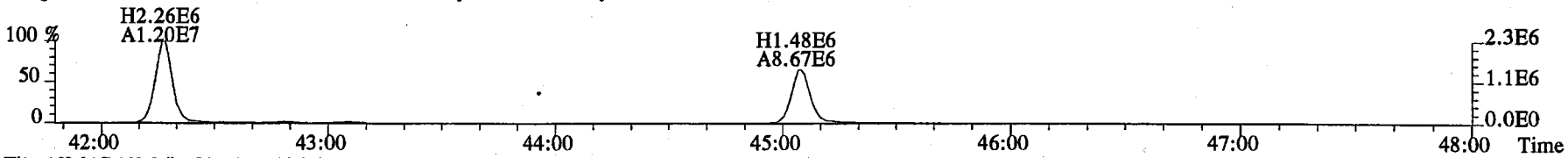
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



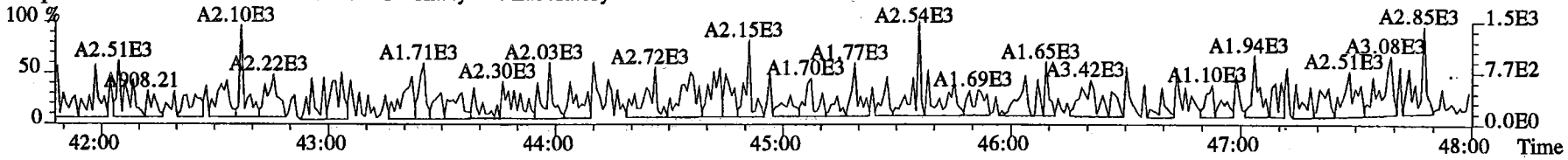
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



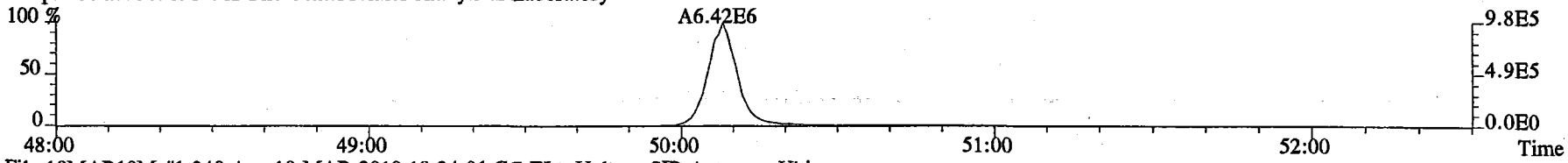
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



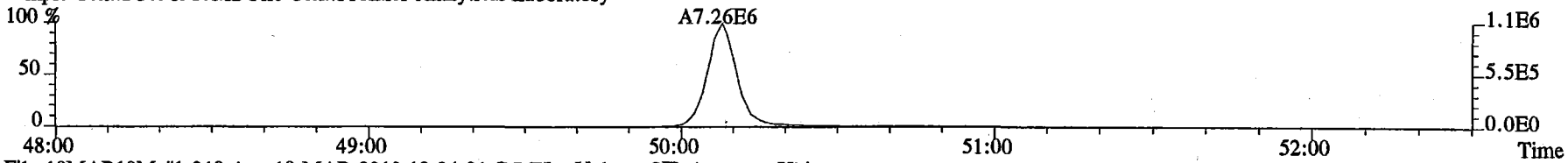
File:19MAR10M #1-541 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



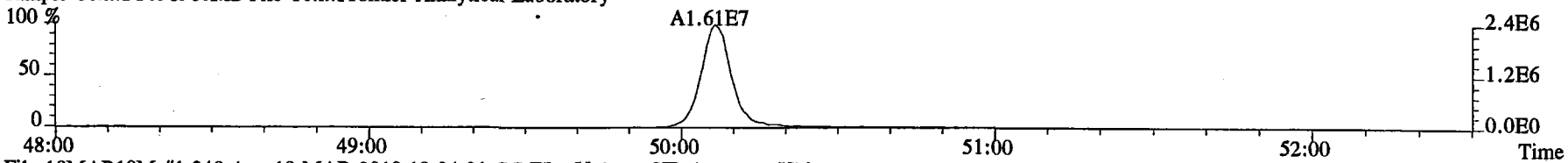
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



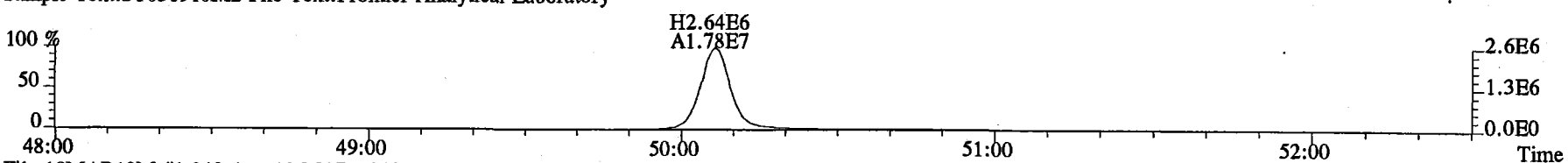
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



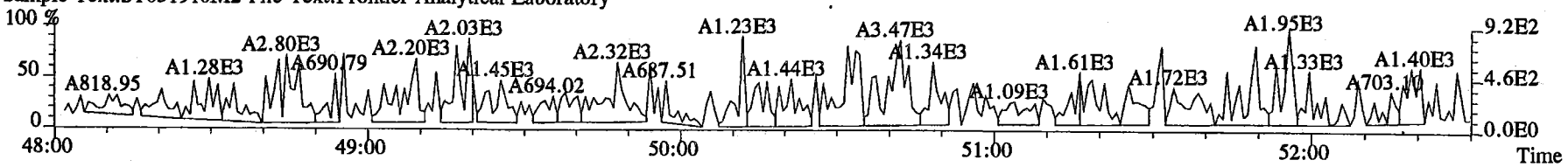
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory



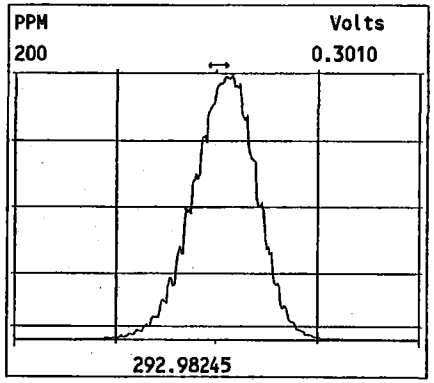
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory

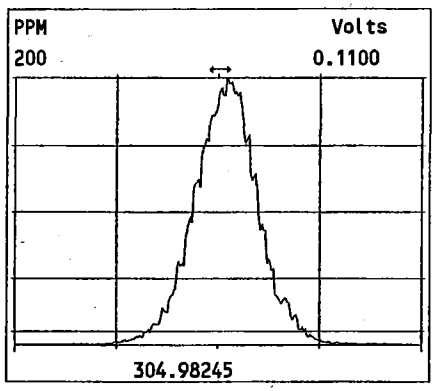


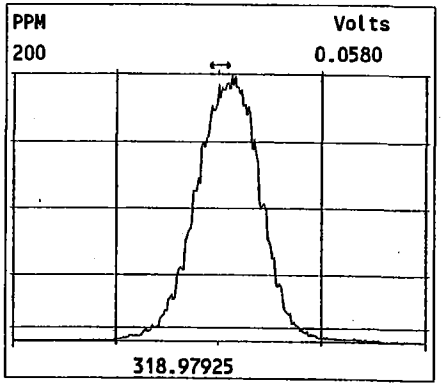
File:19MAR10M #1-348 Acq:19-MAR-2010 18:34:01 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M2 File Text:Frontier Analytical Laboratory

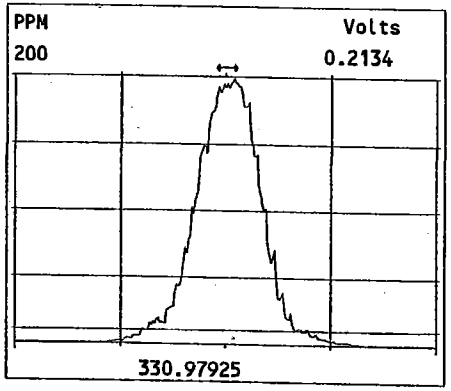


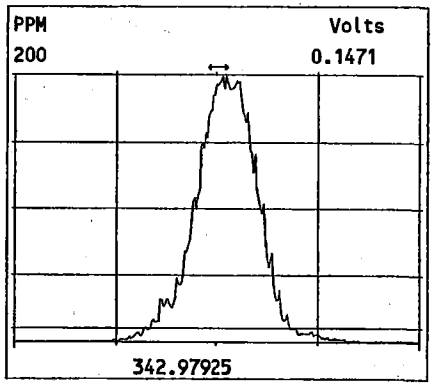
Peak Locate Examination:20-MAR-2010:05:42 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

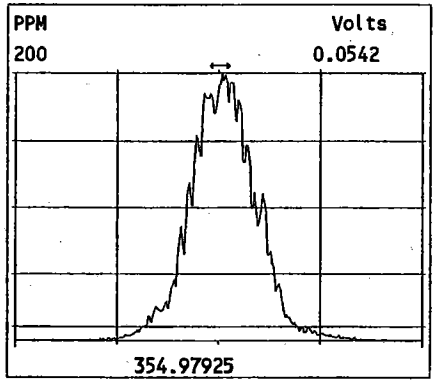


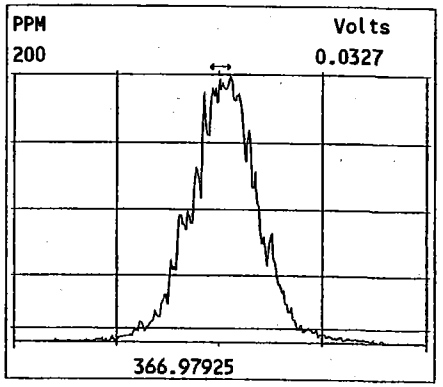


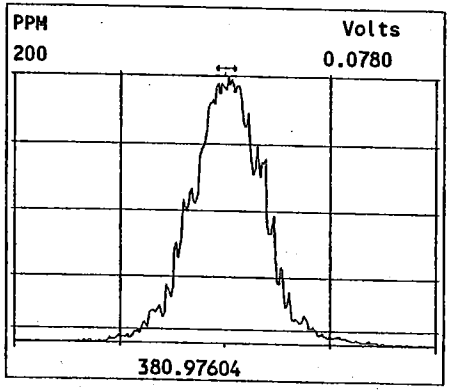


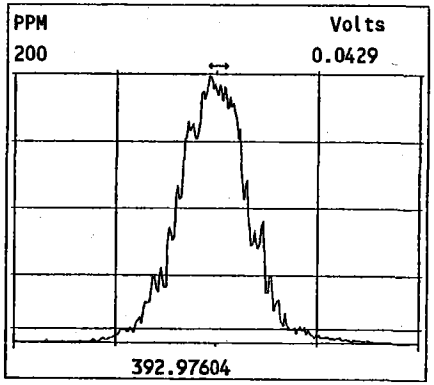


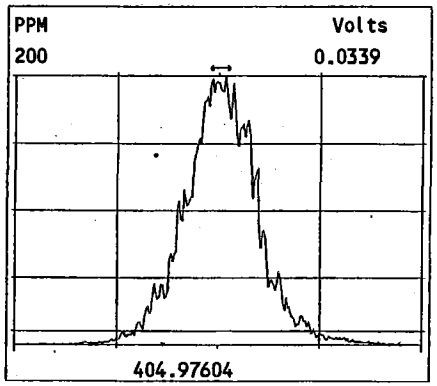


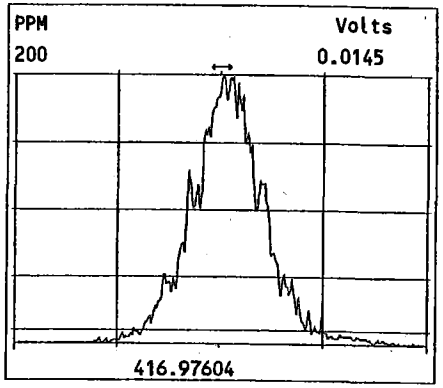




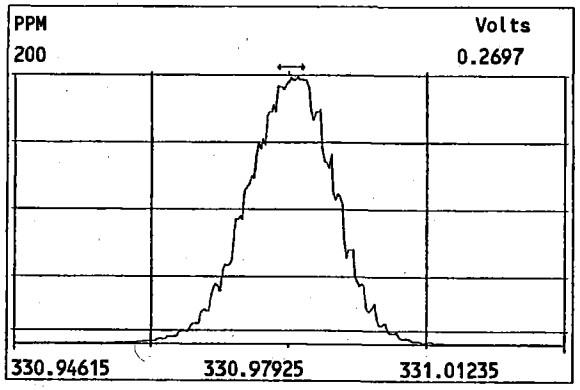


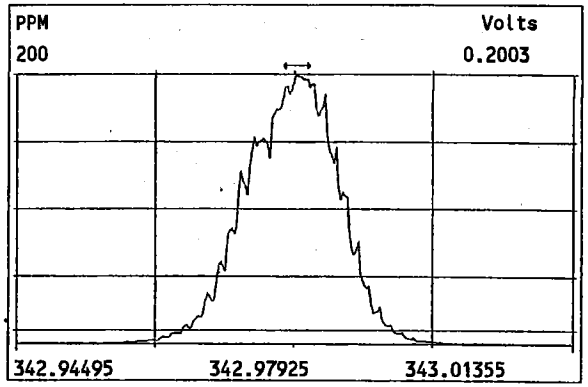


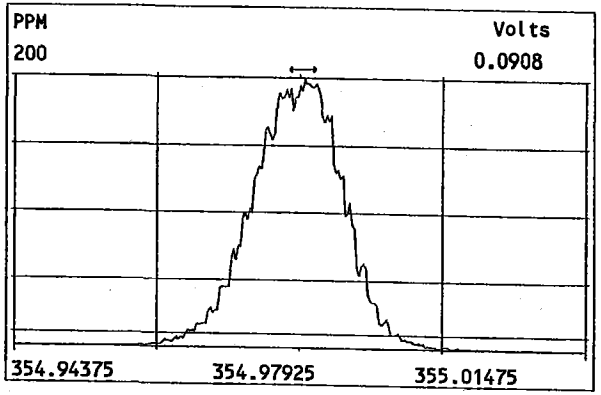


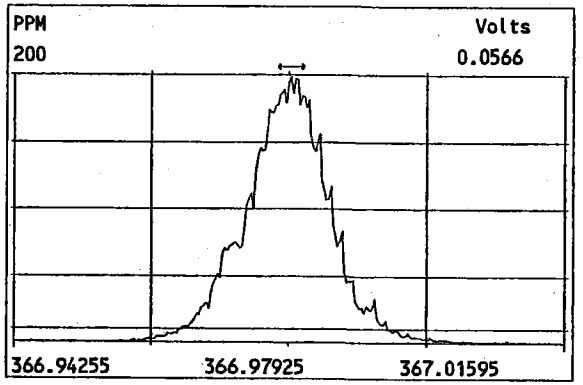


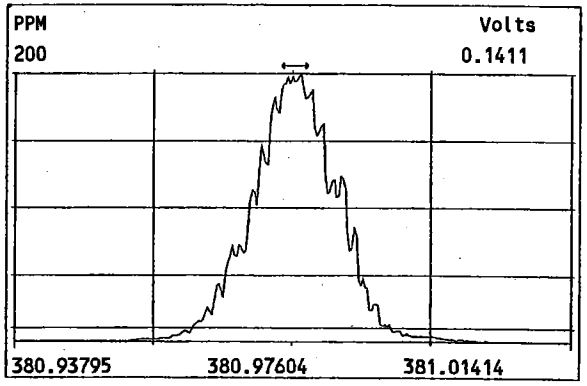
Peak Locate Examination:20-MAR-2010:05:44 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

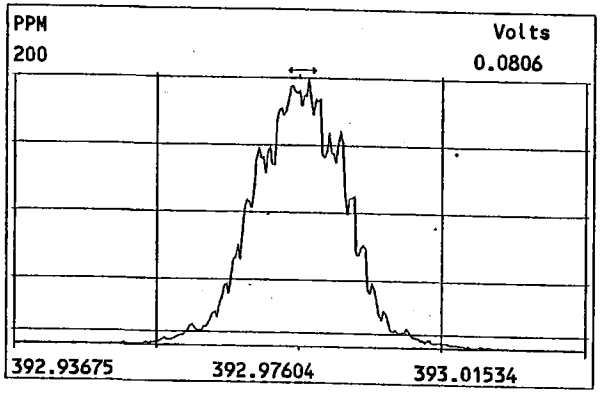


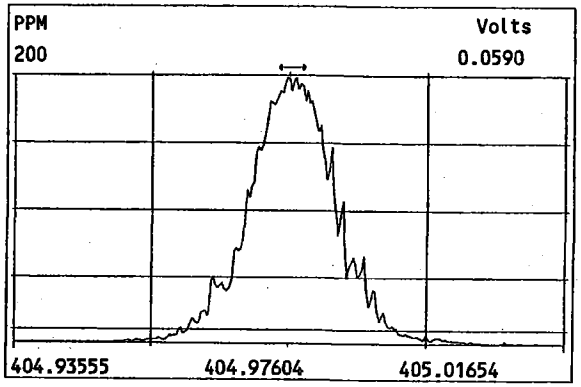


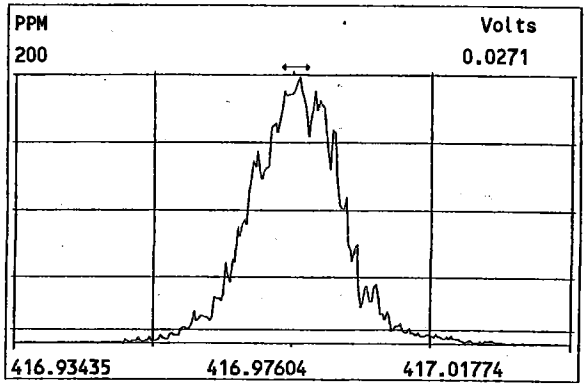






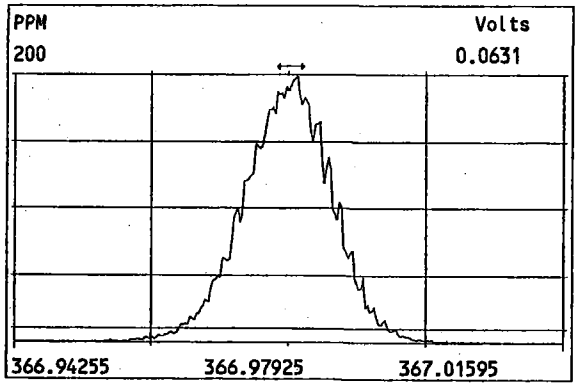


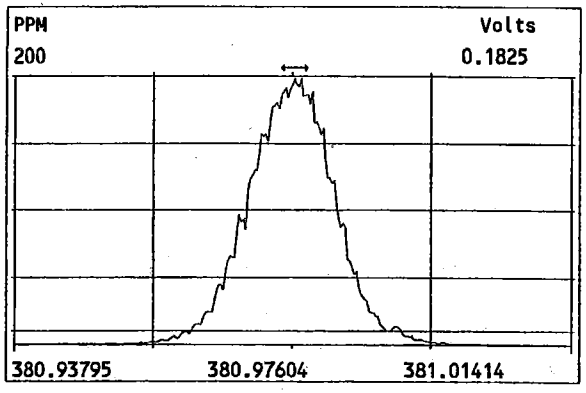


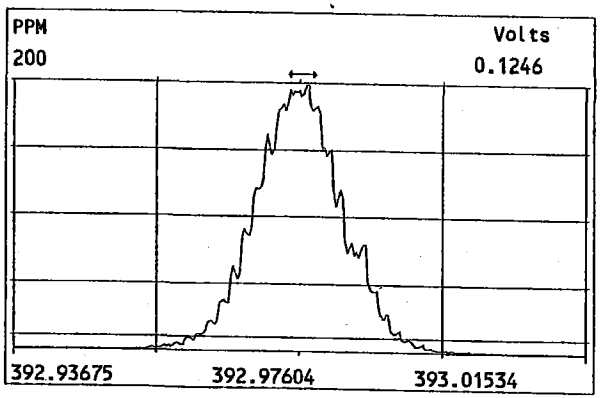


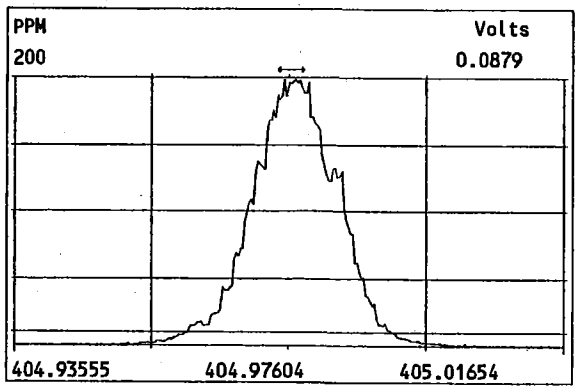
Peak Locate Examination:20-MAR-2010:05:46 File:19MAR10M_RES_CHECK

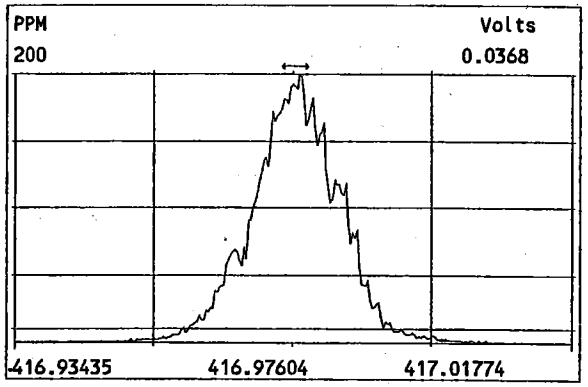
Experiment:PCDD Function:3 Reference:PFK

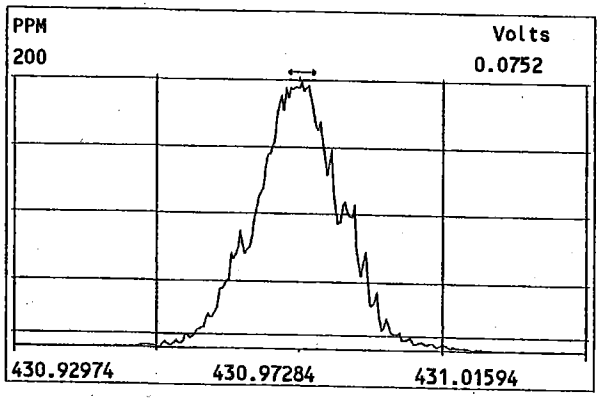


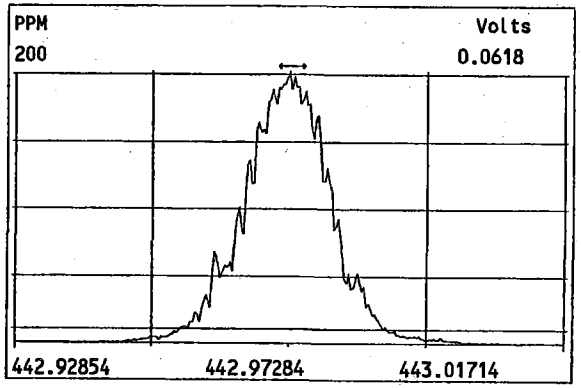


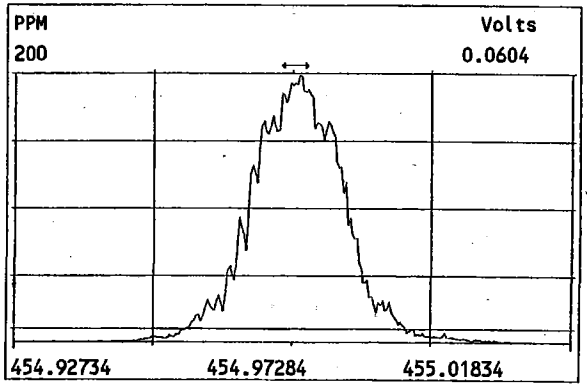




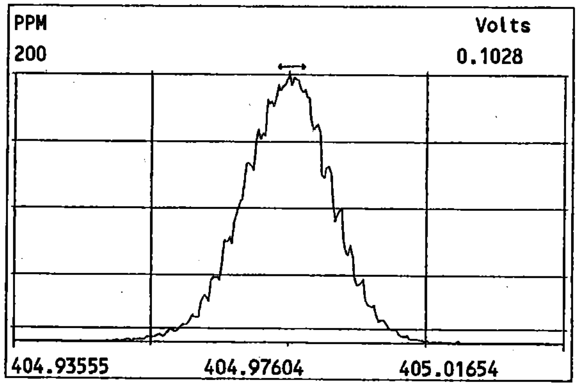


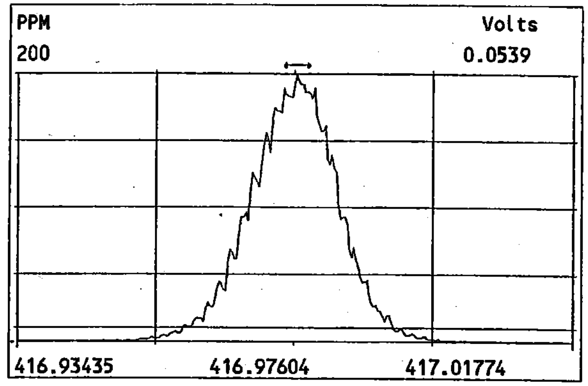


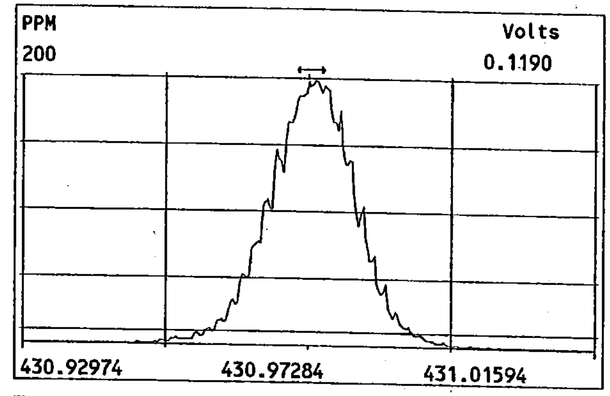


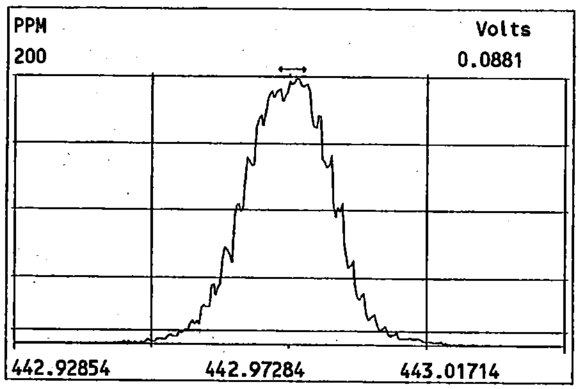


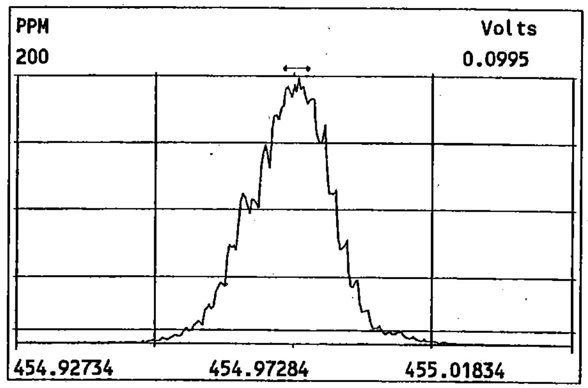
Peak Locate Examination:20-MAR-2010:05:48 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

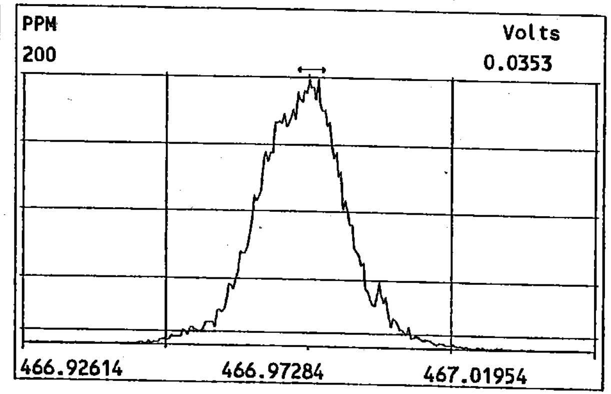


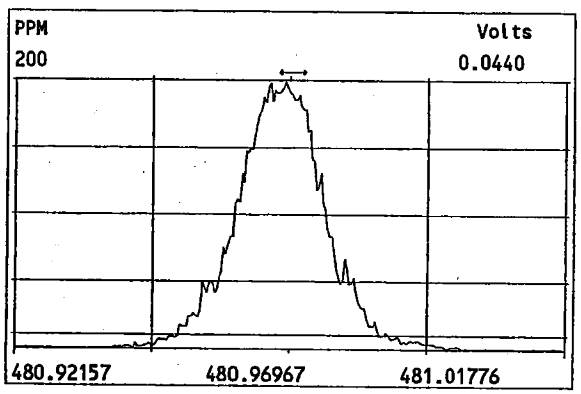






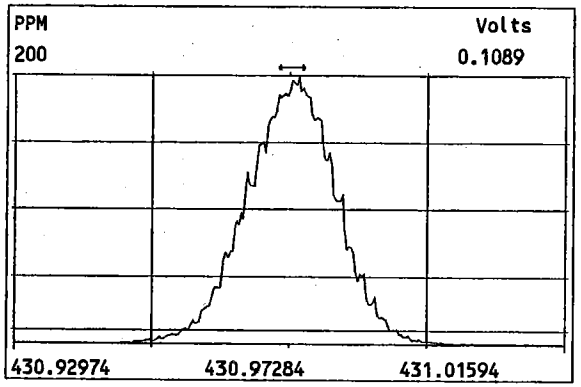


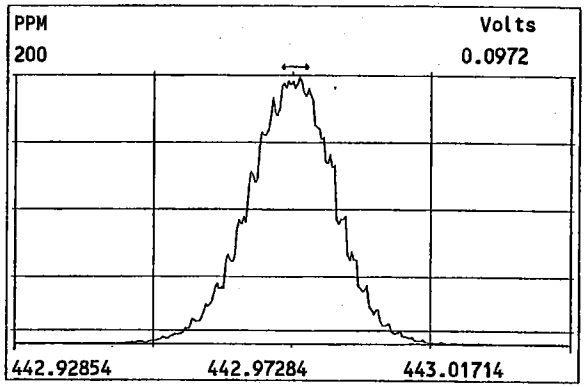


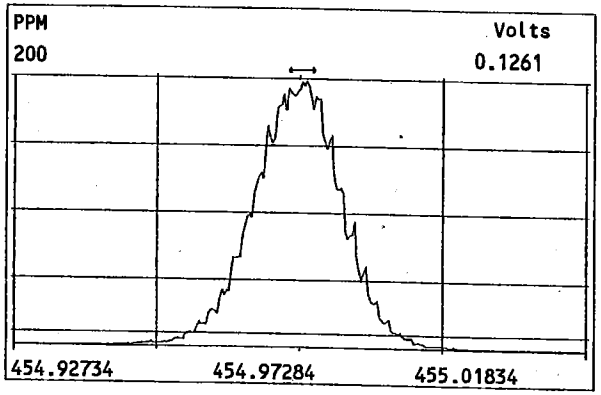


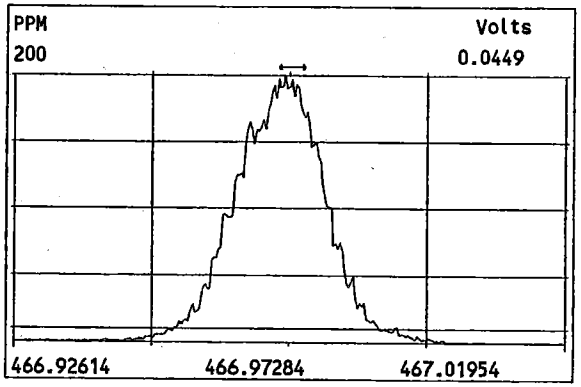
Peak Locate Examination:20-MAR-2010:05:50 File:19MAR10M_RES_CHECK

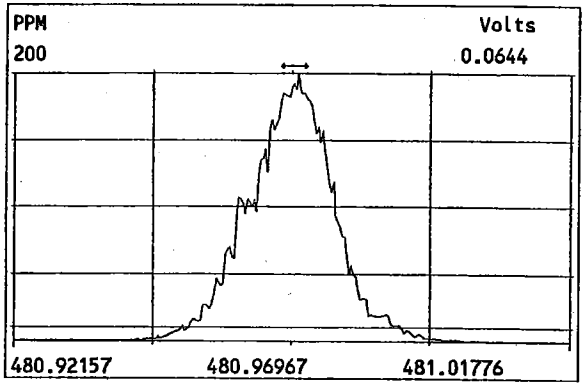
Experiment:PCDD Function:5 Reference:PFK

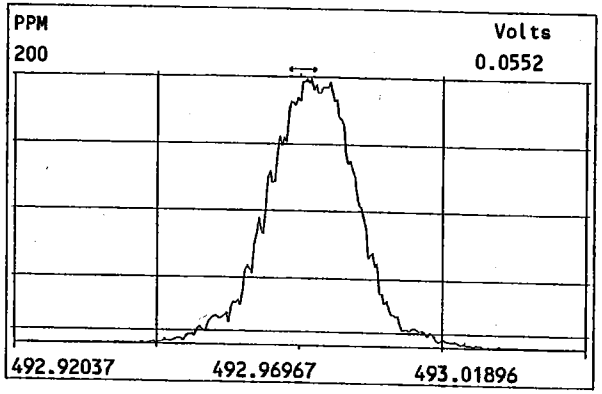


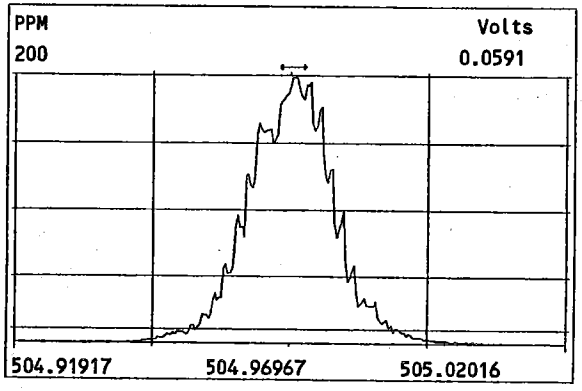


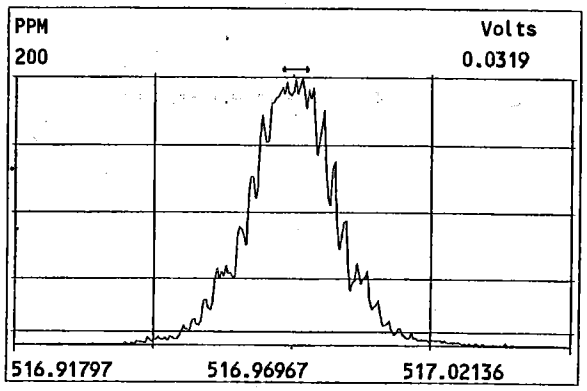












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 19MAR10M Sam:23 Analysis Date: 20-MAR-10 04:42:38

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	0.81	0.65-0.89	y	11.7	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	54.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	51.8	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	50.9	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05-1.43	y	51.4	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.90	0.88-1.20	y	48.2	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	104	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.66	0.65-0.89	y	9.65	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	53.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	52.2	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	52.3	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	52.7	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	51.2	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	52.2	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.4	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	50.9	43.0 - 58.0
OCDF	M+2/M+4	0.88	0.76-1.02	y	97.4	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: 3/22/10

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 19MAR10M Sam:23 Analysis Date: 20-MAR-10 04:42:38

	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	0.73	0.65-0.89	y	101	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32-1.78	y	94.7	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.33	1.05-1.43	y	104	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.36	1.05-1.43	y	101	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	92.7	72.0 - 138
13C-OCDD	M+2/M+4	0.96	0.76-1.02	y	166	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.81	0.65-0.89	y	101	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.67	1.32-1.78	y	92.2	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.66	1.32-1.78	y	89.3	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.46	0.43-0.59	y	101	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.47	0.43-0.59	y	97.2	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.46	0.43-0.59	y	98.0	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.48	0.43-0.59	y	94.1	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.49	0.37-0.51	y	91.9	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.50	0.37-0.51	y	86.0	77.0 - 129
13C-OCDF	M+2/M+4	0.92	0.76-1.02	y	156	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					11.3	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: 3/22/10

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: 11/18/09

RT Window Data Filename: 19MAR10M Sam:23 Analysis Date: 20-MAR-10 Time: 04:42:38

DB-5 IS Data Filename: 19MAR10M Sam:23 Analysis Date: 20-MAR-10 Time: 04:42:38

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)	24:22	1,3,6,8-TCDF (F)	23:02
1,2,8,9-TCDD (L)	28:18	1,2,8,9-TCDF (L)	28:31
1,2,4,7,9-PeCDD (F)	30:14	1,3,4,6,8-PeCDF (F)	28:25
1,2,3,8,9-PeCDD (L)	33:46	1,2,3,8,9-PeCDF (L)	34:11
1,2,4,6,7,9-HxCDD (F)	36:06	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)	39:44
1,2,3,4,6,7,9-HpCDD (F)	42:48	1,2,3,4,6,7,8-HpCDF (F)	42:16
1,2,3,4,6,7,8-HpCDD (L)	44:10	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: _____ Date: 3/22/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 20-MAR-10 04:42:38 CS3 or VER Data Filename: 19MAR10M Sam:23

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: 3/22/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 20-MAR-10 04:42:38 CS3 or VER Data Filename: 19MAR10M Sam:23

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	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: 3/22/10

FAL ID: ST031910M3 Filename: 19MAR10M Sam:23 Acquired: 20-MAR-10 04:42:38 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 (90918J) ConCal: ST031910M2 EndCal: ST031910M3
Results: 6026 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 106
WHO 1998 Tox: 133 WHO 2005 Tox: 122

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	3.03e+06	0.81 y	27:22	1.02	11.7		2.50	-	-	*
1,2,3,7,8-PeCDD	1.35e+07	1.56 y	33:12	0.96	54.0		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.39e+07	1.30 y	38:34	1.37	51.8		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.23e+07	1.30 y	38:44	1.34	50.9		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.32e+07	1.30 y	39:11	1.37	51.4		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	8.95e+06	0.90 y	44:10	1.17	48.2		2.50	-	-	*
OCDD	1.33e+07	0.91 y	49:44	1.21	104		2.50	-	-	*
2,3,7,8-TCDF	5.64e+06	0.66 y	26:36	1.29	9.65		2.50	-	-	*
1,2,3,7,8-PeCDF	1.98e+07	1.63 y	31:28	0.89	53.6		2.50	-	-	*
2,3,4,7,8-PeCDF	1.84e+07	1.62 y	32:46	0.91	52.2		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.74e+07	1.25 y	37:11	1.00	52.3		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.79e+07	1.22 y	37:22	0.92	52.7		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.64e+07	1.22 y	38:18	0.99	51.2		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.54e+07	1.24 y	39:44	1.09	52.2		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.32e+07	1.03 y	42:16	1.36	50.4		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.14e+07	1.04 y	45:04	1.61	50.9		2.50	-	-	*
OCDF	1.43e+07	0.88 y	50:06	0.84	97.4		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.55e+07	0.73 y	27:21	0.94	101					101
13C-1,2,3,7,8-PeCDD	2.59e+07	1.55 y	33:10	1.02	94.7					94.7
13C-1,2,3,4,7,8-HxCDD	1.95e+07	1.33 y	38:33	0.98	104					104
13C-1,2,3,6,7,8-HxCDD	1.80e+07	1.36 y	38:42	0.94	101					101
13C-1,2,3,4,6,7,8-HpCDD	1.59e+07	1.06 y	44:09	0.90	92.7					92.7
13C-OCDD	2.11e+07	0.96 y	49:43	0.67	166					82.9
13C-2,3,7,8-TCDF	4.55e+07	0.81 y	26:35	0.88	101					101
13C-1,2,3,7,8-PeCDF	4.16e+07	1.67 y	31:27	0.88	92.2					92.2
13C-2,3,4,7,8-PeCDF	3.90e+07	1.66 y	32:45	0.85	89.3					89.3
13C-1,2,3,4,7,8-HxCDF	3.32e+07	0.46 y	37:09	1.72	101					101
13C-1,2,3,6,7,8-HxCDF	3.71e+07	0.47 y	37:21	2.00	97.2					97.2
13C-2,3,4,6,7,8-HxCDF	3.25e+07	0.46 y	38:16	1.74	98.0					98.0
13C-1,2,3,7,8,9-HxCDF	2.70e+07	0.48 y	39:42	1.51	94.1					94.1
13C-1,2,3,4,6,7,8-HpCDF	1.93e+07	0.49 y	42:15	1.10	91.9					91.9
13C-1,2,3,4,7,8,9-HpCDF	1.39e+07	0.50 y	45:03	0.85	86.0					86.0
13C-OCDF	3.49e+07	0.92 y	50:05	1.17	156					78.0
37Cl-2,3,7,8-TCDD	2.97e+06		27:22	0.97	11.3					113
13C-1,2,3,4-TCDD	2.69e+07	0.75 y	26:47	-	103					
13C-1,2,3,4-TCDF	5.14e+07	0.81 y	25:31	-	111					
13C-1,2,3,7,8,9-HxCDD	1.91e+07	1.41 y	39:09	-	93.0					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.68e+07		24:22	1.02	64.9	2.50	-	-	*		16
Total Penta-Dioxins	2.98e+07		30:14	0.96	120	2.50	-	-	*		16
Total Hexa-Dioxins	4.54e+07		36:06	1.36	178	2.50	-	-	*		17
Total Hepta-Dioxins	1.97e+07		42:48	1.17	106	2.50	-	-	*		22
Total Tetra-Furans	2.19e+07		23:02	1.29	37.5	2.50	-	-	*		17
1st Fn. Tot Penta-Furans	1.81e+07		28:25	0.90	50.0	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.55e+07		30:10	0.90	154	2.50	-	-	*	204	13
Total Hexa-Furans	7.97e+07		35:14	0.99	248	2.50	-	-	*		18
Total Hepta-Furans	2.52e+07		42:16	1.47	104	2.50	-	-	*		14

Analyst: _____ Date: 3/22/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:19MAR10M Instrument: FAL3 GC: DB5 Experiment:PCDD

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
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19MAR10M	2	1964-001-0001-OPR	OPR	19-MAR-10 09:19:40	ST031910M1	ST031910M2	TC
19MAR10M	3	1964-001-0001-MB	Method Blank	19-MAR-10 10:15:48	ST031910M1	ST031910M2	TC
19MAR10M	4	6025-001-0001-SA	EFF	19-MAR-10 11:11:11	ST031910M1	ST031910M2	TC
19MAR10M	5	6026-001-0001-SA	R-1	19-MAR-10 12:06:34	ST031910M1	ST031910M2	TC
19MAR10M	6	6026-002-0001-SA	R-2	19-MAR-10 13:01:52	ST031910M1	ST031910M2	TC
19MAR10M	7	6030-001-0001-SA	CB31A031010COMP	19-MAR-10 13:57:11	ST031910M1	ST031910M2	TC
19MAR10M	8	6030-002-0001-SA	CB4857031010COMP	19-MAR-10 14:52:34	ST031910M1	ST031910M2	TC
19MAR10M	9	6030-003-0001-SA	CB1031010COMP	19-MAR-10 15:47:53	ST031910M1	ST031910M2	TC
19MAR10M	10	6030-004-0001-SA	CB101031010COMP	19-MAR-10 16:43:15	ST031910M1	ST031910M2	TC
19MAR10M	11	6030-003-0001-SA	CB1031010COMP	19-MAR-10 17:38:38	ST031910M1	ST031910M2	TC
19MAR10M	12	ST031910M2	1613 CS3 (90918J)	19-MAR-10 18:34:01	ST031910M2	ST031910M3	TC
19MAR10M	13	1966-001-0001-OPR	OPR	19-MAR-10 19:29:20	ST031910M2	ST031910M3	TC
19MAR10M	14	1966-001-0001-MB	Method Blank	19-MAR-10 20:24:43	ST031910M2	ST031910M3	TC
19MAR10M	15	6016-001-0001-SA	MW-107A-FB-GMW-01A	19-MAR-10 21:20:02	ST031910M2	ST031910M3	TC
19MAR10M	16	6016-002-0001-SA	MW-107A-RB-GMW-01A	19-MAR-10 22:15:23	ST031910M2	ST031910M3	TC
19MAR10M	17	6016-003-0001-SA	MW-101A	19-MAR-10 23:10:42	ST031910M2	ST031910M3	TC
19MAR10M	18	6016-004-0001-SA	DUP-030510	20-MAR-10 00:06:00	ST031910M2	ST031910M3	TC
19MAR10M	19	6016-005-0001-SA	MW-107A	20-MAR-10 01:01:18	ST031910M2	ST031910M3	TC
19MAR10M	20	6016-003-0002-MS	MW-101A	20-MAR-10 01:56:37	ST031910M2	ST031910M3	TC
19MAR10M	21	6016-003-0002-MSD	MW-101A	20-MAR-10 02:51:56	ST031910M2	ST031910M3	TC
19MAR10M	22	SB031910M2	Solvent Blank	20-MAR-10 03:47:15	ST031910M2	ST031910M3	TC
19MAR10M	23	ST031910M3	1613 CS3 (90918J)	20-MAR-10 04:42:38	ST031910M2	ST031910M3	TC

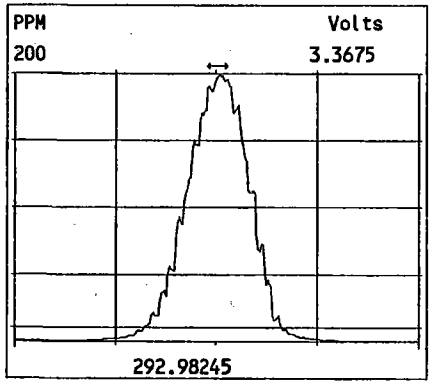
Analyst - spl moved

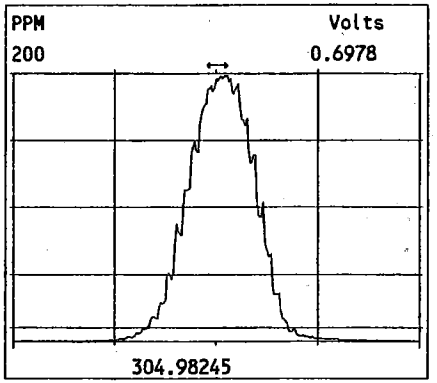
3/22/10

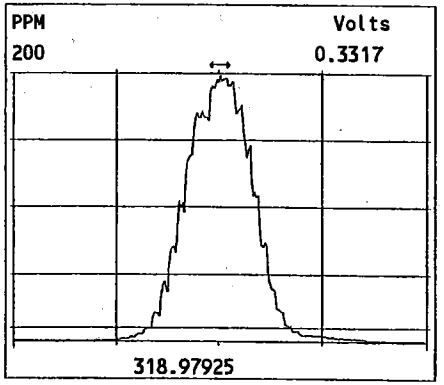
Data Backed Up:_____

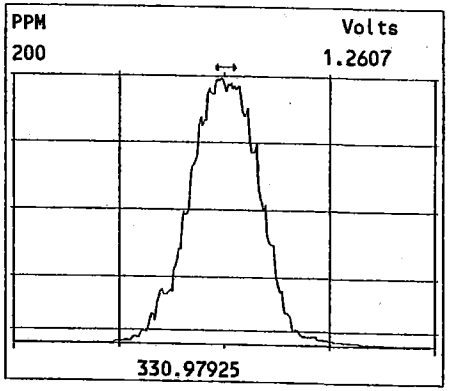
Date:_____

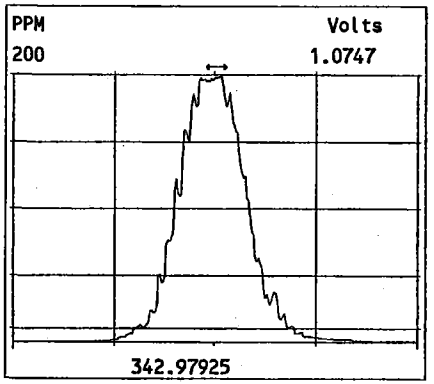
Peak Locate Examination:19-MAR-2010:08:12 File:19MAR10M
Experiment:PCDD Function:1 Reference:PFK

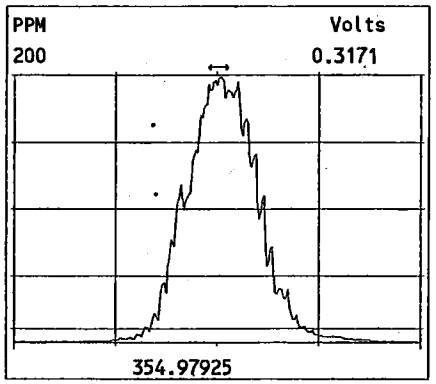


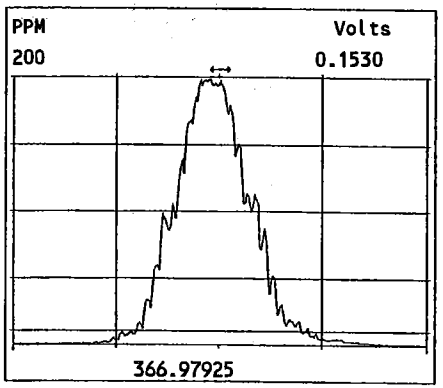


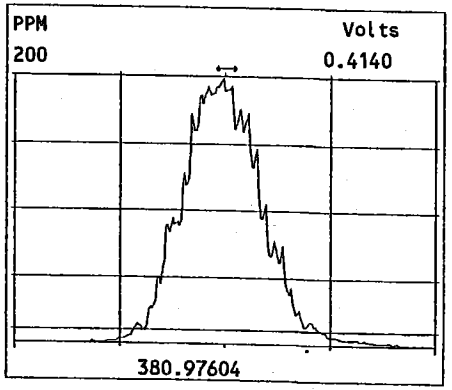


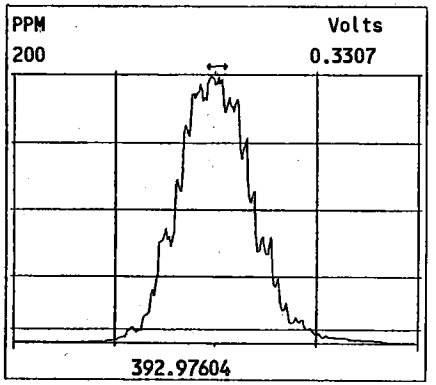


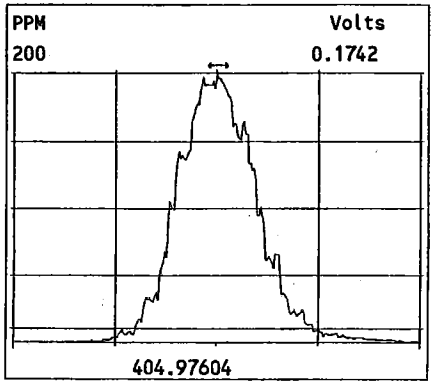


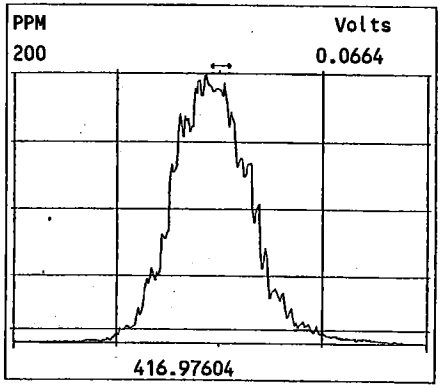




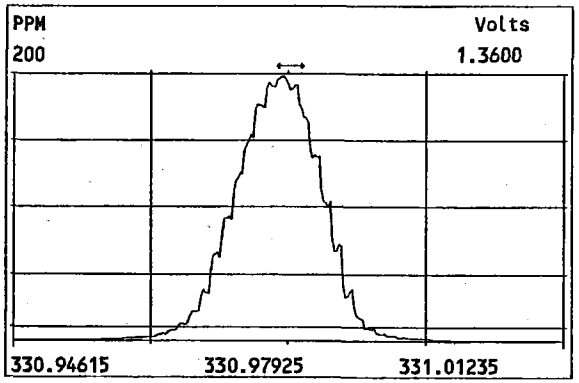


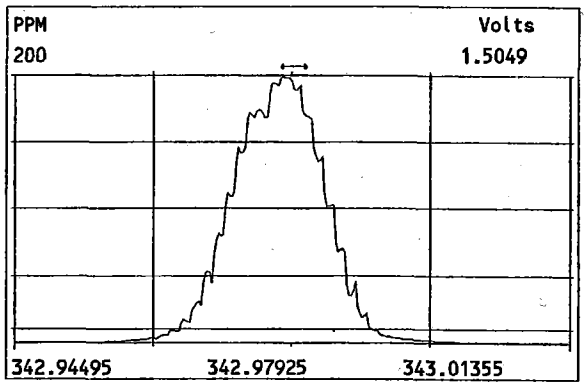


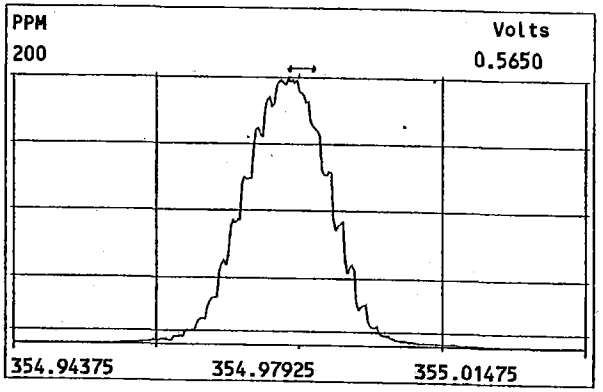


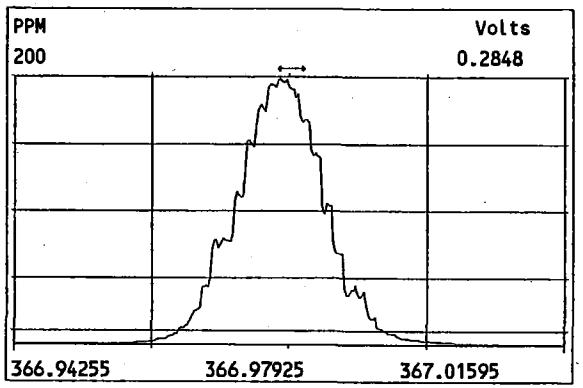


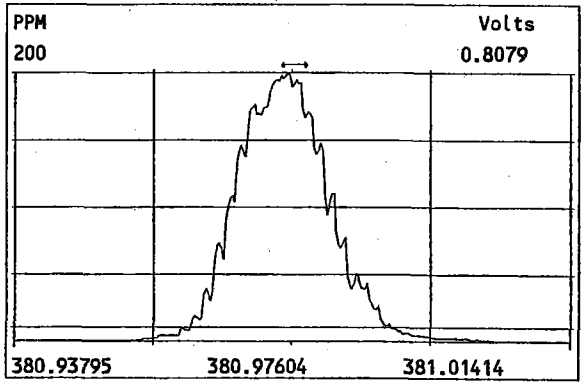
Peak Locate Examination:19-MAR-2010:08:13 File:19MAR10M
Experiment:PCDD Function:2 Reference:PFK

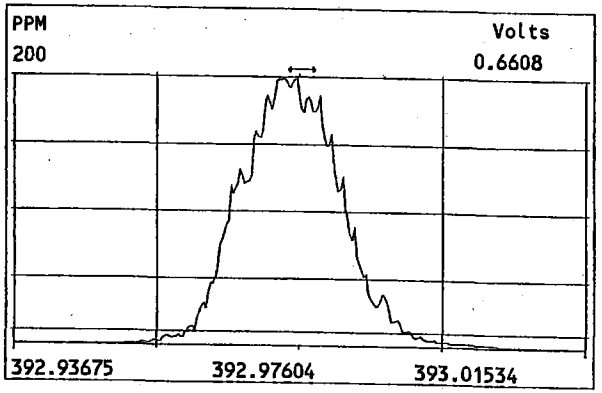


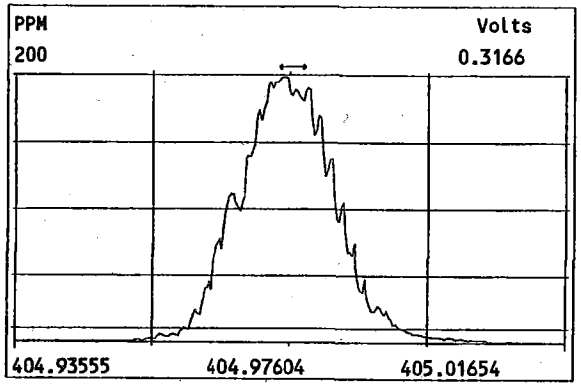


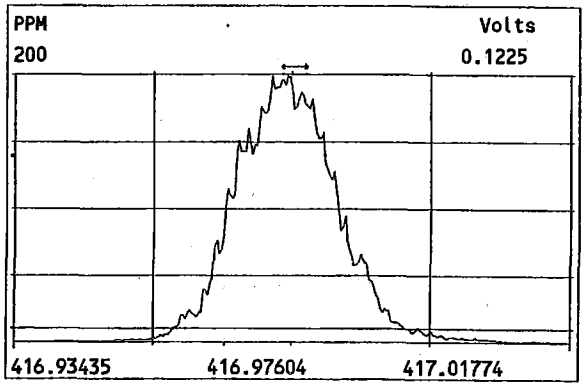




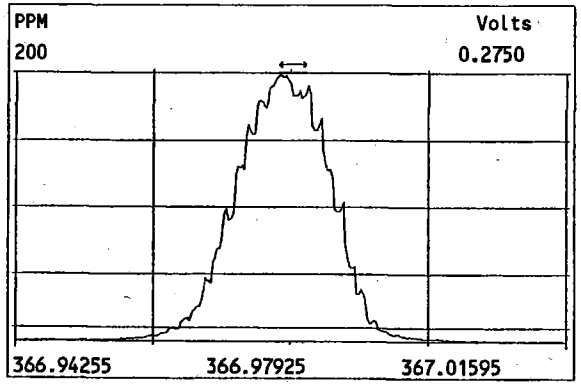


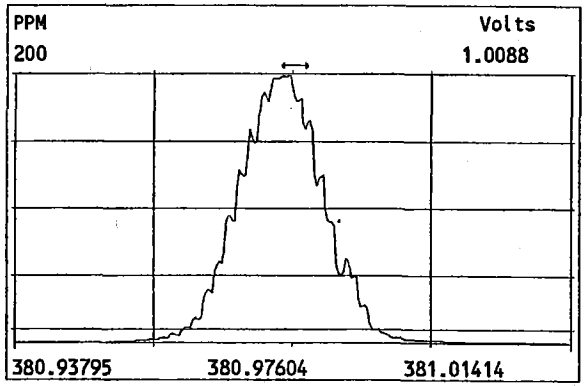


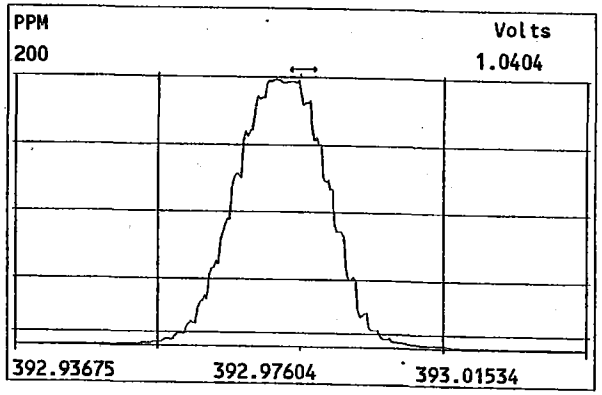


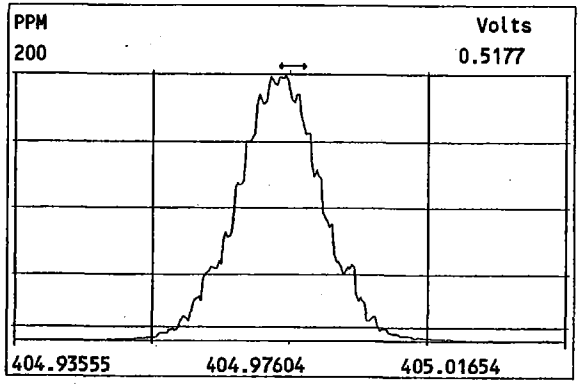


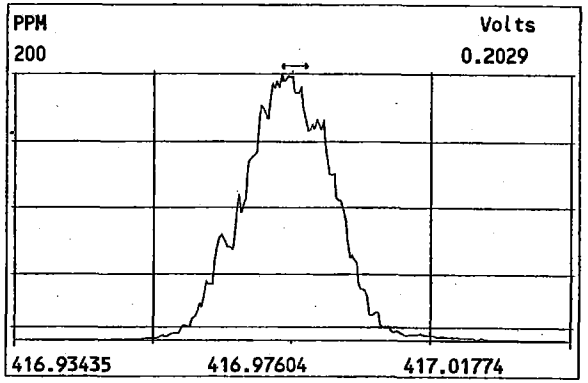
Peak Locate Examination:19-MAR-2010:08:13 File:19MAR10M
Experiment:PCDD Function:3 Reference:PFK

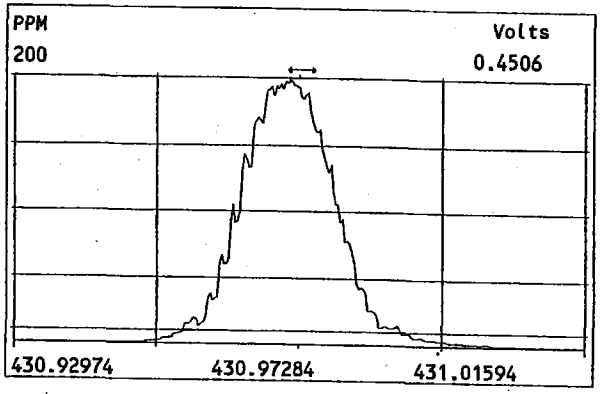


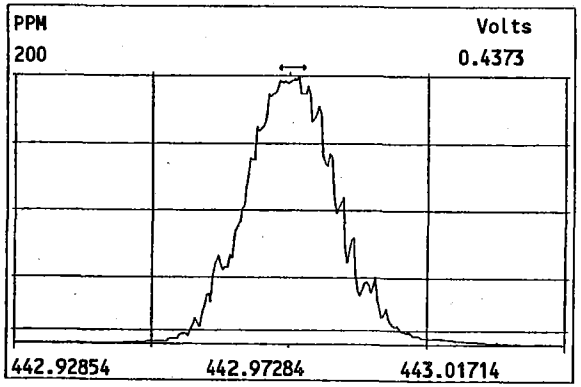


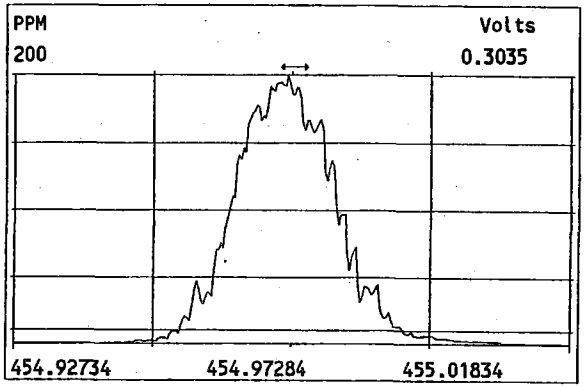




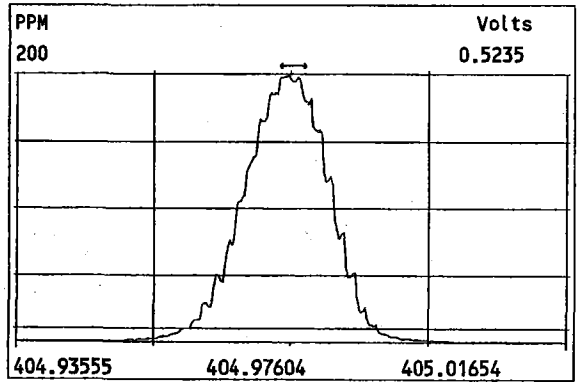


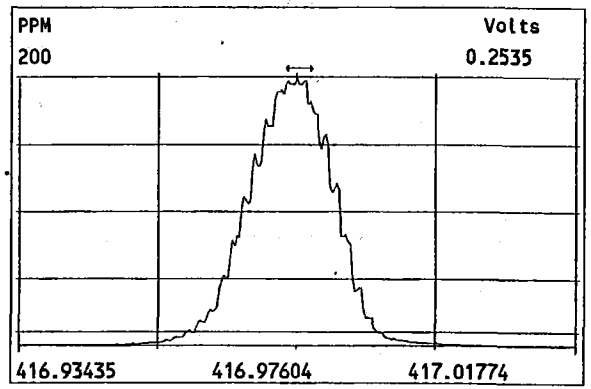


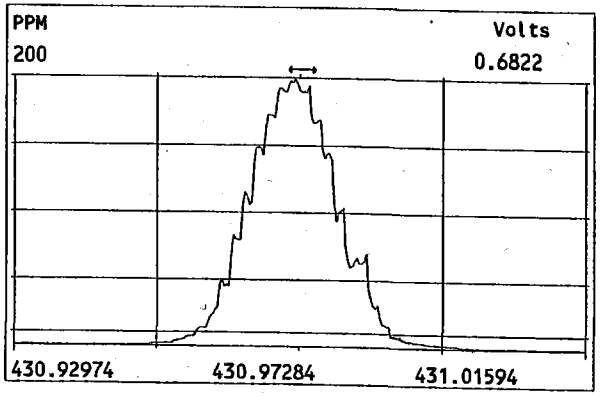


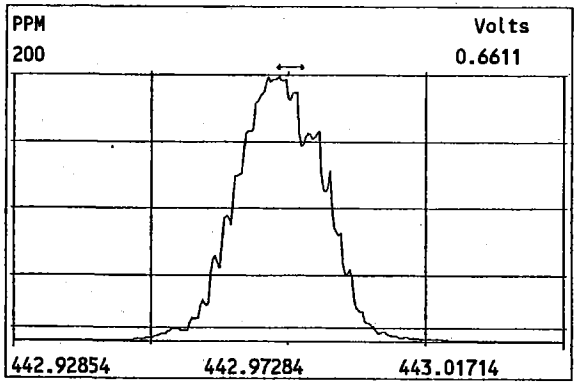


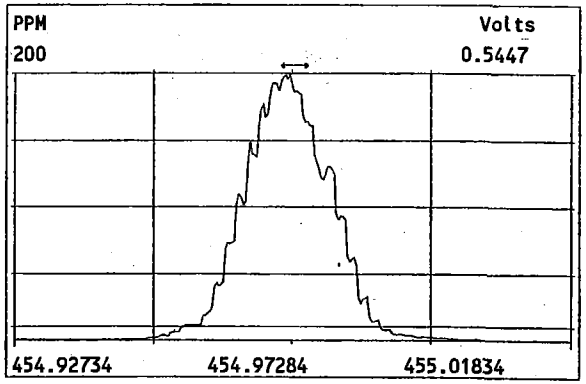
Peak Locate Examination:19-MAR-2010:08:14 File:19MAR10M
Experiment:PCDD Function:4 Reference:PFK

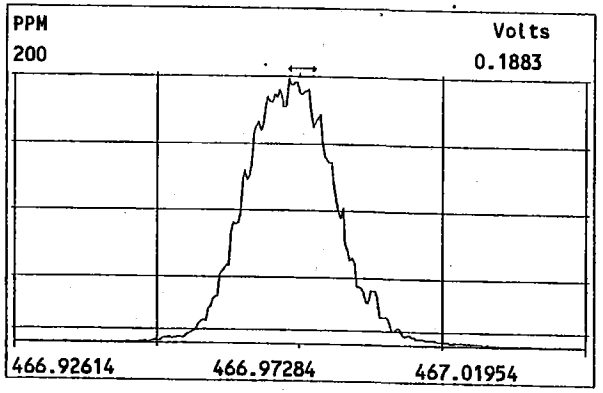


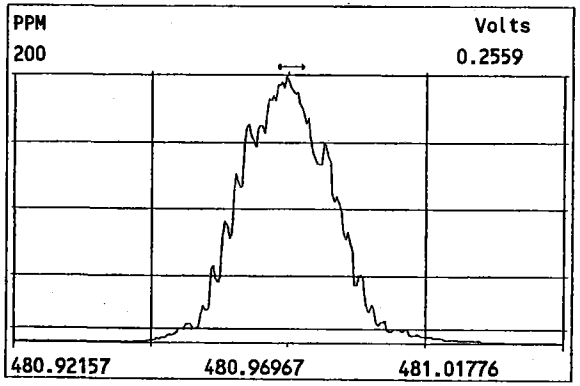




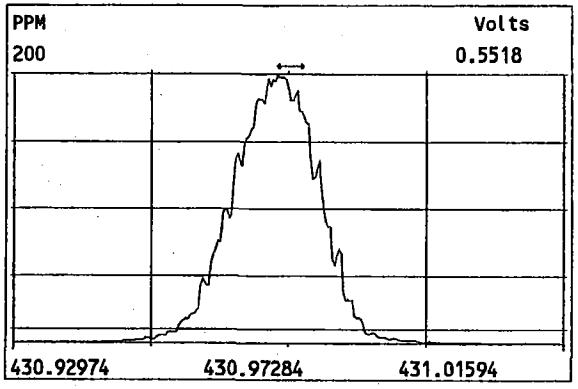


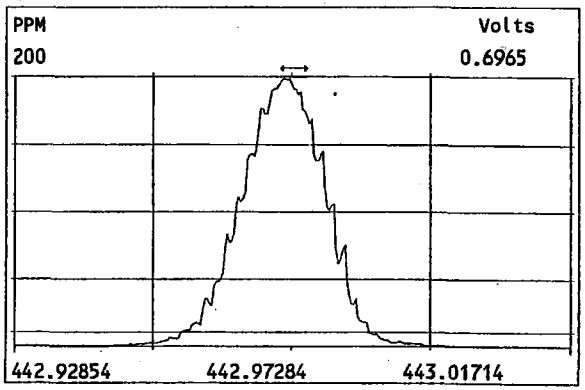


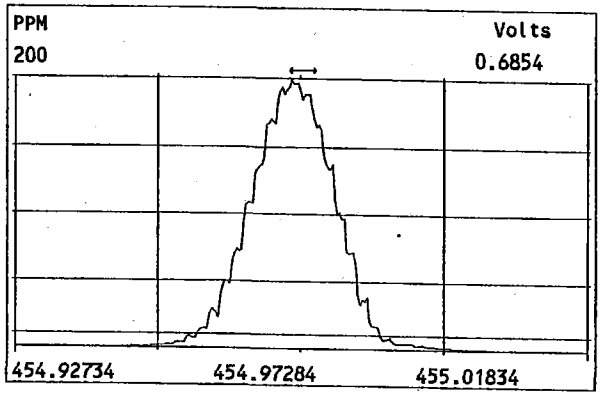


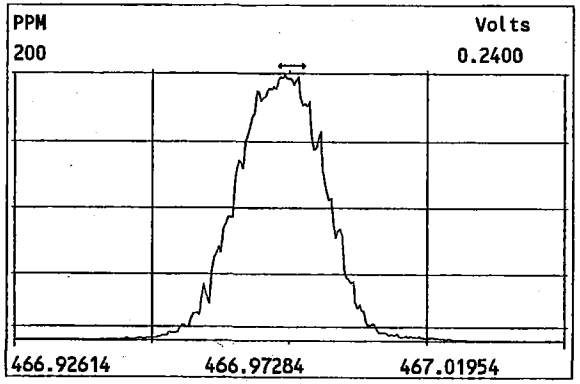


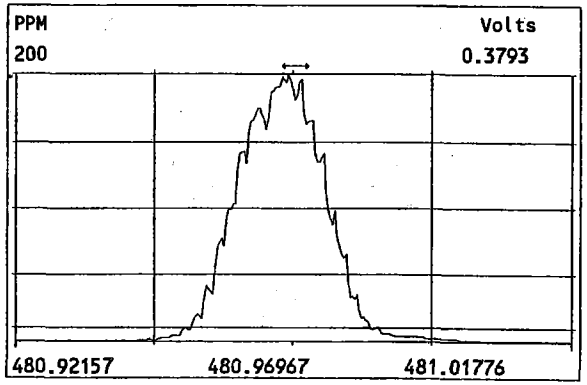
Peak Locate Examination:19-MAR-2010:08:14 File:19MAR10M
Experiment:PCDD Function:5 Reference:PFK

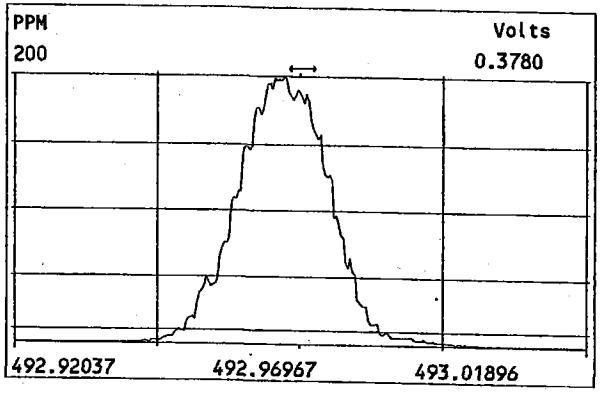


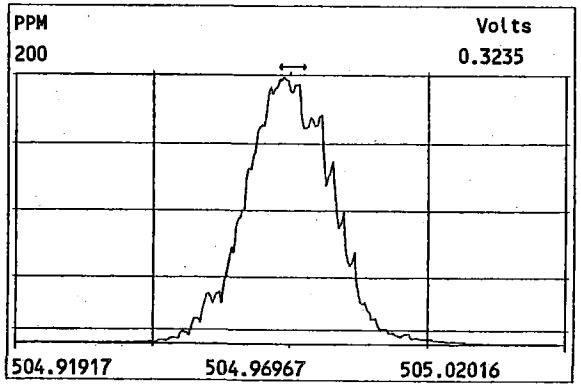


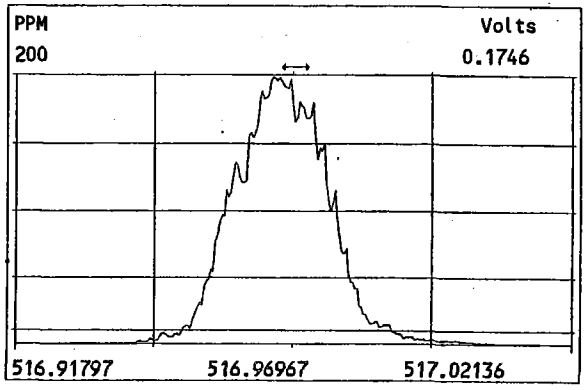




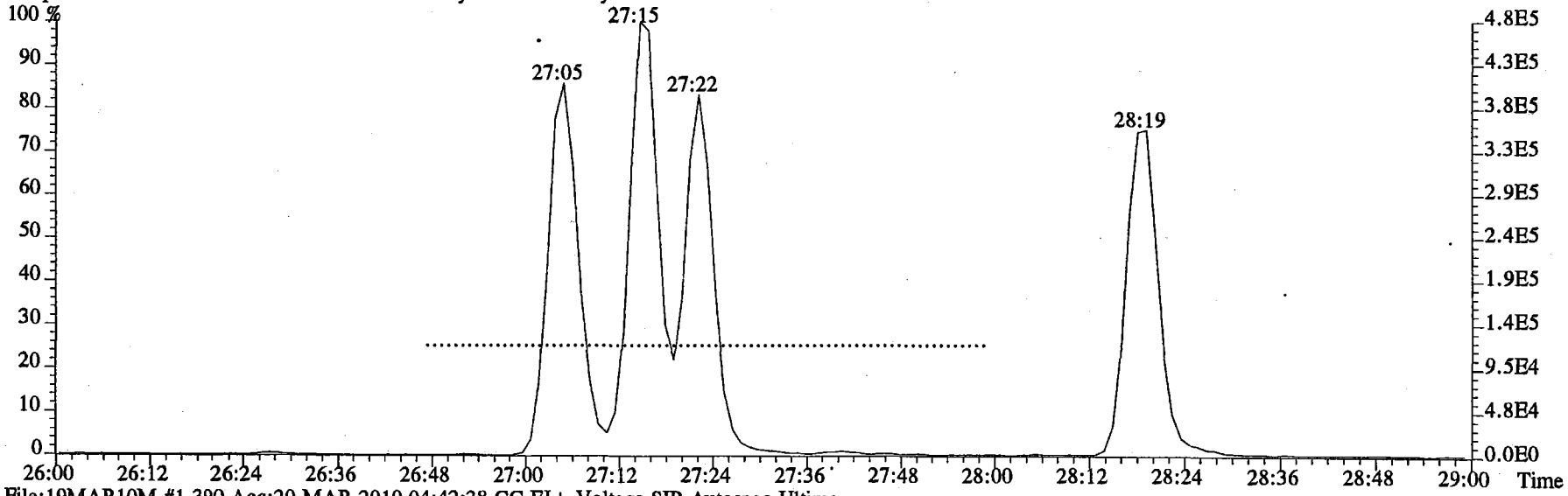




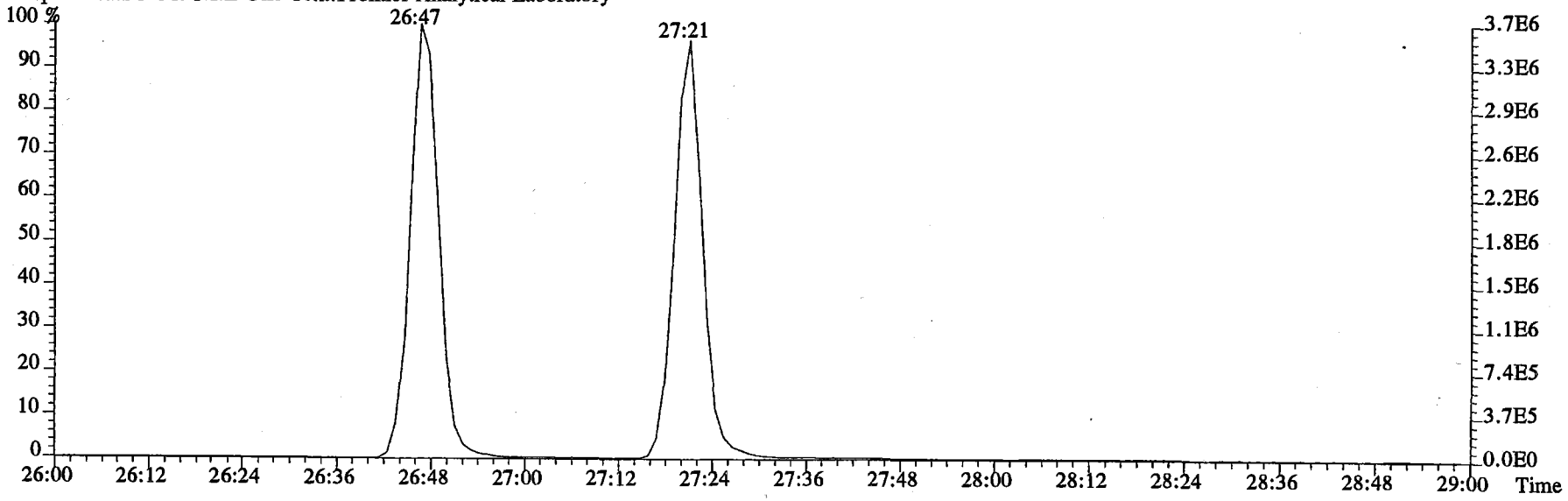




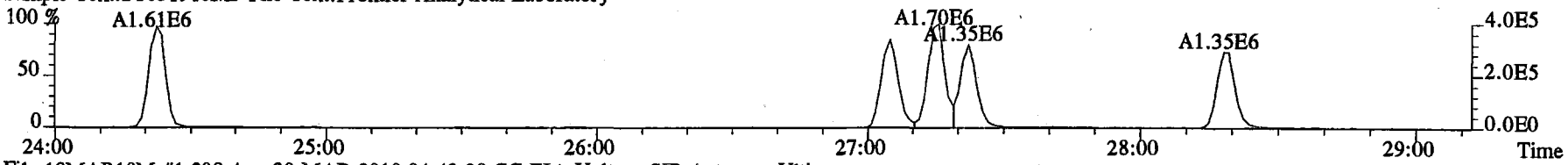
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:23 Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



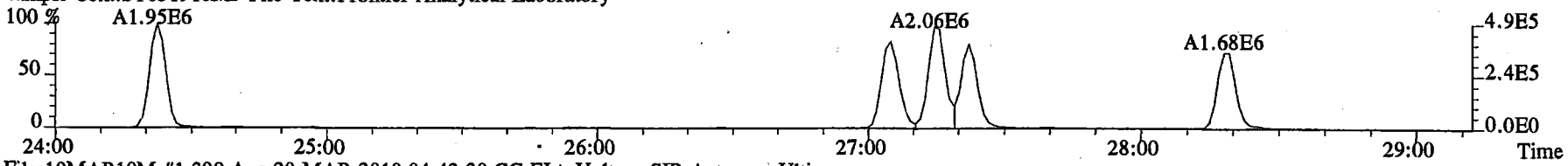
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:23 Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



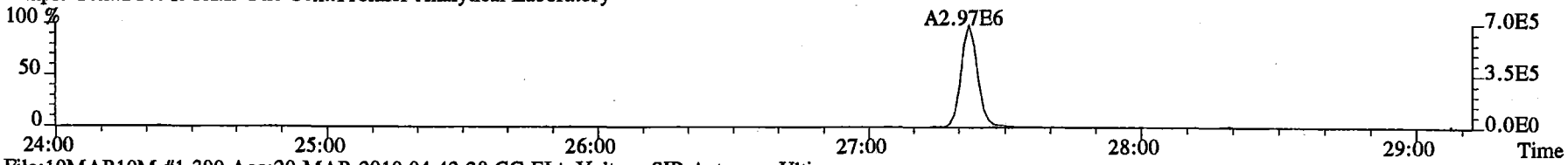
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



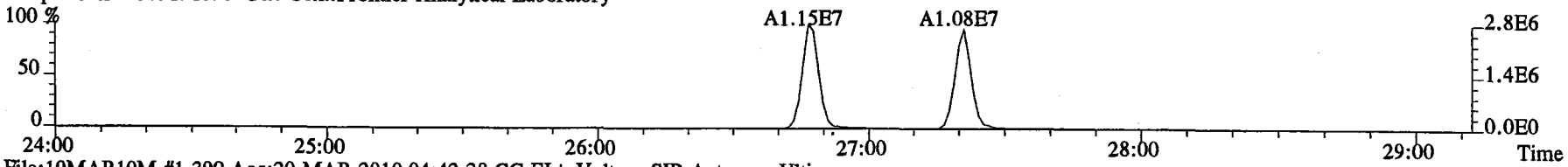
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



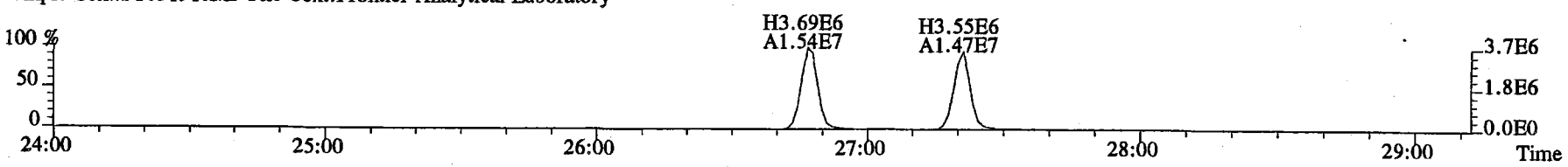
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



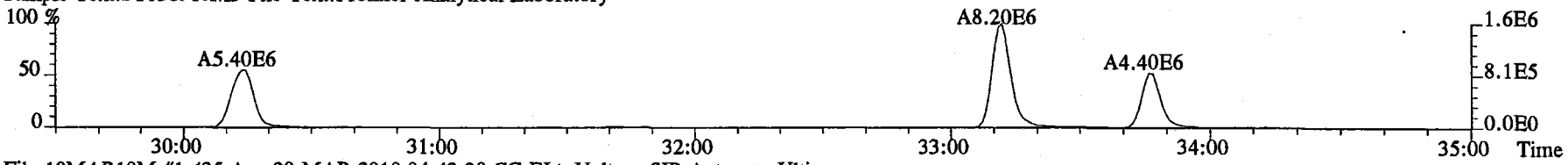
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



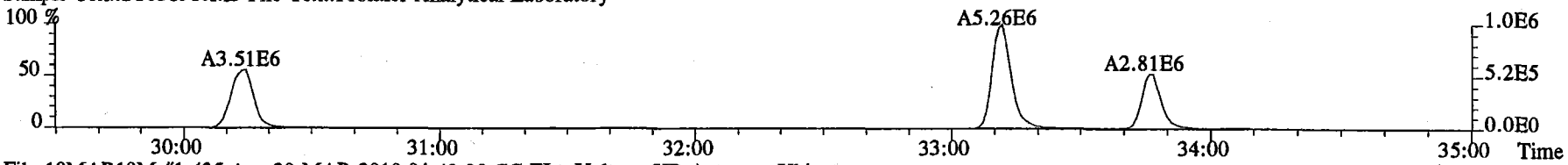
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



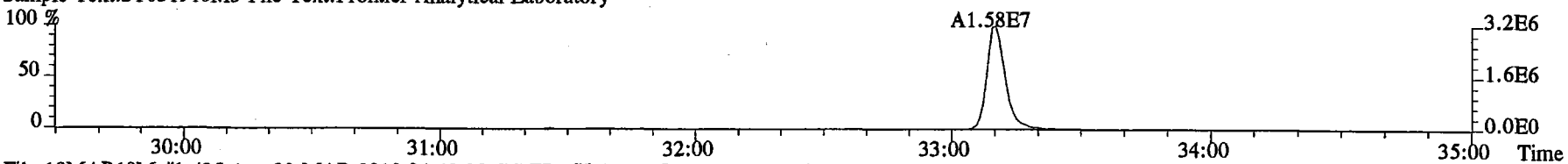
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



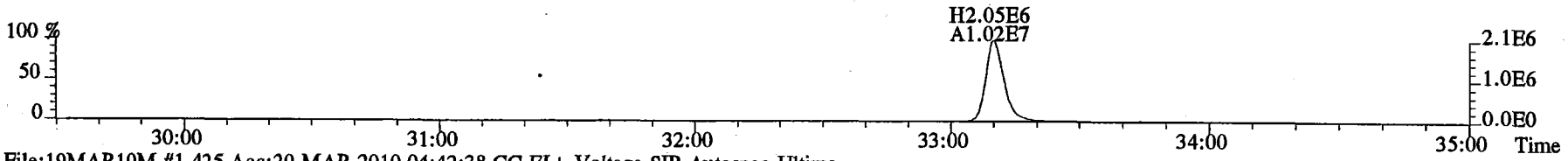
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



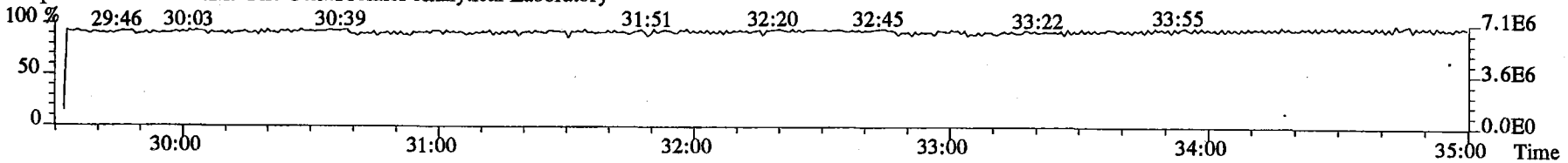
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



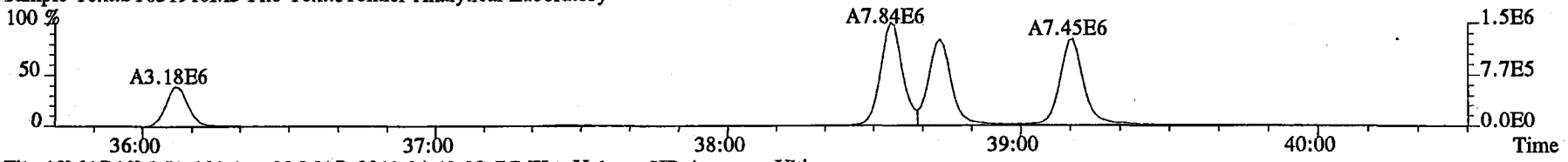
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



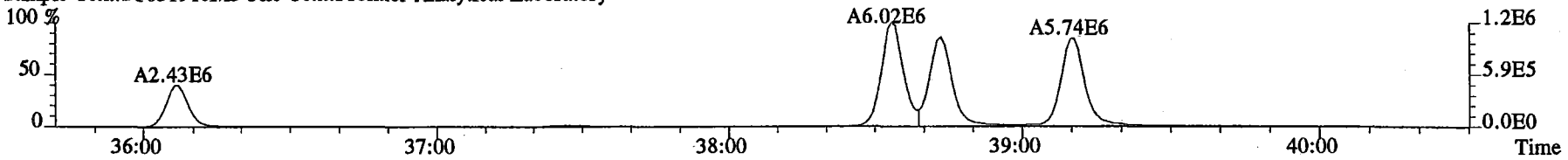
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:23 F:2 Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



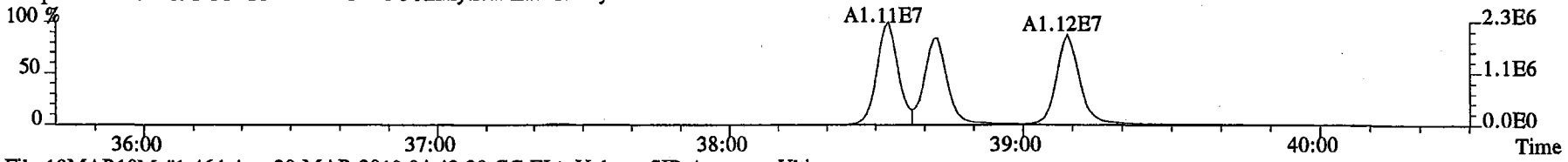
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



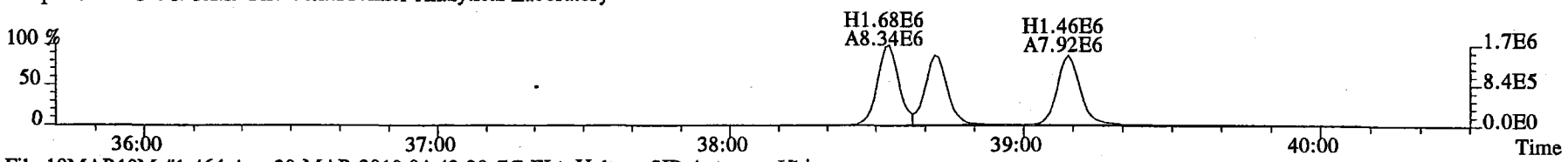
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



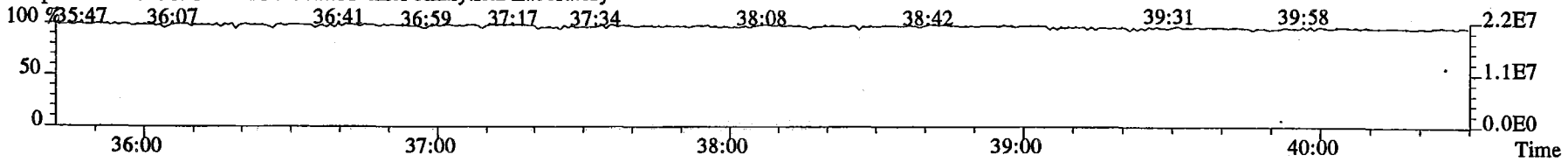
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



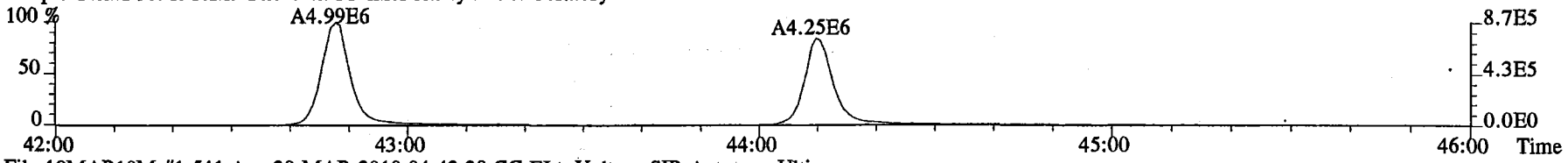
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



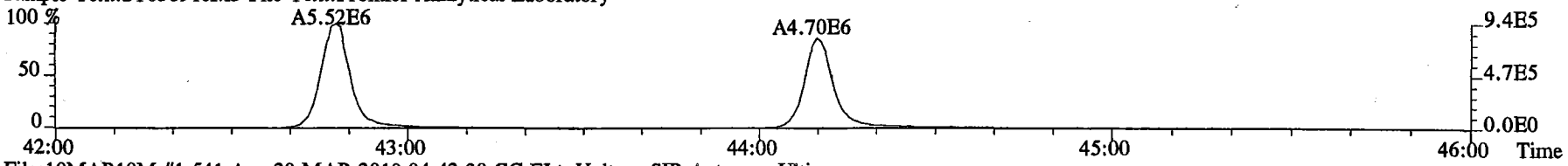
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:23 F:3 Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



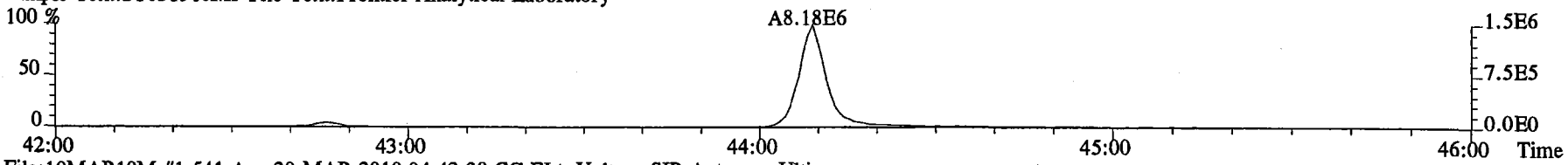
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



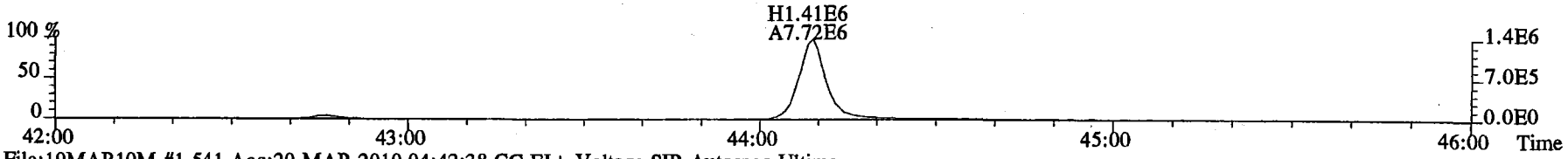
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



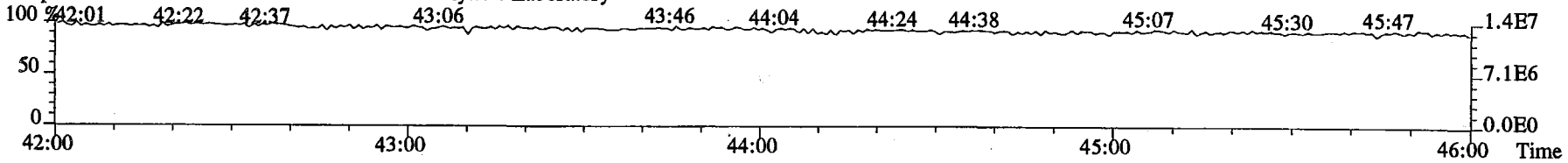
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



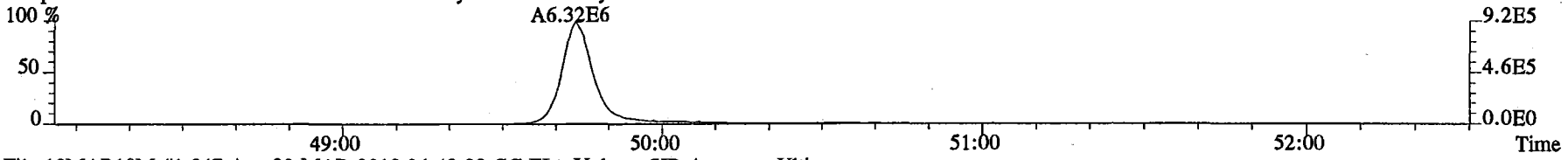
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



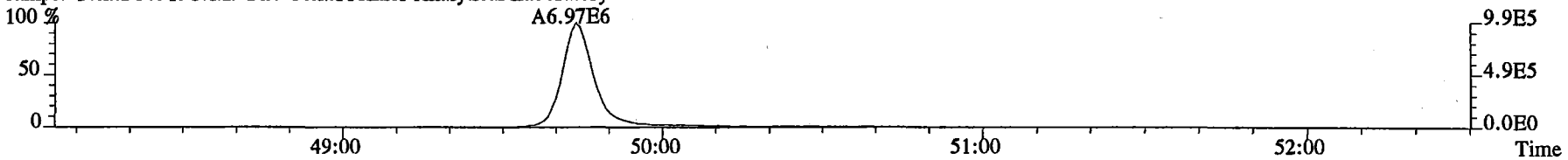
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:23 F:4 Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



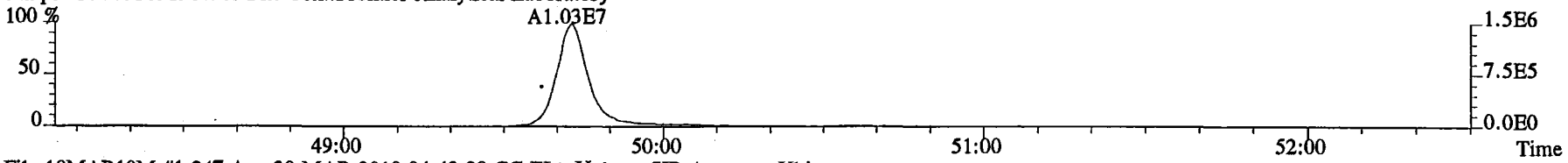
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



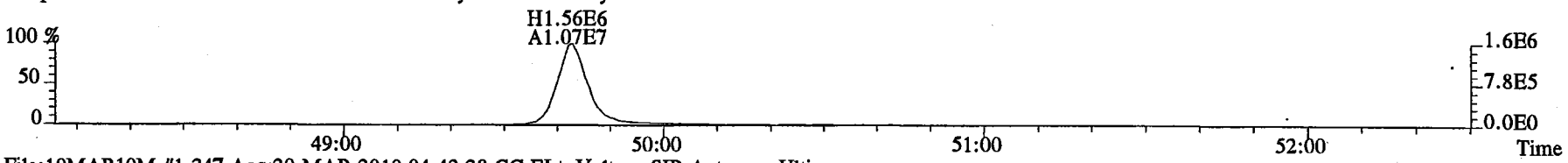
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



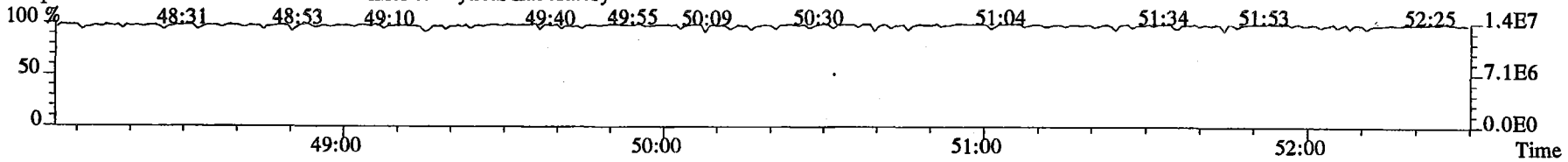
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



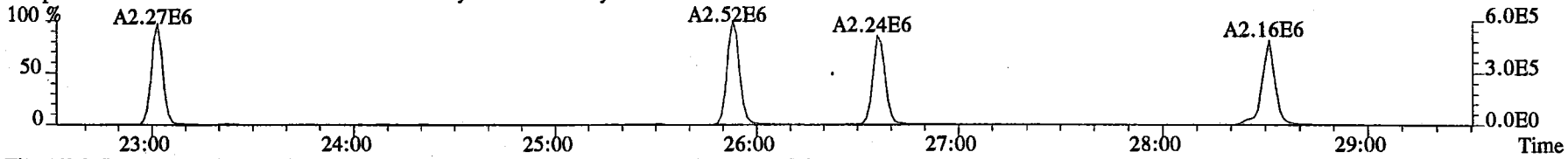
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



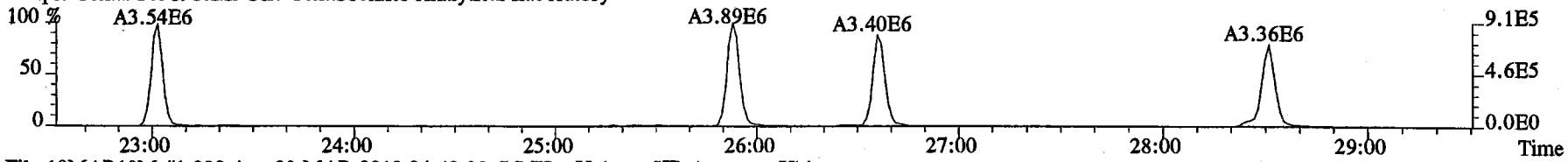
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:23 F:5 Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



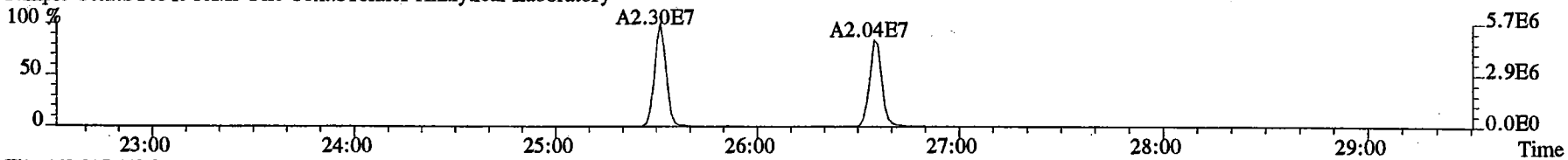
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



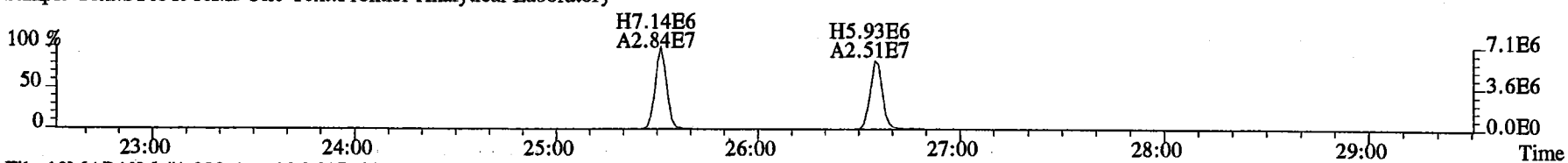
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



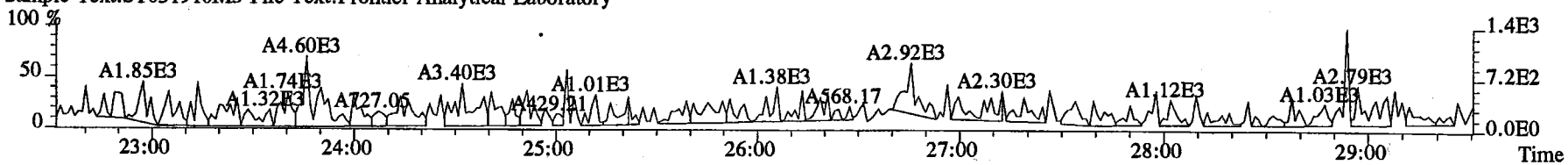
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



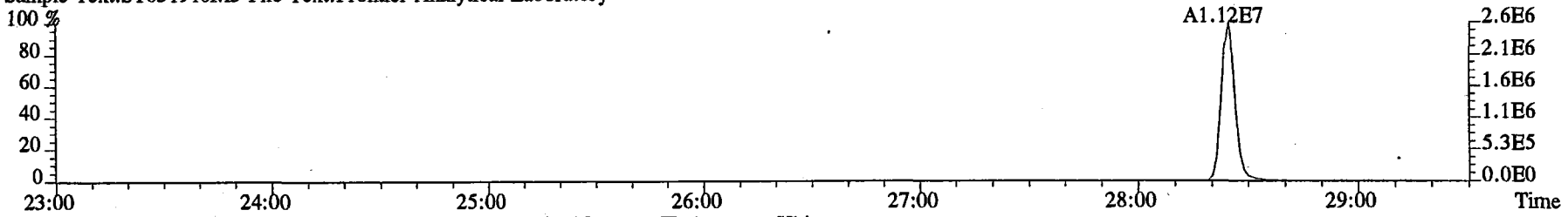
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



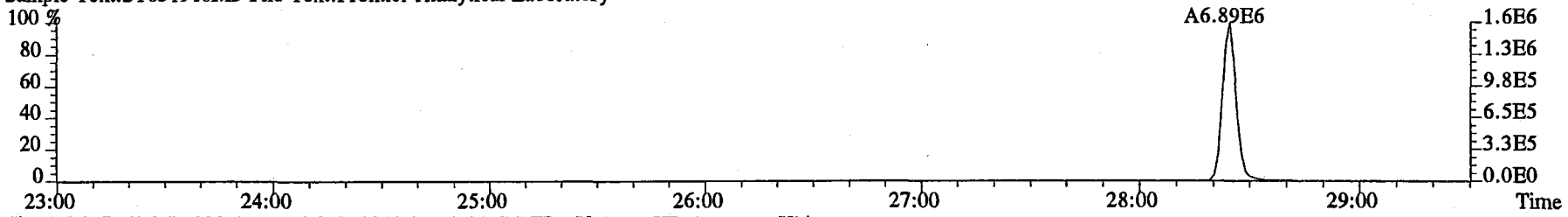
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



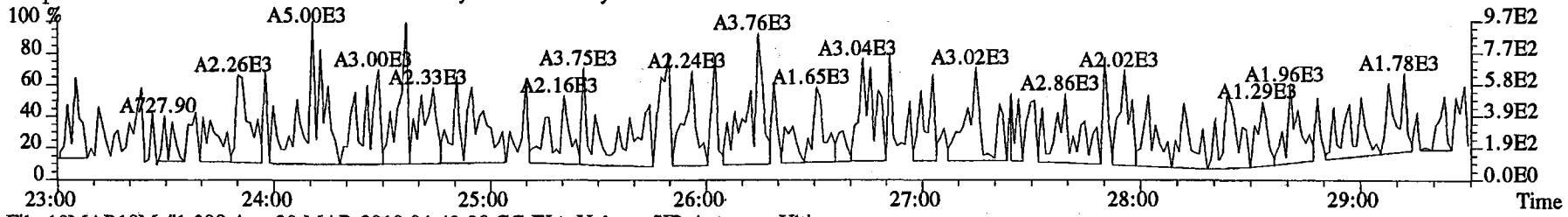
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



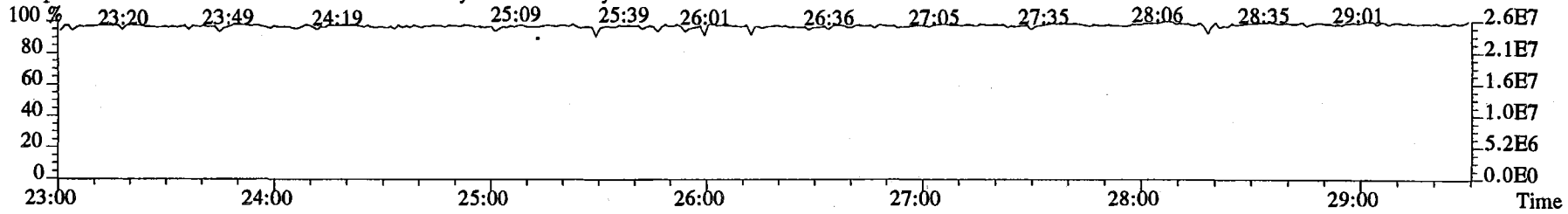
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



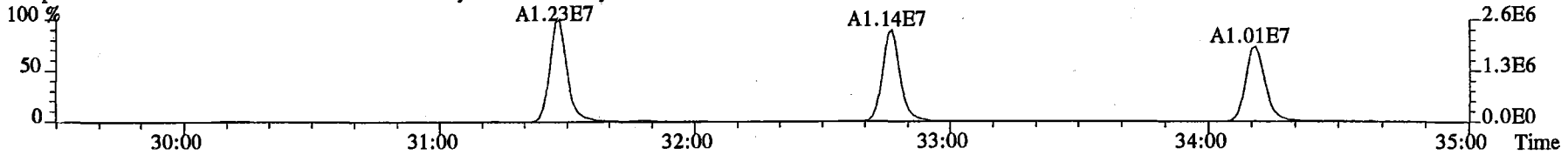
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:23 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



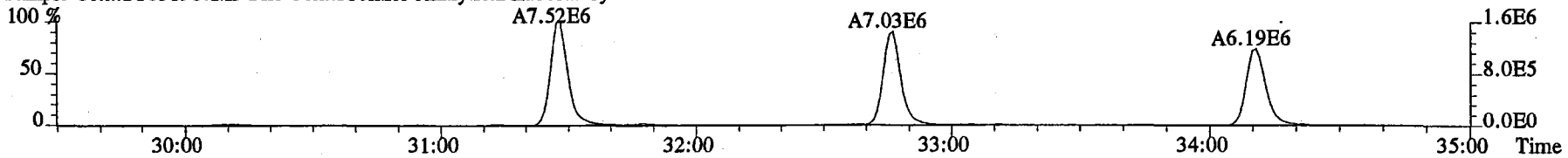
File:19MAR10M #1-390 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:23 Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



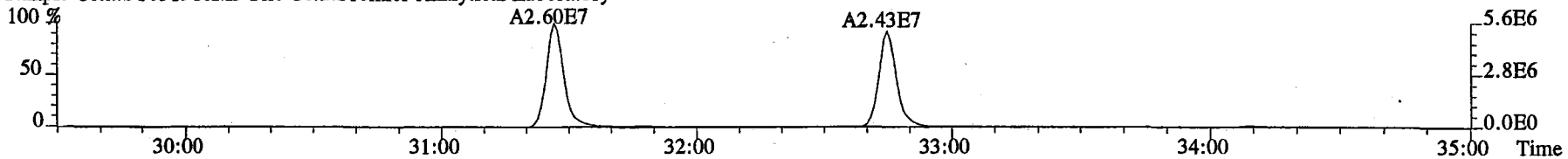
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



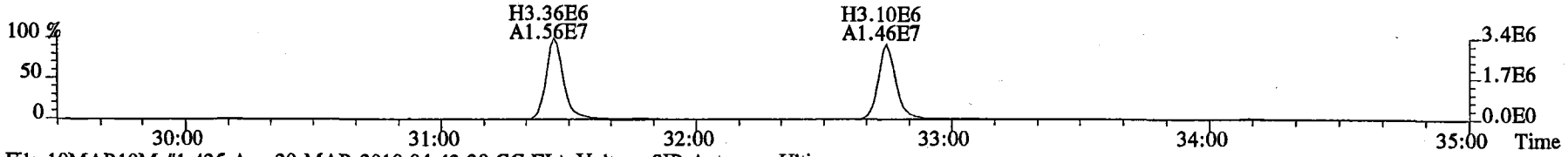
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



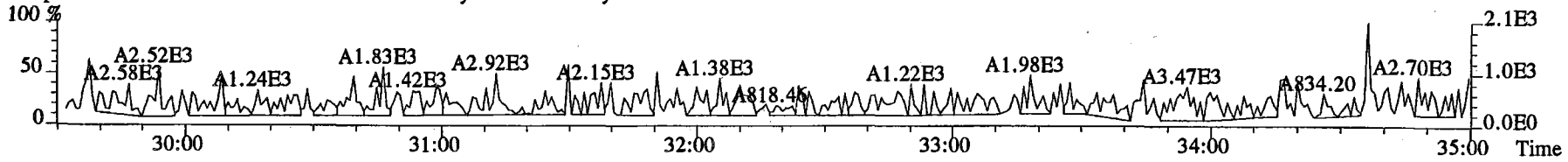
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



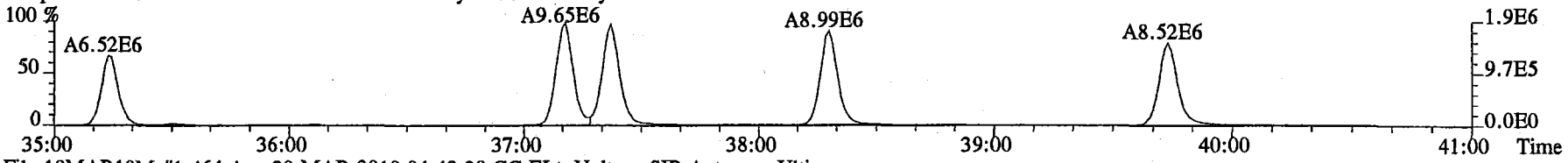
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



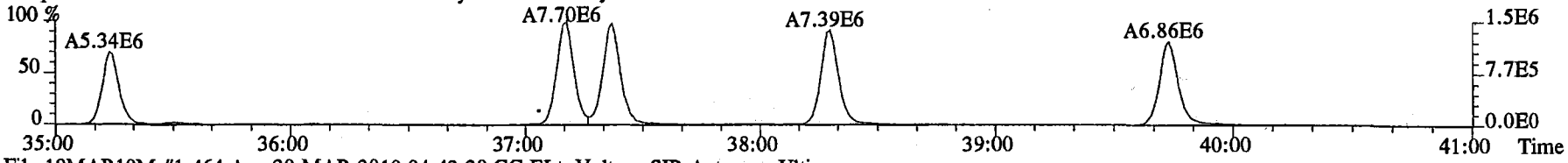
File:19MAR10M #1-425 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:23 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



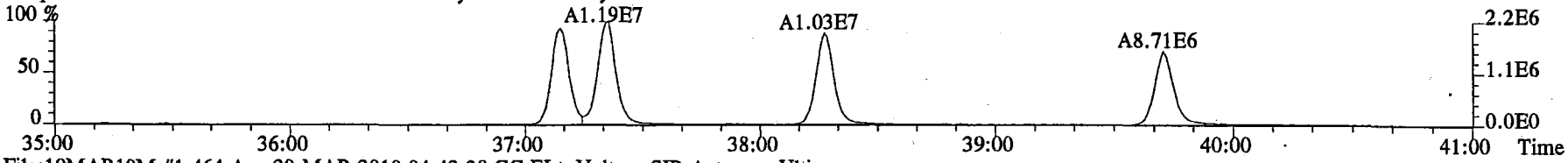
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



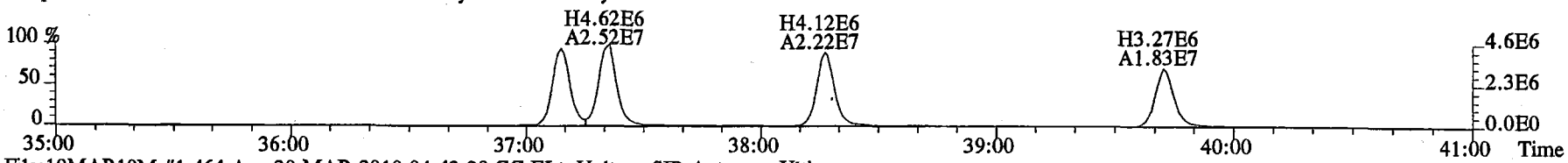
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



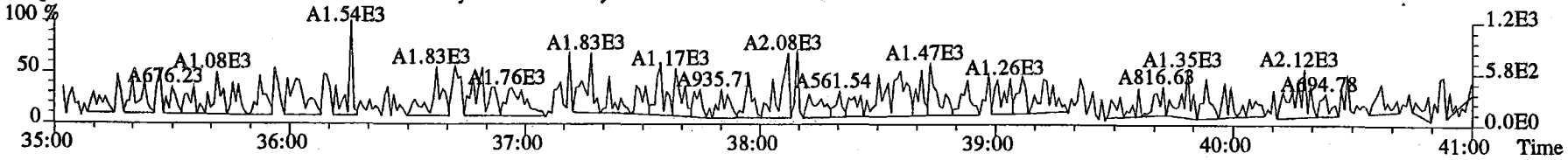
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



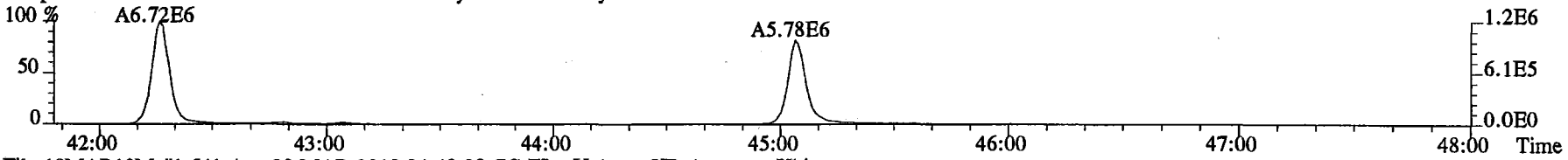
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



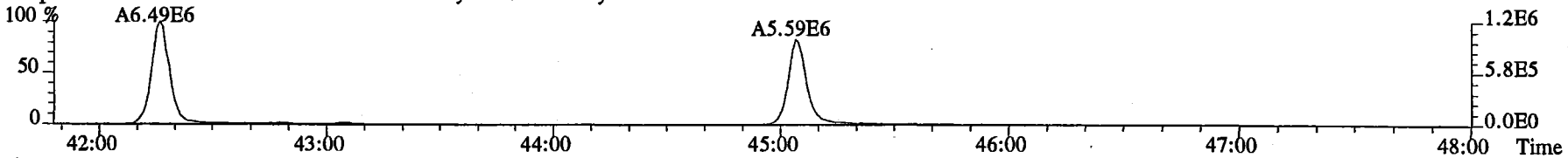
File:19MAR10M #1-464 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:23 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



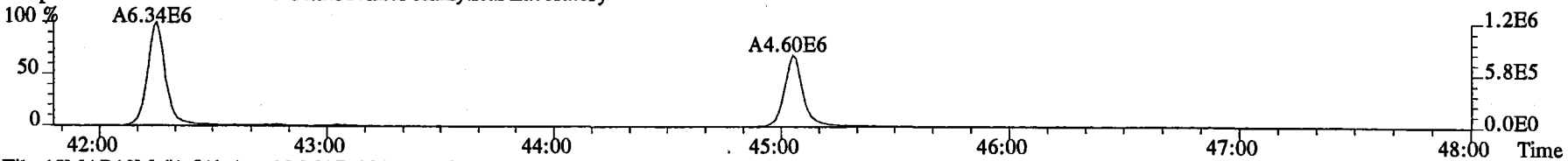
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



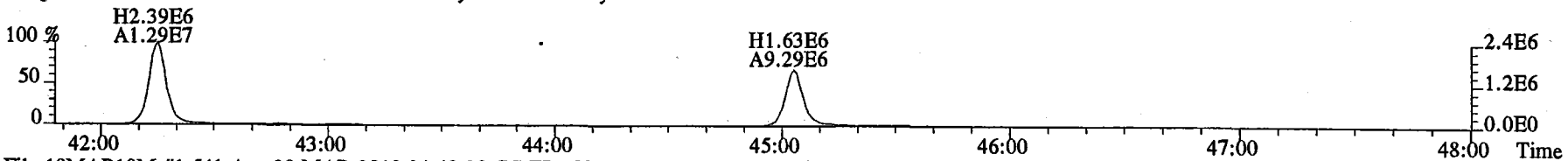
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



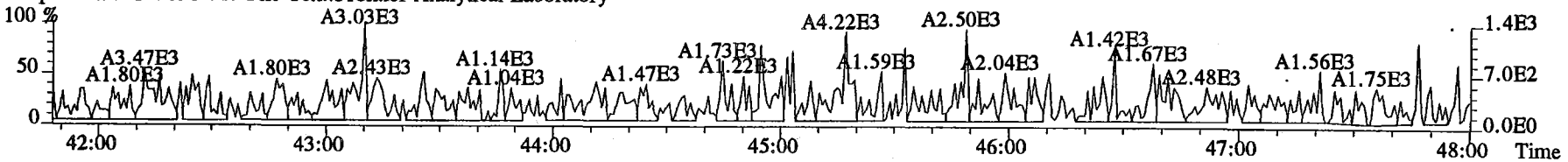
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



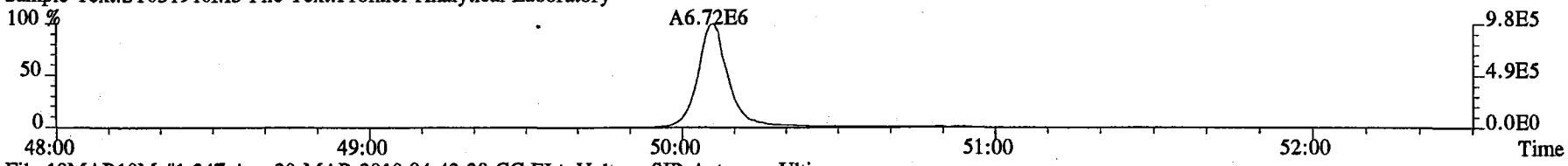
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



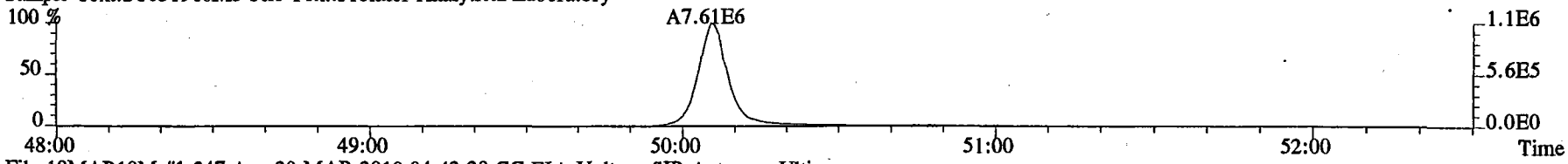
File:19MAR10M #1-541 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:23 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



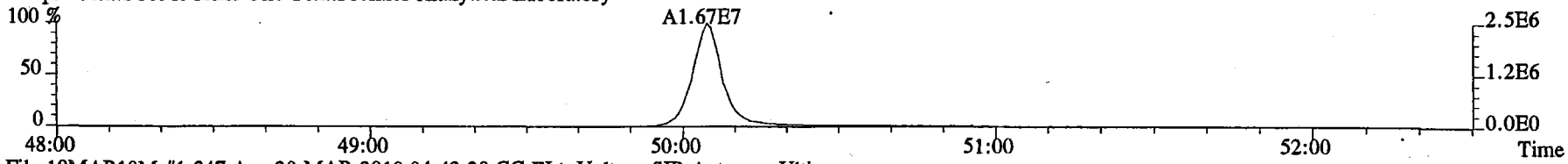
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



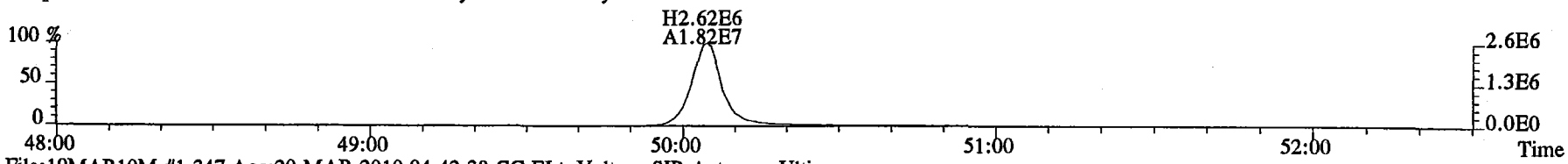
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



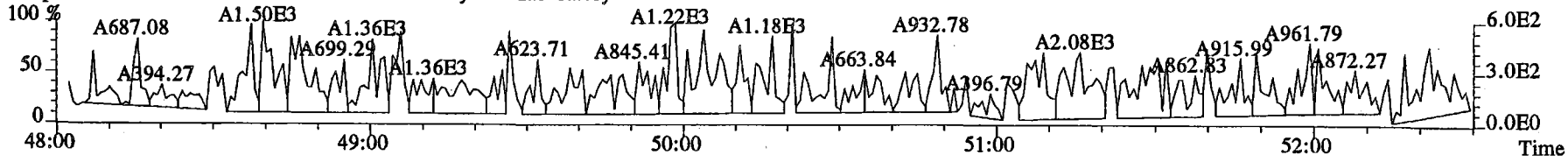
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory



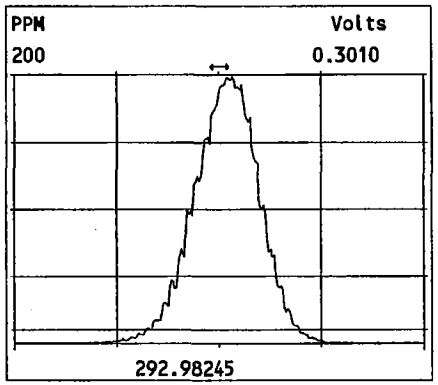
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory

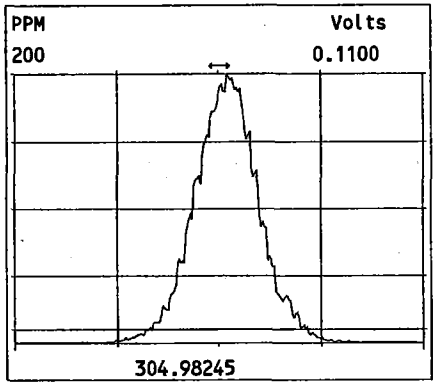


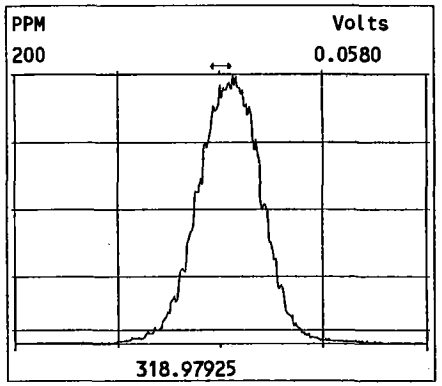
File:19MAR10M #1-347 Acq:20-MAR-2010 04:42:38 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:23 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST031910M3 File Text:Frontier Analytical Laboratory

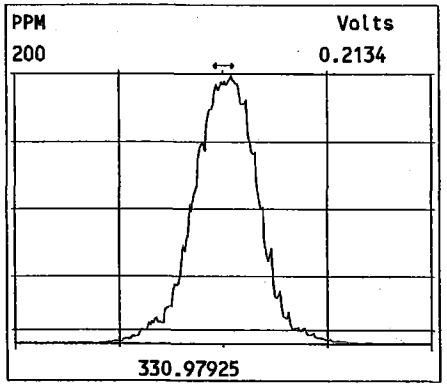


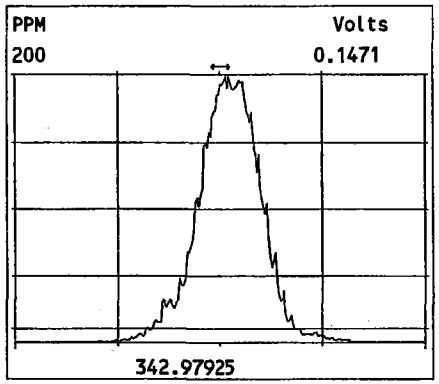
Peak Locate Examination:20-MAR-2010:05:42 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

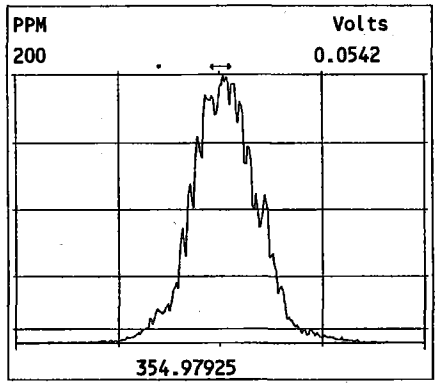


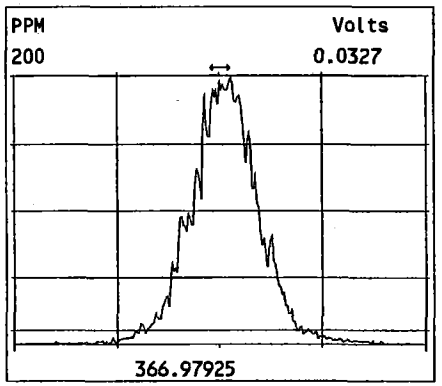


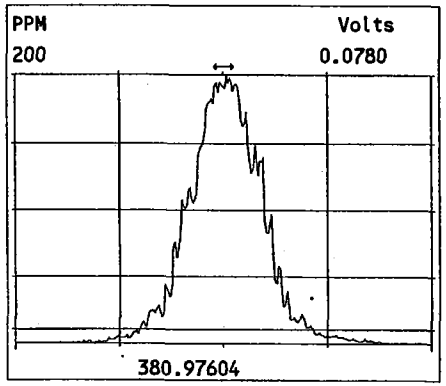


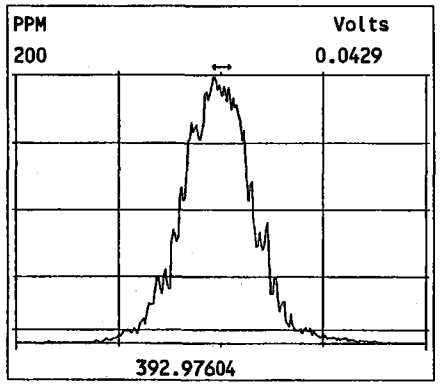


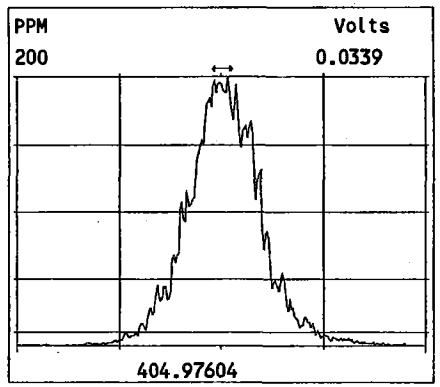


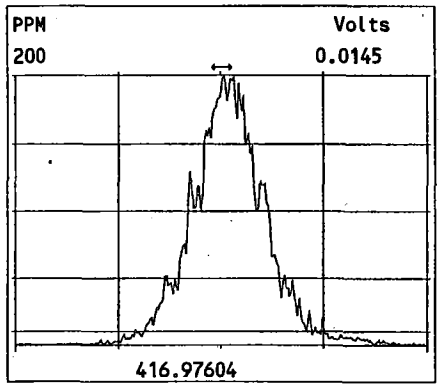




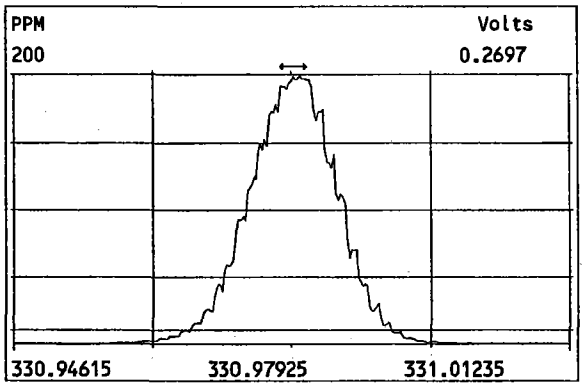


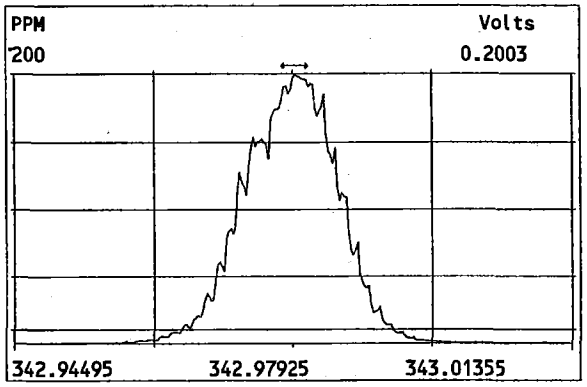


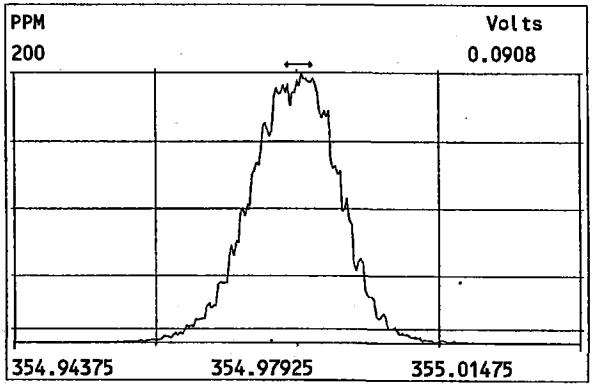


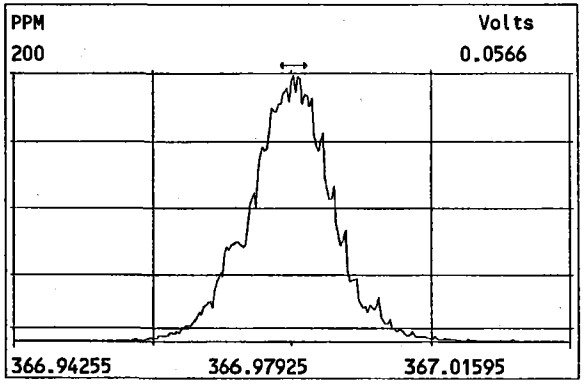


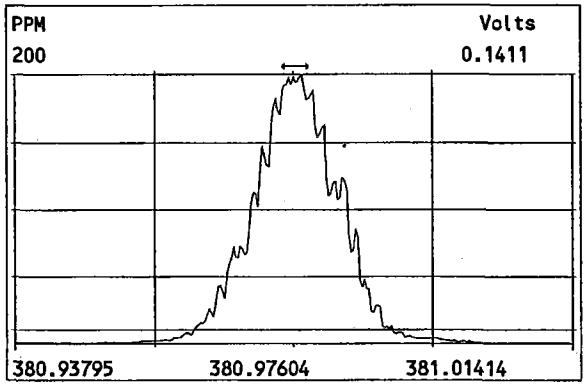
Peak Locate Examination:20-MAR-2010:05:44 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

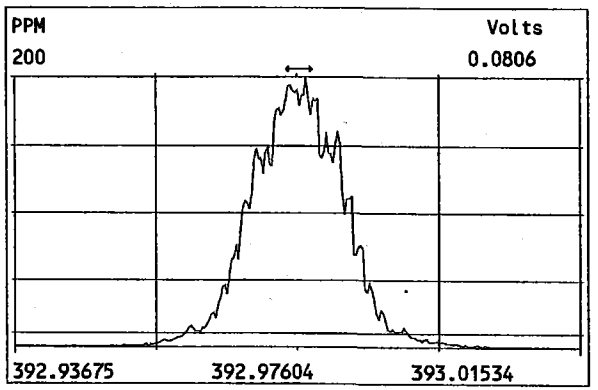


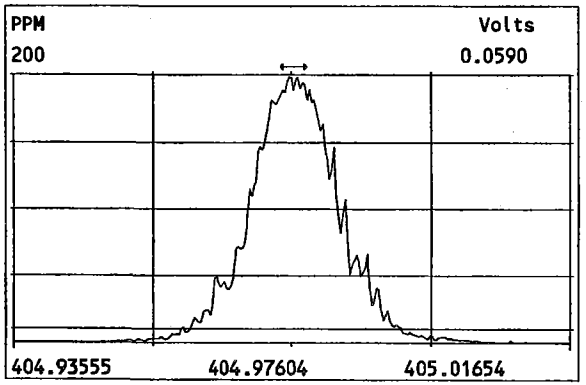


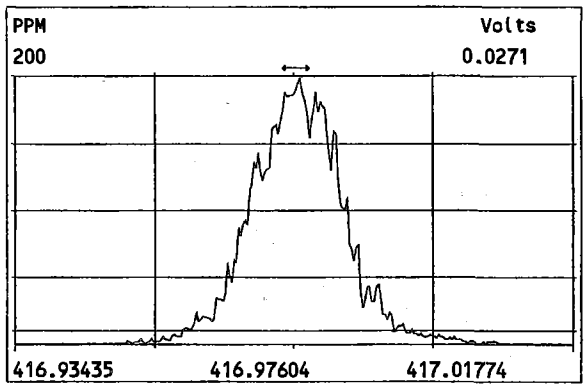




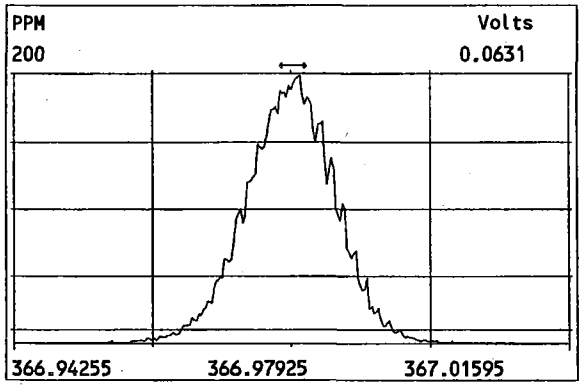


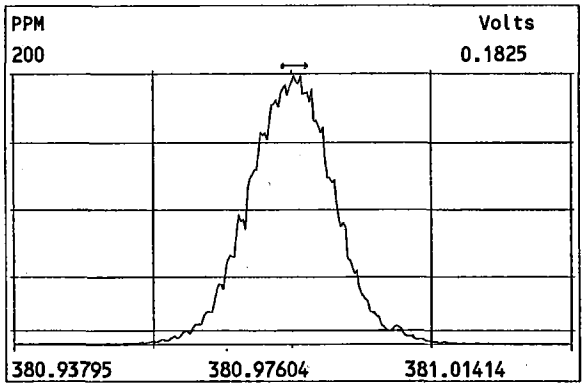


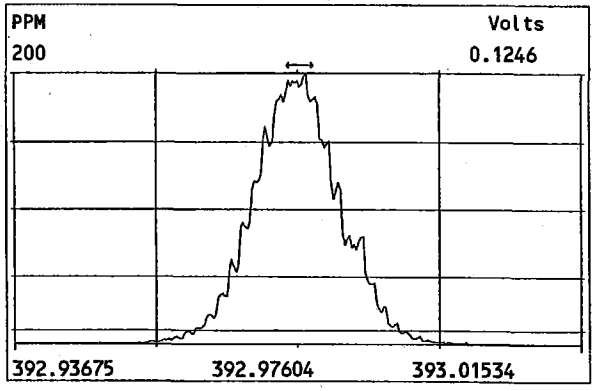


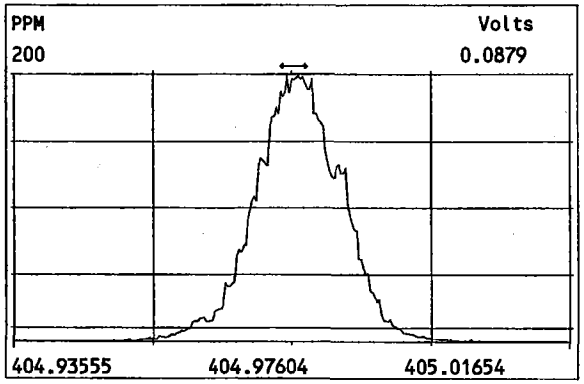


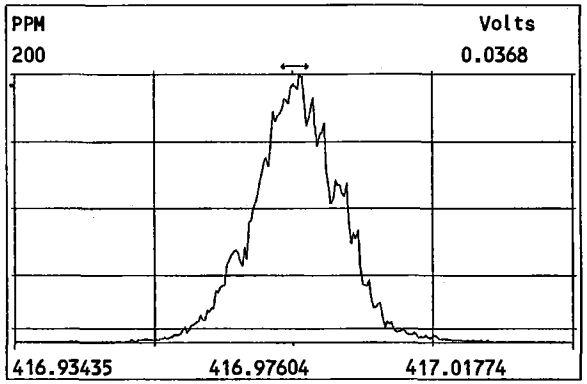
Peak Locate Examination:20-MAR-2010:05:46 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

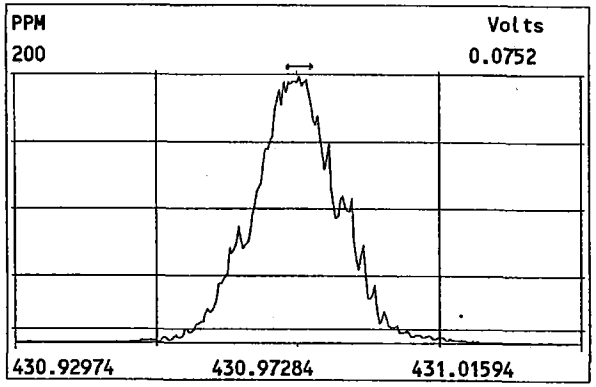


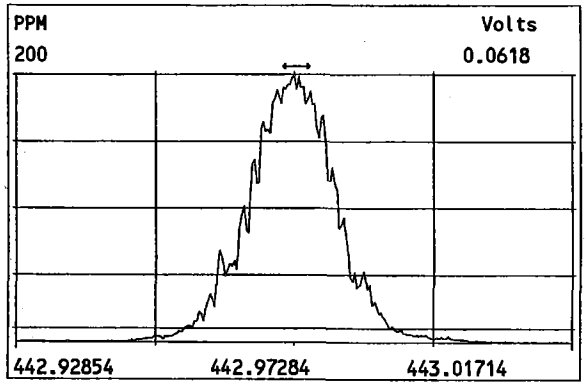


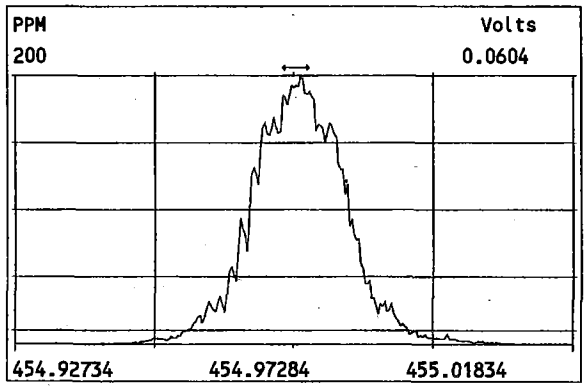




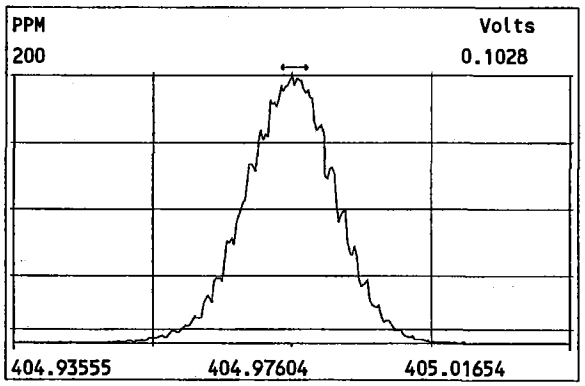


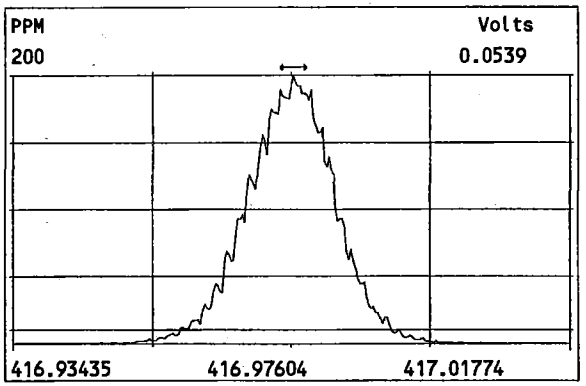


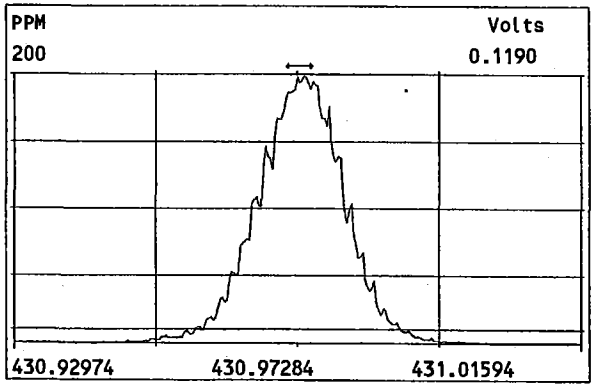


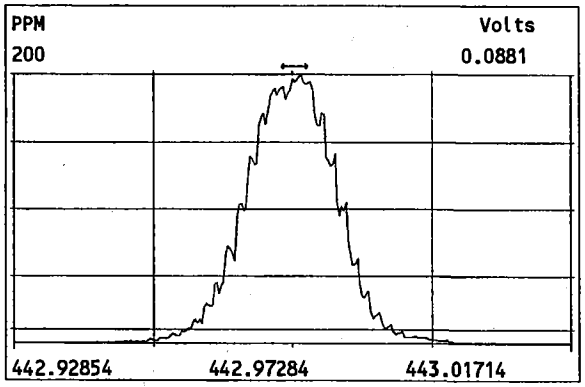


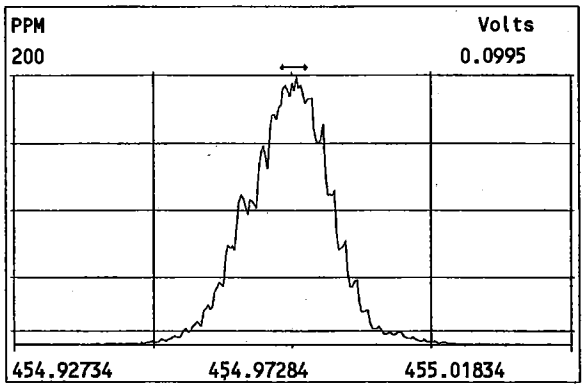
Peak Locate Examination:20-MAR-2010:05:48 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

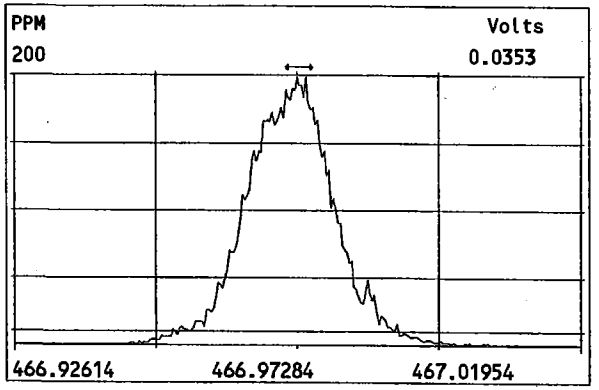


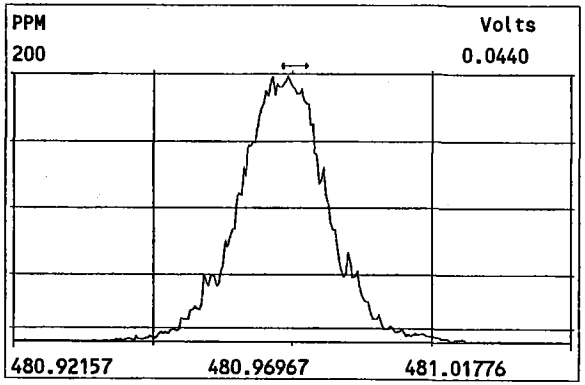




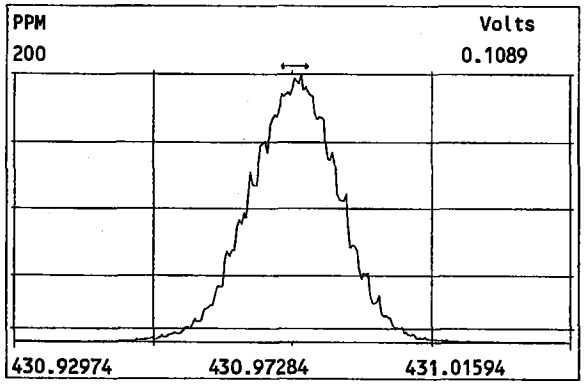


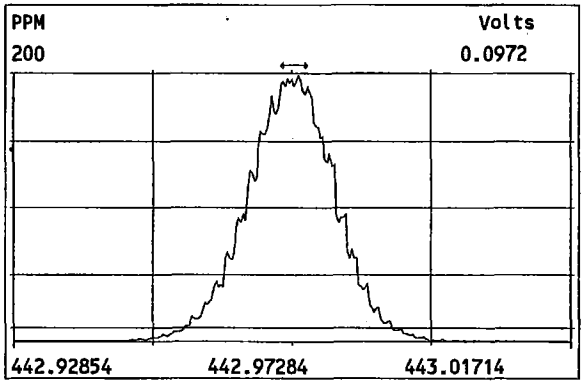


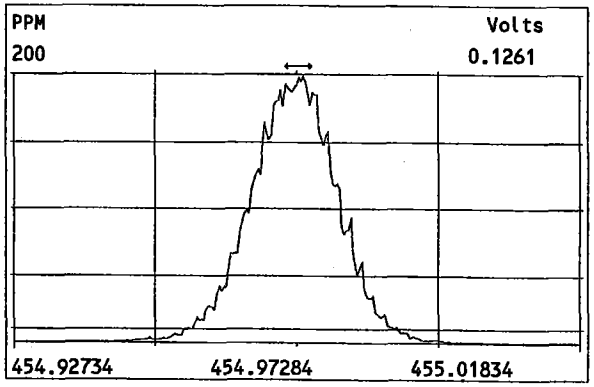


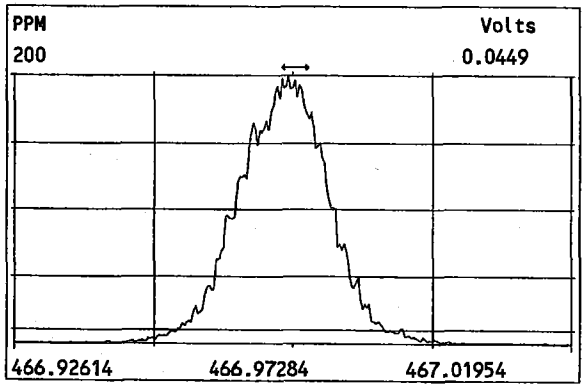


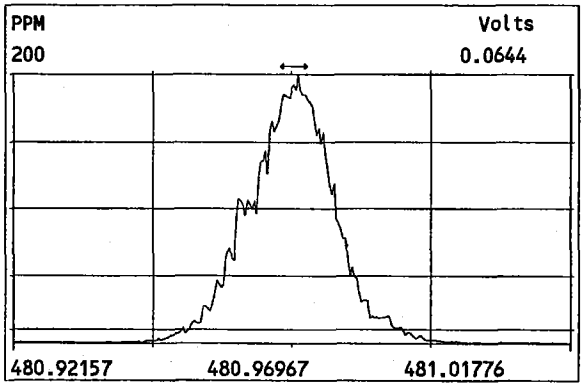
Peak Locate Examination:20-MAR-2010:05:50 File:19MAR10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

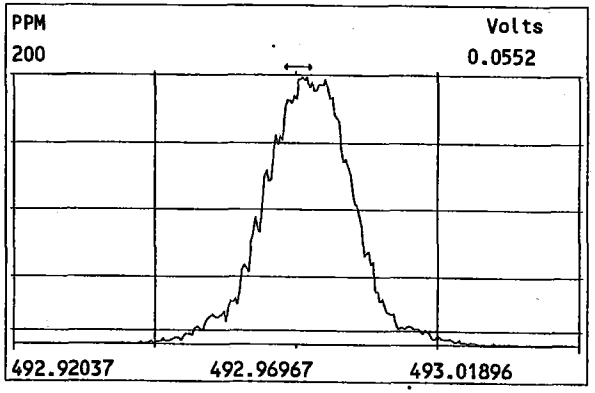


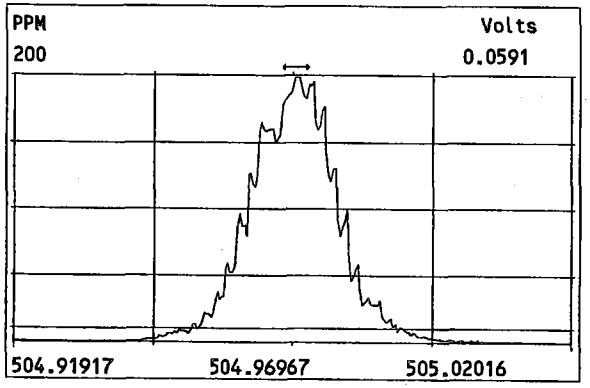


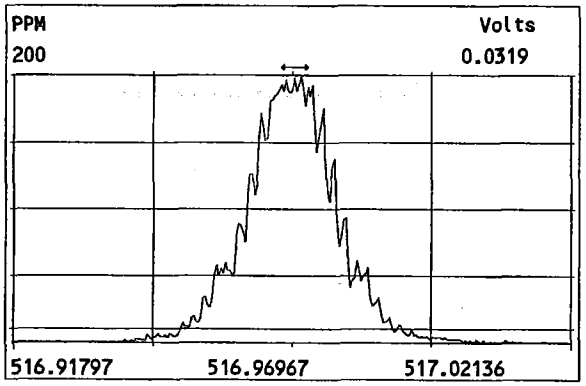












Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 19, 2010

Jessi Massingale
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Client Project: Lora Lake Apartments, POS-LLA
ARI Job No: QQ20 & QQ22

Dear Ms. Massingale:

Please find enclosed the original Chain-of-Custody (COC) record, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and detail of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan D. Dunnihoo
Director, Client Services
sue@arilabs.com
206-695-6207

Enclosures

cc: eFile QQ20

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody
Documentation

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Chain of Custody Record & Laboratory Analysis Request

Port of Seattle

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

ARI Assigned Number: QQ20
Turn-around Requested: Standard
ARI Client Company: Floyd/Snider
Phone: 206-292-2078
Client Contact: Matt Woltman / Megan McCullough
Client Project Name: Lora Lake Apartments
Client Project #: POS-LLA
Samplers: D. Metallo, P. Heltzel

Date: 3-26-2010
Page: 1 of 1
No. of Coolers: 2
Cooler Temps: 3.4, 4.4

Sample ID	Date	Time	Matrix	No. Containers	PAH 8270D-SIM low level	PCP 8041	Arsenic Tot+Diss 200.8	Dioxin/Furan 1613	TSS SM 2540D				Notes/Comments: pH Measurements (see attached worksheets)
CB31A032510COMP	3-25-10	2147	W	1	X	X	X	X	X				6.64
CB4857032510COMP	3-25-10	2220	W	1	X	X	X	X	X				6.44
CB1032510COMP	3-25-10	2219	W	1	X	X	X	X	X				6.29
CB101032510COMP	3-25-10	2320	W	1	X	X	X	X	X				6.59

① Run MS/MSD

Comments/Special Instructions:
- Bottles & glassware decon'ed to LLA Project specific SOP (see attached sheet)

	Relinquished by	Received by	Relinquished by	Received by
(Signature)	[signature]	[signature]		
Printed Name	Dave Metallo	A. Volgardsen		
Company	Taylor	ARI		
Date & Time	3-26-10 (1435)	3/26/10 1435		

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release 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 Client.*

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

① MS/MSD vol. does not include extra vol. for Dioxin/Furan analysis

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider
Project Name: Lora Lakes Apartments
COC No(s): _____ (NA)
Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____
Assigned ARI Job No: QQ20
Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): ~~2.6~~ dw 3.4 4.4 ___ ___ ___

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 3/29/10 Time: 1435

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap (Wet Ice) (Gel Packs) Baggies Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	NA	(YES)	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI : NA (YES) Date/Time: 3/29/10 0930 Equipment: Teflon Churn Split by: JW/AV

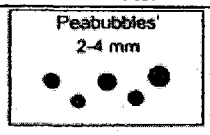
Samples Logged by: 3/29/10 Date: 3/29/10 Time: 0940

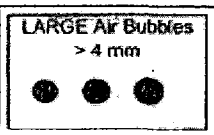
***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:





Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

PRESERVATION VERIFICATION 03/29/10
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **QQ20**

Inquiry Number: NONE
Analysis Requested: 03/26/10
Contact: Massingale, Jessi
Client: Floyd-Snider
Logged by: JW
Sample Set Used: Yes-481
Validatable Package: Yes
Deliverables:

PC: Sue D.
VTSR: 03/26/10

Project #: POS-LLA
Project: Lora Lake Apartments
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
10-8030 **QQ20A**	CB31A032510COMP						TOT Pass															
10-8031 **QQ20B**	CB4857032510COMP						TOT															
10-8032 **QQ20C**	CB1032510COMP						TOT															
10-8033 **QQ20D**	CB101032510COMP						TOT															
10-8034 **QQ20E**	CB31A032510COMP						DIS Unpres									N						
10-8035 **QQ20F**	CB4857032510COMP						DIS									N						
10-8036 **QQ20G**	CB1032510COMP						DIS									N						
10-8037 **QQ20H**	CB101032510COMP						DIS									N						

Checked By JW Date 3/29/10

Chain of Custody Record & Laboratory Analysis Request

Port of Seattle

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

ARI Assigned Number: QQ20	Turn-around Requested: Standard	Date: 3-29-2010	
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Page: 1	of 1
Client Contact: Matt Woltman / Megan McCullough		No. of Coolers: 1	Cooler Temps: 4.6
Client Project Name: Lora Lake Apartments			
Client Project #: POS-LLA	Samplers: D. Metallo		

Sample ID	Date	Time	Matrix	No. Containers	VOC 8260C-SIM	NWTPH-Dx (1)							Notes/Comments
CB31A032910GRAB	3-29-10	0740	W	5									
CB4857032910GRAB	3-29-10	0800	W	5									
CB1032910GRAB	3-29-10	0815	W	13									Run MS/MSD
CB100032910GRAB	3-29-10	0840	W	5									
TB032810	3-28-10	1830	W	3									Trip blank

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by:
(1) Acid/silica gel clean up for NWTPH-Dx	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: Dave Metallo	Printed Name: Jonathon Walter	Printed Name:	Printed Name:
	Company: Taylor Assoc. Inc	Company: ARI	Company:	Company:
	Date & Time: 3-29-10 (1040)	Date & Time: 3/29/10 1040	Date & Time:	Date & Time:

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release 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 Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider | Project Name: Loon Lake Apartments

COC No(s): _____ (NA) | Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: QQ022 | Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 4.6

If cooler temperature is out of compliance fill out form 00070F | Temp Gun ID#: 90941619

Cooler Accepted by: JW | Date: 3/29/10 | Time: 1040

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap (Wet Ice) Gel Packs (Baggies) (Foam Block) Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	NA	3/11/10	

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: AV | Date: 3/29/10 | Time: 1101

** ***Notify Project Manager of discrepancies or concerns*** **

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm	Small → "sm"
			Peabubbles → "pb"
			Large → "lg"
			Headspace → "hs"

Case Narrative

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Case Narrative

Client: Floyd Snider
Project: Lora Lake Apartments, POS-LLA
Matrix: Sediment
ARI Job No.: QQ20 & QQ22

Sample receipt

Analytical Resources, Inc. (ARI) accepted four water samples on March 26, 2010 under ARI job QQ20. The cooler temperatures measured by IR thermometer following ARI SOP were 3.4 and 4.4°C. For details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

Samples were split for each laboratory using a Teflon churn splitter. The churn splitter was cleaned between each sample using the QAPP protocol. Limited sample volumes were available, insufficient for matrix QC for organic parameters.

Dioxin/Furan analyses were subcontracted to Frontier Analytical Laboratory in El Dorado Hills, CA. The Frontier report is included here in its entirety.

Analytical Resources, Inc. (ARI) accepted four water samples (grabs) and a trip blank on March 29, 2010 under ARI job QQ22. The cooler temperature measured by IR thermometer following ARI SOP was 4.6°C. For details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

Volatiles by SW8260C SIM

The samples and associated QC were analyzed within the method recommended holding times.

Initial and continuing calibrations were within limits. Internal standards were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS and LCSD percent recoveries and RPD were within control limits.

Batch matrix spike and matrix spike duplicate percent recoveries were within limits for the sample run under ARI Job QP69. A copy of the summary form is included in this report.

Sample preservation was confirmed within limits after analysis.

SIM Semivolatiles by SW8270

The samples were extracted and analyzed within the method recommended holding times.

Initial calibrations and continuing calibrations were within limits, with an allowed outlier for chrysene at 21.3% (limit 20%). Associated positive values have been "Q" flagged. Internal standards were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS percent recoveries were within control limits with an allowed marginal exceedence for chrysene.

The matrix spike/matrix spike duplicate had recoveries and RPD within limits with the exception of low recoveries for chrysene, benzo(k)fluoranthene, indeno(1,2,3-cd)Pyrene, Dibenz(a,h)anthracene and benzo(g,h,i)perylene. No action is required for matrix QC.

Pentachlorophenol by SW8041

The samples were extracted and analyzed within the method recommended holding times.

Initial calibrations and continuing calibrations were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS percent recoveries were within control limits.

The matrix spike/matrix spike duplicate had recoveries and RPD within limits.

NW-TPHDx with Acid Silica cleanups

The samples and associated QC were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS had recovery within limits.

The matrix spike and matrix spike duplicate percent recovery and RPD of Diesel was within limits.

Total and Dissolved Arsenic by EPA 200.8

The samples were digested and analyzed within the method recommended holding time.

The method blanks were clean at the reporting limit. The LCS percent recoveries were within control limits.

The matrix spike percent recoveries were within limits. Duplicate RPDs were within control limits.

General Chemistry (TSS)

The samples were prepared and analyzed within the method recommended holding time.

The method blank was clean at the reporting limit. The LCS percent recovery was within control limits.

The replicate RPD was within the control limit.

Data Reporting Qualifiers

Effective 7/10/2009

Inorganic Data

U Indicates that the target analyte was not detected at the reported concentration

* Duplicate RPD is not within established control limits

B Reported value is less than the CRDL but ≥ the Reporting Limit

N Matrix Spike recovery not within established control limits

NA Not Applicable, analyte not spiked

H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U Indicates that the target analyte was not detected at the reported concentration

* Flagged value is not within established control limits

B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J Estimated concentration when the value is less than ARI's established reporting limits

D The spiked compound was not detected due to sample extract dilution

E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

SURR SOLUTIONS

4/3/2010

LABEL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
A	1706-2	ABN	100/150	MEOH	07/30/10
B	1633-3	SIM PNA	15/75	MEOH	08/12/10
C	1705-4	SIM ABN	25/37.5	MEOH	03/08/11
D	1689-2	LOW PCB	0.2	ACETONE	12/29/10
E	1661-2	HERB	62.5	MEOH	10/02/10
F	1683-3	PCP	12.5	ACETONE	12/09/10
G	1707-2	1,4DIOXANE	100	MEOH	03/19/11
H	1723-2	OP-PEST	25	MEOH	04/02/11
I	1634-1	LOW S. PNA	1.5	MEOH	08/12/10
J	1681-2	TBT-PORE	0.125	MECL2	12/01/10
K	1689-1	MED PCB	20	ACETONE	12/29/10
L	1681-1	TBT	2.5	MECL2	12/01/10
M	1682-1	EPH	1500	MECL2	09/17/10
N	1689-3	PCB	2	ACETONE	12/29/10
O	1699-1	TPH	450	MECL2	07/02/10
P	1707-4	HCID	2250	MECL2	07/02/10
Q	1620-2	EDB	1	MEOH	06/22/10
R	1615-1	RESIN ACID	250	ACETONE	06/17/10
S*	1568-5	PBDE	.25	MEOH	01/13/11
T	1674-2	ALKYL PNA	10	MEOH	07/30/10
U	1633-1	CONGENER	2.5	ACETONE	08/11/10
V					
*reverified solution					
#project specific					
Y					
Z					

LCS SOLUTIONS

4/3/2010

LABL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
1	1716-1	PCB 1660	20	ACETONE	03/30/11
2#	1472-3	BCOC PEST	10	ACETONE	NA
3	1705-3	PEST	02/04/20	ACETONE	03/08/11
4	1667-1	LOW PEST	0.2/0.4/2	ACETONE	06/26/10
5	1677-1	EPH	1500	MECL2	11/12/10
6	1702-2	PCP	12.5/125	ACETONE	02/18/11
7	1705-1	ABN	100	ACETONE	07/01/10
8	1681-4	TBT	2.5	MECL2	12/01/10
9	1682-2	PORE TBT	.125/.25	MECL2	12/01/10
10	1698-2	ABN ACID	100/200	MECL2	07/14/10
11	1642-2	TPHD	15000	ACETONE	09/07/10
12	1698-1	ABN BASE	200	MEOH	07/24/10
13	1613-1	LOW PCB	2	ACETONE	06/08/10
14*	1547-1	LOW ABN ACID	10/20	MEOH	04/10/10
15	1716-2	SIM PNA	15/75	MEOH	03/30/11
16	1707-1	DIOXANE	100	MEOH	11/05/10
17	1644-1	1248 PCB	10	ACETONE	09/10/10
18*	1591-4	LOW SIM PNA	1.5	ACETONE	08/28/10
19	1685-3	AK103	7500	ACETONE	09/03/10
20	1682-4	PNA	100	ACETONE	12/04/10
21	1593-3	SKY/BHT	100	MEOH	03/31/10
22	1702-4	HERB	12.5/12500	MEOH	04/17/10
23	1706-1	LW ABN BASE	20	MEOH	03/08/11
24	1696-1	LOW ABN	10	ACETONE	01/13/11
25#	1481-1	DIPHENYL	100	MEOH	NA
26	1723-3	OP-PEST	25	MEOH	11/20/10
27	1668-3	STEROLS	200	MEOH	10/30/10
28#	1684-1	ADD. PEST	4	ACETONE	03/25/10
29#	1496-3	DECANES	100	MEOH	NA
30	1620-1	EDB/DBCP	0.2	MEOH	06/22/10

LCS SOLUTIONS

4/3/2010

31	1707-3	TERPINEOL	100	MEOH	03/19/11
32	1619-3	GUAIACOL	50-200	ACETONE	04/30/10
33	1639-3	RETENE	100	MEOH	09/03/10
34	1633-1	CONGENERS	2.5	ACETONE	08/11/10
35	1674-3	ALKYL PNA A	10	MEOH	10/28/10
36	1601-3	ALKYL PNA B	10	MEOH	05/13/10
50	1617-1	FULL RESIN	250	ACETONE	06/17/10
51	1696-3	DDTS	2.5	ACETONE	06/03/10
52	1613-5	1232 PCB	20	ACETONE	06/16/10
53	1703-3	DALAPON	50	MEOH	09/11/10
54	1701-2	PBDE	0.5	ACETONE	02/10/11
#=PROJECT SPECIFIC SOLUTION					
*=REVERIFIED SOLUTION					

Spike Recovery Control Limits for SIM VOA
EPA Method SW-846-8260C [1,2]

Effective 12/24/07

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use.
http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Sample Matrix:	Water
Purge Volume:	10 mL
LCS Spike Recovery [3]	
Vinyl Chloride	76 - **120**
1,1-Dichloroethene	79 - 126
cis-1,2-Dichloroethene	76 - 127
Trichloroethene	79 - **120**
Benzene	75 - 121
Tetrachloroethene	75 - 123
1,1,2,2-Tetrachloroethane	72 - 129
Method Blank/LCS Surrogate Recovery	
d4-1,2-Dichloroethane	80 - 133
d8-Toluene	**80** - 121
Sample Surrogate Recovery	
d4-1,2-Dichloroethane	**80** - 136
d8-Toluene	**80** - **120**

(1) Control limits calculated using historic data collected from 4/1/05 to 11/15/07
(2) Highlighted control limits (**bold font**) adjusted from the calculated values as follows:

a) ARI does not use control limits < 10
b) Control limits for analyzes with no separate preparation procedure are adjusted to reflect the minimum uncertainty in the calibration of the instrument allowed by the referenced analytical method.

(3) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Polycyclic Aromatic Hydrocarbons Selected Ion Monitoring (SIM) EPA Method SW-846-8270D-Modified Low Level Aqueous Samples[1,7]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Sample Volume / Final Volume	500 mL to 0.5 mL	
	Control Limits	ME Limits [2]
LCS Spike Recovery [6]		
Napthalene	41 - 101	31 - 111
2-Methylnapthalene	47 - **100**	39 - 103
1-Methylnapthalene	30 - 160 [3]	30 - 160 [3]
Acenaphthylene	35 - **100**	25 - 104
Acenapthene	43 - 104	33 - 114
Dibenzofuran	37 - **100**	27 - 108
Fluorene	51 - 103	42 - 112
Phenanthrene	55 - 109	46 - 118
Anthracene	30 - 101	18 - 113
Fluoranthene	49 - 123	37 - 135
Pyrene	48 - 120	36 - 132
Benz(a)anthracene	43 - 113	31 - 125
Chrysene	59 - 112	50 - 121
Benzo(b)fluoranthene	44 - 121	31 - 134
Benzo(k)fluoranthene	50 - 117	39 - 128
Benzo(a)pyrene	**10** - **100**	**10** - 109
Indeno(1,2,3-cd)pyrene	43 - 112	32 - 124
Dibenzo(a,h)anthracene	42 - 114	30 - 126
Benzo(g,h,i)perylene	31 - 118	17 - 133
MB / LCS Surrogate Recovery		
d10-2-Methylnaphthalene	42 - **100**	(4)
d14-Dibenzo(a,h)anthracene	40 - 125	(4)
Sample Surrogate Recovery		
d10-2-Methylnaphthalene	31 - 109	(4)
d14-Dibenzo(a,h)anthracene	**10** - 133	(4)

(1) ARI's Control limits calculated using all available spike recovery data from 1/1/08 through 12/1/08.
(2) **ME** = A **marginal exceedance** defined in the NELAC Standard [5] as beyond the LCS-CL but still within the ME limits. ME limits are between 3 and 4 standard deviations around the mean. A maximum of one marginal exceedance is acceptable. Two or more marginal exceedances require corrective action.
(3) 30 – 160 are default, advisory control limits used when there is insufficient data to calculate historic control limits. **DO NOT** use these limits as the sole reason to reject the data from a batch of analyses.
(4) Marginal Exceedances not allowed for surrogate standards.
(5) **2003 NELAC Standard (EPA/600/R-04/003), July 2003**, Chapter 5, pages 251-252.
(6)Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.
(7) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Chlorinated Phenols
EPA Method SW-846-8041[1,2]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Calculated Control Limits	
Sample Matrix:	Water	Soil / Sediment
Sample Amount / Final Volume:	500 / 50 mL	10 g / 25 mL
LCS Spike Recovery [3]		
Pentachlorophenol	27 - 115	**10** - 162
Method Blank/LCS Surrogate Recovery		
2,4,6-Tribromophenol	40 - 130	50 - 115
Sample Surrogate Recovery		
2,4,6-Tribromophenol	11 - 156	**10** - 146

(1) ARI's Control limits calculated using all available spike recovery data from 1/1/08 through 12/1/08.
(2) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10.
(3) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits Hydrocarbon Identification (NWTPH-HCID) and Diesel Range Petroleum Hydrocarbons (NWTPH-D & AK-102) [1]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Method:	NWTPH-HCID [2]	NWTPH-D		AK102 [2]
Sample Matrix:	Water& Soil	Water	Soil	Water & Soil
Preparation:	500 to 1 mL	500 to 1 mL	10g to 1 mL	500 to 1 mL or 10g to 1 mL
LCS Spike Recovery [3]				
Diesel	-- - --	56 - 103	55 - 104	75 - 125
Diesel with Acid & Silica Clean-up	-- - --	43 - 100	54 - 96	(4)
Diesel with Silica Clean-up	-- --	43 - 100	54 - 96	75 - 125
Method Blank/LCS Surrogate Recovery				
o-Terphenyl	-- - --	57 - 120	58 - 121	60 - 120
o-Terphenyl with Acid & Silica Clean-up	-- - --	51 - 120	63 - 115	(4)
o-Terphenyl Silica Clean-up		51 - 120	63 - 115	60 - 120
Sample Surrogate Recovery				
o-Terphenyl	50 - 150	35 - 131	53 - 118	50 - 150
o-Terphenyl with Acid & Silica Clean-up	-- - --	41 - 121	49 - 120	(4)
o-Terphenyl with Silica Clean-up		41 - 121	49 - 120	50 - 150

1. Control Limits calculated using all data generated 1/1/08 through 12/31/08
2. Method specified, non-prescriptive limits. The NWTPH-HCID Method does not include LCS or MS analyses.
3. Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.
4. Alaska State UST Methods do not allow acid cleanup of sample extracts.

Summary of Laboratory Control Limits Metals Analyses (All Methods & Sample Matrices)

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Element	Matrix Spike Recovery	LCS Recovery	Replicate RPD
Aluminum	75 - 125	80 - 120	≤ 20%
Antimony	75 - 125	80 - 120	≤ 20%
Arsenic	75 - 125	80 - 120	≤ 20%
Barium	75 - 125	80 - 120	≤ 20%
Beryllium	75 - 125	80 - 120	≤ 20%
Boron	75 - 125	80 - 120	≤ 20%
Cadmium	75 - 125	80 - 120	≤ 20%
Calcium	75 - 125	80 - 120	≤ 20%
Chromium	75 - 125	80 - 120	≤ 20%
Cobalt	75 - 125	80 - 120	≤ 20%
Copper	75 - 125	80 - 120	≤ 20%
Iron	75 - 125	80 - 120	≤ 20%
Lead	75 - 125	80 - 120	≤ 20%
Magnesium	75 - 125	80 - 120	≤ 20%
Manganese	75 - 125	80 - 120	≤ 20%
Mercury	75 - 125	80 - 120	≤ 20%
Nickel	75 - 125	80 - 120	≤ 20%
Potassium	75 - 125	80 - 120	≤ 20%
Selenium	75 - 125	80 - 120	≤ 20%
Silica	75 - 125	80 - 120	≤ 20%
Silver	75 - 125	80 - 120	≤ 20%
Sodium	75 - 125	80 - 120	≤ 20%
Strontium	75 - 125	80 - 120	≤ 20%
Thallium	75 - 125	80 - 120	≤ 20%
Vanadium	75 - 125	80 - 120	≤ 20%
Zinc	75 - 125	80 - 120	≤ 20%

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Conventional Wet Chemistry

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 125	75 - 125
Chloride	75 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

Data Summary Package

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

SIM VOLATILE ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB31A032910GRAB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QQ22A
LIMS ID: 10-8052
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 22:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB4857032910GRAB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QQ22B
LIMS ID: 10-8053
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 22:36

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	123%
d8-Toluene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB1032910GRAB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QQ22C
LIMS ID: 10-8054
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 23:03

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB100032910GRAB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QQ22D
LIMS ID: 10-8055
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 23:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	131%
d8-Toluene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: TB032810**
Page 1 of 1 **Trip Blank**

Lab Sample ID: QQ22E
LIMS ID: 10-8056
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/28/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 15:30

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	102%

ANALYTICAL RESOURCES INCORPORATED

SW8260-SIM SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	DCE	TOL	TOT OUT
MB-032910	109%	102%	0
LCS-032910	99.5%	102%	0
LCSD-032910	105%	101%	0
CB31A032910GRAB	122%	102%	0
CB4857032910GRAB	123%	102%	0
CB1032910GRAB	124%	103%	0
CB100032910GRAB	131%	102%	0
TB032810	122%	102%	0

	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-133)	(80-136)
(TOL) = d8-Toluene	(80-121)	(80-120)

Prep Method: SW5030
Log Number Range: 10-8052 to 10-8056

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB31A032510GRAB**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: QP69A
LIMS ID: 10-7709
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QP69-Floyd/Snider
Project: Lora Lake Apartment
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/25/10

Instrument/Analyst MS: NT7/PKC
MSD: NT7/PKC
Date Analyzed MS: 03/29/10 19:56
MSD: 03/29/10 20:23

Sample Amount MS: 10.0 mL
MSD: 10.0 mL
Purge Volume MS: 10.0 mL
MSD: 10.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
1,2-Dichloroethane	< 0.020 U	1.20	1.00	120%	1.22	1.00	122%	1.7%
cis-1,2-Dichloroethene	< 0.020 U	0.992	1.00	99.2%	1.03	1.00	103%	3.8%
trans-1,2-Dichloroethene	< 0.020 U	1.00	1.00	100%	1.04	1.00	104%	3.9%
Trichloroethene	< 0.020 U	1.06	1.00	106%	1.05	1.00	105%	0.9%
Tetrachloroethene	< 0.020 U	1.12	1.00	112%	1.11	1.00	111%	0.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: LCS-032910

LAB CONTROL SAMPLE

Lab Sample ID: LCS-032910
LIMS ID: 10-8052
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT7/PKC
LCSD: NT7/PKC
Date Analyzed LCS: 03/29/10 13:12
LCSD: 03/29/10 13:39

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,2-Dichloroethane	1.00	1.00	100%	1.18	1.00	118%	16.5%
cis-1,2-Dichloroethene	0.880	1.00	88.0%	1.04	1.00	104%	16.7%
trans-1,2-Dichloroethene	0.895	1.00	89.5%	1.06	1.00	106%	16.9%
Trichloroethene	0.928	1.00	92.8%	1.04	1.00	104%	11.4%
Tetrachloroethene	0.971	1.00	97.1%	1.09	1.00	109%	11.5%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	99.5%	105%
d8-Toluene	102%	101%

4A
VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0330

Lab Name: ANALYTICAL RESOURCES, INC
Client: FLOYD/SNIDER

ARI Job No: QP69
Project: LORA LAKE APARTMENT

Lab File ID: 03301005
Lab Sample ID: MB0330

Date Analyzed: 03/29/10
Time Analyzed: 1405

Instrument ID: NT7
Heated Purge: (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0330	LCS0330	03301003	1312
02	LCSD0330	LCSD0330	03301004	1339
03	TB032510	QP69E	03301007	1503
04	TB032810	QQ22E	03301008	1530
05	CB31A032510G	QP69A	03301017	1930
06	CB31A032510G	QP69AMS	03301018	1956
07	CB31A032510G	QP69AMSD	03301019	2023
08	CB4857032510	QP69B	03301020	2050
09	CB1032510GRA	QP69C	03301021	2116
10	CB101032510G	QP69D	03301022	2143
11	CB31A032910G	QQ22A	03301023	2209
12	CB4857032910	QQ22B	03301024	2236
13	CB1032910GRA	QQ22C	03301025	2303
14	CB100032910G	QQ22D	03301026	2329
15				
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: MB-032910**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-032910
LIMS ID: 10-8052
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 14:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	109%
d8-Toluene	102%

SIM SEMIVOLATILE ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A032510COMP
SAMPLE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 18:34
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.017**
91-57-6	**2-Methylnaphthalene**	**0.010**	**0.012**
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.042**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.078**
129-00-0	**Pyrene**	**0.010**	**0.079**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.017**
218-01-9	**Chrysene**	**0.010**	**0.039 Q**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.020**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.020**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.018**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.015**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.031**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	58.0%
d14-Dibenzo(a,h)anthracene	23.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB4857032510COMP
SAMPLE

Lab Sample ID: QQ20B
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 19:45
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.016**
91-57-6	**2-Methylnaphthalene**	**0.010**	**0.010**
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.032**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.056**
129-00-0	**Pyrene**	**0.010**	**0.059**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.011**
218-01-9	**Chrysene**	**0.010**	**0.025 Q**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.014**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.014**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.013**
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.020**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	70.3%
d14-Dibenzo(a,h)anthracene	30.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB1032510COMP
SAMPLE

Lab Sample ID: QQ20C
LIMS ID: 10-8032
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 20:09
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	< 0.010 U
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	Phenanthrene	0.010	< 0.010 U
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	Fluoranthene	0.010	< 0.010 U
129-00-0	Pyrene	0.010	< 0.010 U
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
205-99-2	Benzo(b)fluoranthene	0.010	< 0.010 U
207-08-9	Benzo(k)fluoranthene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	Benzo(g,h,i)perylene	0.010	< 0.010 U
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	62.7%
d14-Dibenzo(a,h)anthracene	24.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB101032510COMP
SAMPLE

Lab Sample ID: QQ20D
LIMS ID: 10-8033
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 20:33
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.016**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.032**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.062**
129-00-0	**Pyrene**	**0.010**	**0.064**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.014**
218-01-9	**Chrysene**	**0.010**	**0.031 Q**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.017**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.017**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.015**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.013**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.025**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.7%
d14-Dibenzo(a,h)anthracene	32.7%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	MNP	DBA	TOT OUT
MB-033010	73.7%	65.3%	0
LCS-033010	70.0%	63.3%	0
CB31A032510COMP	58.0%	23.0%	0
CB31A032510COMP MS	67.7%	28.6%	0
CB31A032510COMP MSD	66.3%	27.7%	0
CB4857032510COMP	70.3%	30.0%	0
CB1032510COMP	62.7%	24.8%	0
CB101032510COMP	64.7%	32.7%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(42-100)	(31-109)
(DBA) = d14-Dibenzo(a,h)anthracene	(40-125)	(10-133)

Prep Method: SW3520C
Log Number Range: 10-8030 to 10-8033

FORM-II SIM SW8270

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted MS/MSD: 03/30/10

Date Analyzed MS: 04/02/10 18:58
MSD: 04/02/10 19:22
Instrument/Analyst MS: NT8/YZ
MSD: NT8/YZ

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 0.50 mL
MSD: 0.50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Naphthalene	0.0170	0.204	0.300	62.3%	0.195	0.300	59.3%	4.5%
2-Methylnaphthalene	0.0118	0.211	0.300	66.4%	0.212	0.300	66.7%	0.5%
1-Methylnaphthalene	< 0.0100 U	0.200	0.300	66.7%	0.201	0.300	67.0%	0.5%
Acenaphthylene	< 0.0100 U	0.199	0.300	66.3%	0.198	0.300	66.0%	0.5%
Acenaphthene	< 0.0100 U	0.198	0.300	66.0%	0.189	0.300	63.0%	4.7%
Fluorene	< 0.0100 U	0.225	0.300	75.0%	0.223	0.300	74.3%	0.9%
Phenanthrene	0.0420	0.270	0.300	76.0%	0.269	0.300	75.7%	0.4%
Anthracene	< 0.0100 U	0.179	0.300	59.7%	0.175	0.300	58.3%	2.3%
Fluoranthene	0.0775	0.295	0.300	72.5%	0.282	0.300	68.2%	4.5%
Pyrene	0.0791	0.291	0.300	70.6%	0.277	0.300	66.0%	4.9%
Benzo(a)anthracene	0.0166	0.194	0.300	59.1%	0.197	0.300	60.1%	1.5%
Chrysene	0.0391 Q	0.170 Q	0.300	43.6%	0.167 Q	0.300	42.6%	1.8%
Benzo(b)fluoranthene	0.0201	0.183	0.300	54.3%	0.178	0.300	52.6%	2.8%
Benzo(k)fluoranthene	0.0201	0.112	0.300	30.6%	0.106	0.300	28.6%	5.5%
Benzo(a)pyrene	0.0185	0.130	0.300	37.2%	0.125	0.300	35.5%	3.9%
Indeno(1,2,3-cd)pyrene	0.0151	0.0989	0.300	27.9%	0.0905	0.300	25.1%	8.9%
Dibenz(a,h)anthracene	< 0.0100 U	0.0927	0.300	30.9%	0.0841	0.300	28.0%	9.7%
Benzo(g,h,i)perylene	0.0307	0.123	0.300	30.8%	0.110	0.300	26.4%	11.2%
Dibenzofuran	< 0.0100 U	0.214	0.300	71.3%	0.210	0.300	70.0%	1.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 18:58
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	---
91-57-6	2-Methylnaphthalene	0.010	---
90-12-0	1-Methylnaphthalene	0.010	---
208-96-8	Acenaphthylene	0.010	---
83-32-9	Acenaphthene	0.010	---
86-73-7	Fluorene	0.010	---
85-01-8	Phenanthrene	0.010	---
120-12-7	Anthracene	0.010	---
206-44-0	Fluoranthene	0.010	---
129-00-0	Pyrene	0.010	---
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
205-99-2	Benzo(b)fluoranthene	0.010	---
207-08-9	Benzo(k)fluoranthene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
191-24-2	Benzo(g,h,i)perylene	0.010	---
132-64-9	Dibenzofuran	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	67.7%
d14-Dibenzo(a,h)anthracene	28.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE DUPLICATE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 19:22
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	---
91-57-6	2-Methylnaphthalene	0.010	---
90-12-0	1-Methylnaphthalene	0.010	---
208-96-8	Acenaphthylene	0.010	---
83-32-9	Acenaphthene	0.010	---
86-73-7	Fluorene	0.010	---
85-01-8	Phenanthrene	0.010	---
120-12-7	Anthracene	0.010	---
206-44-0	Fluoranthene	0.010	---
129-00-0	Pyrene	0.010	---
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
205-99-2	Benzo(b)fluoranthene	0.010	---
207-08-9	Benzo(k)fluoranthene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
191-24-2	Benzo(g,h,i)perylene	0.010	---
132-64-9	Dibenzofuran	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	66.3%
d14-Dibenzo(a,h)anthracene	27.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-033010
LAB CONTROL SAMPLE

Lab Sample ID: LCS-033010
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 03/30/10
Date Analyzed LCS: 04/02/10 18:11
Instrument/Analyst LCS: NT8/YZ

Sample Amount LCS: 500 mL
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS		Spike Added	Recovery
Naphthalene	0.186		0.300	62.0%
2-Methylnaphthalene	0.201		0.300	67.0%
1-Methylnaphthalene	0.196		0.300	65.3%
Acenaphthylene	0.183		0.300	61.0%
Acenaphthene	0.192		0.300	64.0%
Fluorene	0.221		0.300	73.7%
Phenanthrene	0.228		0.300	76.0%
Anthracene	0.177		0.300	59.0%
Fluoranthene	0.248		0.300	82.7%
Pyrene	0.238		0.300	79.3%
Benzo(a)anthracene	0.236		0.300	78.7%
Chrysene	0.176	Q	0.300	58.7%
Benzo(b)fluoranthene	0.282		0.300	94.0%
Benzo(k)fluoranthene	0.160		0.300	53.3%
Benzo(a)pyrene	0.169		0.300	56.3%
Indeno(1,2,3-cd)pyrene	0.174		0.300	58.0%
Dibenz(a,h)anthracene	0.184		0.300	61.3%
Benzo(g,h,i)perylene	0.169		0.300	56.3%
Dibenzofuran	0.215		0.300	71.7%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	70.0%
d14-Dibenzo(a,h)anthracene	63.3%

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

QQ20MBW1

Lab Name: ANALYTICAL RESOURCES, INC
Client: FLOYD-SNIDER

ARI Job No: QQ20
Project: LORA LAKE APARTMENTS

Lab File ID: QQ20MB
Date Extracted: 03/30/10

Instrument ID: NT8
Date Analyzed: 04/02/10

Matrix: LIQUID
Time Analyzed: 1747

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	QQ20LCSW1	QQ20LCSW1	QQ20SB	04/02/10
02	CB31A032510COMP	QQ20A	QQ20A	04/02/10
03	CB31A032510COMP	QQ20AMS	QQ20AMS	04/02/10
04	CB31A032510COMP	QQ20AMSD	QQ20AMSD	04/02/10
05	CB4857032510COMP	QQ20B	QQ20B	04/02/10
06	CB1032510COMP	QQ20C	QQ20C	04/02/10
07	CB101032510COMP	QQ20D	QQ20D	04/02/10
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MB-033010
METHOD BLANK

Lab Sample ID: MB-033010
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 17:47
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	< 0.010 U
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	Phenanthrene	0.010	< 0.010 U
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	Fluoranthene	0.010	< 0.010 U
129-00-0	Pyrene	0.010	< 0.010 U
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
205-99-2	Benzo(b)fluoranthene	0.010	< 0.010 U
207-08-9	Benzo(k)fluoranthene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	Benzo(g,h,i)perylene	0.010	< 0.010 U
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	73.7%
d14-Dibenzo(a,h)anthracene	65.3%

PCP/CHLOROPHENOLS ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A032510COMP
SAMPLE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 21:50
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**0.25**	**0.84**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	74.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB4857032510COMP
SAMPLE

Lab Sample ID: QQ20B
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 22:50
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**0.25**	**0.60**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	63.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB1032510COMP
SAMPLE

Lab Sample ID: QQ20C
LIMS ID: 10-8032
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/03/10 23:10
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	68.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB101032510COMP
SAMPLE

Lab Sample ID: QQ20D
LIMS ID: 10-8033
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/03/10 23:30
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	0.59

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	62.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	TBP	TOT OUT
MB-033010	78.4%	0
LCS-033010	83.8%	0
CB31A032510COMP	74.4%	0
CB31A032510COMP MS	76.8%	0
CB31A032510COMP MSD	79.0%	0
CB4857032510COMP	63.6%	0
CB1032510COMP	68.4%	0
CB101032510COMP	62.4%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 10-8030 to 10-8033

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB31A032510COMP
MS/MSD

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted MS/MSD: 03/30/10

Sample Amount MS: 500 mL
MSD: 500 mL

Date Analyzed MS: 04/02/10 22:10
MSD: 04/02/10 22:30

Final Extract Volume MS: 50 mL
MSD: 50 mL

Instrument/Analyst MS: ECD1/JGR
MSD: ECD1/JGR

Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	0.84	3.03	2.50	87.6%	3.14	2.50	92.0%	3.6%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 22:10
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	76.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB31A032510COMP
MATRIX SPIKE DUP

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 22:30
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	79.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-033010
LAB CONTROL

Lab Sample ID: LCS-033010
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 21:30
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	2.51	2.50	100%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	83.8%

Results reported in µg/L

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

QQ20MBW1

Lab Name: ANALYTICAL RESOURCES, INC — Client: FLOYD SNIDER

ARI Job No.: QQ20 — Project: LORA LAKE APTS

Lab Sample ID: QQ20MBW1 — Lab File ID: 0402A024

Matrix (soil/water) LIQUID — Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y — Date Extracted: 03/30/10

Date Analyzed (1): 04/02/10 — Date Analyzed (2): 04/02/10

Time Analyzed (1): 2111 — Time Analyzed (2): 2111

Instrument ID (1): ECD1 — Instrument ID (2): ECD1

GC Column (1): ZB5 ID: 0.53(mm) — GC Column (2): ZB35 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QQ20LCSW1	QQ20LCSW1	04/02/10	04/02/10
02	CB31A032510C	QQ20A	04/02/10	04/02/10
03	CB31A032510C	QQ20AMS	04/02/10	04/02/10
04	CB31A032510C	QQ20AMSD	04/02/10	04/02/10
05	CB4857032510	QQ20B	04/02/10	04/02/10
06	CB1032510COM	QQ20C	04/03/10	04/03/10
07	CB101032510C	QQ20D	04/03/10	04/03/10

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-033010
METHOD BLANK

Lab Sample ID: MB-033010
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 21:11
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	78.4%

FORM I

TPHD ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1
Matrix: Water

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Data Release Authorized:
Reported: 04/06/10

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
QQ22A	CB31A032910GRAB	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8052	HC ID: **MOTOR OIL**		FID9	1.0	**Motor Oil**	**0.50**	**1.1**
					o-Terphenyl		73.6%
QQ22B	CB4857032910GRAB	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8053	HC ID: **MOTOR OIL**		FID9	1.0	**Motor Oil**	**0.50**	**0.68**
					o-Terphenyl		69.6%
MB-033010	Method Blank	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8054	HC ID: ---		FID9	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		80.0%
QQ22C	CB1032910GRAB	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8054	HC ID: ---		FID9	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		75.8%
QQ22D	CB100032910GRAB	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8055	HC ID: **MOTOR OIL**		FID9	1.0	**Motor Oil**	**0.50**	**1.0**
					o-Terphenyl		85.4%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	OTER	TOT OUT
CB31A032910GRAB	73.6%	0
CB4857032910GRAB	69.6%	0
MB-033010	80.0%	0
LCS-033010	83.4%	0
CB1032910GRAB	75.8%	0
CB1032910GRAB MS	71.3%	0
CB1032910GRAB MSD	97.8%	0
CB100032910GRAB	85.4%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(51-120)	(41-121)

Prep Method: SW3510C
Log Number Range: 10-8052 to 10-8055

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: CB1032910GRAB**
Page 1 of 1 **MS/MSD**

Lab Sample ID: QQ22C
LIMS ID: 10-8054
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Date Extracted MS/MSD: 03/30/10

Date Analyzed MS: 03/31/10 18:50
MSD: 03/31/10 19:10
Instrument/Analyst MS: FID/MS
MSD: FID/MS

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	< 0.25	1.97	3.00	65.7%	2.58	3.00	86.0%	26.8%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	71.3%	97.8%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: LCS-033010**
Page 1 of 1 **LAB CONTROL**

Lab Sample ID: LCS-033010
LIMS ID: 10-8054
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Date Extracted: 03/30/10
Date Analyzed: 03/31/10 15:53
Instrument/Analyst: FID/MS

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.24	3.00	74.7%

TPHD Surrogate Recovery

o-Terphenyl	83.4%

Results reported in mg/L

FORM III

4

TPH METHOD BLANK SUMMARY

BLANK NO.

QQ33MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: QQ22 Project No.: LLA

Date Extracted: 03/30/10 Matrix: LIQUID

Date Analyzed : 03/31/10 Instrument ID : FID9

Time Analyzed : 1533

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	QQ33LCSW1	QQ33LCSW1	03/31/10
02	CB31A032910G	QQ22A	03/31/10
03	CB4857032910	QQ22B	03/31/10
04	CB1032910GRA	QQ22C	03/31/10
05	CB1032910GRA	QQ22CMS	03/31/10
06	CB1032910GRA	QQ22CMSD	03/31/10
07	CB100032910G	QQ22D	03/31/10

FORM IV TPH

METALS ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A032510COMP
SAMPLE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**1.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB4857032510COMP
SAMPLE

Lab Sample ID: QQ20B
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.9**	

U-Analyte undetected at given RL
RL-Reporting Limit

FORM-I

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB1032510COMP
SAMPLE

Lab Sample ID: QQ20C
LIMS ID: 10-8032
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB101032510COMP
SAMPLE

Lab Sample ID: QQ20D
LIMS ID: 10-8033
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.8**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	1.07	26.2	25.0	101%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A032510COMP
DUPLICATE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	1.1	1.1	0.0%	+/- 20%	

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: QQ20LCS
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.1	25.0	100%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: QQ20MB
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A032510COMP
SAMPLE

Lab Sample ID: QQ20E
LIMS ID: 10-8034
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB4857032510COMP
SAMPLE

Lab Sample ID: QQ20F
LIMS ID: 10-8035
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.5**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB1032510COMP
SAMPLE

Lab Sample ID: QQ20G
LIMS ID: 10-8036
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB101032510COMP
SAMPLE

Lab Sample ID: QQ20H
LIMS ID: 10-8037
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.5**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20E
LIMS ID: 10-8034
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.570	26.1	25.0	102%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A032510COMP
DUPLICATE

Lab Sample ID: QQ20E
LIMS ID: 10-8034
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.6	0.6	0.0%	+/- 0.2	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: QQ20LCS
LIMS ID: 10-8035
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.4	25.0	102%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: QQ20MB
LIMS ID: 10-8035
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

GENERAL CHEMISTRY ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
Total Suspended Solids by Method EPA 160.2

Data Release Authorized:
Reported: 03/30/10
Date Received: 03/26/10
Page 1 of 1

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
CB31A032510COMP QQ20A 10-8030	03/25/10	Water	03/29/10 13:45 032910#1	2.0	40.2
CB4857032510COMP QQ20B 10-8031	03/25/10	Water	03/29/10 13:45 032910#1	2.2	35.9
CB1032510COMP QQ20C 10-8032	03/25/10	Water	03/29/10 13:45 032910#1	2.1	9.5
CB101032510COMP QQ20D 10-8033	03/25/10	Water	03/29/10 13:45 032910#1	2.8	26.7

Reported in mg/L

RL-Analytical reporting limit
U-Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
QQ20-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/30/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: QQ20A Client ID: CB31A032510COMP					
Total Suspended Solids	03/29/10	mg/L	40.2	44.0	9.0%

LAB CONTROL RESULTS-CONVENTIONALS
QQ20-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/30/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
Total Suspended Solids	03/29/10 13:45	mg/L	49.5	50.0	99.0%

METHOD BLANK RESULTS-CONVENTIONALS
QQ20-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/30/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Total Suspended Solids	03/29/10 13:45	mg/L	< 1.0 U

SUBCONTRACTED ANALYSIS

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **6069**

Received on: **03/30/2010** Project Due: **04/21/2010** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
6069-001-SA	0	QQ20	CB31A032510COMP	EPA 1613 D/F	Aqueous	03/25/2010	09:47 pm	03/25/2011
6069-002-SA	0	QQ20	CB4857032510COMP	EPA 1613 D/F	Aqueous	03/25/2010	10:20 pm	03/25/2011
6069-003-SA	0	QQ20	CB1032510COMP	EPA 1613 D/F	Aqueous	03/25/2010	10:19 pm	03/25/2011
6069-004-SA	0	QQ20	CB101032510COMP	EPA 1613 D/F	Aqueous	03/25/2010	11:20 pm	03/25/2011

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-001-MB
Client ID: Method Blank
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-06-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.516		-	0.212				
1,2,3,7,8-PeCDD	ND	0.724		-	0.302				
1,2,3,4,7,8-HxCDD	ND	0.803		-	0.328				
1,2,3,6,7,8-HxCDD	ND	0.928		-	0.381	Total TCDD	ND	0.516	
1,2,3,7,8,9-HxCDD	ND	0.857		-	0.351	Total PeCDD	ND	0.724	
1,2,3,4,6,7,8-HpCDD	ND	0.952		-	0.495	Total HxCDD	ND	0.928	
OCDD	ND	3.12		-	1.02	Total HpCDD	ND	0.952	
2,3,7,8-TCDF	ND	0.400		-	0.112				
1,2,3,7,8-PeCDF	ND	0.699		-	0.219				
2,3,4,7,8-PeCDF	ND	0.702		-	0.232				
1,2,3,4,7,8-HxCDF	ND	0.613		-	0.162				
1,2,3,6,7,8-HxCDF	ND	0.641		-	0.167				
2,3,4,6,7,8-HxCDF	ND	0.652		-	0.167				
1,2,3,7,8,9-HxCDF	ND	0.790		-	0.185	Total TCDF	ND	0.400	
1,2,3,4,6,7,8-HpCDF	ND	0.613		-	0.251	Total PeCDF	ND	0.702	
1,2,3,4,7,8,9-HpCDF	ND	0.692		-	0.280	Total HxCDF	ND	0.790	
OCDF	ND	1.73		-	0.451	Total HpCDF	ND	0.692	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	78.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	61.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	69.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	67.3	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	64.0	23.0 - 140	
13C-OCDD	62.3	17.0 - 157	
13C-2,3,7,8-TCDF	79.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	59.2	24.0 - 185	
13C-2,3,4,7,8-PeCDF	59.0	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	65.5	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	62.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	62.4	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	61.3	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	56.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	56.3	26.0 - 138	
13C-OCDF	55.5	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	96.1	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-001-OPR
Client ID: OPR
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: ng/ml

Acquired: 04-06-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	8.85	6.70 - 15.8	
1,2,3,7,8-PeCDD	47.6	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	44.8	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	46.1	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	44.8	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	45.3	35.0 - 70.0	
OCDD	92.7	78.0 - 144	
2,3,7,8-TCDF	8.74	7.50 - 15.8	
1,2,3,7,8-PeCDF	47.4	40.0 - 67.0	
2,3,4,7,8-PeCDF	46.9	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	47.5	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	48.1	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	47.5	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	46.9	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	48.1	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	48.0	39.0 - 69.0	
OCDF	93.3	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	81.7	20.0 - 175	
13C-1,2,3,7,8-PeCDD	60.8	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	77.1	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	74.5	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	66.7	26.0 - 166	
13C-OCDD	60.8	13.0 - 198	
13C-2,3,7,8-TCDF	83.6	22.0 - 152	
13C-1,2,3,7,8-PeCDF	58.9	21.0 - 192	
13C-2,3,4,7,8-PeCDF	58.7	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	74.8	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	71.4	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	70.1	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	66.0	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	61.3	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	57.9	20.0 - 186	
13C-OCDF	53.8	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	100	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-001-SA
Client ID: CB31A032510COMP
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: 03-30-2010
Amount: 1.043 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-06-2010
2005 WHO TEQ: 22.3

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.507		-	0.212				
1,2,3,7,8-PeCDD	3.33	-	J	3.33	0.302				
1,2,3,4,7,8-HxCDD	6.14	-	J	0.614	0.328				
1,2,3,6,7,8-HxCDD	17.7	-	J	1.77	0.381	Total TCDD	ND	0.507	
1,2,3,7,8,9-HxCDD	11.7	-	J	1.17	0.351	Total PeCDD	12.4	-	J
1,2,3,4,6,7,8-HpCDD	619	-		6.19	0.495	Total HxCDD	91.1	-	
OCDD	7770	-		2.33	1.02	Total HpCDD	1030	-	
2,3,7,8-TCDF	ND	0.422		-	0.112				
1,2,3,7,8-PeCDF	ND	1.35		-	0.219				
2,3,4,7,8-PeCDF	ND	1.45		-	0.232				
1,2,3,4,7,8-HxCDF	25.0	-		2.50	0.162				
1,2,3,6,7,8-HxCDF	15.0	-	J	1.50	0.167				
2,3,4,6,7,8-HxCDF	8.30	-	J	0.830	0.167				
1,2,3,7,8,9-HxCDF	2.42	-	J	0.242	0.185	Total TCDF	26.2	-	D,M
1,2,3,4,6,7,8-HpCDF	154	-		1.54	0.251	Total PeCDF	90.6	-	D,M
1,2,3,4,7,8,9-HpCDF	14.7	-	J	0.147	0.280	Total HxCDF	386	-	D,M
OCDF	430	-		0.129	0.451	Total HpCDF	494	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	96.9	25.0 - 164	
13C-1,2,3,7,8-PeCDD	83.6	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	90.7	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	85.5	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	88.7	23.0 - 140	
13C-OCDD	83.8	17.0 - 157	
13C-2,3,7,8-TCDF	94.4	24.0 - 169	
13C-1,2,3,7,8-PeCDF	81.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	78.8	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	81.1	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	75.9	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	77.7	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	80.2	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	75.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	77.6	26.0 - 138	
13C-OCDF	70.5	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	109	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/5/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-002-SA
Client ID: CB4857032510COMP
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: 03-30-2010
Amount: 1.044 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-07-2010
2005 WHO TEQ: 13.2

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.404		-	0.212				
1,2,3,7,8-PeCDD	2.00	-	J	2.00	0.302				
1,2,3,4,7,8-HxCDD	4.03	-	J	0.403	0.328				
1,2,3,6,7,8-HxCDD	11.3	-	J	1.13	0.381	Total TCDD	ND	0.404	
1,2,3,7,8,9-HxCDD	7.19	-	J	0.719	0.351	Total PeCDD	5.71	-	J
1,2,3,4,6,7,8-HpCDD	381	-		3.81	0.495	Total HxCDD	59.1	-	
OCDD	4200	-		1.26	1.02	Total HpCDD	634	-	
2,3,7,8-TCDF	ND	0.406		-	0.112				
1,2,3,7,8-PeCDF	ND	0.882		-	0.219				
2,3,4,7,8-PeCDF	ND	0.955		-	0.232				
1,2,3,4,7,8-HxCDF	15.1	-	J	1.51	0.162				
1,2,3,6,7,8-HxCDF	6.34	-	J	0.634	0.167				
2,3,4,6,7,8-HxCDF	5.30	-	J	0.530	0.167				
1,2,3,7,8,9-HxCDF	1.70	-	J	0.170	0.185	Total TCDF	12.7	-	D,M
1,2,3,4,6,7,8-HpCDF	82.2	-		0.822	0.251	Total PeCDF	38.0	-	D,M
1,2,3,4,7,8,9-HpCDF	8.95	-	J	0.0895	0.280	Total HxCDF	176	-	D,M
OCDF	255	-		0.0765	0.451	Total HpCDF	280	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	90.3	25.0 - 164	
13C-1,2,3,7,8-PeCDD	77.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	85.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	79.6	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	83.3	23.0 - 140	
13C-OCDD	78.0	17.0 - 157	
13C-2,3,7,8-TCDF	91.4	24.0 - 169	
13C-1,2,3,7,8-PeCDF	79.0	24.0 - 185	
13C-2,3,4,7,8-PeCDF	75.4	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	77.0	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	74.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	74.7	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	75.7	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	72.6	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	74.4	26.0 - 138	
13C-OCDF	67.5	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	98.4	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-003-SA
Client ID: CB1032510COMP
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: 03-30-2010
Amount: 1.044 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-07-2010
2005 WHO TEQ: 0.218

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.513		-	0.212				
1,2,3,7,8-PeCDD	ND	0.780		-	0.302				
1,2,3,4,7,8-HxCDD	ND	0.797		-	0.328				
1,2,3,6,7,8-HxCDD	ND	0.962		-	0.381	Total TCDD	ND	0.513	
1,2,3,7,8,9-HxCDD	ND	0.868		-	0.351	Total PeCDD	ND	0.780	
1,2,3,4,6,7,8-HpCDD	15.3	-	J	0:153	0.495	Total HxCDD	5.65	-	J
OCDD	90.7	-		0.0272	1.02	Total HpCDD	31.8	-	
2,3,7,8-TCDF	ND	0.500		-	0.112				
1,2,3,7,8-PeCDF	ND	0.908		-	0.219				
2,3,4,7,8-PeCDF	ND	1.02		-	0.232				
1,2,3,4,7,8-HxCDF	ND	0.475		-	0.162				
1,2,3,6,7,8-HxCDF	ND	0.496		-	0.167				
2,3,4,6,7,8-HxCDF	ND	0.616		-	0.167				
1,2,3,7,8,9-HxCDF	ND	0.669		-	0.185	Total TCDF	ND	0.500	
1,2,3,4,6,7,8-HpCDF	3.56	-	J	0.0356	0.251	Total PeCDF	ND	1.02	
1,2,3,4,7,8,9-HpCDF	ND	0.438		-	0.280	Total HxCDF	3.67	-	J
OCDF	6.80	-	J	0.00204	0.451	Total HpCDF	7.45	-	J

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	65.8	25.0 - 164	
13C-1,2,3,7,8-PeCDD	54.3	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	66.6	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	61.4	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	63.5	23.0 - 140	
13C-OCDD	60.0	17.0 - 157	
13C-2,3,7,8-TCDF	60.7	24.0 - 169	
13C-1,2,3,7,8-PeCDF	56.2	24.0 - 185	
13C-2,3,4,7,8-PeCDF	49.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	65.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	61.0	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	53.3	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	54.2	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	58.2	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	57.8	26.0 - 138	
13C-OCDF	53.8	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	68.8	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-004-SA
Client ID: CB101032510COMP
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: 03-30-2010
Amount: 1.036 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-07-2010
2005 WHO TEQ: 14.0

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.460		-	0.212				
1,2,3,7,8-PeCDD	2.25	-	J	2.25	0.302				
1,2,3,4,7,8-HxCDD	4.09	-	J	0.409	0.328				
1,2,3,6,7,8-HxCDD	11.8	-	J	1.18	0.381	Total TCDD	ND	0.460	
1,2,3,7,8,9-HxCDD	8.04	-	J	0.804	0.351	Total PeCDD	6.39	-	J
1,2,3,4,6,7,8-HpCDD	405	-		4.05	0.495	Total HxCDD	63.4	-	
OCDD	4430	-		1.33	1.02	Total HpCDD	677	-	
2,3,7,8-TCDF	ND	0.412		-	0.112				
1,2,3,7,8-PeCDF	ND	1.27		-	0.219				
2,3,4,7,8-PeCDF	ND	1.30		-	0.232				
1,2,3,4,7,8-HxCDF	15.6	-	J	1.56	0.162				
1,2,3,6,7,8-HxCDF	6.19	-	J	0.619	0.167				
2,3,4,6,7,8-HxCDF	5.41	-	J	0.541	0.167				
1,2,3,7,8,9-HxCDF	1.61	-	J	0.161	0.185	Total TCDF	11.5	-	D,M
1,2,3,4,6,7,8-HpCDF	94.7	-		0.947	0.251	Total PeCDF	39.1	-	D,M
1,2,3,4,7,8,9-HpCDF	9.62	-	J	0.0962	0.280	Total HxCDF	172	-	D,M
OCDF	270	-		0.0810	0.451	Total HpCDF	315	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	93.7	25.0 - 164	
13C-1,2,3,7,8-PeCDD	75.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	88.5	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	84.1	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	85.3	23.0 - 140	
13C-OCDD	78.8	17.0 - 157	
13C-2,3,7,8-TCDF	93.3	24.0 - 169	
13C-1,2,3,7,8-PeCDF	76.0	24.0 - 185	
13C-2,3,4,7,8-PeCDF	75.4	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	82.0	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	75.9	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	77.7	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	78.6	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	72.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	75.0	26.0 - 138	
13C-OCDF	67.9	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	102	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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Laboratory Data Package

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

SIM Volatile Analysis
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SW8260-SIM SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	DCE	TOL	TOT OUT
MB-032910	109%	102%	0
LCS-032910	99.5%	102%	0
LCSD-032910	105%	101%	0
CB31A032910GRAB	122%	102%	0
CB4857032910GRAB	123%	102%	0
CB1032910GRAB	124%	103%	0
CB100032910GRAB	131%	102%	0
TB032810	122%	102%	0

	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-133)	(80-136)
(TOL) = d8-Toluene	(80-121)	(80-120)

Prep Method: SW5030
Log Number Range: 10-8052 to 10-8056

FORM-II SW8260-SIM

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB31A032510GRAB**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: QP69A
LIMS ID: 10-7709
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QP69-Floyd/Snider
Project: Lora Lake Apartment
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/25/10

Instrument/Analyst MS: NT7/PKC
MSD: NT7/PKC
Date Analyzed MS: 03/29/10 19:56
MSD: 03/29/10 20:23

Sample Amount MS: 10.0 mL
MSD: 10.0 mL
Purge Volume MS: 10.0 mL
MSD: 10.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
1,2-Dichloroethane	< 0.020 U	1.20	1.00	120%	1.22	1.00	122%	1.7%
cis-1,2-Dichloroethene	< 0.020 U	0.992	1.00	99.2%	1.03	1.00	103%	3.8%
trans-1,2-Dichloroethene	< 0.020 U	1.00	1.00	100%	1.04	1.00	104%	3.9%
Trichloroethene	< 0.020 U	1.06	1.00	106%	1.05	1.00	105%	0.9%
Tetrachloroethene	< 0.020 U	1.12	1.00	112%	1.11	1.00	111%	0.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: LCS-032910
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-032910
LIMS ID: 10-8052
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT7/PKC
LCSD: NT7/PKC
Date Analyzed LCS: 03/29/10 13:12
LCSD: 03/29/10 13:39

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,2-Dichloroethane	1.00	1.00	100%	1.18	1.00	118%	16.5%
cis-1,2-Dichloroethene	0.880	1.00	88.0%	1.04	1.00	104%	16.7%
trans-1,2-Dichloroethene	0.895	1.00	89.5%	1.06	1.00	106%	16.9%
Trichloroethene	0.928	1.00	92.8%	1.04	1.00	104%	11.4%
Tetrachloroethene	0.971	1.00	97.1%	1.09	1.00	109%	11.5%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	99.5%	105%
d8-Toluene	102%	101%

4A
VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0330

Lab Name: ANALYTICAL RESOURCES, INC
Client: FLOYD/SNIDER

ARI Job No: QP69
Project: LORA LAKE APARTMENT

Lab File ID: 03301005
Lab Sample ID: MB0330

Date Analyzed: 03/29/10
Time Analyzed: 1405

Instrument ID: NT7
Heated Purge: (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0330	LCS0330	03301003	1312
02	LCSD0330	LCSD0330	03301004	1339
03	TB032510	QP69E	03301007	1503
04	TB032810	QQ22E	03301008	1530
05	CB31A032510G	QP69A	03301017	1930
06	CB31A032510G	QP69AMS	03301018	1956
07	CB31A032510G	QP69AMSD	03301019	2023
08	CB4857032510	QP69B	03301020	2050
09	CB1032510GRA	QP69C	03301021	2116
10	CB101032510G	QP69D	03301022	2143
11	CB31A032910G	QQ22A	03301023	2209
12	CB4857032910	QQ22B	03301024	2236
13	CB1032910GRA	QQ22C	03301025	2303
14	CB100032910G	QQ22D	03301026	2329
15				
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COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES, INC Contract: FLOYD/SNIDER

Lab Code: ARI Case No.: LORA LAKE APARTMENT SDG No.: QP69

Lab File ID: 03181001 BFB Injection Date: 03/18/10

Instrument ID: NT7 BFB Injection Time: 0135

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.0
75	30.0 - 66.0% of mass 95	41.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 101.0% of mass 95	69.6
175	4.0 - 9.0% of mass 174	4.9 (7.1)1
176	93.0 - 101.0% of mass 174	68.7 (98.7)1
177	5.0 - 9.0% of mass 176	4.4 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	100 PPT	01000318	03181006	03/18/10	0407
02	20 PPT	00200318	03181008	03/18/10	0501
03	4 PPB	40000318	03181009	03/18/10	0527
04	2 PPB	20000318	03181010	03/18/10	0554
05	1 PPB	10000318	03181011	03/18/10	0621
06	500 PPT	05000318	03181012	03/18/10	0647
07	ICV0318	ICV0318	03181013	03/18/10	0714
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES, INC Contract: FLOYD/SNIDER

Lab Code: ARI Case No.: LORA LAKE APARTMENT SDG No.: QP69

Lab File ID: 03301001 BFB Injection Date: 03/29/10

Instrument ID: NT7 BFB Injection Time: 1206

GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.3
75	30.0 - 66.0% of mass 95	43.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 101.0% of mass 95	69.6
175	4.0 - 9.0% of mass 174	5.0 (7.2)1
176	93.0 - 101.0% of mass 174	65.1 (93.5)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0330	CC0330	03301002	03/29/10	1245
02	LCS0330	LCS0330	03301003	03/29/10	1312
03	LCSD0330	LCSD0330	03301004	03/29/10	1339
04	MB0330	MB0330	03301005	03/29/10	1405
05	TB032510	QP69E	03301007	03/29/10	1503
06	TB032810	QQ22E	03301008	03/29/10	1530
07	CB31A032510GRAB	QP69A	03301017	03/29/10	1930
08	CB31A032510GRAB	QP69AMS	03301018	03/29/10	1956
09	CB31A032510GRAB	QP69AMSD	03301019	03/29/10	2023
10	CB4857032510GRAB	QP69B	03301020	03/29/10	2050
11	CB1032510GRAB	QP69C	03301021	03/29/10	2116
12	CB101032510GRAB	QP69D	03301022	03/29/10	2143
13	CB31A032910GRAB	QQ22A	03301023	03/29/10	2209
14	CB4857032910GRAB	QQ22B	03301024	03/29/10	2236
15	CB1032910GRAB	QQ22C	03301025	03/29/10	2303
16	CB100032910GRAB	QQ22D	03301026	03/29/10	2329
17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QP69 Project: LORA LAKE APARTMENT

Ical Midpoint ID: 03181012 Ical Date: 03/18/10

Instrument ID: NT7 Project Run Date: 03/18/10

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	415601	5.32	615588	5.75		
	UPPER LIMIT	831202	5.82	1231176	6.25		
	LOWER LIMIT	207800	4.82	307794	5.25		
	Sample ID						
01	ICV0318	409680	5.32	614179	5.75		
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QP69 Project: LORA LAKE APARTMENT

Ical Midpoint ID: 03181012 Ical Date: 03/18/10

Instrument ID: NT7 Project Run Date: 03/29/10

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	415601	5.32	615588	5.75		
	UPPER LIMIT	831202	5.82	1231176	6.25		
	LOWER LIMIT	207800	4.82	307794	5.25		
	Sample ID						
01	LCS0330	519204	5.33	715267	5.75		
02	LCSD0330	483790	5.32	698198	5.75		
03	MB0330	487441	5.33	670171	5.76		
04	TB032510	456756	5.32	654382	5.75		
05	TB032810	455606	5.33	657384	5.76		
06	CB31A032510G	431275	5.33	614940	5.76		
07	CB31A032510G	468699	5.33	636642	5.76		
08	CB31A032510G	445071	5.33	634500	5.76		
09	CB4857032510	453806	5.33	612020	5.76		
10	CB1032510GRA	438892	5.33	598574	5.76		
11	CB101032510G	420095	5.32	602942	5.75		
12	CB31A032910G	435261	5.33	586771	5.75		
13	CB4857032910	415408	5.33	568553	5.76		
14	CB1032910GRA	395094	5.33	565599	5.75		
15	CB100032910G	389406	5.33	558769	5.75		
16							
17							
18							
19							
20							
21							
22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

SIM Volatile Analysis
Sample Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB31A032910GRAB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QQ22A
LIMS ID: 10-8052
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 22:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	102%

PC 3/31/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301023.d
Lab Smp Id: QQ22A Client Smp ID: CB31A032910GRAB
Inj Date : 29-MAR-2010 22:09
Operator : PC Inst ID: nt7.i
Smp Info : QQ22A,10,10,0
Misc Info : 10-8052
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:25 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.327	5.315	(1.000)	435261	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.327	5.327	(1.000)	192302	1219.38	1219.4(R)
	176 1,2-Dichloroethane	62	5.386	5.386	(1.011)	542	2.63128	2.631(Q)
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.746	5.745	(1.000)	586771	1000.00	
$	9 d8-Toluene	98	6.902	6.903	(1.201)	681323	1020.90	1020.9
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301023.d
Lab Smp Id: QQ22A
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8052

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: CB31A032910GRAB
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	435261	-0.33
7 1,4-Difluorobenze	618992	309496	1237984	586771	-5.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.33	0.23
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ22A
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: all.sub
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8052

Client SDG: QQ22
Fraction: VOA
Client Smp ID: CB31A032910GRAB
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

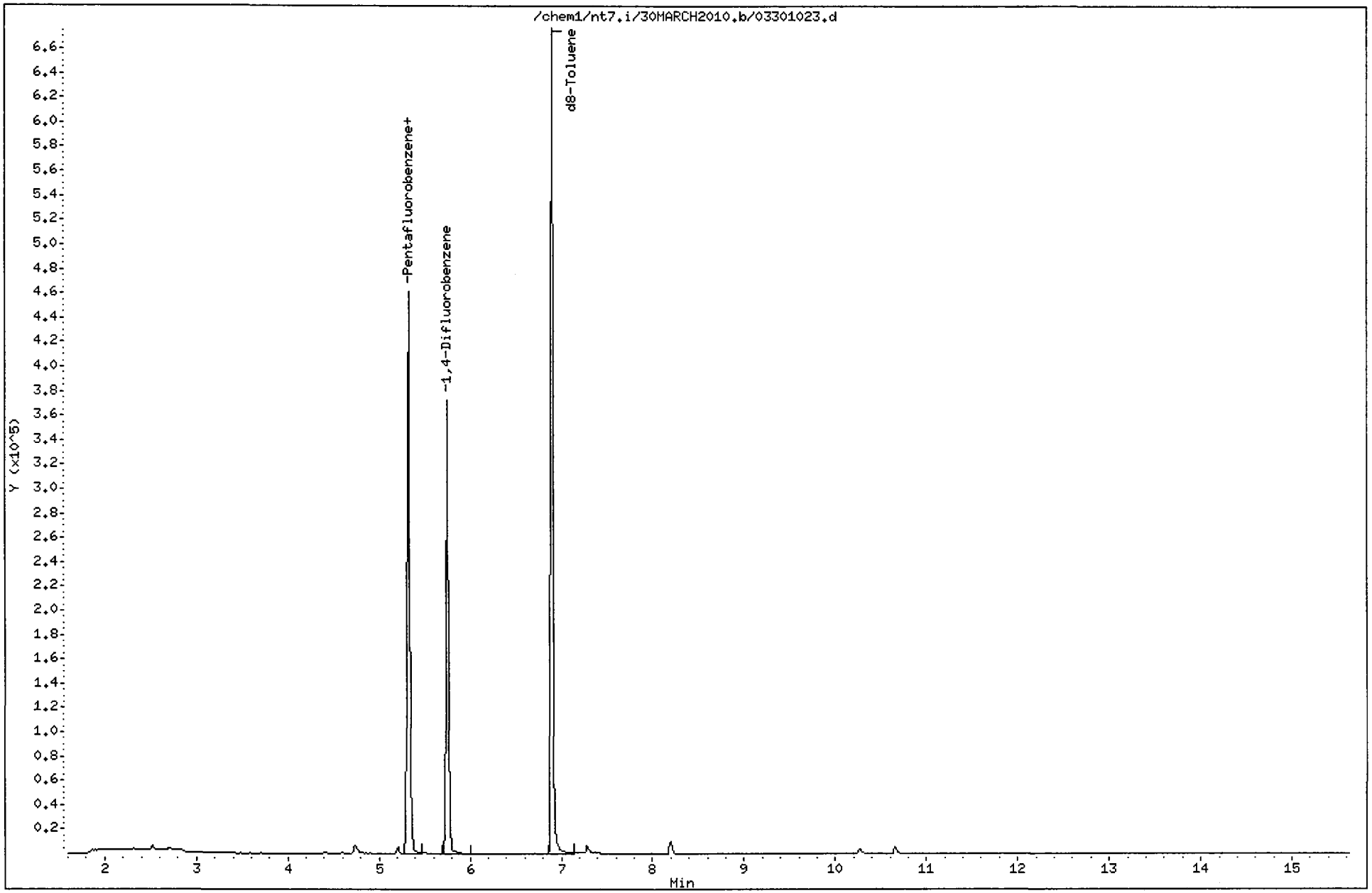
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1219.4	121.94*	76-119
$ 9 d8-Toluene	1000.0	1020.9	102.09	60-140

Data File: /chem1/nt7.i/30MARCH2010.b/03301023.d
Date : 29-MAR-2010 22:09
Client ID: CB31A032910GRAB
Sample Info: QQ22A,10,10,0

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB4857032910GRAB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QQ22B
LIMS ID: 10-8053
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 22:36

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	123%
d8-Toluene	102%

PS 3/31/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301024.d
Lab Smp Id: QQ22B Client Smp ID: CB4857032910GRAB
Inj Date : 29-MAR-2010 22:36
Operator : PC Inst ID: nt7.i
Smp Info : QQ22B,10,10,0
Misc Info : 10-8053
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:25 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	5.210	5.209	(0.905)	8994	11.7058	11.706
*	4 Pentafluorobenzene	168	5.328	5.315	(1.000)	415408	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.328	5.327	(1.000)	185509	1232.52	1232.5(R)
	176 1,2-Dichloroethane	62	5.387	5.386	(1.011)	635	3.22608	3.226(Q)
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.757	5.745	(1.000)	568553	1000.00	
$	9 d8-Toluene	98	6.903	6.903	(1.199)	659962	1020.57	1020.6
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301024.d
Lab Smp Id: QQ22B
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8053

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: CB4857032910GRAB
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	415408	-4.88
7 1,4-Difluorobenze	618992	309496	1237984	568553	-8.15

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.33	0.24
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.20

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ22B
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: all.sub
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8053

Client SDG: QQ22
Fraction: VOA
Client Smp ID: CB4857032910GRAB
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

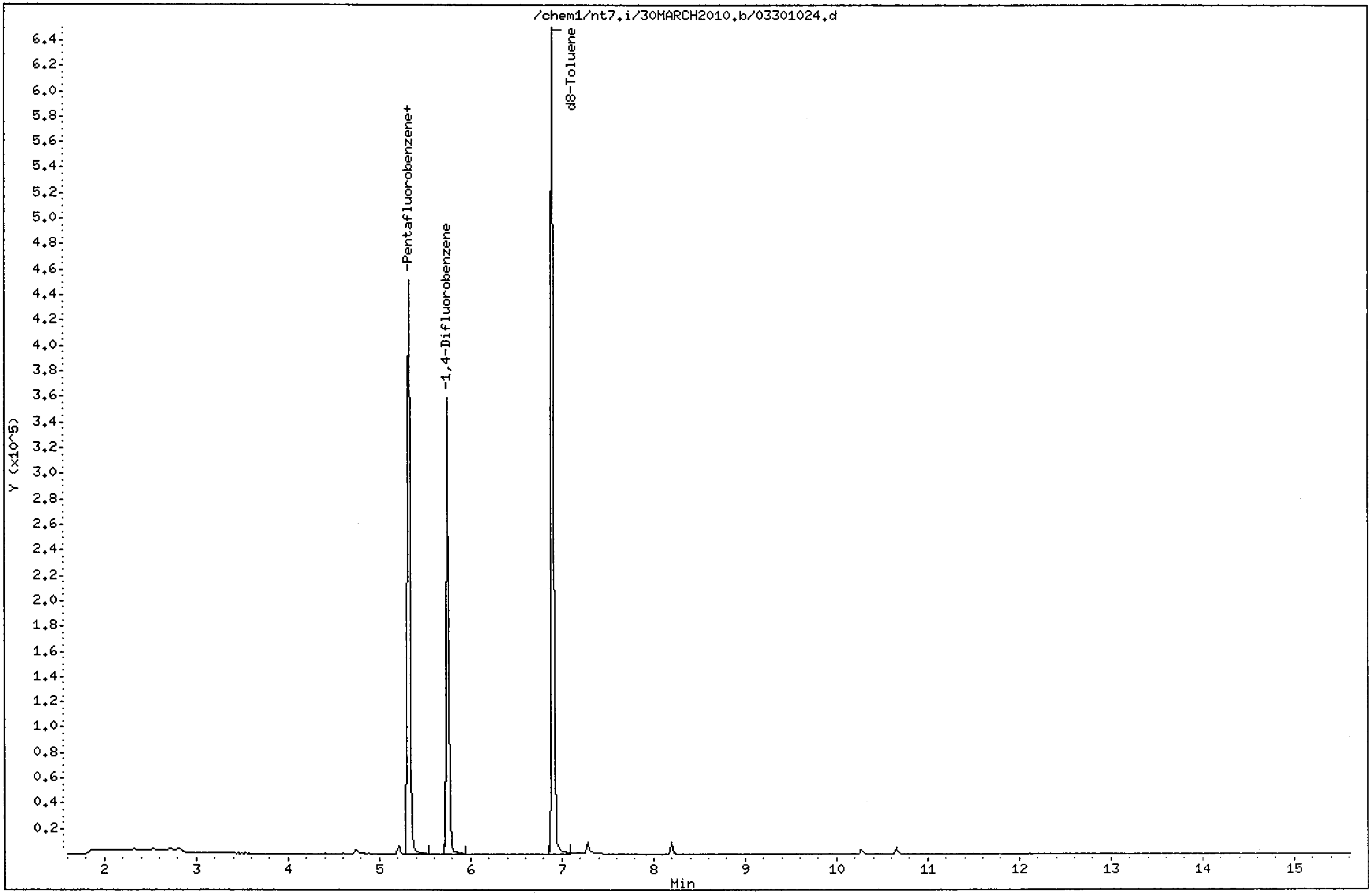
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1232.5	123.25*	76-119
$ 9 d8-Toluene	1000.0	1020.6	102.06	60-140

Data File: /chem1/nt7.i/30MARCH2010.b/03301024.d
Date : 29-MAR-2010 22:36
Client ID: CB4857032910GRAB
Sample Info: QQ22B,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB1032910GRAB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QQ22C
LIMS ID: 10-8054
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 23:03

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	103%

PC 3/31/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301025.d
Lab Smp Id: QQ22C Client Smp ID: CB1032910GRAB
Inj Date : 29-MAR-2010 23:03
Operator : PC Inst ID: nt7.i
Smp Info : QQ22C,10,10,0
Misc Info : 10-8054
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:25 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	CONCENTRATIONS FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.328	5.315	(1.000)	395094	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.328	5.327	(1.000)	177076	1236.98	1237.0(R)
	176 1,2-Dichloroethane	62	5.387	5.386	(1.011)	514	2.74820	2.748(Q)
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.746	5.745	(1.000)	565599	1000.00	
$	9 d8-Toluene	98	6.901	6.903	(1.201)	661808	1028.77	1028.8
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301025.d
Lab Smp Id: QQ22C
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8054

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: CB1032910GRAB
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	395094	-9.53
7 1,4-Difluorobenze	618992	309496	1237984	565599	-8.63

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.33	0.25
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ22C
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: all.sub
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8054

Client SDG: QQ22
Fraction: VOA
Client Smp ID: CB1032910GRAB
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

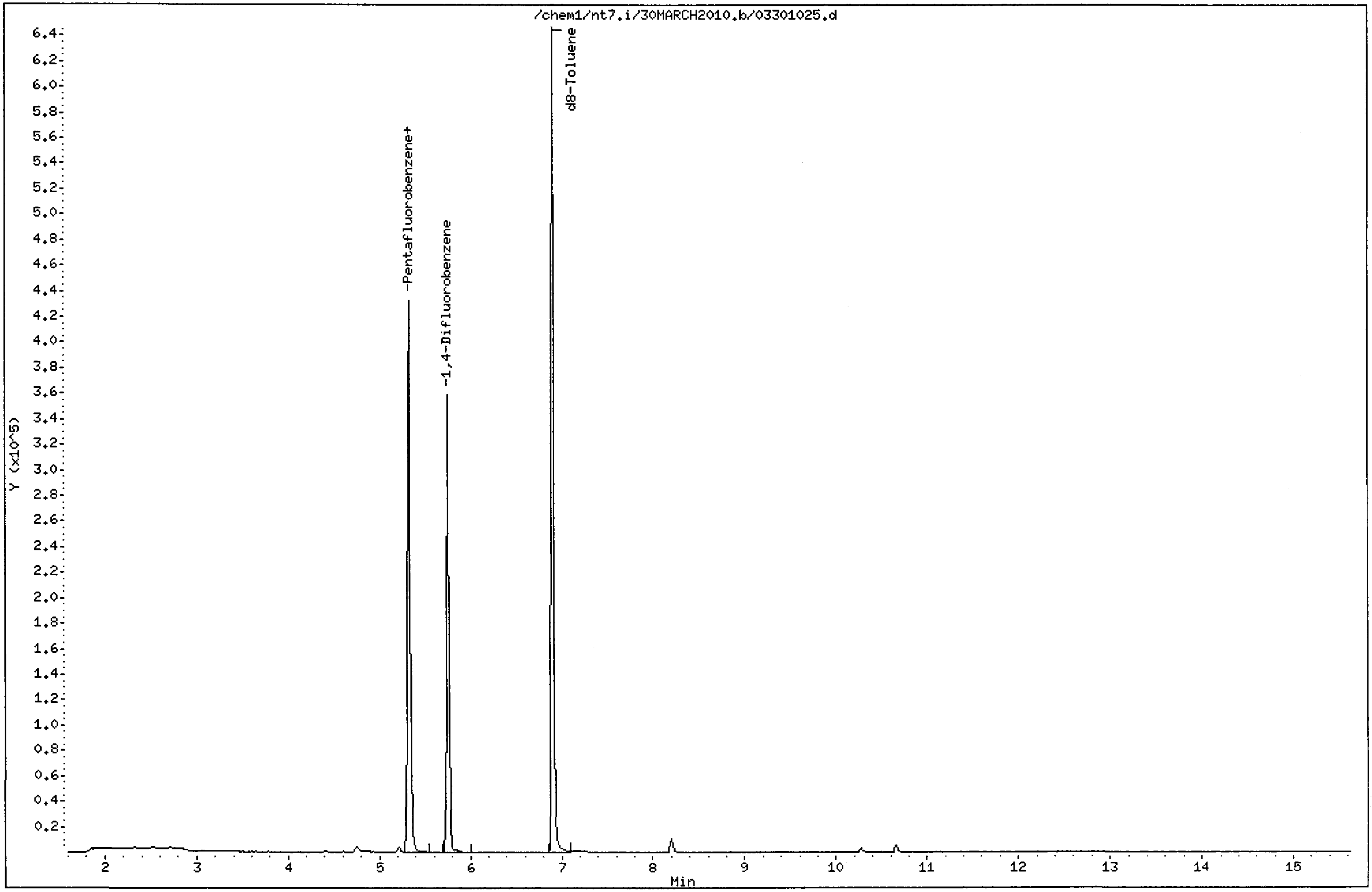
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1237.0	123.70*	76-119
$ 9 d8-Toluene	1000.0	1028.8	102.88	60-140

Data File: /chem1/nt7.i/30MARCH2010.b/03301025.d
Date : 29-MAR-2010 23:03
Client ID: CB1032910GRAB
Sample Info: QQ22C,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: CB100032910GRAB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QQ22D
LIMS ID: 10-8055
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 23:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	131%
d8-Toluene	102%

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301026.d
Lab Smp Id: QQ22D Client Smp ID: CB100032910GRAB
Inj Date : 29-MAR-2010 23:29
Operator : PC Inst ID: nt7.i
Smp Info : QQ22D,10,10,0
Misc Info : 10-8055
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:25 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	CONCENTRATIONS FINAL (ug/L)
	1	Vinyl Chloride	62	Compound Not Detected.					
	2	1,1-Dichloroethene	96	Compound Not Detected.					
	175	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3	cis-1,2-dichloroethene	96	Compound Not Detected.					
	6	Benzene	78	5.210	5.209	(0.907)	7755	10.2704	10.270
*	4	Pentafluorobenzene	168	5.327	5.315	(1.000)	389406	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.327	5.327	(1.000)	184363	1306.70	1306.7(R)
	176	1,2-Dichloroethane	62	5.386	5.386	(1.011)	509	2.75834	2.758(Q)
	8	Trichloroethene	130	Compound Not Detected.					
*	7	1,4-Difluorobenzene	114	5.746	5.745	(1.000)	558769	1000.00	
$	9	d8-Toluene	98	6.902	6.903	(1.201)	649706	1022.30	1022.3
	10	Tetrachloroethene	166	Compound Not Detected.					
	11	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301026.d
Lab Smp Id: QQ22D
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8055

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: CB100032910GRAB
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	389406	-10.83
7 1,4-Difluorobenze	618992	309496	1237984	558769	-9.73

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.33	0.23
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

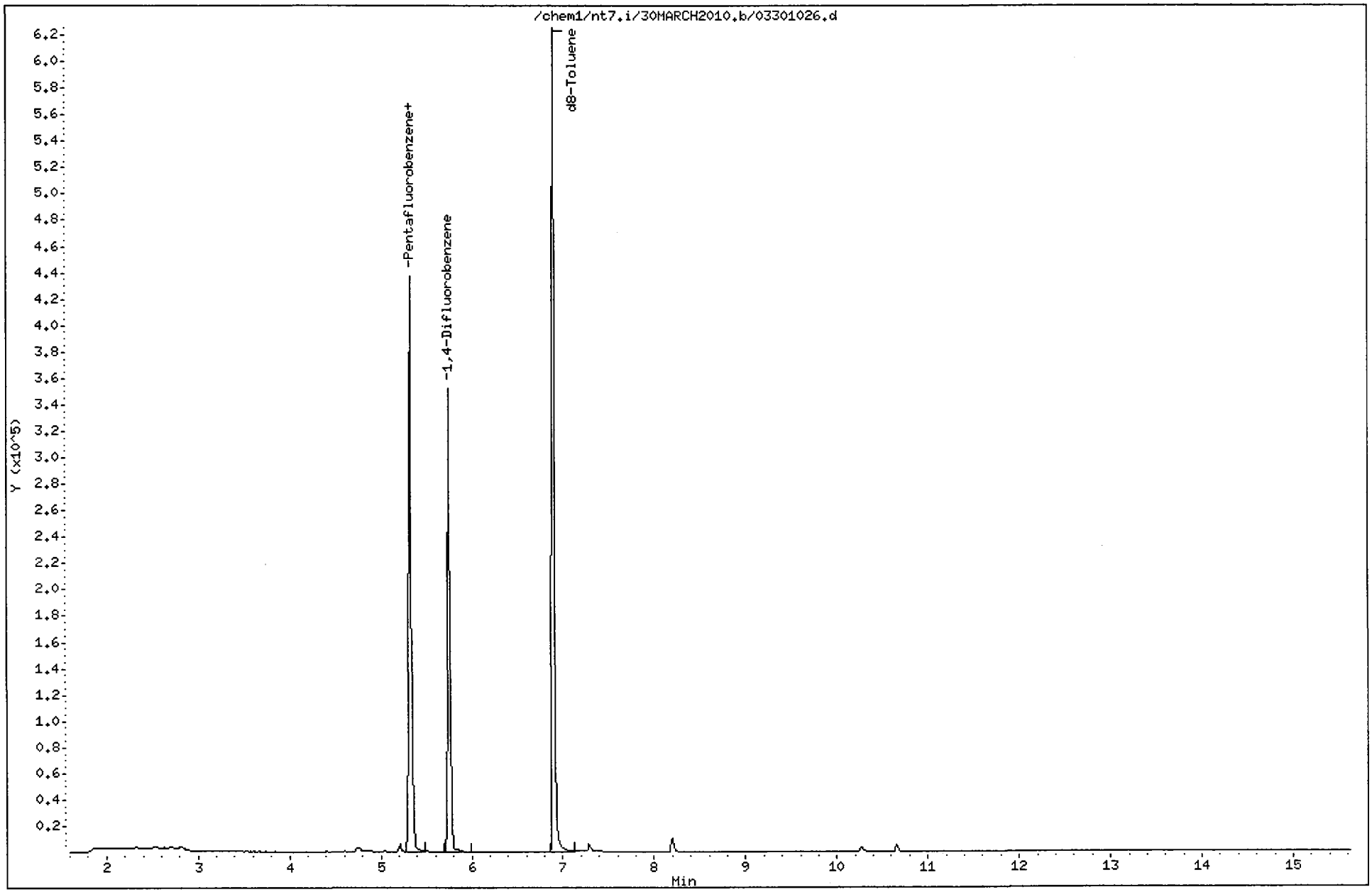
Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ22D
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: all.sub
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8055

Client SDG: QQ22
Fraction: VOA
Client Smp ID: CB100032910GRAB
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1306.7	130.67*	76-119
$ 9 d8-Toluene	1000.0	1022.3	102.23	60-140

Data File: /chem1/nt7.i/30MARCH2010.b/03301026.d
Date : 29-MAR-2010 23:29
Client ID: CB100032910GRAB
Sample Info: QQ22D,10,10,0

Instrument: nt7.i
Operator: PC
Column phase: RTXVMS
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: TB032810**
Page 1 of 1 **Trip Blank**

Lab Sample ID: QQ22E
LIMS ID: 10-8056
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/28/10
Date Received: 03/29/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 15:30

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	102%

PS 3/31/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301008.d
Lab Smp Id: QQ22E Client Smp ID: TB032810
Inj Date : 29-MAR-2010 15:30
Operator : PC Inst ID: nt7.i
Smp Info : QQ22E,10,10,0
Misc Info : 10-8056
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:25 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.328	5.315	(1.000)	455606	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.328	5.327	(1.000)	201378	1219.90	1219.9(R)
	176 1,2-Dichloroethane	62	5.386	5.386	(1.011)	240	1.11324	1.113(Q)
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.757	5.745	(1.000)	657384	1000.00	
$	9 d8-Toluene	98	6.903	6.903	(1.199)	758600	1014.59	1014.6
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301008.d
Lab Smp Id: QQ22E
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8056

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: TB032810
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	455606	4.33
7 1,4-Difluorobenze	618992	309496	1237984	657384	6.20

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.33	0.24
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.20

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ22E
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: all.sub
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-8056

Client SDG: QQ22
Fraction: VOA
Client Smp ID: TB032810
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1219.9	121.99*	76-119
$ 9 d8-Toluene	1000.0	1014.6	101.46	60-140

Data File: /chem1/nt7.i/30MARCH2010.b/03301008.d

Date : 29-MAR-2010 15:30

Client ID: TB032810

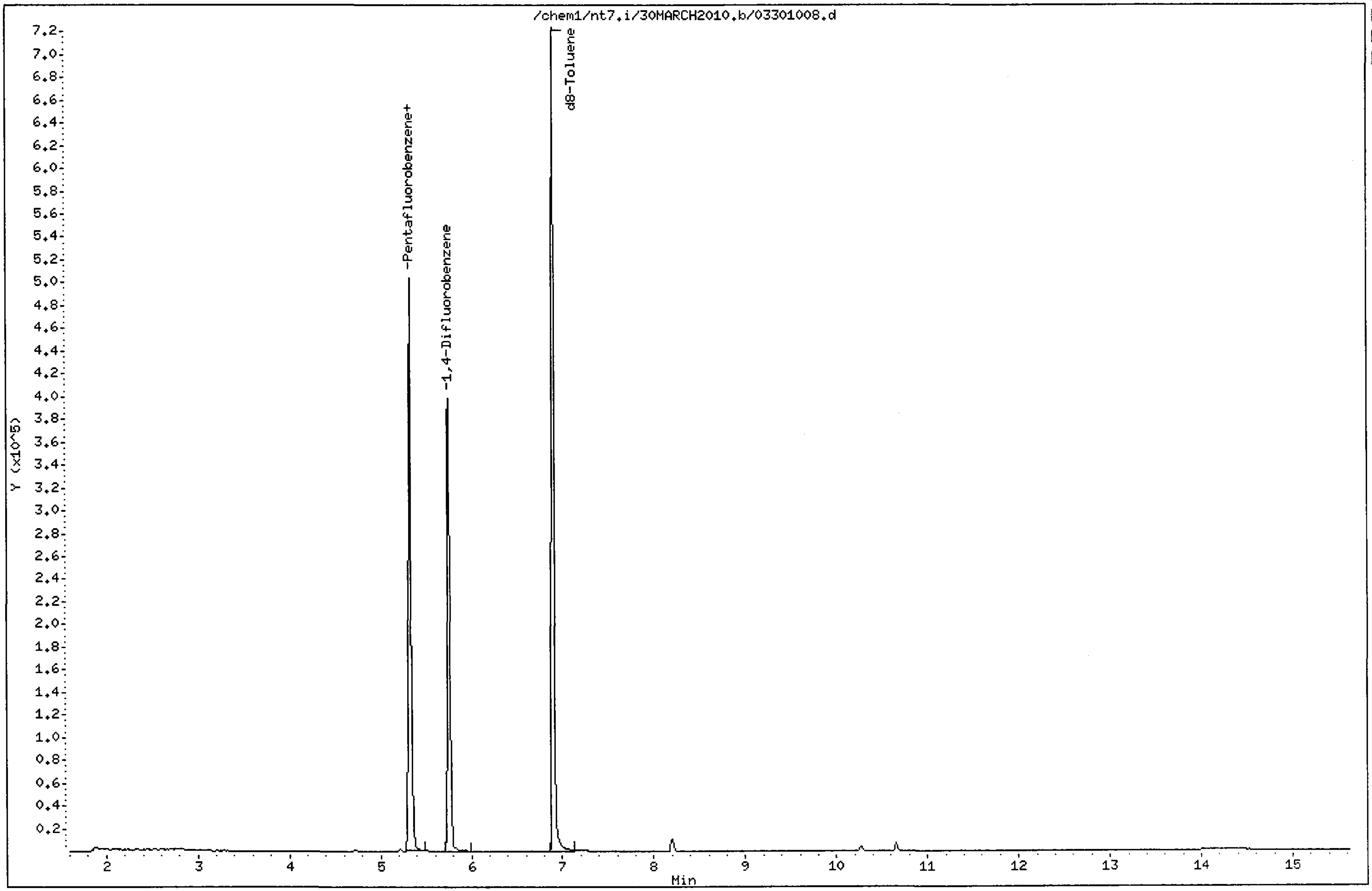
Sample Info: QQ22E,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC

Column diameter: 0.18



SIM Volatile Analysis
Standard Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QP69 Project: LORA LAKE APARTMENT

Instrument ID: NT7 Calibration Date: 03/18/10

LAB FILE ID: RF20: 03181008 RF50: 03181007 RF100: 03181006
RF500: 03181012 RF1000: 03181011

COMPOUND	RF20	RF50	RF100	RF500	RF1000
Vinyl Chloride	0.484		0.508	0.544	0.538
1,1-Dichloroethene	0.425		0.408	0.446	0.435
cis-1,2-dichloroethene	0.457		0.456	0.498	0.496
Benzene	1.396		1.302	1.367	1.405
Trichloroethene	0.356		0.334	0.350	0.363
Tetrachloroethene	0.307		0.309	0.333	0.346
1,1,2,2-Tetrachloroethane	0.180		0.197	0.224	0.245
Trans-1,2-Dichloroethene	0.466		0.433	0.491	0.485
1,2-Dichloroethane	0.379		0.425	0.512	0.506
d4-1,2-Dichloroethane	0.379		0.393	0.362	0.340
d8-Toluene	1.141		1.146	1.135	1.134

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QP69 Project: LORA LAKE APARTMENT

Instrument ID: NT7 Calibration Date: 03/18/10

LAB FILE ID: RF2000: 03181010 RF4000: 03181009

COMPOUND	TYPE	RF	CURVE OR R^2	AVE	%RSD
Vinyl Chloride	0.557	0.522	AVRG	0.525	5.1
1,1-Dichloroethene	0.451	0.422	AVRG	0.431	3.8
cis-1,2-dichloroethene	0.513	0.479	AVRG	0.483	4.8
Benzene	1.375	1.263	AVRG	1.351	4.2
Trichloroethene	0.360	0.337	AVRG	0.350	3.4
Tetrachloroethene	0.339	0.320	AVRG	0.326	5.0
1,1,2,2-Tetrachloroethane	0.251	0.235	AVRG	0.222	12.7
Trans-1,2-Dichloroethene	0.497	0.466	AVRG	0.473	4.9
1,2-Dichloroethane	0.532	0.490	AVRG	0.474	12.4
d4-1,2-Dichloroethane	0.354	0.346	AVRG	0.362	5.7
d8-Toluene	1.138	1.130	AVRG	1.137	0.5

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

art Cal Date : 18-MAR-2010 04:07
id Cal Date : 18-MAR-2010 06:47
uant Method : ISTD
rigin : Disabled
urget Version : 3.50
ntegrator : HP RTE
ethod file : /chem1/nt7.i/18MARCH2010.b/sim031810.m
al Date : 19-Mar-2010 09:31 paul
urve Type : Average

alibration File Names:
evel 1: /chem1/nt7.i/18MARCH2010.b/03181008.d
evel 2: /chem1/nt7.i/18MARCH2010.b/03181007.d
evel 3: /chem1/nt7.i/18MARCH2010.b/03181006.d
evel 4: /chem1/nt7.i/18MARCH2010.b/03181012.d
evel 5: /chem1/nt7.i/18MARCH2010.b/03181011.d
evel 6: /chem1/nt7.i/18MARCH2010.b/03181010.d
evel 7: /chem1/nt7.i/18MARCH2010.b/03181009.d

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	4000.000 Level 7	RRF	% RSD
1 Vinyl Chloride	0.48376	+++++	0.50774	0.54359	0.53814	0.55692	0.52179	0.52532	5.069
2 1,1-Dichloroethene	0.42537	+++++	0.40807	0.44646	0.43475	0.45126	0.42152	0.43124	3.754
175 Trans-1,2-Dichloroethene	0.46650	+++++	0.43332	0.49097	0.48515	0.49691	0.46660	0.47324	4.910
3 cis-1,2-dichloroethene	0.45730	+++++	0.45609	0.49779	0.49618	0.51299	0.47881	0.48319	4.804
6 Benzene	1.39651	+++++	1.30166	1.36727	1.40479	1.37544	1.26302	1.35145	4.186
176 1,2-Dichloroethane	0.37907	+++++	0.42523	0.51151	0.50624	0.53152	0.49034	0.47398	12.450

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

.art Cal Date : 18-MAR-2010 04:07
id Cal Date : 18-MAR-2010 06:47
iant Method : ISTD
·igin : Disabled
irget Version : 3.50
itegrator : HP RTE
:thod file : /chem1/nt7.i/18MARCH2010.b/sim031810.m
il Date : 19-Mar-2010 09:31 paul
irve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	4000.000 Level 7	___ RRF	% RSD
8 Trichloroethene	0.35651	+++++	0.33408	0.34966	0.36312	0.36008	0.33729	0.35012	3.454
10 Tetrachloroethene	0.30707	+++++	0.30885	0.33278	0.34616	0.33903	0.31987	0.32563	4.973
11 1,1,2,2-Tetrachloroethane	0.17951	+++++	0.19690	0.22438	0.24462	0.25117	0.23538	0.22199	12.714
5 d4-1,2-Dichloroethane	0.37943	+++++	0.39306	0.36247	0.33968	0.35381	0.34550	0.36232	5.664
9 d8-Toluene	1.14117	+++++	1.14584	1.13501	1.13444	1.13810	1.12969	1.13737	0.497

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

art Cal Date	: 18-MAR-2010 04:07
id Cal Date	: 18-MAR-2010 06:47
iant Method	: ISTD
igin	: Disabled
irget Version	: 3.50
itegrator	: HP RTE
ethod file	: /chem1/nt7.i/18MARCH2010.b/sim031810.m
il Date	: 19-Mar-2010 09:31 paul
irve Type	: Average

erage %RSD Results.

lculated Average %RSD = 5.67955

ximun Average %RSD = 5.00000

Failed Average %RSD Test.

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
Batch File: /chem1/nt7.i/18MARCH2010.b
Inst ID: nt7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	03181006	03181008	03181009	03181010	03181011	03181012
INJ.DATE:	18-MAR-2010	18-MAR-2010	18-MAR-2010	18-MAR-2010	18-MAR-2010	18-MAR-2010
INJ.TIME:	04:07	05:01	05:27	05:54	06:21	06:47

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Vinyl Chloride	1.554	1.553	1.550	1.551	1.554	1.553	1.554	1.341-1.766	1.553	0.001
	2 1,1-Dichloroethene	2.519	2.519	2.520	2.519	2.519	2.520	2.519	2.307-2.732	2.519	0.000
	175 Trans-1,2-Dichloroethe	3.295	3.295	3.296	3.295	3.295	3.296	3.295	3.082-3.507	3.295	0.000
	3 cis-1,2-dichloroethene	4.446	4.446	4.447	4.446	4.446	4.447	4.446	4.234-4.659	4.446	0.000
	6 Benzene	5.210	5.210	5.211	5.210	5.210	5.211	5.210	4.980-5.440	5.210	0.000
*	4 Pentafluorobenzene	5.316	5.316	5.317	5.316	5.316	5.317	5.316	5.103-5.528	5.316	0.000
$	5 d4-1,2-Dichloroethane	5.328	5.327	5.328	5.327	5.328	5.328	5.328	5.115-5.540	5.328	0.000
	176 1,2-Dichloroethane	5.386	5.386	5.375	5.386	5.386	5.387	5.386	5.174-5.599	5.385	0.005
	8 Trichloroethene	5.711	5.711	5.711	5.712	5.710	5.712	5.710	5.481-5.940	5.711	0.001
*	7 1,4-Difluorobenzene	5.746	5.745	5.745	5.747	5.745	5.746	5.745	5.515-5.975	5.746	0.001
$	9 d8-Toluene	6.902	6.902	6.902	6.902	6.903	6.902	6.903	6.673-7.133	6.902	0.000
	10 Tetrachloroethene	7.259	7.259	7.258	7.259	7.260	7.258	7.260	7.030-7.489	7.259	0.000
	11 1,1,2,2-Tetrachloroeth	9.446	9.458	9.445	9.446	9.447	9.445	9.447	9.217-9.676	9.448	0.005

Reviewer 1 ______________________ Date: ____________
Reviewer 2 ______________________ Date: ____________

PC 3/19/10

Analytical Resources, Inc.

SW8260C SIM

ata file : /chem1/nt7.i/18MARCH2010.b/03181006.d
ab Smp Id: 01000318 Client Smp ID: 100 PPT
nj Date : 18-MAR-2010 04:07
perator : PC Inst ID: nt7.i
np Info : 01000318,10,10,0
.sc Info : 10-
omment :
ethod : /chem1/nt7.i/18MARCH2010.b/sim031810.m
eth Date : 19-Mar-2010 10:16 paul Quant Type: ISTD
al Date : 18-MAR-2010 04:07 Cal File: 03181006.d
.s bottle: 1 Calibration Sample, Level: 3
.l Factor: 1.00000
ntegrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

nd Variable Local Compound Variable

pounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
1 Vinyl Chloride	62	1.554	1.554	(0.292)	24712	100.000	96.653
2 1,1-Dichloroethene	96	2.519	2.519	(0.474)	19861	100.000	94.627
75 Trans-1,2-Dichloroethene	96	3.295	3.295	(0.620)	21090	100.000	91.564
3 cis-1,2-dichloroethene	96	4.446	4.446	(0.836)	22198	100.000	94.390
6 Benzene	78	5.210	5.210	(0.907)	92044	100.000	96.316
4 Pentafluorobenzene	168	5.316	5.316	(1.000)	486706	1000.00	
5 d4-1,2-Dichloroethane	65	5.328	5.328	(1.002)	191304	1000.00	1084.8
76 1,2-Dichloroethane	62	5.386	5.386	(1.013)	20696	100.000	89.713
8 Trichloroethene	130	5.711	5.710	(0.994)	23624	100.000	95.419
7 1,4-Difluorobenzene	114	5.746	5.745	(1.000)	707128	1000.00	
9 d8-Toluene	98	6.902	6.903	(1.201)	810254	1000.00	1007.4
10 Tetrachloroethene	166	7.259	7.260	(1.263)	21840	100.000	94.849
11 1,1,2,2-Tetrachloroethane	83	9.446	9.447	(1.644)	13923	100.000	88.694

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

ıstrument ID: nt7.i
ıb File ID: 03181006.d
ıb Smp Id: 01000318
ıalysis Type: VOA
ıant Type: ISTD
)erator: PC
:thod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
sc Info: 10-

Calibration Date: 18-MAR-2010
Calibration Time: 06:21
Client Smp ID: 100 PPT
Level: LOW
Sample Type: WATER

:st Mode:
Use Initial Calibration Level 5.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	486706	11.45
7 1,4-Difluorobenze	618992	309496	1237984	707128	14.24

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.01

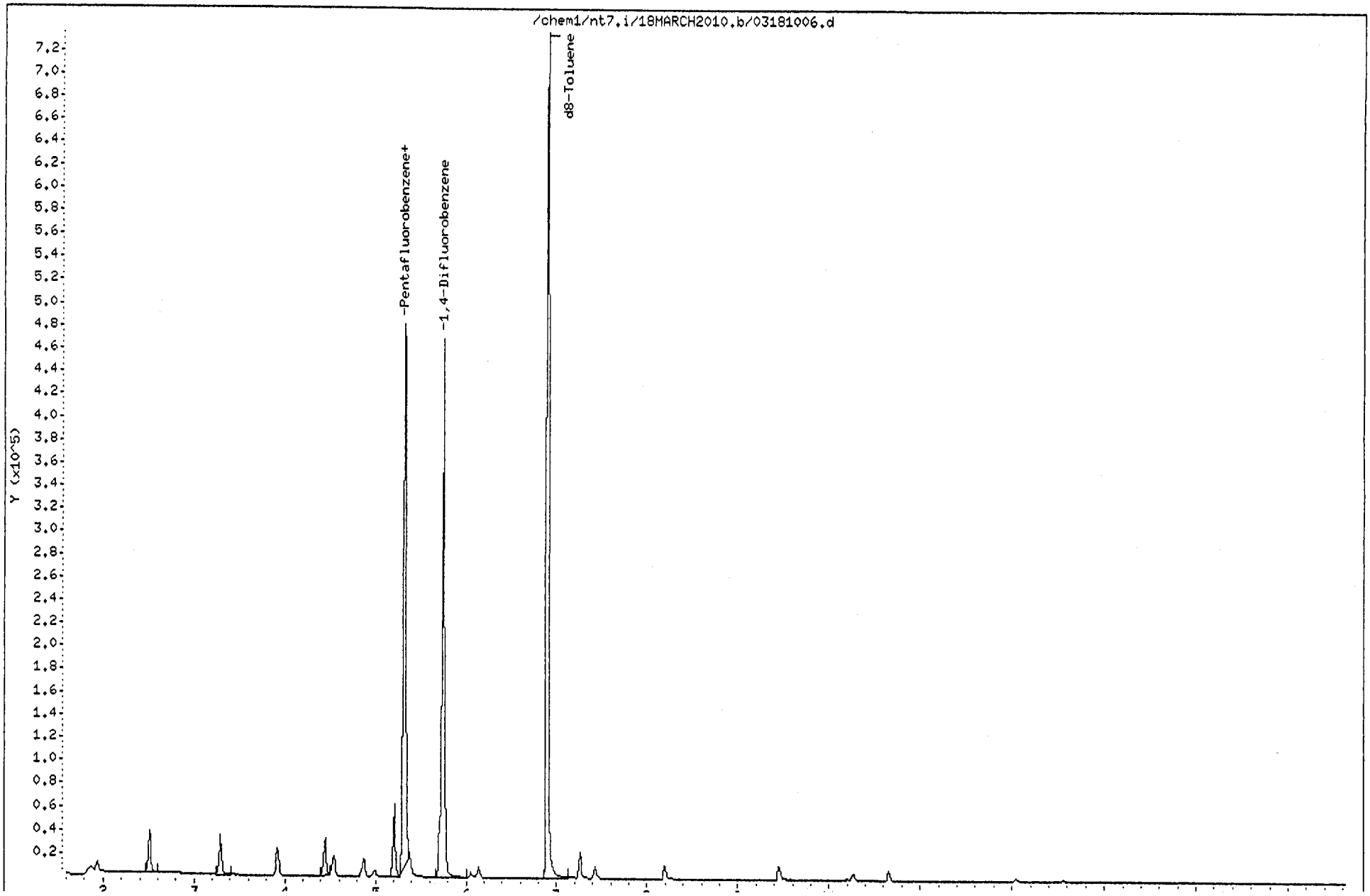
EA UPPER LIMIT = +100% of internal standard area.
EA LOWER LIMIT = - 50% of internal standard area.
UPPER LIMIT = + 0.50 minutes of internal standard RT.
LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/18MARCH2010.b/03181006.d
Date : 18-MAR-2010 04:07
Client ID: 100 PPT
Sample Info: 01000318,10,10,0

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



PS 3/19/10

Analytical Resources, Inc.

SW8260C SIM

ata file : /chem1/nt7.i/18MARCH2010.b/03181008.d
ab Smp Id: 00200318 Client Smp ID: 20 PPT
nj Date : 18-MAR-2010 05:01
perator : PC Inst ID: nt7.i
mp Info : 00200318,10,10,0
isc Info : 10-
omment :
ethod : /chem1/nt7.i/18MARCH2010.b/sim031810.m
eth Date : 19-Mar-2010 10:16 paul Quant Type: ISTD
al Date : 18-MAR-2010 05:01 Cal File: 03181008.d
ls bottle: 1 Calibration Sample, Level: 1
il Factor: 1.00000
ntegrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

nd Variable Local Compound Variable

pounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
1 Vinyl Chloride	62	1.553	1.554	(0.292)	4681	20.0000	18.418
2 1,1-Dichloroethene	96	2.519	2.519	(0.474)	4116	20.0000	19.728
75 Trans-1,2-Dichloroethene	96	3.295	3.295	(0.620)	4514	20.0000	19.715
3 cis-1,2-dichloroethene	96	4.446	4.446	(0.836)	4425	20.0000	18.928
6 Benzene	78	5.210	5.210	(0.907)	18928	20.0000	20.667
4 Pentafluorobenzene	168	5.316	5.316	(1.000)	483815	1000.00	
5 d4-1,2-Dichloroethane	65	5.327	5.328	(1.002)	183573	1000.00	1047.2
76 1,2-Dichloroethane	62	5.386	5.386	(1.013)	3668	20.0000	15.995
8 Trichloroethene	130	5.711	5.710	(0.994)	4832	20.0000	20.365
7 1,4-Difluorobenzene	114	5.745	5.745	(1.000)	677688	1000.00	
9 d8-Toluene	98	6.902	6.903	(1.201)	773355	1000.00	1003.3
10 Tetrachloroethene	166	7.259	7.260	(1.263)	4162	20.0000	18.860
11 1,1,2,2-Tetrachloroethane	83	9.458	9.447	(1.646)	2433	20.0000	16.172

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

nstrument ID: nt7.i
ab File ID: 03181008.d
ab Smp Id: 00200318
nalysis Type: VOA
uant Type: ISTD
perator: PC
ethod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
.sc Info: 10-

Calibration Date: 18-MAR-2010
Calibration Time: 06:21
Client Smp ID: 20 PPT
Level: LOW
Sample Type: WATER

est Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	483815	10.79
7 1,4-Difluorobenze	618992	309496	1237984	677688	9.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.00

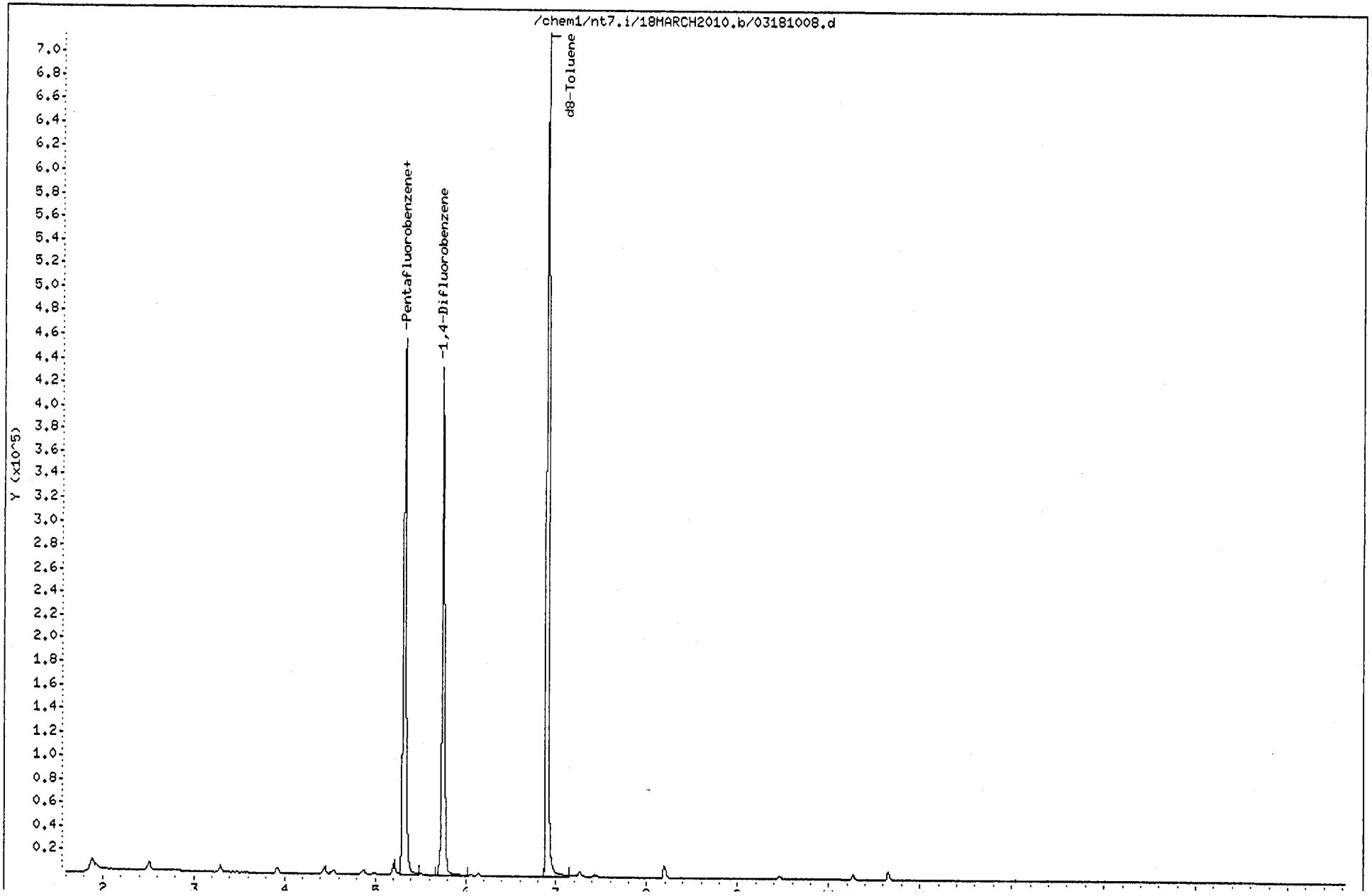
EA UPPER LIMIT = +100% of internal standard area.
EA LOWER LIMIT = - 50% of internal standard area.
UPPER LIMIT = + 0.50 minutes of internal standard RT.
LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/18MARCH2010.b/03181008.d
Date : 18-MAR-2010 05:01
Client ID: 20 PPT
Sample Info: 00200318,10,10,0

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



PC
3/19/10

Analytical Resources, Inc.

SW8260C SIM

ata file : /chem1/nt7.i/18MARCH2010.b/03181009.d
ab Smp Id: 40000318 Client Smp ID: 4 PPB
nj Date : 18-MAR-2010 05:27
perator : PC Inst ID: nt7.i
mp Info : 40000318,10,10,0
isc Info : 10-
omment :
ethod : /chem1/nt7.i/18MARCH2010.b/sim031810.m
eth Date : 19-Mar-2010 10:16 paul Quant Type: ISTD
al Date : 18-MAR-2010 05:27 Cal File: 03181009.d
.s bottle: 1 Calibration Sample, Level: 7
.l Factor: 1.00000
ntegrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

nd Variable Local Compound Variable

pounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	ON-COL (ng/L)
1 Vinyl Chloride	62	1.550	1.554	(0.292)	976919	4000.00	3973.1
2 1,1-Dichloroethene	96	2.520	2.519	(0.474)	789181	4000.00	3909.8
75 Trans-1,2-Dichloroethene	96	3.296	3.295	(0.620)	873583	4000.00	3943.9
3 cis-1,2-dichloroethene	96	4.447	4.446	(0.836)	896442	4000.00	3963.7
6 Benzene	78	5.211	5.210	(0.907)	3489674	4000.00	3738.3
4 Pentafluorobenzene	168	5.317	5.316	(1.000)	468059	1000.00	
5 d4-1,2-Dichloroethane	65	5.328	5.328	(1.002)	161716	1000.00	953.58
76 1,2-Dichloroethane	62	5.375	5.386	(1.011)	918031	4000.00	4138.0
8 Trichloroethene	130	5.711	5.710	(0.994)	931919	4000.00	3853.4
7 1,4-Difluorobenzene	114	5.745	5.745	(1.000)	690741	1000.00	
9 d8-Toluene	98	6.902	6.903	(1.201)	780321	1000.00	993.24
10 Tetrachloroethene	166	7.258	7.260	(1.263)	883796	4000.00	3929.3
11 1,1,2,2-Tetrachloroethane	83	9.445	9.447	(1.644)	650351	4000.00	4241.2

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

ıstrument ID: nt7.i
ıb File ID: 03181009.d
ıb Smp Id: 40000318
ıalysis Type: VOA
ıant Type: ISTD
)erator: PC
:thod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
.sc Info: 10-

Calibration Date: 18-MAR-2010
Calibration Time: 06:21
Client Smp ID: 4 PPB
Level: LOW
Sample Type: WATER

:st Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	468059	7.18
7 1,4-Difluorobenze	618992	309496	1237984	690741	11.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.02
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.01

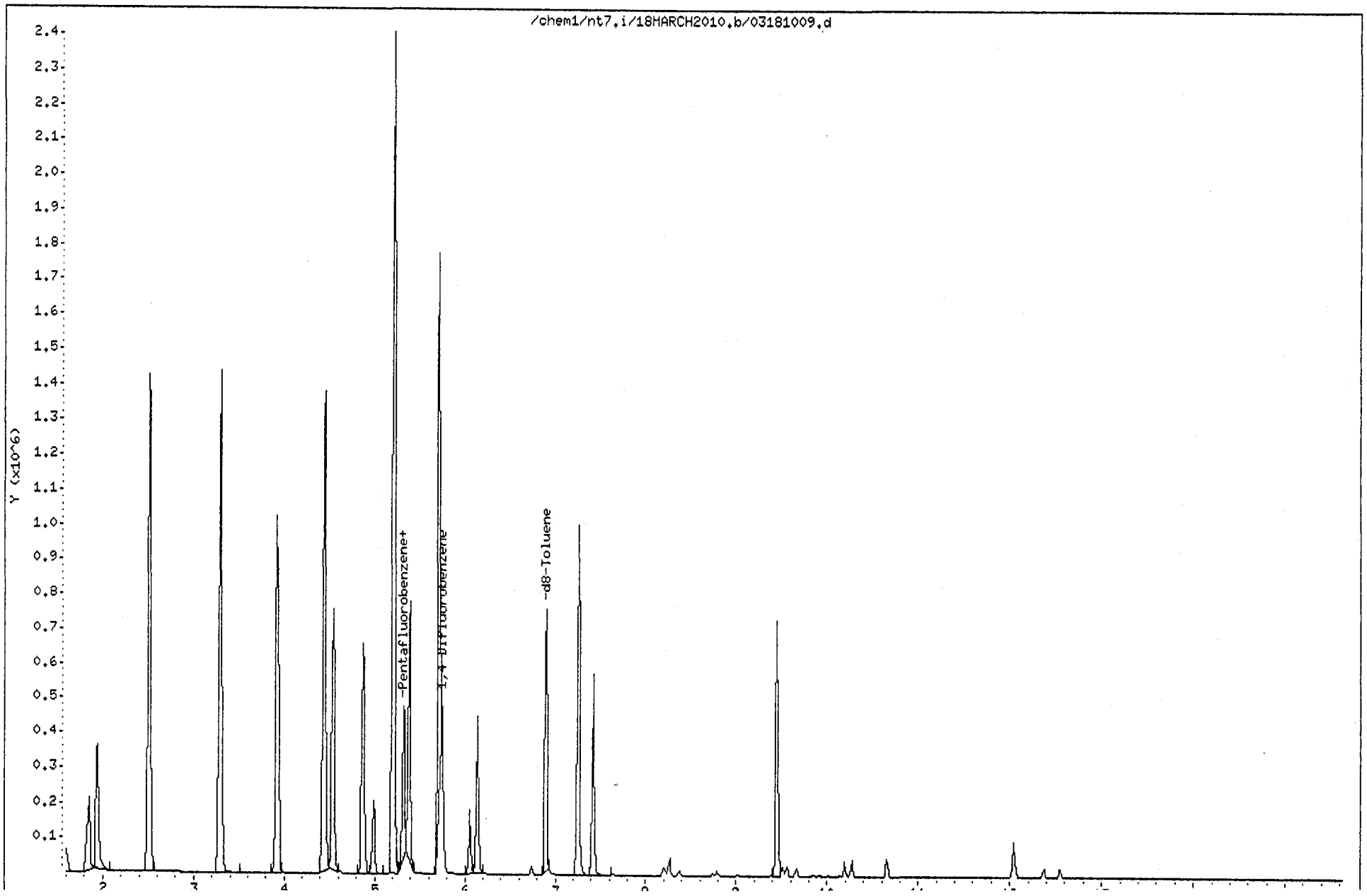
.EA UPPER LIMIT = +100% of internal standard area.
.EA LOWER LIMIT = - 50% of internal standard area.
' UPPER LIMIT = + 0.50 minutes of internal standard RT.
' LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/18MARCH2010.b/03181009.d
Date : 18-MAR-2010 05:27
Client ID: 4 PPB
Sample Info: 40000318,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



PC
3/19/10

Analytical Resources, Inc.

SW8260C SIM

ıta file : /chem1/nt7.i/18MARCH2010.b/03181010.d
ıb Smp Id: 20000318 Client Smp ID: 2 PPB
ıj Date : 18-MAR-2010 05:54
)erator : PC Inst ID: nt7.i
ıp Info : 20000318,10,10,0
.sc Info : 10-
)mment :
:thod : /chem1/nt7.i/18MARCH2010.b/sim031810.m
:th Date : 19-Mar-2010 10:16 paul Quant Type: ISTD
ıl Date : 18-MAR-2010 05:54 Cal File: 03181010.d
.s bottle: 1 Calibration Sample, Level: 6
.l Factor: 1.00000
ıtegrator: HP RTE Compound Sublist: all.sub
ırget Version: 3.50

)ncentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

)nd Variable Local Compound Variable

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
ıpounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/L)	(ng/L)
1 Vinyl Chloride	62	1.551	1.554	(0.292)	493762	2000.00	2120.3
2 1,1-Dichloroethene	96	2.519	2.519	(0.474)	400081	2000.00	2092.8
75 Trans-1,2-Dichloroethene	96	3.295	3.295	(0.620)	440559	2000.00	2100.0
3 cis-1,2-dichloroethene	96	4.446	4.446	(0.836)	454814	2000.00	2123.3
6 Benzene	78	5.210	5.210	(0.907)	1807019	2000.00	2035.5
4 Pentafluorobenzene	168	5.316	5.316	(1.000)	443296	1000.00	
5 d4-1,2-Dichloroethane	65	5.327	5.328	(1.002)	156841	1000.00	976.49
76 1,2-Dichloroethane	62	5.386	5.386	(1.013)	471238	2000.00	2242.8
8 Trichloroethene	130	5.712	5.710	(0.994)	473069	2000.00	2056.9
7 1,4-Difluorobenzene	114	5.747	5.745	(1.000)	656889	1000.00	
9 d8-Toluene	98	6.902	6.903	(1.201)	747607	1000.00	1000.6
10 Tetrachloroethene	166	7.259	7.260	(1.263)	445404	2000.00	2082.3
11 1,1,2,2-Tetrachloroethane	83	9.446	9.447	(1.644)	329981	2000.00	2262.9

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

ıstrument ID: nt7.i
ıb File ID: 03181010.d
ıb Smp Id: 20000318
ıalysis Type: VOA
ıant Type: ISTD
)erator: PC
:thod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
.sc Info: 10-

Calibration Date: 18-MAR-2010
Calibration Time: 06:21
Client Smp ID: 2 PPB
Level: LOW
Sample Type: WATER

:st Mode:
Use Initial Calibration Level 5.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	443296	1.51
7 1,4-Difluorobenze	618992	309496	1237984	656889	6.12

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.03

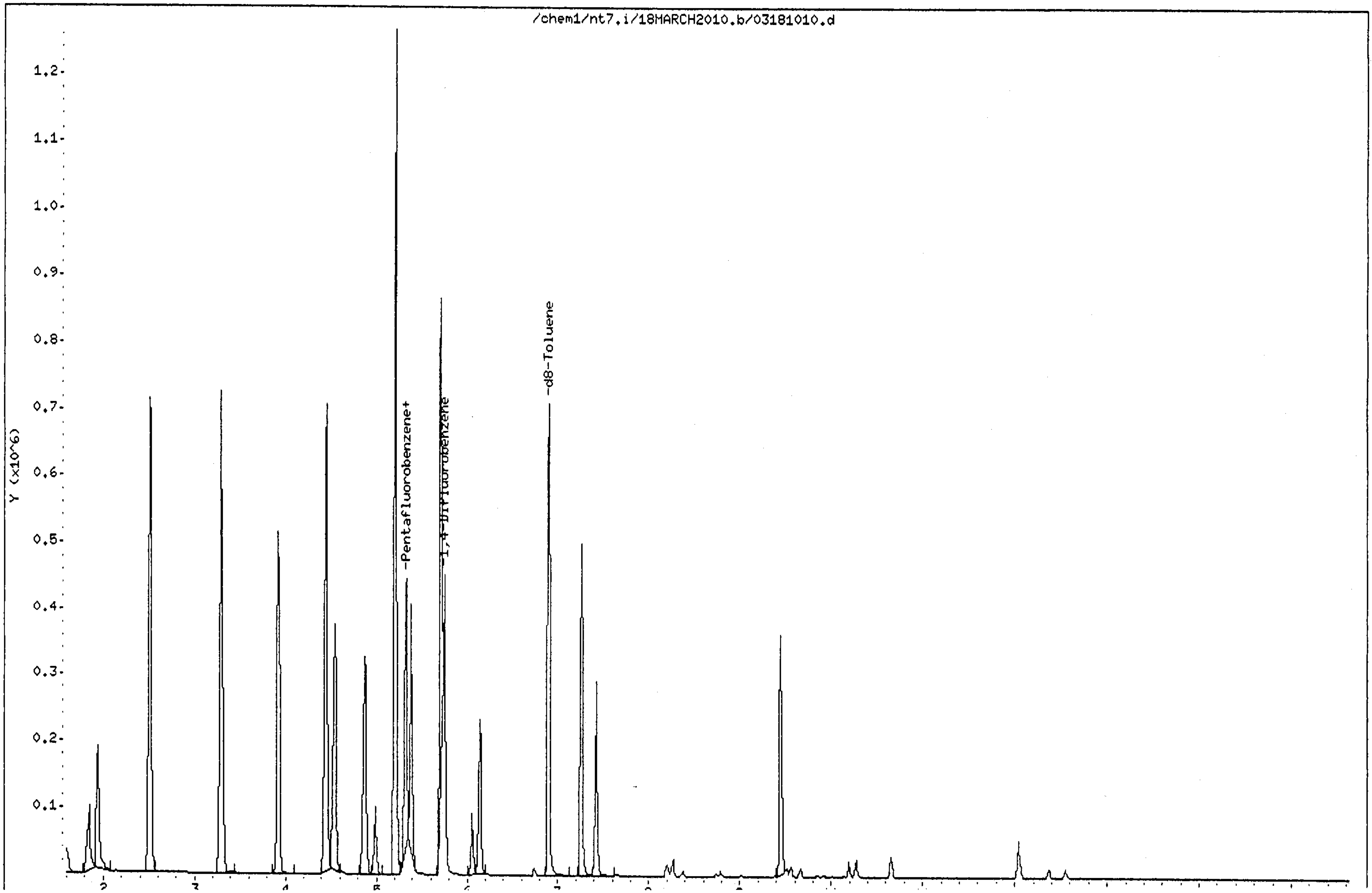
:EA UPPER LIMIT = +100% of internal standard area.
:EA LOWER LIMIT = - 50% of internal standard area.
' UPPER LIMIT = + 0.50 minutes of internal standard RT.
' LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/18MARCH2010.b/03181010.d
Date : 18-MAR-2010 05:54
Client ID: 2 PPB
Sample Info: 20000318,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



Analytical Resources, Inc.

SW8260C SIM

ata file : /chem1/nt7.i/18MARCH2010.b/03181011.d
ab Smp Id: 10000318 Client Smp ID: 1 PPB
nj Date : 18-MAR-2010 06:21
perator : PC Inst ID: nt7.i
mp Info : 10000318,10,10,0
isc Info : 10-
omment :
ethod : /chem1/nt7.i/18MARCH2010.b/sim031810.m
eth Date : 19-Mar-2010 10:16 paul Quant Type: ISTD
al Date : 18-MAR-2010 06:21 Cal File: 03181011.d
ls bottle: 1 Calibration Sample, Level: 5
il Factor: 1.00000
ntegrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

pnd Variable Local Compound Variable

	mpounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	ON-COL (ng/L)
1	Vinyl Chloride	62	1.554	1.554	(0.292)	235013	1000.00	1024.4
2	1,1-Dichloroethene	96	2.519	2.519	(0.474)	189863	1000.00	1008.2
175	Trans-1,2-Dichloroethene	96	3.295	3.295	(0.620)	211872	1000.00	1025.2
3	cis-1,2-dichloroethene	96	4.446	4.446	(0.836)	216688	1000.00	1026.9
6	Benzene	78	5.210	5.210	(0.907)	869551	1000.00	1039.5
4	Pentafluorobenzene	168	5.316	5.316	(1.000)	436713	1000.00	
5	d4-1,2-Dichloroethane	65	5.328	5.328	(1.002)	148341	1000.00	937.49
176	1,2-Dichloroethane	62	5.386	5.386	(1.013)	221082	1000.00	1068.1
8	Trichloroethene	130	5.710	5.710	(0.994)	224768	1000.00	1037.1
7	1,4-Difluorobenzene	114	5.745	5.745	(1.000)	618992	1000.00	
9	d8-Toluene	98	6.903	6.903	(1.202)	702212	1000.00	997.42
10	Tetrachloroethene	166	7.260	7.260	(1.264)	214273	1000.00	1063.1
11	1,1,2,2-Tetrachloroethane	83	9.447	9.447	(1.644)	151420	1000.00	1101.9

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

ıstrument ID: nt7.i
ıb File ID: 03181011.d
ıb Smp Id: 10000318
ıalysis Type: VOA
ıant Type: ISTD
)erator: PC
:thod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
.sc Info: 10-

Calibration Date: 18-MAR-2010
Calibration Time: 06:21
Client Smp ID: 1 PPB
Level: LOW
Sample Type: WATER

:st Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	436713	0.00
7 1,4-Difluorobenze	618992	309496	1237984	618992	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.00

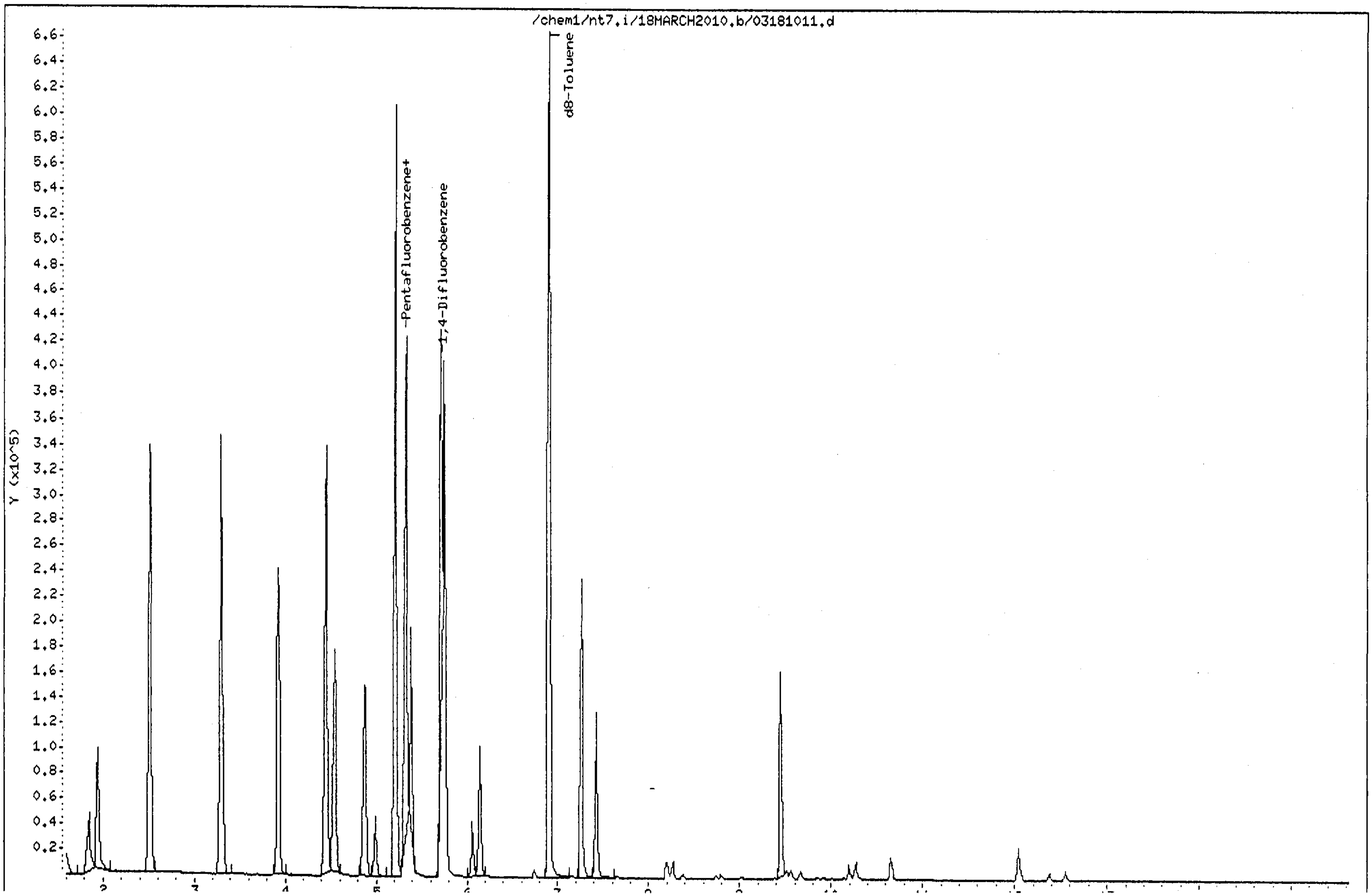
.EA UPPER LIMIT = +100% of internal standard area.
.EA LOWER LIMIT = - 50% of internal standard area.
' UPPER LIMIT = + 0.50 minutes of internal standard RT.
' LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/18MARCH2010.b/03181011.d
Date : 18-MAR-2010 06:21
Client ID: 1 PPB
Sample Info: 10000318,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



KC 3/19/10

Analytical Resources, Inc.

SW8260C SIM

ata file : /chem1/nt7.i/18MARCH2010.b/03181012.d
ab Smp Id: 05000318 Client Smp ID: 500 PPT
aj Date : 18-MAR-2010 06:47
perator : PC Inst ID: nt7.i
ap Info : 05000318,10,10,0
.sc Info : 10-
omment :
ethod : /chem1/nt7.i/18MARCH2010.b/sim031810.m
eth Date : 19-Mar-2010 10:16 paul Quant Type: ISTD
al Date : 18-MAR-2010 06:47 Cal File: 03181012.d
.s bottle: 1 Calibration Sample, Level: 4
.l Factor: 1.00000
ategrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

nd Variable Local Compound Variable

pounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	ON-COL (ng/L)
1 Vinyl Chloride	62	1.553	1.554	(0.292)	112959	500.000	517.39
2 1,1-Dichloroethene	96	2.520	2.519	(0.474)	92775	500.000	517.65
75 Trans-1,2-Dichloroethene	96	3.296	3.295	(0.620)	102023	500.000	518.73
3 cis-1,2-dichloroethene	96	4.447	4.446	(0.836)	103442	500.000	515.11
6 Benzene	78	5.211	5.210	(0.907)	420837	500.000	505.85
4 Pentafluorobenzene	168	5.317	5.316	(1.000)	415601	1000.00	
5 d4-1,2-Dichloroethane	65	5.328	5.328	(1.002)	150644	1000.00	1000.4
76 1,2-Dichloroethane	62	5.387	5.386	(1.013)	106291	500.000	539.58
8 Trichloroethene	130	5.712	5.710	(0.994)	107622	500.000	499.33
7 1,4-Difluorobenzene	114	5.746	5.745	(1.000)	615588	1000.00	
9 d8-Toluene	98	6.902	6.903	(1.201)	698699	1000.00	997.92
10 Tetrachloroethene	166	7.258	7.260	(1.263)	102427	500.000	510.98
11 1,1,2,2-Tetrachloroethane	83	9.445	9.447	(1.644)	69063	500.000	505.38

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

nstrument ID: nt7.i
ab File ID: 03181012.d
ab Smp Id: 05000318
nalysis Type: VOA
uant Type: ISTD
perator: PC
ethod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
.sc Info: 10-

Calibration Date: 18-MAR-2010
Calibration Time: 06:21
Client Smp ID: 500 PPT
Level: LOW
Sample Type: WATER

est Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	415601	-4.83
7 1,4-Difluorobenze	618992	309496	1237984	615588	-0.55

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.02
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.02

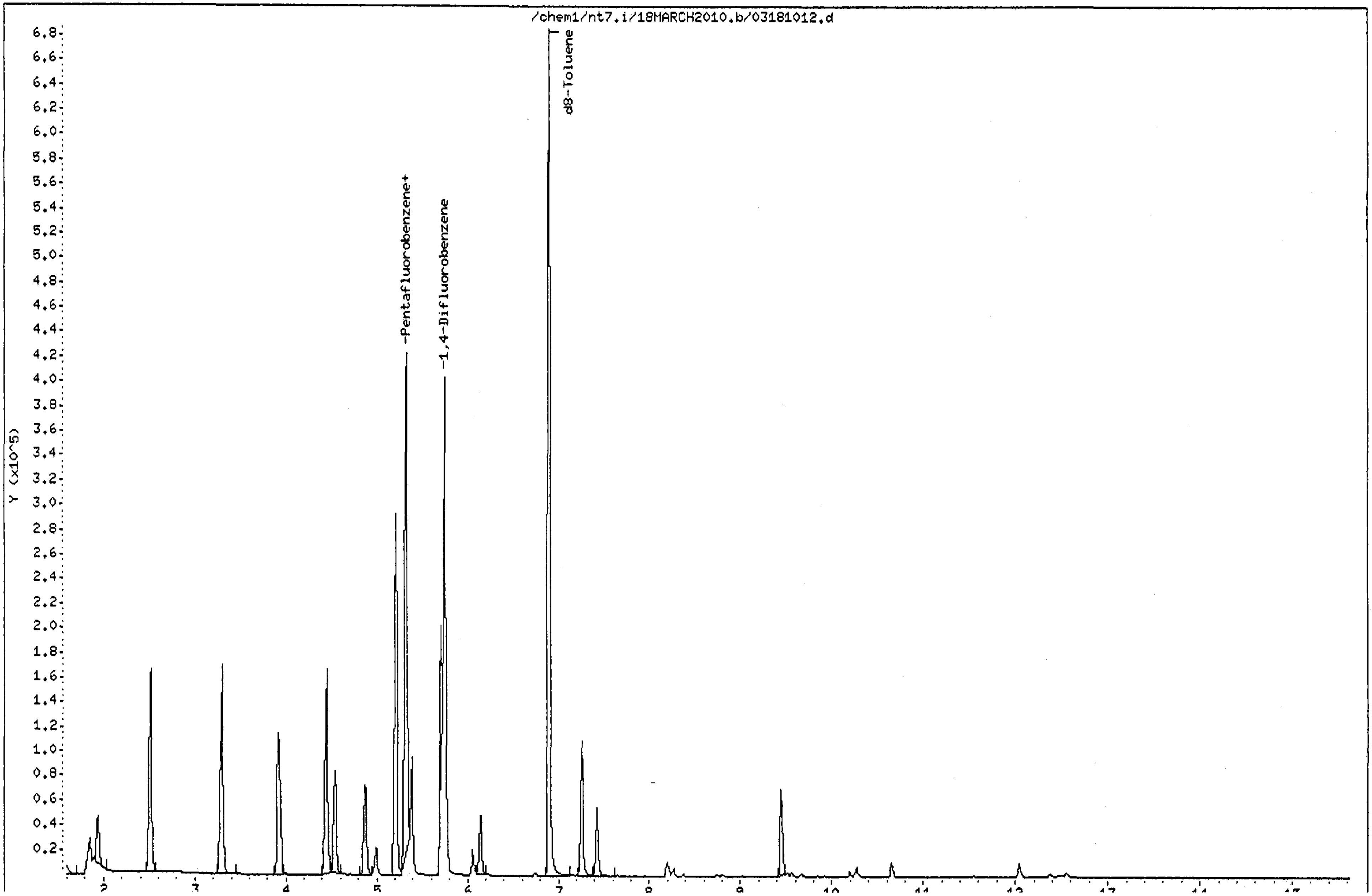
EA UPPER LIMIT = +100% of internal standard area.
EA LOWER LIMIT = - 50% of internal standard area.
' UPPER LIMIT = + 0.50 minutes of internal standard RT.
' LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/18MARCH2010.b/03181012.d
Date : 18-MAR-2010 06:47
Client ID: 500 PPT
Sample Info: 05000318,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



PC 3/19/10

Analytical Resources, Inc.

SW8260C SIM

ata file : /chem1/nt7.i/18MARCH2010.b/03181013.d
ab Smp Id: icv0318 Client Smp ID: icv0318
nj Date : 18-MAR-2010 07:14
perator : PC Inst ID: nt7.i
mp Info : icv0318,10,10,0
sc Info : 10-
omment :
ethod : /chem1/nt7.i/18MARCH2010.b/sim031810.m
eth Date : 19-Mar-2010 10:16 paul Quant Type: ISTD
al Date : 18-MAR-2010 06:47 Cal File: 03181012.d
s bottle: 1 QC Sample: LCS
l Factor: 1.00000
ntegrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

nd Variable Local Compound Variable

	pounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
1	Vinyl Chloride	62	1.552	1.554	(0.292)	217111	1008.81	1008.8
2	1,1-Dichloroethene	96	2.519	2.519	(0.474)	175819	995.184	995.18
.75	Trans-1,2-Dichloroethene	96	3.295	3.295	(0.620)	201746	1040.58	1040.6
3	cis-1,2-dichloroethene	96	4.446	4.446	(0.836)	210840	1065.09	1065.1
6	Benzene	78	5.210	5.210	(0.907)	859471	1035.47	1035.5
4	Pentafluorobenzene	168	5.316	5.316	(1.000)	409680	1000.00	
5	d4-1,2-Dichloroethane	65	5.328	5.328	(1.002)	146516	987.058	987.06
.76	1,2-Dichloroethane	62	5.386	5.386	(1.013)	219876	1132.32	1132.3
8	Trichloroethene	130	5.712	5.710	(0.994)	224489	1043.95	1043.9
7	1,4-Difluorobenzene	114	5.746	5.745	(1.000)	614179	1000.00	
9	d8-Toluene	98	6.903	6.903	(1.201)	699132	1000.83	1000.8
10	Tetrachloroethene	166	7.260	7.260	(1.263)	213067	1065.37	1065.4
11	1,1,2,2-Tetrachloroethane	83	9.447	9.447	(1.644)	148477	1088.99	1089.0

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

nstrument ID: nt7.i
ab File ID: 03181013.d
ab Smp Id: icv0318
nalysis Type: VOA
uant Type: ISTD
perator: PC
ethod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
isc Info: 10-

Calibration Date: 18-MAR-2010
Calibration Time: 06:21
Client Smp ID: icv0318
Level: LOW
Sample Type: WATER

est Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	409680	-6.19
7 1,4-Difluorobenze	618992	309496	1237984	614179	-0.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.02

EA UPPER LIMIT = +100% of internal standard area.
EA LOWER LIMIT = - 50% of internal standard area.
UPPER LIMIT = + 0.50 minutes of internal standard RT.
LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

ient Name: Client SDG: 18MARCH2010
ample Matrix: LIQUID Fraction: VOA
ab Smp Id: icv0318 Client Smp ID: icv0318
evel: LOW Operator: PC
ata Type: MS DATA SampleType: LCS
pikeList File: special.spk Quant Type: ISTD
ablist File: all.sub
ethod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
sc Info: 10-

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	1008.8	100.88	76-120
176	1,2-Dichloroethane	1000.0	1132.3	113.23	70-130
175	Trans-1,2-Dichloro	1000.0	1040.6	104.06	70-130
2	1,1-Dichloroethene	1000.0	995.18	99.52	79-126
3	cis-1,2-dichloroet	1000.0	1065.1	106.51	76-127
6	Benzene	1000.0	1035.5	103.55	75-121
8	Trichloroethene	1000.0	1043.9	104.39	79-120
10	Tetrachloroethene	1000.0	1065.4	106.54	75-123
11	1,1,2,2-Tetrachlor	1000.0	1089.0	108.90	72-129

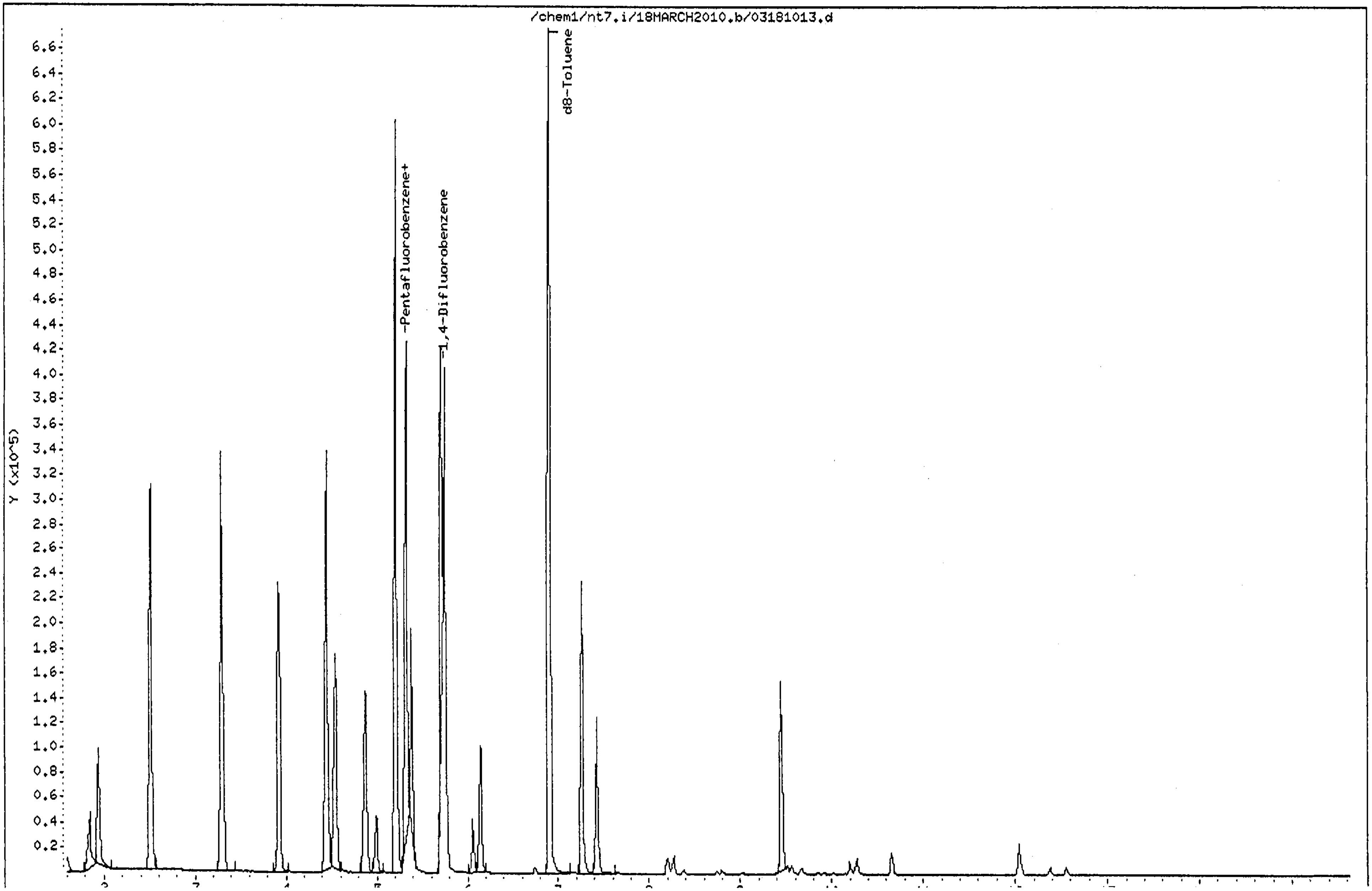
	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	987.06	98.71	76-119
$ 9	d8-Toluene	1000.0	1000.8	100.08	60-140

Data File: /chem1/nt7.i/18MARCH2010.b/03181013.d
Date : 18-MAR-2010 07:14
Client ID: icv0318
Sample Info: icv0318,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



NOT USED
IS FAILURE
KC
3/19/10

Analytical Resources, Inc.

SW8260C SIM

ata file : /chem1/nt7.i/18MARCH2010.b/03181007.d
ab Smp Id: 00500318 Client Smp ID: 50 PPT
nj Date : 18-MAR-2010 04:34
perator : PC Inst ID: nt7.i
mp Info : 00500318,10,10,0
isc Info : 10-
omment :
ethod : /chem1/nt7.i/18MARCH2010.b/sim031810.m
eth Date : 19-Mar-2010 10:16 paul Quant Type: ISTD
al Date : 18-MAR-2010 04:34 Cal File: 03181007.d
ls bottle: 1 Calibration Sample, Level: 2
il Factor: 1.00000
ntegrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

pnd Variable Local Compound Variable

npounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	ON-COL (ng/L)
1 Vinyl Chloride	62	1.552	1.554	(0.292)	11141	50.0000	100.57
2 1,1-Dichloroethene	96	2.520	2.519	(0.474)	9588	50.0000	105.43
175 Trans-1,2-Dichloroethene	96	3.295	3.295	(0.620)	9430	50.0000	94.492
3 cis-1,2-dichloroethene	96	4.447	4.446	(0.836)	10245	50.0000	100.54
6 Benzene	78	5.211	5.210	(0.907)	42374	50.0000	106.56
4 Pentafluorobenzene	168	5.317	5.316	(1.000)	210878	1000.00	
5 d4-1,2-Dichloroethane	65	5.328	5.328	(1.002)	76125	1000.00	996.32
176 1,2-Dichloroethane	62	5.387	5.386	(1.013)	10268	50.0000	102.73
8 Trichloroethene	130	5.712	5.710	(0.994)	10972	50.0000	106.50
7 1,4-Difluorobenzene	114	5.746	5.745	(1.000)	294252	1000.00	
9 d8-Toluene	98	6.902	6.903	(1.201)	334875	1000.00	1000.6
10 Tetrachloroethene	166	7.259	7.260	(1.263)	9990	50.0000	104.26
11 1,1,2,2-Tetrachloroethane	83	9.457	9.447	(1.646)	6166	50.0000	94.394

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

nstrument ID: nt7.i
ab File ID: 03181007.d
ab Smp Id: 00500318
nalysis Type: VOA
ant Type: ISTD
perator: PC
ethod File: /chem1/nt7.i/18MARCH2010.b/sim031810.m
.sc Info: 10-

Calibration Date: 18-MAR-2010
Calibration Time: 06:21
Client Smp ID: 50 PPT
Level: LOW
Sample Type: WATER

est Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
4 Pentafluorobenzen	436713	218356	873426	210878	-51.71	<-
7 1,4-Difluorobenze	618992	309496	1237984	294252	-52.46	<-

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.01
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.02

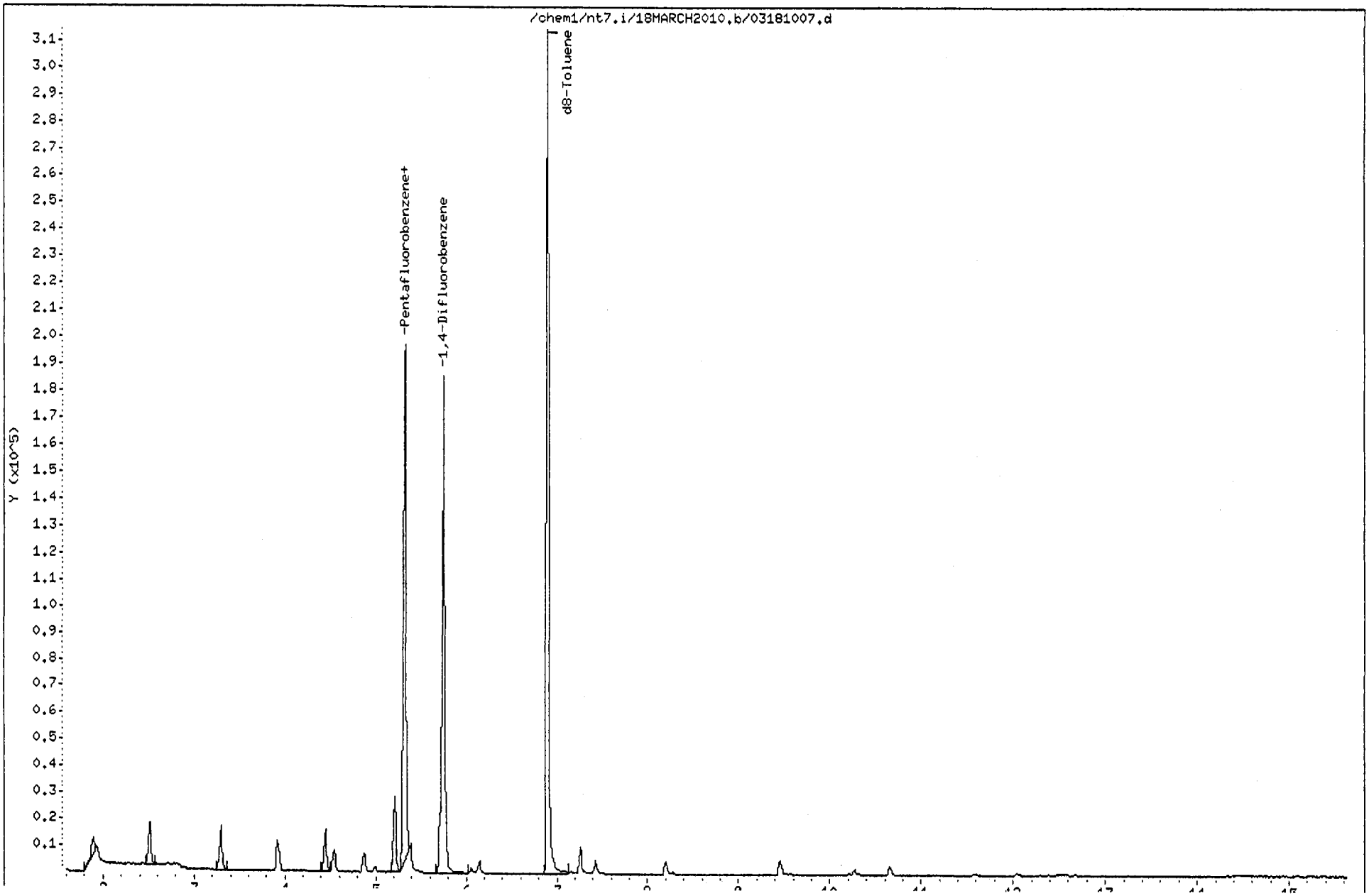
EA UPPER LIMIT = +100% of internal standard area.
EA LOWER LIMIT = - 50% of internal standard area.
UPPER LIMIT = + 0.50 minutes of internal standard RT.
LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/18MARCH2010.b/03181007.d
Date : 18-MAR-2010 04:34
Client ID: 50 PPT
Sample Info: 00500318,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QP69 Project: LORA LAKE APARTMENT

Instrument ID: NT7 Cont. Calib. Date: 03/29/10

Init. Calib. Date: 03/18/10 Cont. Calib. Time: 1245

COMPOUND	CalAmt or ARF	CC Amt 1000	MIN RRF	CURVE TYPE	%D or Drift	
Vinyl Chloride	0.526	0.502	0.010	AVRG	-4.6	
1,1-Dichloroethene	0.431	0.410	0.010	AVRG	-4.9	
cis-1,2-dichloroethene	0.483	0.445	0.010	AVRG	-7.9	
Benzene	1.351	1.246	0.010	AVRG	-7.8	
Trichloroethene	0.350	0.324	0.010	AVRG	-7.4	
Tetrachloroethene	0.326	0.317	0.010	AVRG	-2.8	
1,1,2,2-Tetrachloroethane	0.222	0.238	0.300	AVRG	7.2	*
Trans-1,2-Dichloroethene	0.473	0.440	0.010	AVRG	-7.0	
1,2-Dichloroethane	0.474	0.503	0.010	AVRG	6.1	
d4-1,2-Dichloroethane	0.362	0.385	0.010	AVRG	6.4	
d8-Toluene	1.137	1.146	0.010	AVRG	0.8	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

PC 3/31/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301002.d
Lab Smp Id: CC0330 Client Smp ID: CC0330
Inj Date : 29-MAR-2010 12:45
Operator : PC Inst ID: nt7.i
Smp Info : CC0330,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:24 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
1 Vinyl Chloride	62	1.554	1.554	(0.292)	249805	1000.00	955.63
2 1,1-Dichloroethene	96	2.519	2.519	(0.474)	203854	1000.00	949.99
175 Trans-1,2-Dichloroethene	96	3.294	3.294	(0.620)	218805	1000.00	929.16
3 cis-1,2-dichloroethene	96	4.446	4.446	(0.836)	221446	1000.00	921.00
6 Benzene	78	5.209	5.209	(0.907)	905885	1000.00	922.40
4 Pentafluorobenzene	168	5.315	5.315	(1.000)	497606	1000.00	
5 d4-1,2-Dichloroethane	65	5.327	5.327	(1.002)	191774	1000.00	1063.7
176 1,2-Dichloroethane	62	5.386	5.386	(1.013)	250151	1000.00	1060.6
8 Trichloroethene	130	5.711	5.711	(0.994)	235138	1000.00	924.16
7 1,4-Difluorobenzene	114	5.745	5.745	(1.000)	726697	1000.00	
9 d8-Toluene	98	6.903	6.903	(1.202)	833105	1000.00	1008.0
10 Tetrachloroethene	166	7.260	7.260	(1.264)	230138	1000.00	972.55
11 1,1,2,2-Tetrachloroethane	83	9.447	9.447	(1.644)	172822	1000.00	1071.3

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301002.d
Lab Smp Id: CC0330
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: CC0330
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	497606	13.94
7 1,4-Difluorobenze	618992	309496	1237984	726697	17.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt7.i
Lab File ID: 03301002.d
Analysis Type: WATER
Lab Sample ID: CC0330
Method: /chem1/nt7.i/30MARCH2010.b/sim031810.m

Injection Date: 29-MAR-2010 12:45
Init. Cal. Date(s): 18-MAR-2010 18-MAR-2010
Init. Cal. Times: 04:07 06:47
Quant Type: ISTD

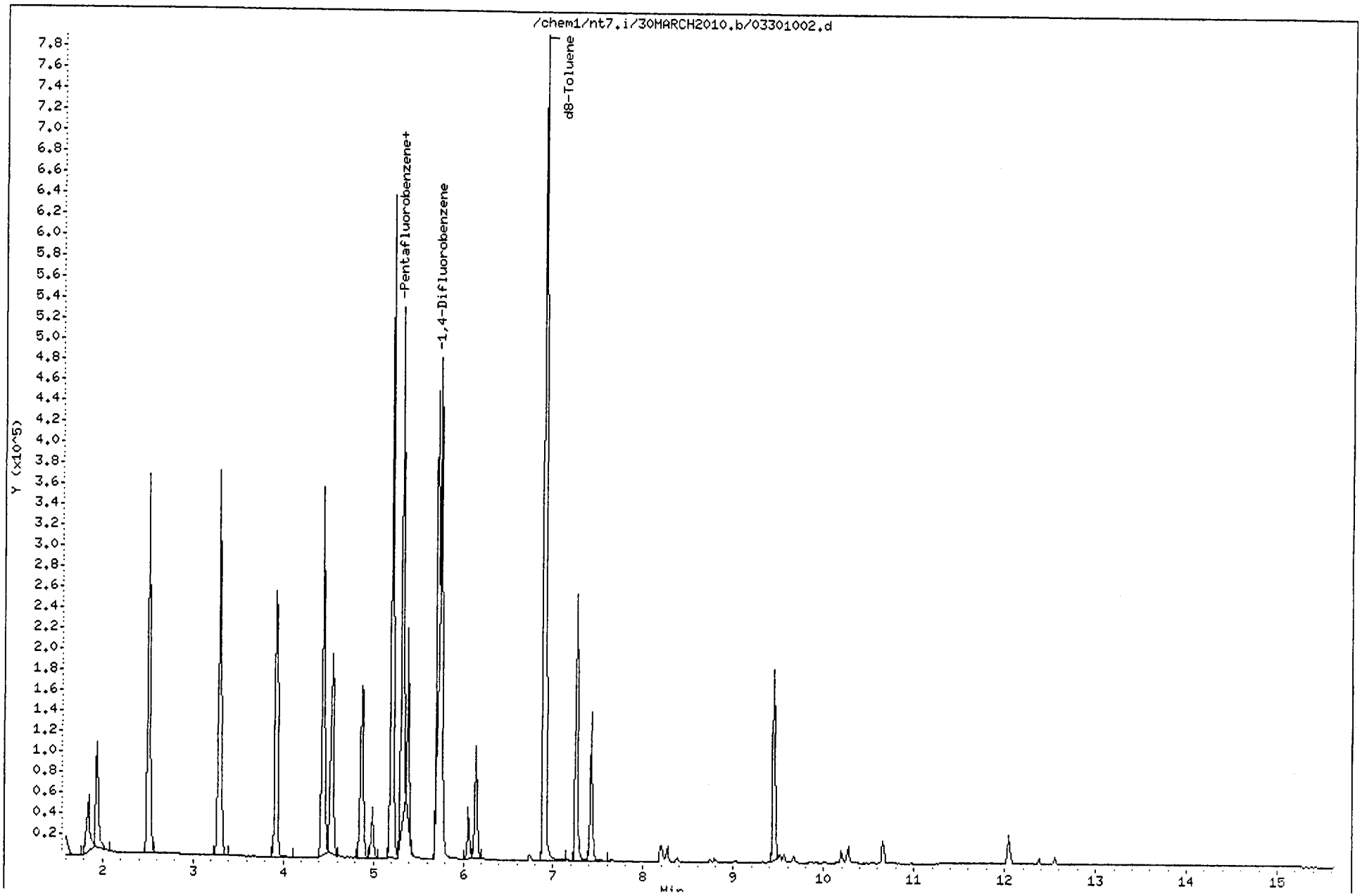
COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Vinyl Chloride	0.52532	0.50201	0.100	-4.43744	20.00000	Averaged
2 1,1-Dichloroethene	0.43124	0.40967	0.100	-5.00129	20.00000	Averaged
175 Trans-1,2-Dichloroethene	0.47324	0.43972	0.100	-7.08416	20.00000	Averaged
3 cis-1,2-dichloroethene	0.48319	0.44502	0.100	-7.89951	20.00000	Averaged
6 Benzene	1.35145	1.24658	0.100	-7.75966	20.00000	Averaged
$ 5 d4-1,2-Dichloroethane	0.36232	0.38539	0.100	6.36727	20.00000	Averaged
176 1,2-Dichloroethane	0.47398	0.50271	0.100	6.06083	20.00000	Averaged
8 Trichloroethene	0.35012	0.32357	0.100	-7.58360	20.00000	Averaged
$ 9 d8-Toluene	1.13737	1.14643	0.100	0.79590	20.00000	Averaged
10 Tetrachloroethene	0.32563	0.31669	0.100	-2.74470	20.00000	Averaged
11 1,1,2,2-Tetrachloroethane	0.22199	0.23782	0.100	7.12934	20.00000	Averaged

Data File: /chem1/nt7.i/30MARCH2010.b/03301002.d
Date : 29-MAR-2010 12:45
Client ID: CC0330
Sample Info: CC0330,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



SIM Volatile Analysis
QC Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Data File: /chem1/nt7.i/18MARCH2010.b/03181001.d

Date : 18-MAR-2010 01:35

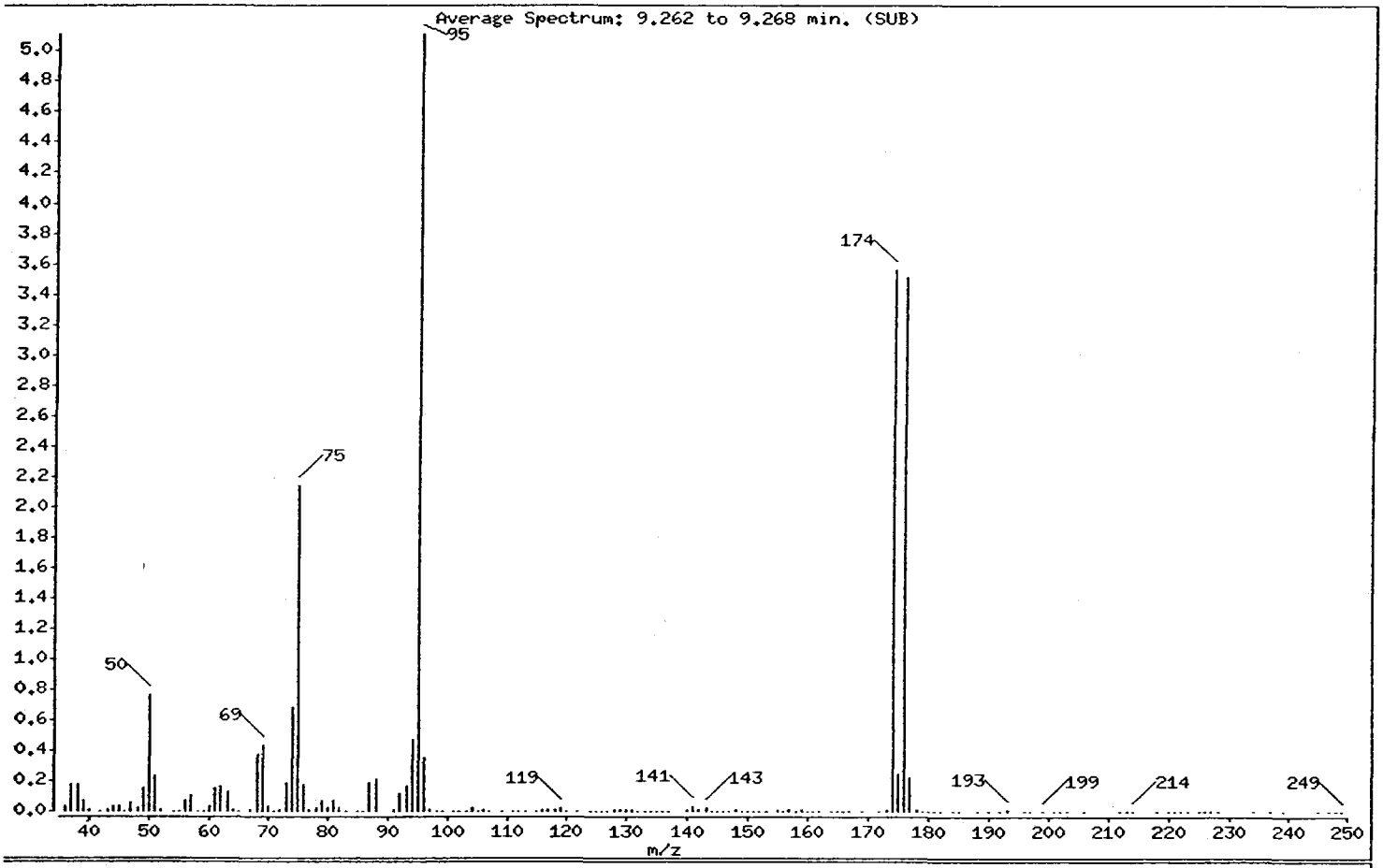
Client ID: BFB0318 Instrument: nt7.i

Sample Info: BFB0318

Purge Volume: 5.0 Operator: PC

Column phase: RTX502.2 Column diameter: 0.18

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	15.00
75	30.00 - 66.00% of mass 95	41.84
96	5.00 - 9.00% of mass 95	6.87
173	Less than 2.00% of mass 174	0.23 (0.34)
174	50.00 - 101.00% of mass 95	69.56
175	4.00 - 9.00% of mass 174	4.94 (7.10)
176	93.00 - 101.00% of mass 174	68.65 (98.70)
177	5.00 - 9.00% of mass 176	4.38 (6.38)

Data File: /chem1/nt7.i/18MARCH2010.b/03181001.d

Date : 18-MAR-2010 01:35

Client ID: BFB0318 Instrument: nt7.i

Sample Info: BFB0318

Purge Volume: 5.0 Operator: PC

Column phase: RTX502.2 Column diameter: 0.18

Data File: 03181001.d

Spectrum: Average Spectrum: 9.262 to 9.268 min. (SUB)

Location of Maximum: 95.00

Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3271	80.00	2333	130.00	1288	178.00	859
37.00	18080	81.00	7251	131.00	870	179.00	248
38.00	17640	82.00	1932	132.00	88	180.00	77
39.00	6485	83.00	485	133.00	190	181.00	63
40.00	760	85.00	146	134.00	197	182.00	61
42.00	479	86.00	445	135.00	489	184.00	185
43.00	635	87.00	18224	136.00	185	185.00	70
44.00	3064	88.00	21216	137.00	229	188.00	141
45.00	4085	91.00	750	140.00	726	190.00	223
46.00	192	92.00	11285	141.00	3175	192.00	75
47.00	5689	93.00	16285	142.00	665	193.00	895
48.00	2711	94.00	47400	143.00	2722	196.00	174
49.00	14921	95.00	511040	144.00	175	197.00	155
50.00	76672	96.00	35104	145.00	550	199.00	510
51.00	22936	97.00	1143	146.00	368	201.00	54
52.00	1001	98.00	226	147.00	353	202.00	72
54.00	165	99.00	123	148.00	1390	203.00	119
55.00	290	101.00	119	149.00	375	206.00	340
56.00	6704	102.00	95	150.00	77	212.00	242
57.00	10162	103.00	284	151.00	266	213.00	82
58.00	82	104.00	2356	152.00	515	214.00	292
59.00	488	105.00	238	153.00	522	218.00	57
60.00	3987	106.00	1148	155.00	1165	220.00	57
61.00	15800	107.00	289	156.00	195	221.00	67
62.00	16920	109.00	311	157.00	833	222.00	55
63.00	12379	111.00	472	158.00	129	223.00	55
64.00	1418	112.00	407	159.00	752	225.00	110
65.00	345	113.00	28	160.00	69	226.00	152
67.00	673	115.00	508	161.00	407	227.00	61
68.00	37824	116.00	1431	162.00	203	228.00	142
69.00	43080	117.00	1524	164.00	197	234.00	279
70.00	3943	118.00	927	165.00	168	237.00	237
71.00	319	119.00	2137	166.00	67	239.00	68
72.00	1575	120.00	135	167.00	140	245.00	242
73.00	18296	122.00	171	169.00	93	247.00	61

Data File: /chem1/nt7.i/18MARCH2010.b/03181001.d

Date : 18-MAR-2010 01:35

Client ID: BFB0318 Instrument: nt7.i

Sample Info: BFB0318

Purge Volume: 5.0 Operator: PC

Column phase: RTX502.2 Column diameter: 0.18

Data File: 03181001.d

Spectrum: Average Spectrum: 9.262 to 9.268 min. (SUB)

Location of Maximum: 95.00

Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	68536	124.00	383	172.00	106	248.00	131
75.00	213760	125.00	237	173.00	1198	249.00	582
76.00	17832	126.00	502	174.00	355456		
77.00	1420	127.00	321	175.00	25232		
78.00	2052	128.00	1555	176.00	350848		
79.00	7375	129.00	662	177.00	22392		

PC 3/31/10

Data File: /chem1/nt7.i/30MARCH2010.b/03301001.d

Date : 29-MAR-2010 12:06

Client ID: BFB0330

Instrument: nt7.i

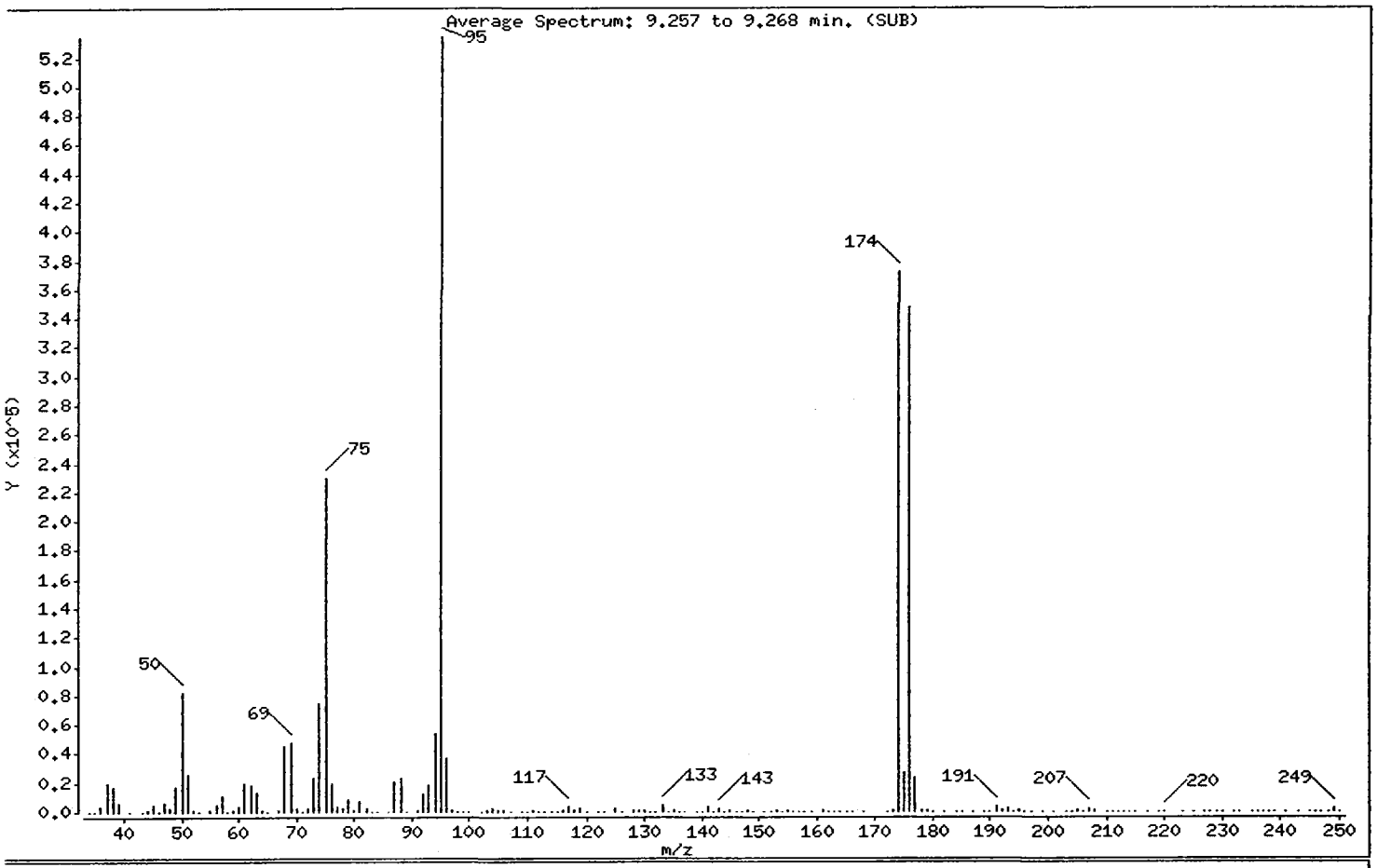
Sample Info: BFB0330

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	15.35
75	30.00 - 66.00% of mass 95	43.10
96	5.00 - 9.00% of mass 95	6.88
173	Less than 2.00% of mass 174	0.26 (0.38)
174	50.00 - 101.00% of mass 95	69.59
175	4.00 - 9.00% of mass 174	5.01 (7.20)
176	93.00 - 101.00% of mass 174	65.06 (93.48)
177	5.00 - 9.00% of mass 176	4.36 (6.70)

Data File: /chem1/nt7.i/30MARCH2010.b/03301001.d

Date : 29-MAR-2010 12:06

Client ID: BFB0330

Instrument: nt7.i

Sample Info: BFB0330

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: 03301001.d

Spectrum: Average Spectrum: 9.257 to 9.268 min. (SUB)

Location of Maximum: 95.00

Number of points: 180

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	56	84.00	304	137.00	2	194.00	592
35.00	257	86.00	577	139.00	181	195.00	682
36.00	3726	87.00	21216	140.00	216	196.00	133
37.00	20152	88.00	23408	141.00	3216	197.00	124
38.00	16664	89.00	273	142.00	111	199.00	110
39.00	6041	91.00	1029	143.00	3004	201.00	267
41.00	278	92.00	12467	144.00	241	203.00	478
43.00	61	93.00	17928	145.00	757	204.00	55
44.00	1460	94.00	53672	146.00	508	205.00	950
45.00	4439	95.00	534144	147.00	516	206.00	232
46.00	450	96.00	36760	148.00	991	207.00	2747
47.00	5646	97.00	740	149.00	296	208.00	770
48.00	2321	98.00	280	151.00	205	210.00	231
49.00	17552	99.00	108	152.00	392	211.00	64
50.00	81976	100.00	233	153.00	644	212.00	118
51.00	25616	102.00	258	154.00	121	213.00	103
52.00	1396	103.00	1039	155.00	1117	214.00	170
53.00	568	104.00	1875	156.00	100	215.00	154
55.00	1839	105.00	775	157.00	607	217.00	57
56.00	5474	106.00	1129	158.00	312	219.00	96
57.00	11612	107.00	222	159.00	605	220.00	200
58.00	212	109.00	109	161.00	693	223.00	137
59.00	681	110.00	368	162.00	51	225.00	92
60.00	3589	111.00	773	163.00	411	227.00	78
61.00	20232	112.00	503	164.00	324	228.00	154
62.00	18152	113.00	326	165.00	330	229.00	72
63.00	13600	114.00	255	166.00	123	230.00	45
64.00	1514	115.00	445	168.00	102	232.00	138
65.00	507	116.00	1212	172.00	571	233.00	414
67.00	937	117.00	3106	173.00	1403	235.00	261
68.00	44880	118.00	1698	174.00	371712	236.00	192
69.00	48024	119.00	3010	175.00	26752	237.00	219
70.00	3056	120.00	341	176.00	347456	238.00	51
71.00	183	122.00	140	177.00	23280	239.00	87
72.00	2873	123.00	194	178.00	1046	241.00	149

Date : 29-MAR-2010 12:06

Client ID: BFB0330 Instrument: nt7.i

Sample Info: BFB0330

Operator: PC

Column phase: RTXVMS Column diameter: 0.18

Data File: 03301001.d
Spectrum: Average Spectrum: 9.257 to 9.268 min. (SUB)
Location of Maximum: 95.00
Number of points: 180

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	23304	125.00	2189	179.00	1153	243.00	159
74.00	74832	126.00	327	180.00	302	245.00	39
75.00	230144	128.00	1254	182.00	143	246.00	31
76.00	19920	129.00	963	184.00	72	247.00	190
77.00	3772	130.00	1710	185.00	173	248.00	89
78.00	1912	131.00	542	187.00	36	249.00	2027
79.00	8605	132.00	429	189.00	378	250.00	189
80.00	1742	133.00	4316	190.00	159		
81.00	7977	134.00	299	191.00	3268		
82.00	1863	135.00	648	192.00	1170		
83.00	502	136.00	418	193.00	2803		

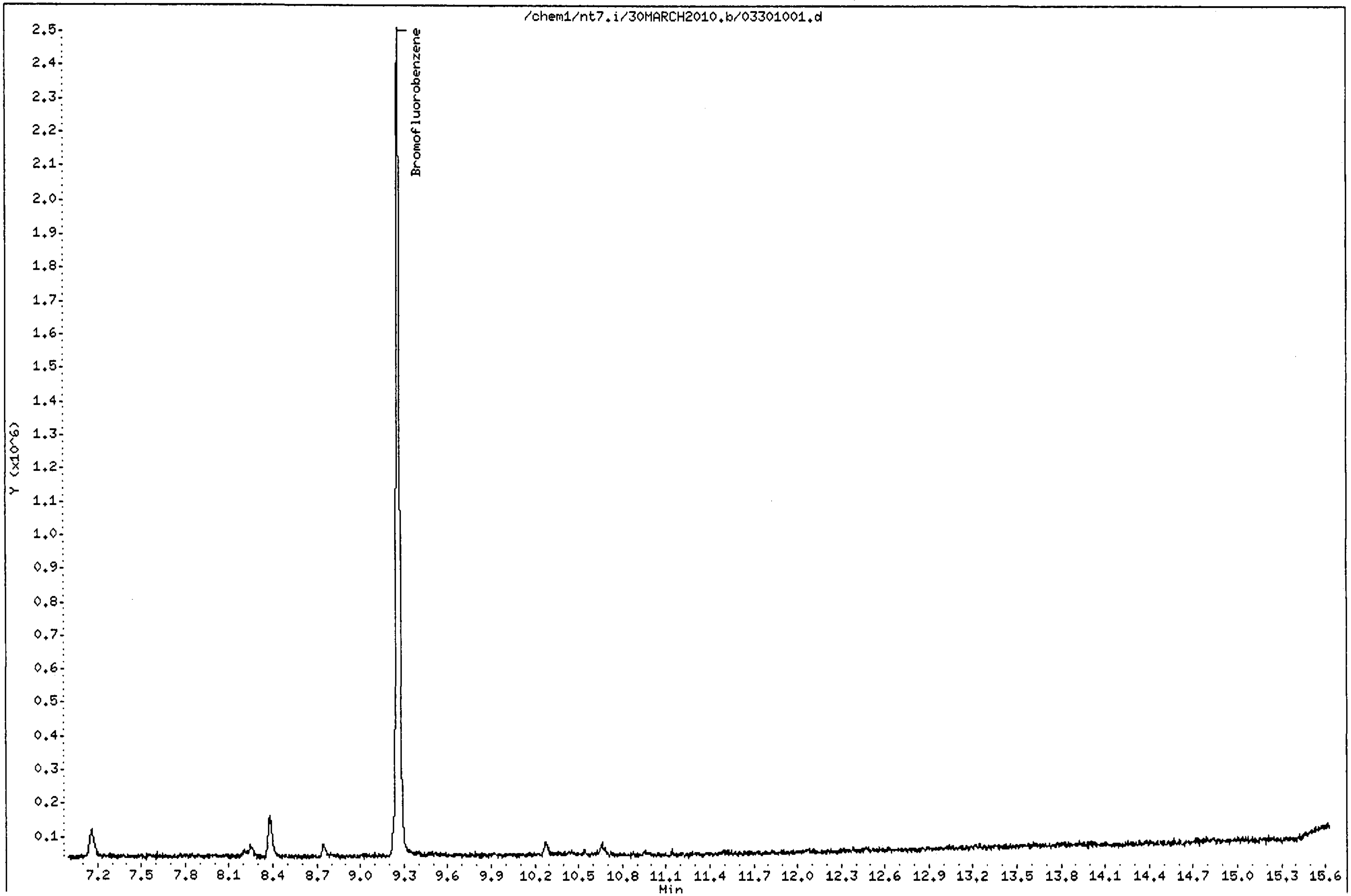
Data File: /chem1/nt7.i/30MARCH2010.b/03301001.d
Date : 29-MAR-2010 12:06
Client ID: BFB0330
Sample Info: BFB0330

Instrument: nt7.i

Operator: PC

Column phase: RTXVHS

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: MB-032910**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-032910
LIMS ID: 10-8052
Matrix: Water
Data Release Authorized:
Reported: 04/30/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT7/PKC
Date Analyzed: 03/29/10 14:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	102%

PC 3/31/10

Data File: /chem1/nt7.i/30MARCH2010.b/03301005.d
Report Date: 31-Mar-2010 10:25

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301005.d
Lab Smp Id: MB0330 Client Smp ID: MB0330
Inj Date : 29-MAR-2010 14:05
Operator : PC Inst ID: nt7.i
Smp Info : MB0330,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:25 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
1 Vinyl Chloride	62	Compound Not Detected.					
2 1,1-Dichloroethene	96	Compound Not Detected.					
175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
3 cis-1,2-dichloroethene	96	Compound Not Detected.					
6 Benzene	78	Compound Not Detected.					
4 Pentafluorobenzene	168	5.328	5.315	(1.000)	487441	1000.00	
5 d4-1,2-Dichloroethane	65	5.328	5.327	(1.000)	192397	1089.38	1089.4
176 1,2-Dichloroethane	62	Compound Not Detected.					
8 Trichloroethene	130	Compound Not Detected.					
7 1,4-Difluorobenzene	114	5.757	5.745	(1.000)	670171	1000.00	
9 d8-Toluene	98	6.903	6.903	(1.199)	777460	1019.97	1020.0
10 Tetrachloroethene	166	Compound Not Detected.					
11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301005.d
Lab Smp Id: MB0330
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: MB0330
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	487441	11.62
7 1,4-Difluorobenze	618992	309496	1237984	670171	8.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.33	0.23
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.20

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MB0330
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: all.sub
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-

Client SDG: 30MARCH2010
Fraction: VOA
Client Smp ID: MB0330
Operator: PC
SampleType: BLANK
Quant Type: ISTD

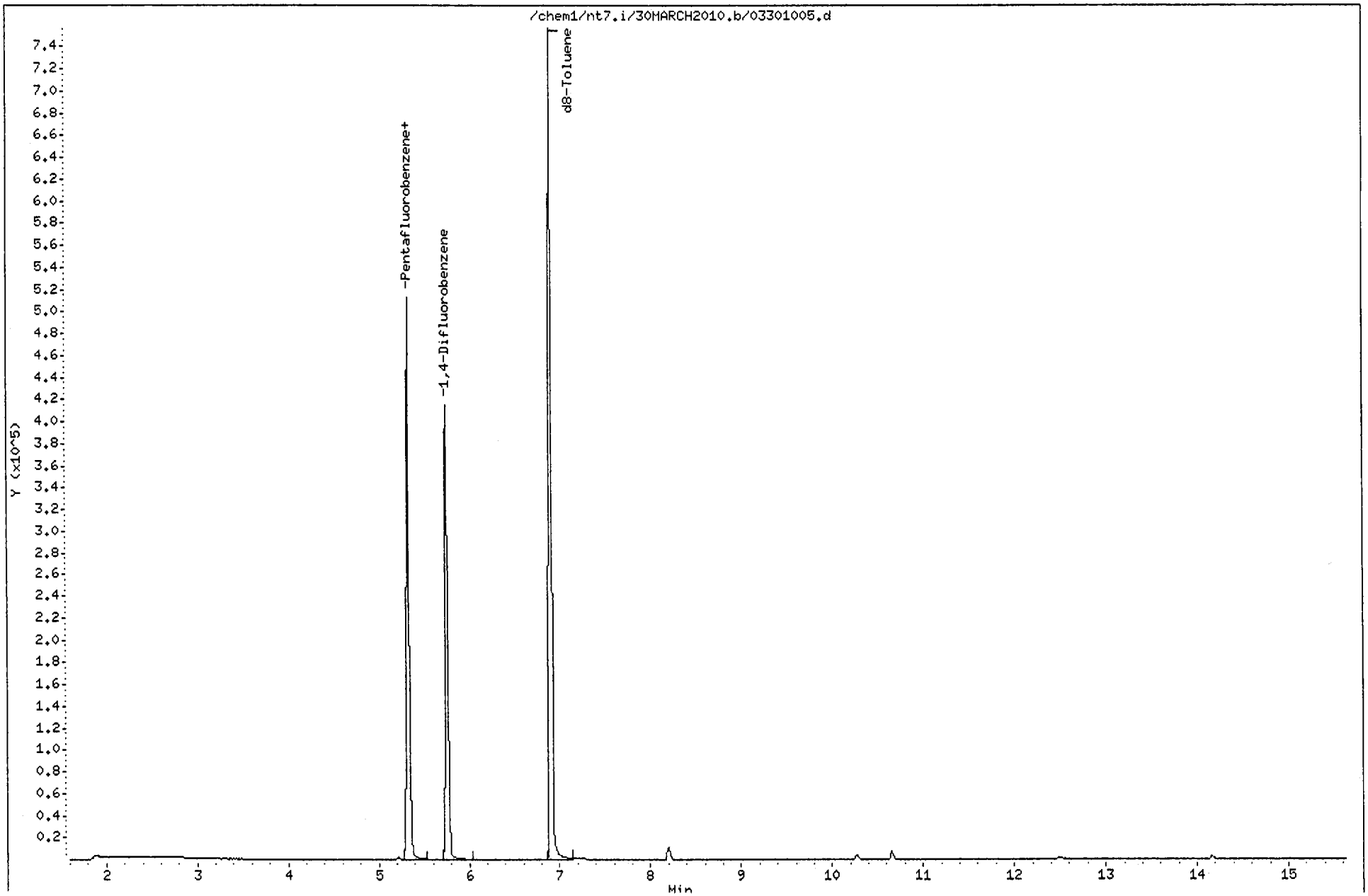
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1089.4	108.94	76-119
$ 9 d8-Toluene	1000.0	1020.0	102.00	60-140

Data File: /chem1/nt7.i/30MARCH2010.b/03301005.d
Date : 29-MAR-2010 14:05
Client ID: MB0330
Sample Info: MB0330,10,10,0

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



PS 3/31/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301003.d
Lab Smp Id: LCS0330 Client Smp ID: LCS0330
Inj Date : 29-MAR-2010 13:12
Operator : PC Inst ID: nt7.i
Smp Info : LCS0330,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:24 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

ompounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
1 Vinyl Chloride	62	1.553	1.554	(0.292)	250797	919.511	919.51
2 1,1-Dichloroethene	96	2.519	2.519	(0.473)	202532	904.563	904.56
175 Trans-1,2-Dichloroethene	96	3.294	3.294	(0.618)	219824	894.654	894.65
3 cis-1,2-dichloroethene	96	4.446	4.446	(0.835)	220695	879.698	879.70
6 Benzene	78	5.210	5.209	(0.907)	906838	938.128	938.13
4 Pentafluorobenzene	168	5.327	5.315	(1.000)	519204	1000.00	
5 d4-1,2-Dichloroethane	65	5.327	5.327	(1.000)	187178	994.992	994.99
176 1,2-Dichloroethane	62	5.386	5.386	(1.011)	246240	1000.59	1000.6
8 Trichloroethene	130	5.711	5.711	(0.994)	232408	928.031	928.03
7 1,4-Difluorobenzene	114	5.746	5.745	(1.000)	715267	1000.00	
9 d8-Toluene	98	6.903	6.903	(1.201)	826233	1015.62	1015.6
10 Tetrachloroethene	166	7.260	7.260	(1.264)	226258	971.439	971.44
11 1,1,2,2-Tetrachloroethane	83	9.447	9.447	(1.644)	166055	1045.79	1045.8

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301003.d
Lab Smp Id: LCS0330
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: LCS0330
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	519204	18.89
7 1,4-Difluorobenze	618992	309496	1237984	715267	15.55

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.33	0.23
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: LCS0330
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: all.sub
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-

Client SDG: 30MARCH2010
Fraction: VOA
Client Smp ID: LCS0330
Operator: PC
SampleType: LCS
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	919.51	91.95	76-120
176	1,2-Dichloroethane	1000.0	1000.6	100.06	70-130
175	Trans-1,2-Dichloro	1000.0	894.65	89.47	70-130
2	1,1-Dichloroethene	1000.0	904.56	90.46	79-126
3	cis-1,2-dichloroet	1000.0	879.70	87.97	76-127
6	Benzene	1000.0	938.13	93.81	75-121
8	Trichloroethene	1000.0	928.03	92.80	79-120
10	Tetrachloroethene	1000.0	971.44	97.14	75-123
11	1,1,2,2-Tetrachlor	1000.0	1045.8	104.58	72-129

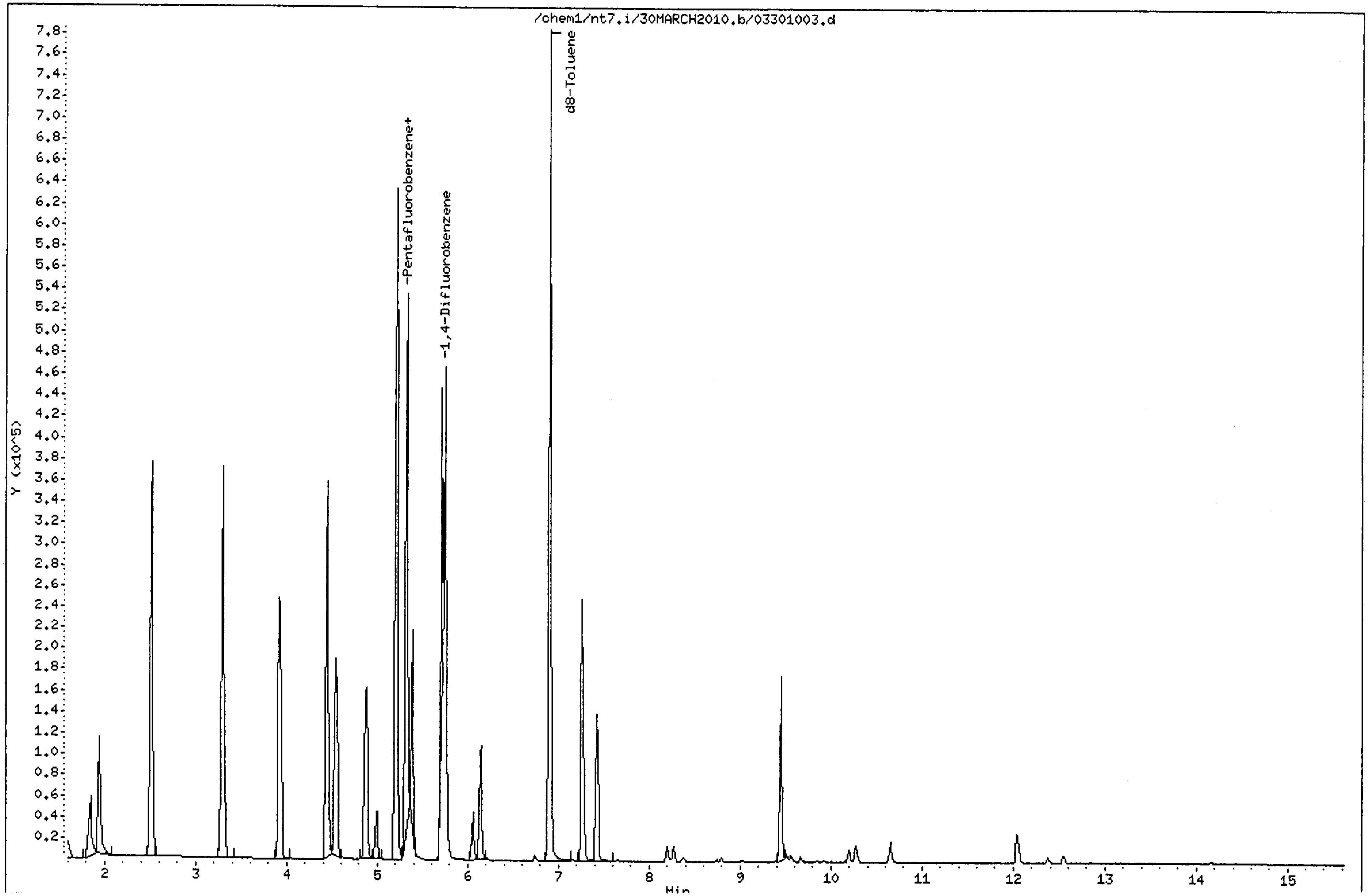
	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	994.99	99.50	76-119
$ 9	d8-Toluene	1000.0	1015.6	101.56	60-140

Data File: /chem1/nt7.i/30MARCH2010.b/03301003.d
Date : 29-MAR-2010 13:12
Client ID: LCS0330
Sample Info: LCS0330,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



PC 3/31/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/30MARCH2010.b/03301004.d
Lab Smp Id: LCSD0330 Client Smp ID: LCSD0330
Inj Date : 29-MAR-2010 13:39
Operator : PC Inst ID: nt7.i
Smp Info : LCSD0330,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/30MARCH2010.b/sim031810.m
Meth Date : 31-Mar-2010 10:24 paul Quant Type: ISTD
Cal Date : 18-MAR-2010 06:47 Cal File: 03181012.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
1 Vinyl Chloride	62	1.551	1.554	(0.292)	276605	1088.37	1088.4
2 1,1-Dichloroethene	96	2.520	2.519	(0.474)	222787	1067.87	1067.9
175 Trans-1,2-Dichloroethene	96	3.296	3.294	(0.620)	241591	1055.22	1055.2
3 cis-1,2-dichloroethene	96	4.447	4.446	(0.836)	243868	1043.22	1043.2
6 Benzene	78	5.211	5.209	(0.907)	997348	1056.99	1057.0
4 Pentafluorobenzene	168	5.317	5.315	(1.000)	483790	1000.00	
5 d4-1,2-Dichloroethane	65	5.329	5.327	(1.002)	184461	1052.33	1052.3
176 1,2-Dichloroethane	62	5.387	5.386	(1.013)	269825	1176.69	1176.7
8 Trichloroethene	130	5.712	5.711	(0.994)	255074	1043.44	1043.4
7 1,4-Difluorobenzene	114	5.746	5.745	(1.000)	698198	1000.00	
9 d8-Toluene	98	6.902	6.903	(1.201)	805517	1014.36	1014.4
10 Tetrachloroethene	166	7.259	7.260	(1.263)	247099	1086.86	1086.9
11 1,1,2,2-Tetrachloroethane	83	9.446	9.447	(1.644)	177945	1148.07	1148.1

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 03301004.d
Lab Smp Id: LCSD0330
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-

Calibration Date: 29-MAR-2010
Calibration Time: 12:45
Client Smp ID: LCSD0330
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	436713	218356	873426	483790	10.78
7 1,4-Difluorobenze	618992	309496	1237984	698198	12.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.03
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: LCSD0330
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: all.sub
Method File: /chem1/nt7.i/30MARCH2010.b/sim031810.m
Misc Info: 10-

Client SDG: 30MARCH2010
Fraction: VOA
Client Smp ID: LCSD0330
Operator: PC
SampleType: LCSD
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	1088.4	108.84	76-120
176	1,2-Dichloroethane	1000.0	1176.7	117.67	70-130
175	Trans-1,2-Dichloro	1000.0	1055.2	105.52	70-130
2	1,1-Dichloroethene	1000.0	1067.9	106.79	79-126
3	cis-1,2-dichloroet	1000.0	1043.2	104.32	76-127
6	Benzene	1000.0	1057.0	105.70	75-121
8	Trichloroethene	1000.0	1043.4	104.34	79-120
10	Tetrachloroethene	1000.0	1086.9	108.69	75-123
11	1,1,2,2-Tetrachlor	1000.0	1148.1	114.81	72-129

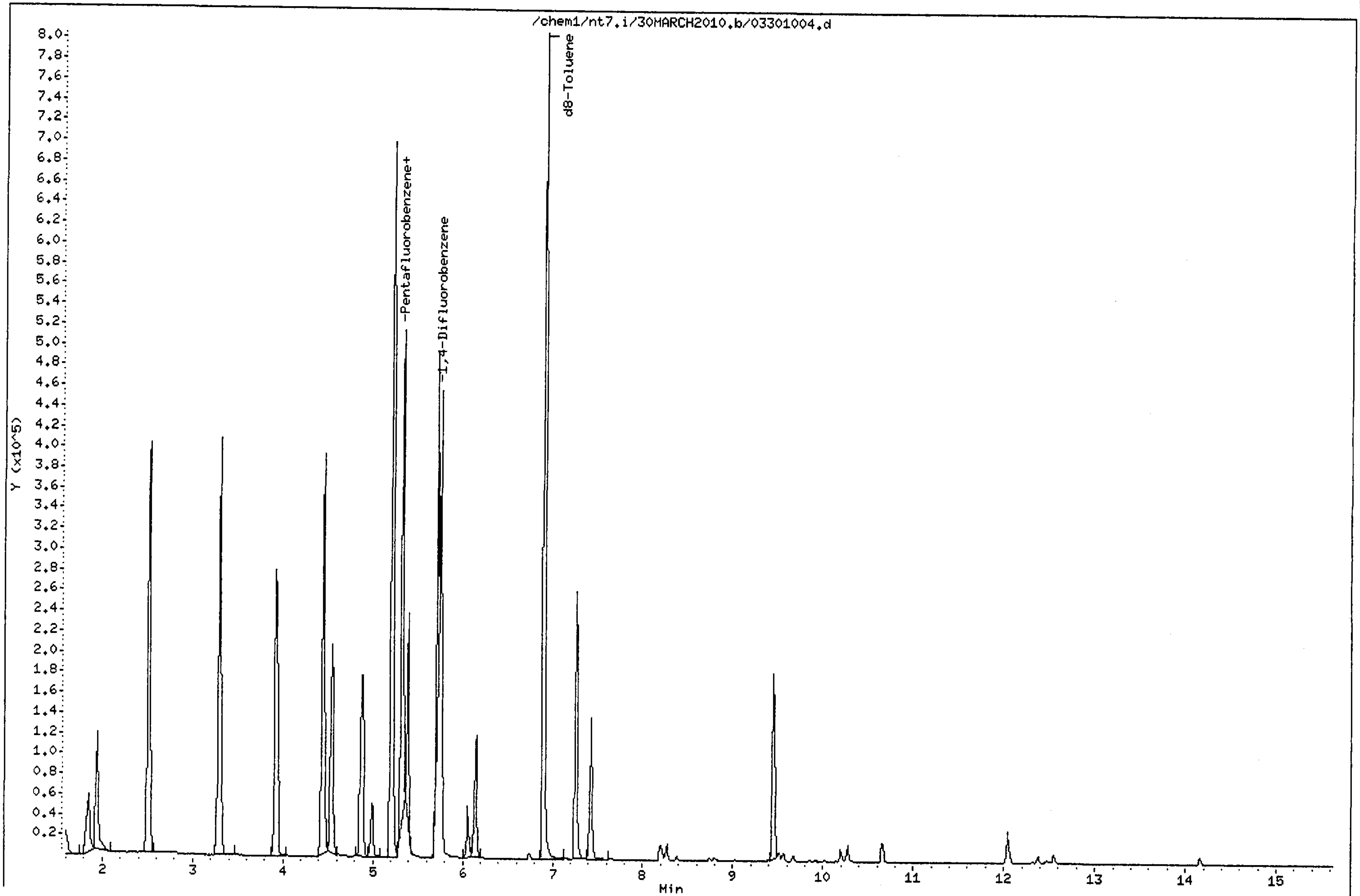
	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	1052.3	105.23	76-119
$ 9	d8-Toluene	1000.0	1014.4	101.44	60-140

Data File: /chem1/nt7.i/30MARCH2010.b/03301004.d
Date : 29-MAR-2010 13:39
Client ID: LCSD0330
Sample Info: LCSD0330,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



SIM Volatile Analysis
Run Logs

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Analytical Resources Inc.: Volatile Organics Instrument Log

NT-7 Serial No.:GC=US00024417, MS=US72821196

Date: 3/18/10 Analysis: SIM VOA Analyst: PC

GC Program: VC Column No: 850322 Column Type: RTXVMS

Instrument Tune (.U or .CT.): 03181001 EM Voltage: 1835

Calibration File: 03181011 Curve Date: 3/18/10

IS/SS	Ical/Ccal	LCS/ICV
VW621-2	VW624-4	VW614-2

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt7.i/18MARCH2010.b

	Time	Filename	LabID	ClientID	Vial#	pH	DF			
1	0115	03181001.d	BFB0318	BFB0318	1					
2	0211	03181002.d	40000318		1	5.32	5404611	5.75	753753	
3	0239	03181003.d	20000318		1	5.32	5379927	5.75	752079	
4	0306	03181004.d	10000318		1	5.32	5092673	5.75	701409	
5	0333	03181005.d	5000318		1	5.32	4856481	5.75	709951	
6	0427	03181006.d	01000318	100 PPT	1	5.32	4967061	5.75	707123	
7	0436	03181007.d	00500318	50 PPT	1	5.32	2108781	5.75	294252	
8	0501	03181008.d	00200318	20 PPT	1	5.32	4833151	5.75	677684	
9	0527	03181009.d	40000318	4 PPB	1	5.32	4550591	5.75	650741	
10	0554	03181010.d	20000318	2 PPB	1	5.32	4432961	5.75	656899	
11	0621	03181011.d	10000318	1 PPB	1	5.32	4357131	5.75	618992	
12	0647	03181012.d	05000318	500 PPT	1	5.32	4155031	5.75	615563	
13	0714	03181013.d	ICV0318	ICV0318	1	5.32	4096801	5.75	614173	

PC 3/22/10

Maintenance / Comments 50 ppt point misinjected - poor IS delivery

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: SIM ICAL Client ID: _____

ARI SOP: **404S**(Gas) **410S**(BTEX) **430S**(VPH) **703S**(SIM) **706S**(524.2) **708S**(8260C) **710S**(MME)

Parameter(s): SIM VOA

Instrument: NT-3 NT-5 NT-7 NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 10 Curve Date: 3/18/10 Analysis Start Date: _____

pH ≤ 2.0	YES / NO / NA	Method Blank In Control?	YES / NO
BFB Tune Meets Criteria?	YES / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
Internal Standard Meets Criteria?	YES / NO / NA	Surrogate Recovery In Control?	YES / NO
Special Analysis Criteria Met?	YES / NO / NA		

ICal acceptable? YES / NO; Q flag applied? YES / NO / NA

CCal acceptable? YES / NO; Q flag applied? YES / NO / NA

Bubbles/Headspace: None SM (≤ 2mm •) PB (2-4mm) LG (> 4mm ●) Head Space

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

50 point not used due to mechanical failure - IS not delivered properly.
1,2 dichloroethane added to SIM method.

Additional Details on Reverse: Yes / No

Analyst Signature: Paul Eglund **Date:** 3/19/10

Reviewer's Signature: _____ **Date:** 3/14/10

Analytical Resources Inc.: Volatile Organics Instrument Log

NT-7 Serial No.:GC=US00024417, MS=US72821196

Date: 3/30/10 Analysis: 5 IM VOA Analyst: PC

GC Program: VC Column No: 850322 Column Type: RTXVMS

Instrument Tune (.U or .CT.): 0330100] EM Voltage: 1871

Calibration File: 0330102 Curve Date: 3/18/10

IS/SS	Ical/Ccal	LCS/ICV
~~VH624-1~~ PC 3/31/10 VH624-2	VH624-4	VH624-4

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt7.i/30MARCH2010.b

	Time	Filename	LabID	ClientID	MT					
1	1256	03301001.d	BFB0330	BFB0330	9.00					
2	1245	03301002.d	CC0330	CC0330	1	5.32	497606	5.75	726697	
3	1312	03301003.d	LCS0330	LCS0330	1	5.33	519204	5.75	715267	
4	1339	03301004.d	LCSD0330	LCSD0330	1	5.32	483739	5.75	698198	
5	1405	03301005.d	MB0330	MB0330	1	5.33	487441	5.76	670171	
6	1437	03301006.d	QP67R	Trip Blank	1	5.33	454585	5.76	655788	CC
7	1503	03301007.d	QP69E	TB032510	1	5.32	456756	5.75	654382	
8	1530	03301008.d	QQ22E	TB032910	3	5.33	455606	5.76	657384	
9	1557	03301009.d	QP67J	MW-4	1	5.33	471894	5.76	647770	
10	1623	03301010.d	QP67K	MW-5B	1	5.33	473206	5.76	641576	
11	1650	03301011.d	QP67L	MW-8	1	5.33	444503	5.76	644179	
12	1716	03301012.d	QP67M	MW-10	1	5.33	438627	5.76	628528	
13	1743	03301013.d	QP67N	MW-7	1	5.33	443000	5.76	638774	
14	1810	03301014.d	QP67O	MW-3B	1	5.33	459504	5.76	644931	
15	1836	03301015.d	QP67P	MW-1B	1	5.33	428868	5.76	621753	
16	1903	03301016.d	QP67Q	MW-11	1	5.33	455872	5.76	620392	
17	1930	03301017.d	QP69A	CB31A032510GRAB	2	5.33	431275	5.76	614940	
18	1956	03301018.d	QP69AMS	CB31A032510GRAB MS	1	5.33	468699	5.76	636642	
19	2023	03301019.d	QP69AMSD	CB31A032510GRAB MSD	3	5.33	445071	5.76	634500	
20	2050	03301020.d	QP69B	CB4857032510GRAB	1	5.33	453606	5.76	612020	
21	2116	03301021.d	QP69C	CB1032510GRAB	1	5.33	438892	5.76	598574	
22	2143	03301022.d	QP69D	CB1D1032510GRAB	1	5.32	420095	5.75	602942	
23	2209	03301023.d	QQ22A	CB31A032910GRAB	1	5.33	435261	5.75	586771	
24	2236	03301024.d	QQ22B	CB4857032910GRAB	1	5.33	415408	5.76	568553	
25	2103	03301025.d	QQ22C	CB1032910GRAB	1	5.33	395094	5.75	565599	CC
26	2329	03301026.d	QQ22D	CB100032910GRAB	1	5.33	389406	5.75	558769	1

Maintenance / Comments

PC 3/31/10

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: QQV2 Client ID: Floyd/Snider

ARI SOP: **404S**(Gas) **410S**(BTEX) **430S**(VPH) (**703S**(SIM)) **706S**(524.2) **708S**(8260C) **710S**(MME)

Parameter(s): SIM

Instrument: NT-3 NT-5 (NT-7) NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 10 Curve Date: 3/18/10 Analysis Start Date: 3/30/10

pH ≤ 2.0 (YES) / NO / NA Method Blank In Control? YES / NO

BFB Tune Meets Criteria? (YES) / NO / NA LCS / LCSD Recovery In Control? (YES) / NO

Internal Standard Meets Criteria? (YES) / NO / NA Surrogate Recovery In Control? (YES) / NO

Special Analysis Criteria Met? YES / NO / (NA)

ICal acceptable? (YES) / NO; Q flag applied? YES / (NO) / NA

CCal acceptable? (YES) / NO; Q flag applied? YES / (NO) / NA

Bubbles/Headspace: (None) SM (≤ 2mm •) PB (2-4mm) LG (> 4mm ●) Head Space

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

MS/MSD on QP69A sufficient per PM

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** _____

Reviewer's Signature: _____ **Date:** 3/31/10

SIM Semivolatile Analysis
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	MNP	DBA	TOT OUT
MB-033010	73.7%	65.3%	0
LCS-033010	70.0%	63.3%	0
CB31A032510COMP	58.0%	23.0%	0
CB31A032510COMP MS	67.7%	28.6%	0
CB31A032510COMP MSD	66.3%	27.7%	0
CB4857032510COMP	70.3%	30.0%	0
CB1032510COMP	62.7%	24.8%	0
CB101032510COMP	64.7%	32.7%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(42-100)	(31-109)
(DBA) = d14-Dibenzo(a,h)anthracene	(40-125)	(10-133)

Prep Method: SW3520C
Log Number Range: 10-8030 to 10-8033

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted MS/MSD: 03/30/10

Date Analyzed MS: 04/02/10 18:58
MSD: 04/02/10 19:22
Instrument/Analyst MS: NT8/YZ
MSD: NT8/YZ

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 0.50 mL
MSD: 0.50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Naphthalene	0.0170	0.204	0.300	62.3%	0.195	0.300	59.3%	4.5%
2-Methylnaphthalene	0.0118	0.211	0.300	66.4%	0.212	0.300	66.7%	0.5%
1-Methylnaphthalene	< 0.0100 U	0.200	0.300	66.7%	0.201	0.300	67.0%	0.5%
Acenaphthylene	< 0.0100 U	0.199	0.300	66.3%	0.198	0.300	66.0%	0.5%
Acenaphthene	< 0.0100 U	0.198	0.300	66.0%	0.189	0.300	63.0%	4.7%
Fluorene	< 0.0100 U	0.225	0.300	75.0%	0.223	0.300	74.3%	0.9%
Phenanthrene	0.0420	0.270	0.300	76.0%	0.269	0.300	75.7%	0.4%
Anthracene	< 0.0100 U	0.179	0.300	59.7%	0.175	0.300	58.3%	2.3%
Fluoranthene	0.0775	0.295	0.300	72.5%	0.282	0.300	68.2%	4.5%
Pyrene	0.0791	0.291	0.300	70.6%	0.277	0.300	66.0%	4.9%
Benzo(a)anthracene	0.0166	0.194	0.300	59.1%	0.197	0.300	60.1%	1.5%
Chrysene	0.0391 Q	0.170 Q	0.300	43.6%	0.167 Q	0.300	42.6%	1.8%
Benzo(b)fluoranthene	0.0201	0.183	0.300	54.3%	0.178	0.300	52.6%	2.8%
Benzo(k)fluoranthene	0.0201	0.112	0.300	30.6%	0.106	0.300	28.6%	5.5%
Benzo(a)pyrene	0.0185	0.130	0.300	37.2%	0.125	0.300	35.5%	3.9%
Indeno(1,2,3-cd)pyrene	0.0151	0.0989	0.300	27.9%	0.0905	0.300	25.1%	8.9%
Dibenz(a,h)anthracene	< 0.0100 U	0.0927	0.300	30.9%	0.0841	0.300	28.0%	9.7%
Benzo(g,h,i)perylene	0.0307	0.123	0.300	30.8%	0.110	0.300	26.4%	11.2%
Dibenzofuran	< 0.0100 U	0.214	0.300	71.3%	0.210	0.300	70.0%	1.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS

Sample ID: LCS-033010
LAB CONTROL SAMPLE

Lab Sample ID: LCS-033010
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 03/30/10
Date Analyzed LCS: 04/02/10 18:11
Instrument/Analyst LCS: NT8/YZ

Sample Amount LCS: 500 mL
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS		Spike Added	Recovery
Naphthalene	0.186		0.300	62.0%
2-Methylnaphthalene	0.201		0.300	67.0%
1-Methylnaphthalene	0.196		0.300	65.3%
Acenaphthylene	0.183		0.300	61.0%
Acenaphthene	0.192		0.300	64.0%
Fluorene	0.221		0.300	73.7%
Phenanthrene	0.228		0.300	76.0%
Anthracene	0.177		0.300	59.0%
Fluoranthene	0.248		0.300	82.7%
Pyrene	0.238		0.300	79.3%
Benzo(a)anthracene	0.236		0.300	78.7%
Chrysene	0.176	Q	0.300	58.7%
Benzo(b)fluoranthene	0.282		0.300	94.0%
Benzo(k)fluoranthene	0.160		0.300	53.3%
Benzo(a)pyrene	0.169		0.300	56.3%
Indeno(1,2,3-cd)pyrene	0.174		0.300	58.0%
Dibenz(a,h)anthracene	0.184		0.300	61.3%
Benzo(g,h,i)perylene	0.169		0.300	56.3%
Dibenzofuran	0.215		0.300	71.7%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	70.0%
d14-Dibenzo(a,h)anthracene	63.3%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

QQ20MBW1

Lab Name: ANALYTICAL RESOURCES, INC

Client: FLOYD-SNIDER

ARI Job No: QQ20

Project: LORA LAKE APARTMENTS

Lab File ID: QQ20MB

Date Extracted: 03/30/10

Instrument ID: NT8

Date Analyzed: 04/02/10

Matrix: LIQUID

Time Analyzed: 1747

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	QQ20LCSW1	QQ20LCSW1	QQ20SB	04/02/10
02	CB31A032510COMP	QQ20A	QQ20A	04/02/10
03	CB31A032510COMP	QQ20AMS	QQ20AMS	04/02/10
04	CB31A032510COMP	QQ20AMSD	QQ20AMSD	04/02/10
05	CB4857032510COMP	QQ20B	QQ20B	04/02/10
06	CB1032510COMP	QQ20C	QQ20C	04/02/10
07	CB101032510COMP	QQ20D	QQ20D	04/02/10
08				
09				
10				
11				
12				
13				
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FORM IV SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

Instrument ID: NT8 Project: LORA LAKE APARTMENTS

DFTPP Injection Date: 03/22/10 DFTPP Injection Time: 1521

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	27.0	
68	Less than 2.0% of mass 69	1.2	(1.8)1
69	Mass 69 relative abundance	67.5	
70	Less than 2.0% of mass 69	0.3	(0.4)1
127	10.0 - 80.0% of mass 198	57.2	
197	Less than 2.0% of mass 198	0.7	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	21.2	
365	Greater than 1.0% of mass 198	2.84	
441	0.0 - 24.0% of mass 442	10.3	(14.2)2
442	50.0 - 200.0% of mass 198	72.3	
443	15.0 - 24.0% of mass 442	13.8	(19.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		IC0322A	IC0322A	03/22/10	1537
02		IC0322B	IC0322B	03/22/10	1600
03		IC0322C	IC0322C	03/22/10	1624
04		IC0322D	IC0322D	03/22/10	1648
05		IC0322E	IC0322E	03/22/10	1712
06		IC0322F	IC0322F	03/22/10	1735
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

Instrument ID: NT8 Project: LORA LAKE APARTMENTS

DFTPP Injection Date: 04/02/10 DFTPP Injection Time: 1338

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	27.1
68	Less than 2.0% of mass 69	1.0 (1.4)1
69	Mass 69 relative abundance	68.7
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	10.0 - 80.0% of mass 198	56.6
197	Less than 2.0% of mass 198	0.7
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 60.0% of mass 198	21.8
365	Greater than 1.0% of mass 198	2.89
441	0.0 - 24.0% of mass 442	9.1 (13.7)2
442	50.0 - 200.0% of mass 198	66.6
443	15.0 - 24.0% of mass 442	12.5 (18.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		CC0402A	CC0402A	04/02/10	1354
02	QQ20MBW1	QQ20MBW1	QQ20MB	04/02/10	1747
03	QQ20LCSW1	QQ20LCSW1	QQ20SB	04/02/10	1811
04	CB31A032510COMP	QQ20A	QQ20A	04/02/10	1834
05	CB31A032510COMP	QQ20AMS	QQ20AMS	04/02/10	1858
06	CB31A032510COMP	QQ20AMSD	QQ20AMSD	04/02/10	1922
07	CB4857032510COMP	QQ20B	QQ20B	04/02/10	1945
08	CB1032510COMP	QQ20C	QQ20C	04/02/10	2009
09	CB101032510COMP	QQ20D	QQ20D	04/02/10	2033
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QQ20 Project: LORA LAKE APARTMENTS

Ical Midpoint ID: IC0322A Ical Date: 03/22/10

Instrument ID: NT8 Cont. Cal Date: 04/02/10

		IS1(NPT) AREA #	RT #	IS2(ANT) AREA #	RT #	IS3(PHN) AREA #	RT #
	ICAL MIDPT	218805	4.74	119440	6.56	183479	8.24
	UPPER LIMIT	437610		238880		366958	
	LOWER LIMIT	109402		59720		91740	
	CCAL	227349	5.38	136134	7.31	216975	9.04
	UPPER LIMIT		5.88		7.81		9.54
	LOWER LIMIT		4.88		6.81		8.54
01	QQ20MBW1	199128	5.38	112885	7.31	182294	9.04
02	QQ20LCSW1	218486	5.38	126002	7.31	201515	9.04
03	CB31A032510C	210012	5.38	120756	7.31	192568	9.04
04	CB31A032510C	193478	5.38	111247	7.31	179471	9.04
05	CB31A032510C	205600	5.39	122705	7.31	201406	9.04
06	CB4857032510	196206	5.38	115775	7.31	187706	9.04
07	CB1032510COM	210555	5.39	125046	7.31	200461	9.04
08	CB101032510C	205919	5.39	117008	7.31	189751	9.04
09							
10							
11							
12							
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15							
16							
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19							
20							
21							
22							
23							
24							
25							

IS1 = Naphthalene-d8
IS2 = Acenaphthene-d10
IS3 = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QQ20 Project: LORA LAKE APARTMENTS

Ical Midpoint ID: IC0322A Ical Date: 03/22/10

Instrument ID: NT8 Cont. Cal Date: 04/02/10

		IS4(CRY) AREA #	RT #	IS5(PRY) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	121669	11.42	102197	13.03		
	UPPER LIMIT	243338		204394			
	LOWER LIMIT	60834		51098			
	CCAL	128618	12.27	108431	13.88		
	UPPER LIMIT		12.77		14.38		
	LOWER LIMIT		11.77		13.38		
01	QQ20MBW1	129872	12.25	120744	13.88		
02	QQ20LCSW1	146327	12.25	133169	13.88		
03	CB31A032510C	115817	12.25	112398	13.88		
04	CB31A032510C	110311	12.27	105289	13.88		
05	CB31A032510C	122230	12.25	117304	13.88		
06	CB4857032510	111652	12.27	106602	13.88		
07	CB1032510COM	125127	12.25	114146	13.88		
08	CB101032510C	116784	12.25	111146	13.88		
09							
10							
11							
12							
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15							
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20							
21							
22							
23							
24							
25							

IS4 = Chrysene-d12
IS5 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

SIM Semivolatile Analysis
Sample Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A032510COMP
SAMPLE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 18:34
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.017**
91-57-6	**2-Methylnaphthalene**	**0.010**	**0.012**
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.042**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.078**
129-00-0	**Pyrene**	**0.010**	**0.079**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.017**
218-01-9	**Chrysene**	**0.010**	**0.039 Q**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.020**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.020**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.018**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.015**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.031**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	58.0%
d14-Dibenzo(a,h)anthracene	23.0%

YZ 4/5/10

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/qq20a.d
Lab Smp Id: QQ20A Client Smp ID: CB31A032510COMP
Inj Date : 02-APR-2010 18:34
Operator : VTS Inst ID: nt8.i
Smp Info : QQ20A
Misc Info : 10-8030
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	5.378	5.377	(1.000)	210012	200.000	
	5 Naphthalene	128	5.398	5.398	(1.004)	20186	16.9991	17.0
$	6 2-Methylnaphthalene-d10	152	6.085	6.095	(1.132)	114039	173.588	174
	7 2-Methylnaphthalene	142	6.117	6.116	(1.137)	8457	11.7505	11.8
	8 1-Methylnaphthalene	142	6.241	6.241	(1.161)	4104	5.55987 J	5.56(M)
	10 Acenaphthylene	152	7.125	7.125	(0.975)	6054	5.20973 J	5.21
*	11 Acenaphthene-d10	164	7.307	7.306	(1.000)	120756	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	7.923	7.923	(1.084)	4142	5.35270 J	5.35
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	192568	200.000	
	19 Phenanthrene	178	9.059	9.059	(1.003)	46043	42.0374	42.0
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	10.499	10.499	(1.162)	86500	77.5330	77.5
	25 Pyrene	202	10.778	10.777	(1.193)	91149	79.0845	79.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	12.242	12.242	(0.999)	11478	16.6109	16.6
*	29 Chrysene-d12	240	12.254	12.266	(1.000)	115817	200.000	
	30 Chrysene	228	12.291	12.290	(1.003)	39343	39.0820	39.1(M)
	32 Benzo(b)fluoranthene	252	13.486	13.485	(0.971)	40188	46.6109 2C 125	46.6
	33 Benzo(k)fluoranthene	252	13.486	13.506	(0.971)	40188	33.8961 2C 125	33.9
	34 Benzo(a)pyrene	252	13.819	13.819	(0.995)	13932	18.5164	18.5
*	35 Perylene-d12	264	13.882	13.882	(1.000)	112398	200.000	
	37 *Indeno*(1,2,3-cd)pyrene	276	15.161	15.161	(1.092)	14716	15.0697	15.1
$	36 Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	39570	68.9871	69.0
	38 Dibenzo(a,h)anthracene	278	15.173	15.173	(1.093)	4829	6.22419 J	6.22
	39 Benzo(g,h,i)perylene	276	15.524	15.524	(1.118)	26629	30.7237	30.7

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: qq20a.d
Lab Smp Id: QQ20A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Client Smp ID: CB31A032510COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	210012	-4.02
11 Acenaphthene-d10	119440	59720	238880	120756	1.10
18 Phenanthrene-d10	183479	91740	366958	192568	4.95
29 Chrysene-d12	121669	60834	243338	115817	-4.81
35 Perylene-d12	102197	51098	204394	112398	9.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.38	0.00
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.25	-0.10
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

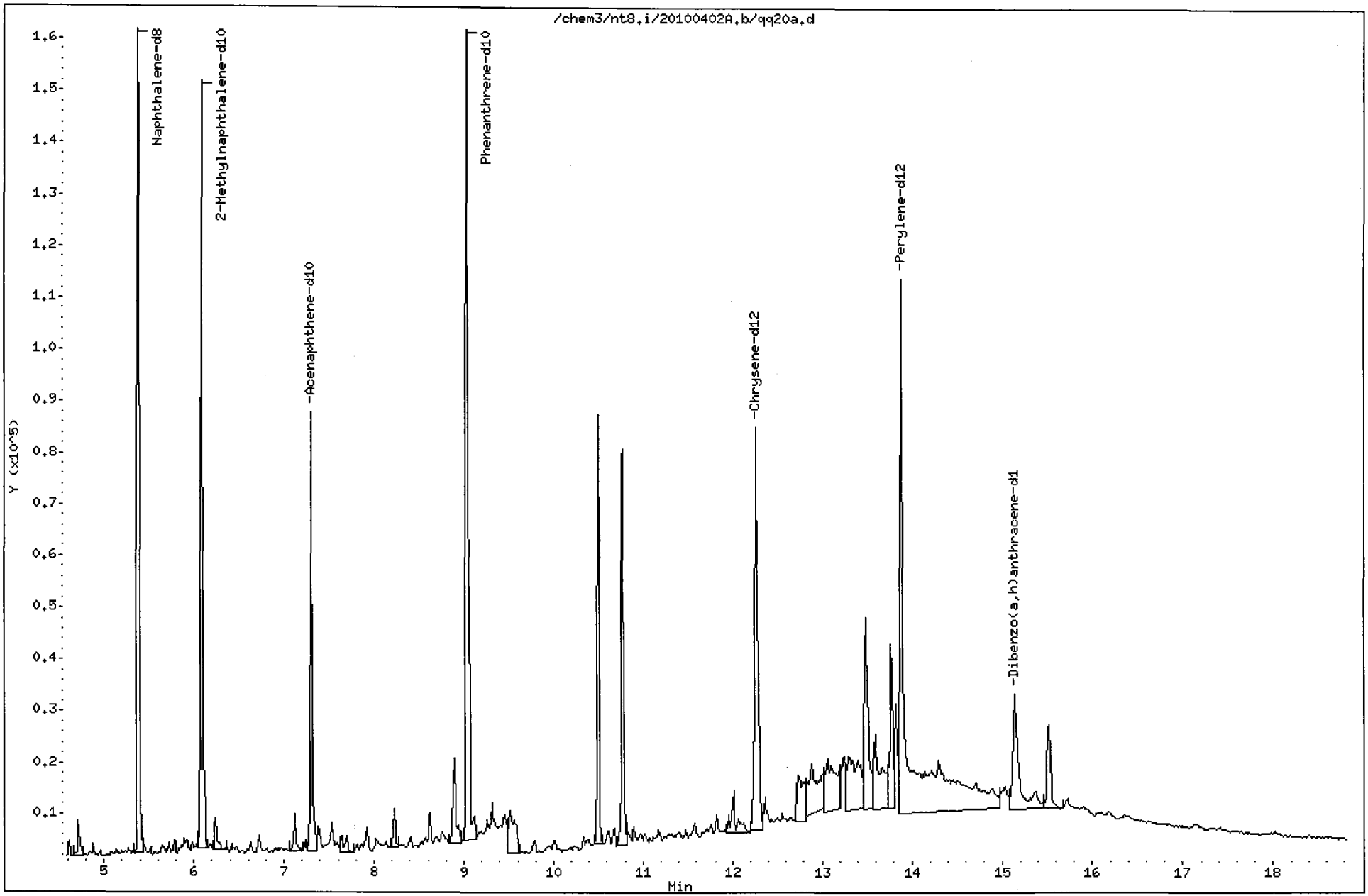
Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ20A
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Client SDG: QQ20
Fraction: SV
Client Smp ID: CB31A032510COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	174	57.86	31-109
$ 36 Dibenzo(a,h)anthra	300	69.0	23.00	10-133

Data File: /chem3/nt8.i/20100402A.b/qq20a.d
Date : 02-APR-2010 18:34
Client ID: CB31A032510COMP
Sample Info: QQ20A
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i
Operator: VTS
Column diameter: 0.25



QQ20 : 00211

Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

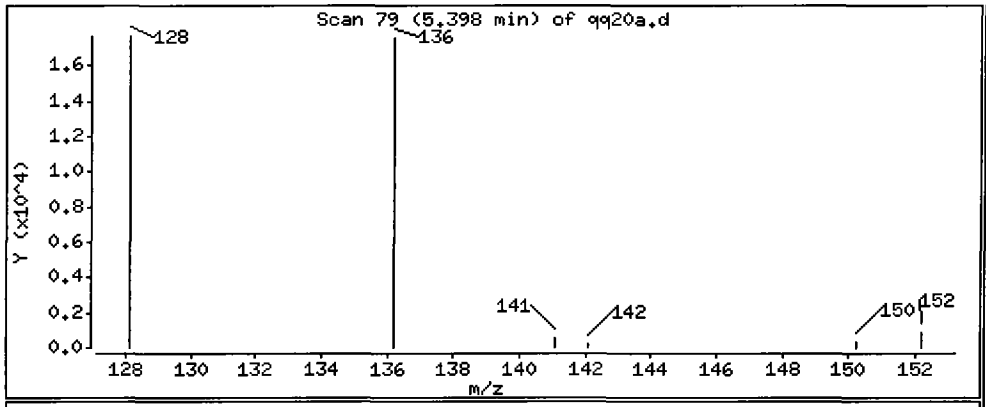
Operator: VTS

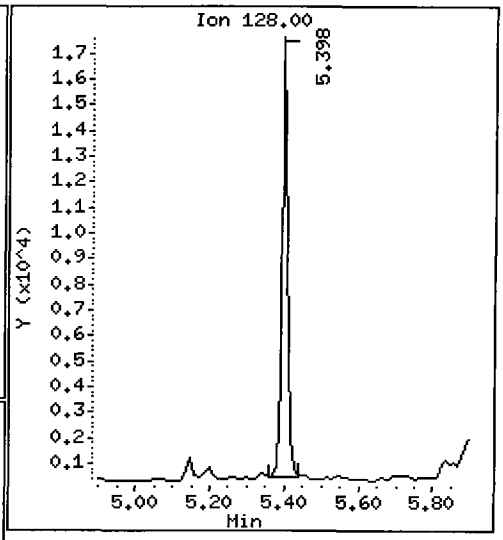
Column phase: ZB-5

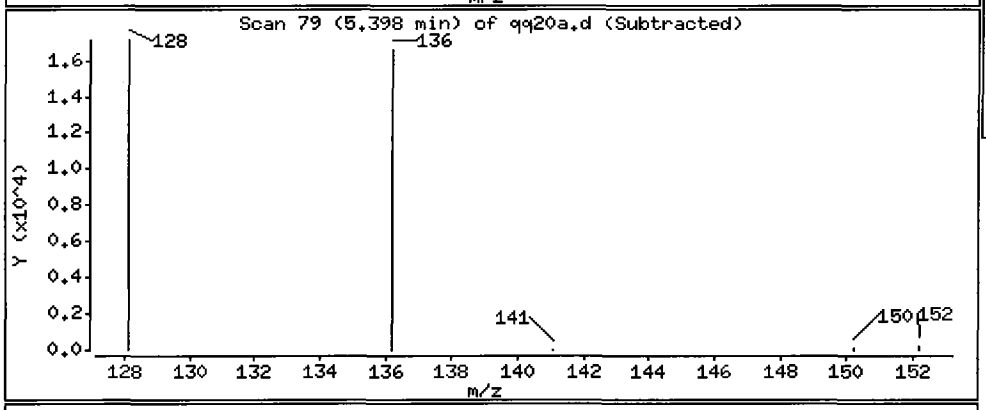
Column diameter: 0.25

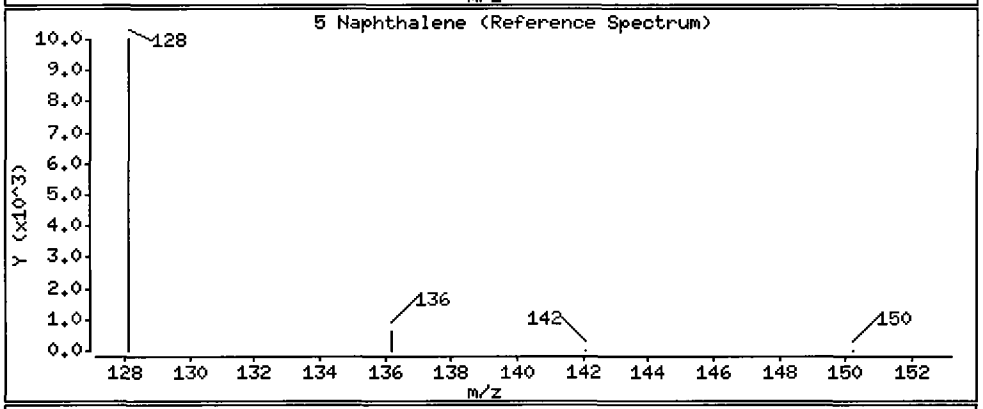
5 Naphthalene

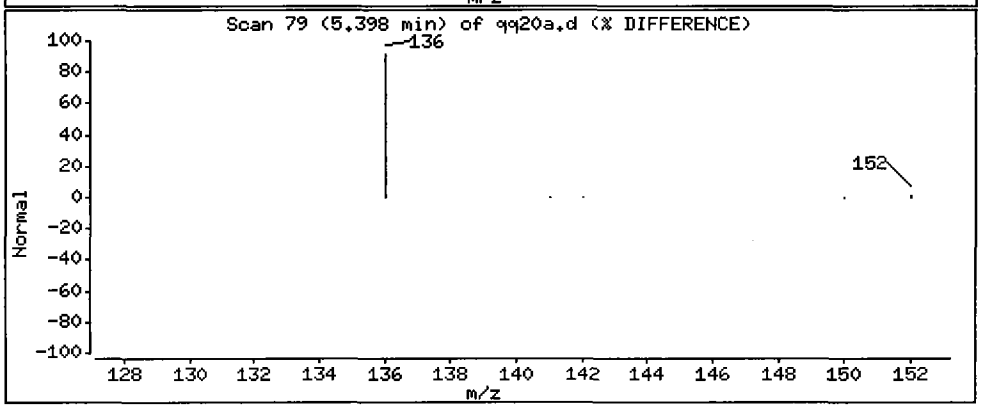
Concentration: 17.0 ug/L











Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

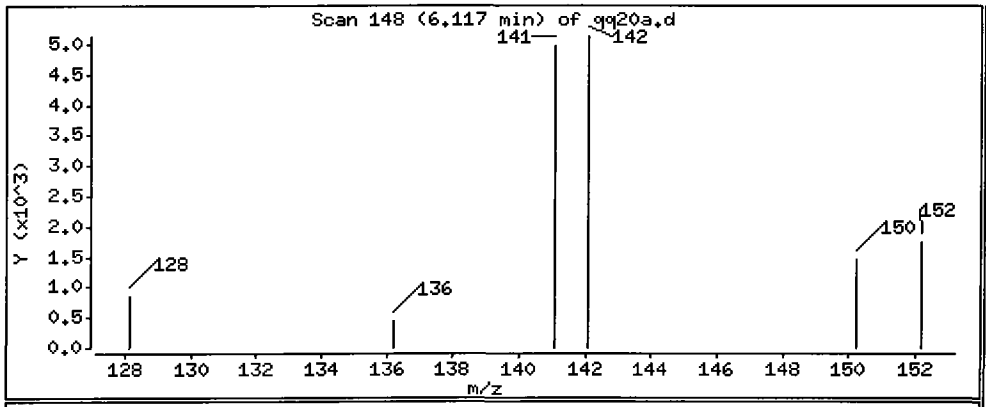
Operator: VTS

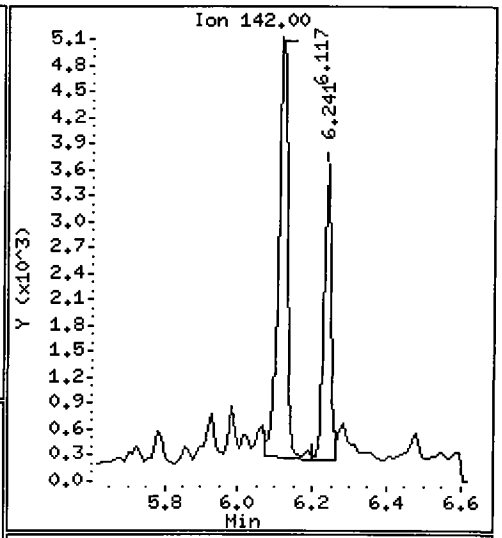
Column phase: ZB-5

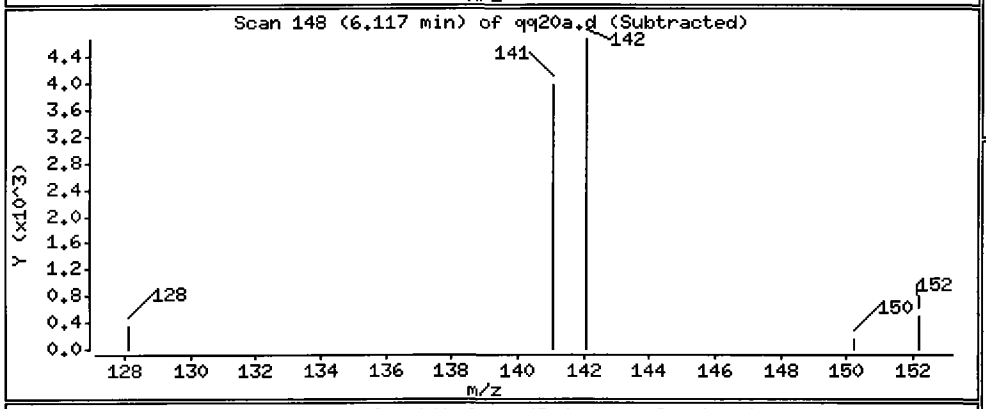
Column diameter: 0.25

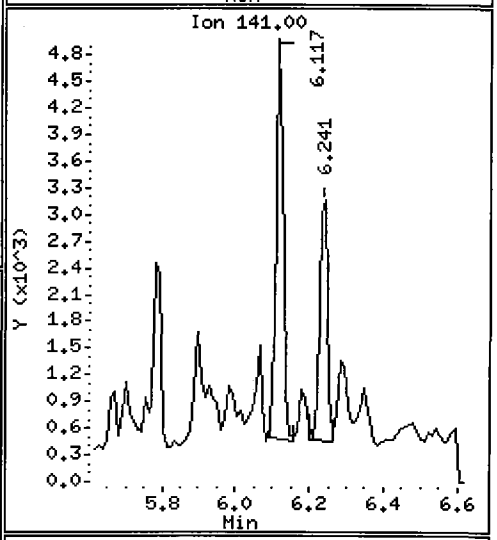
7 2-Methylnaphthalene

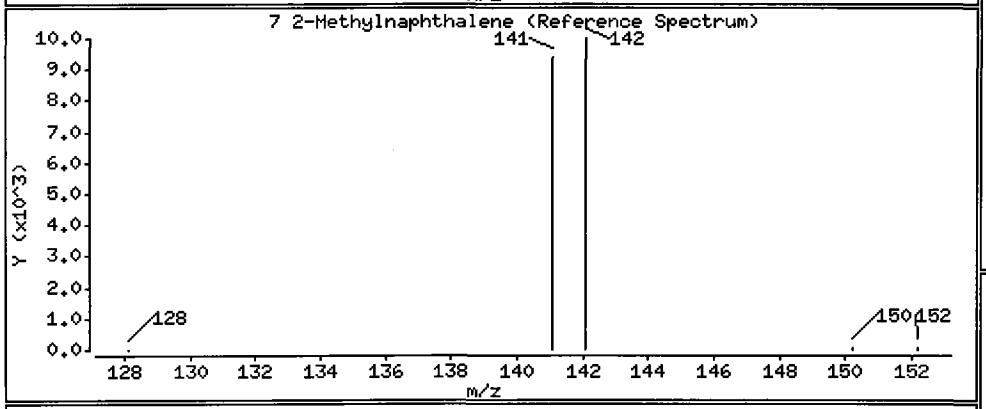
Concentration: 11.8 ug/L

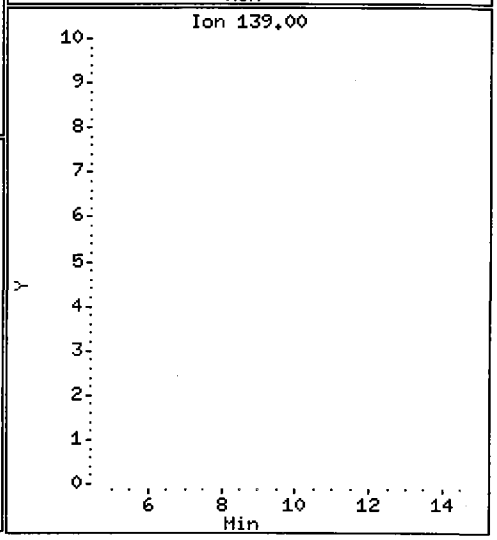


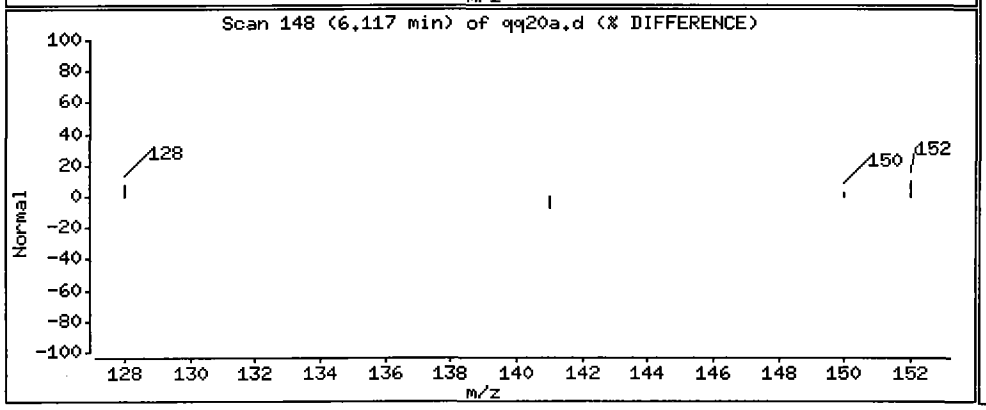












Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

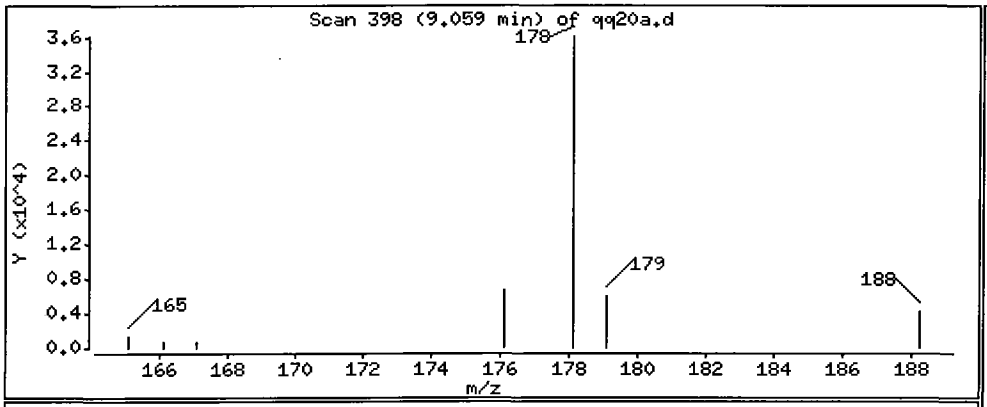
Operator: VTS

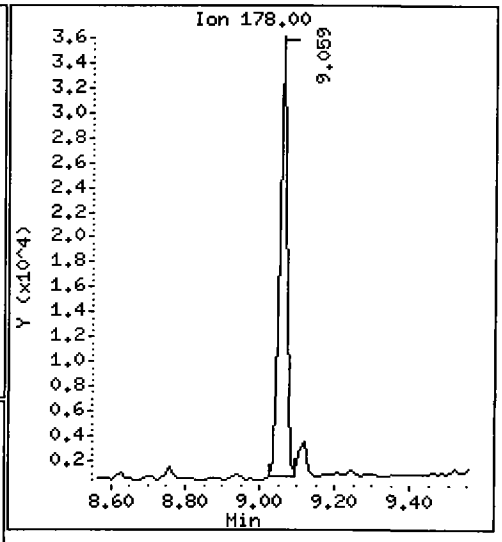
Column phase: ZB-5

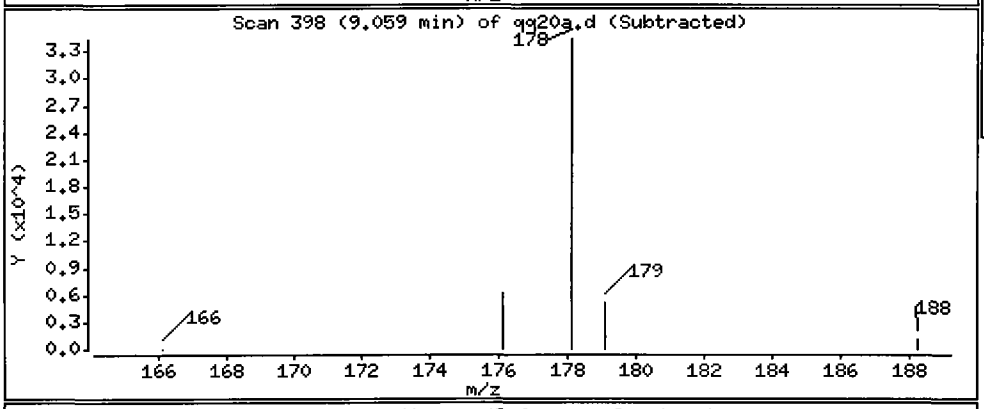
Column diameter: 0.25

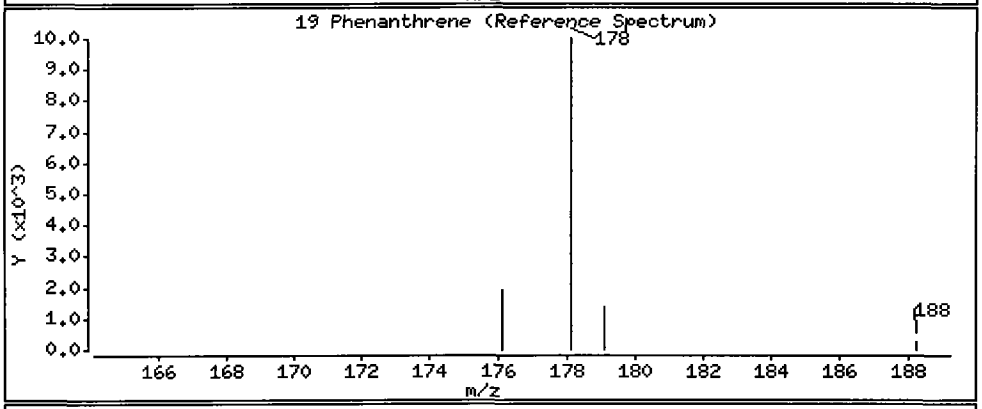
19 Phenanthrene

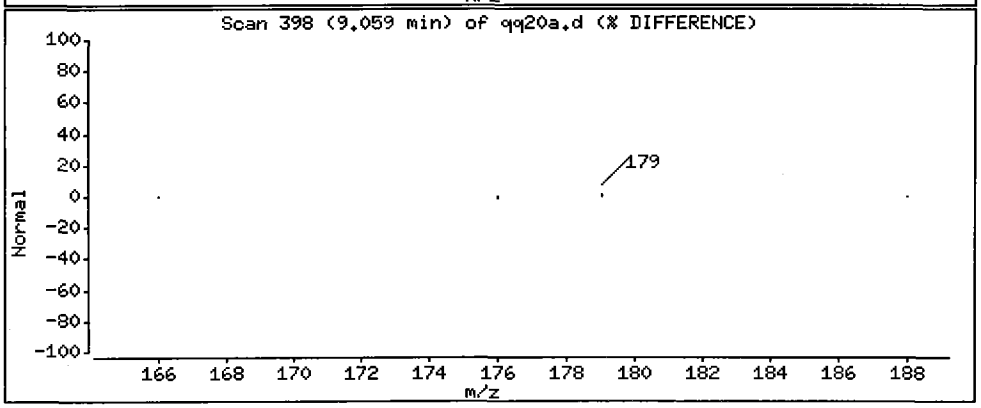
Concentration: 42.0 ug/L











Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

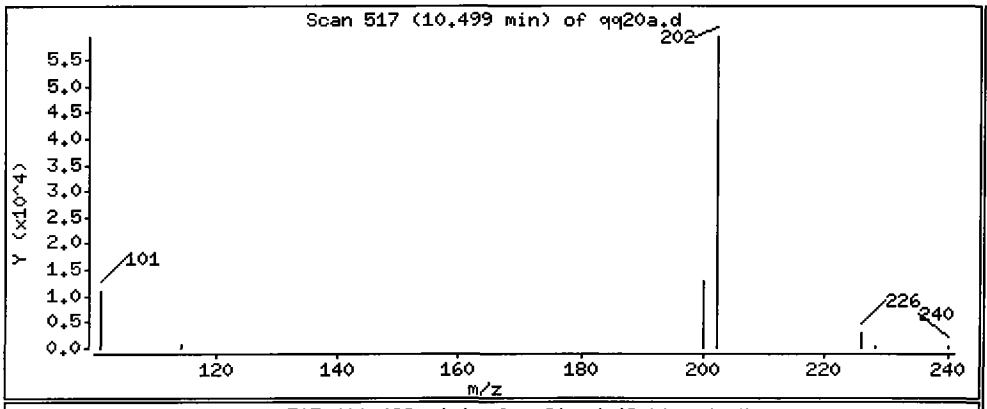
Operator: VTS

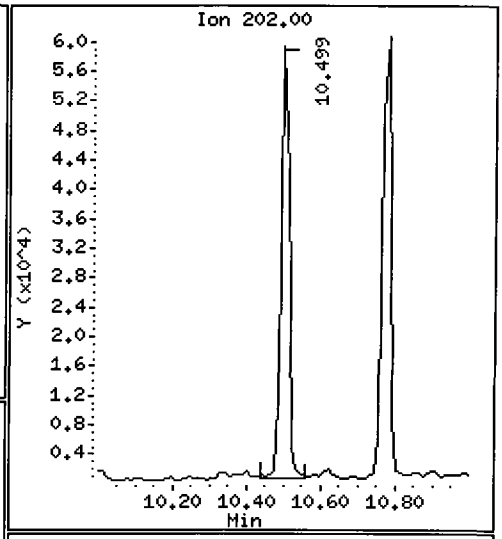
Column phase: ZB-5

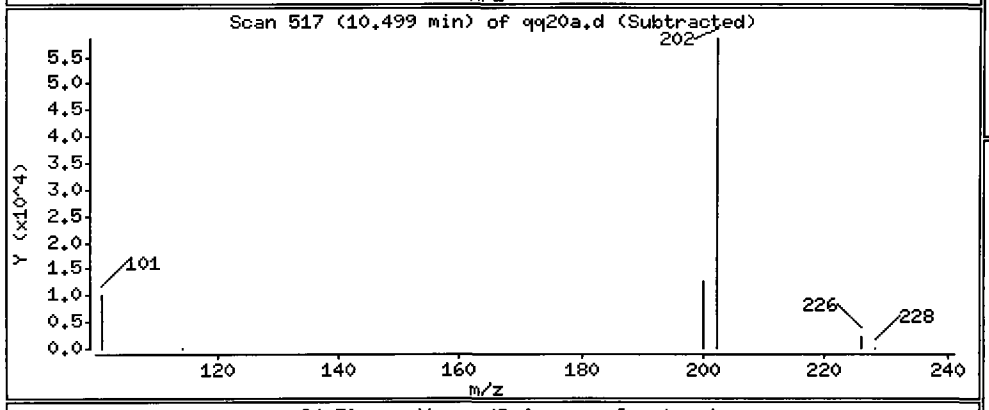
Column diameter: 0.25

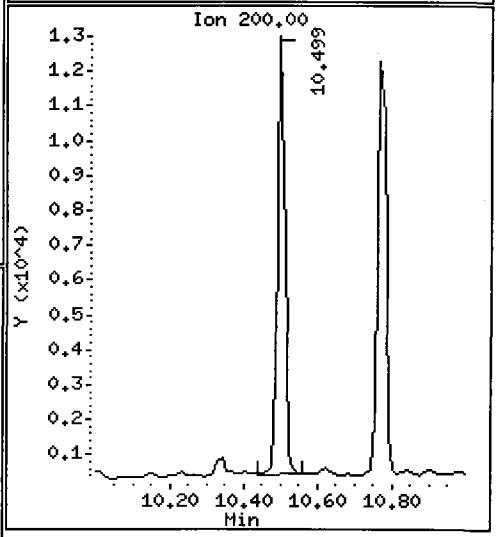
24 Fluoranthene

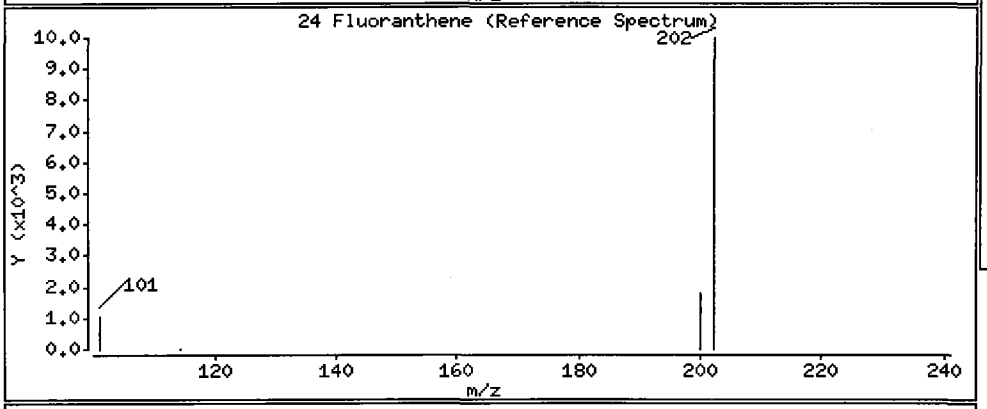
Concentration: 77.5 ug/L

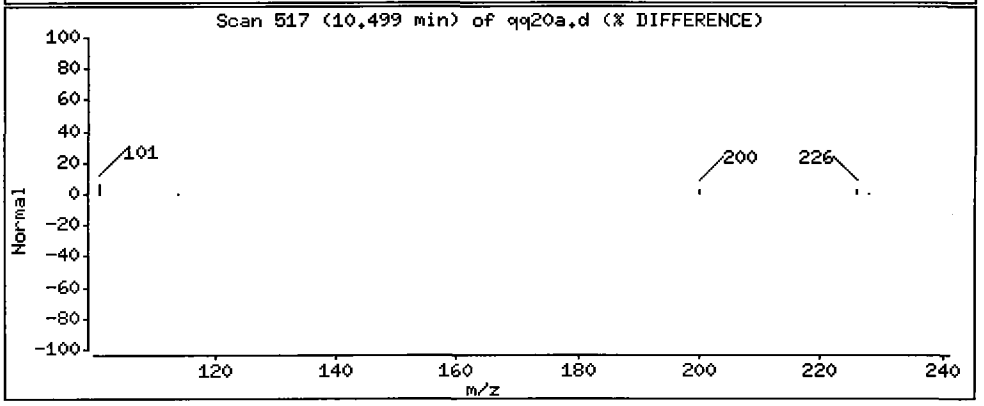












Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

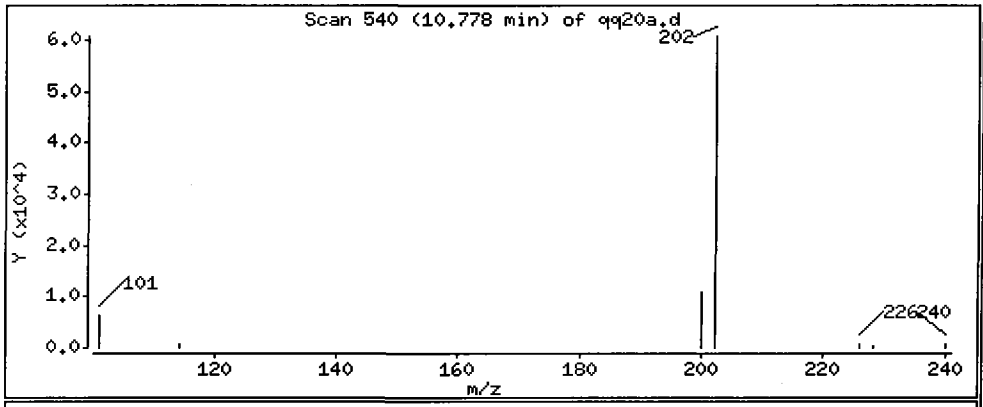
Operator: VTS

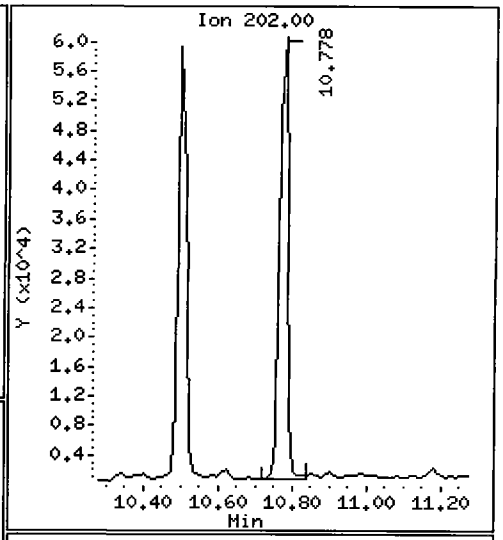
Column phase: ZB-5

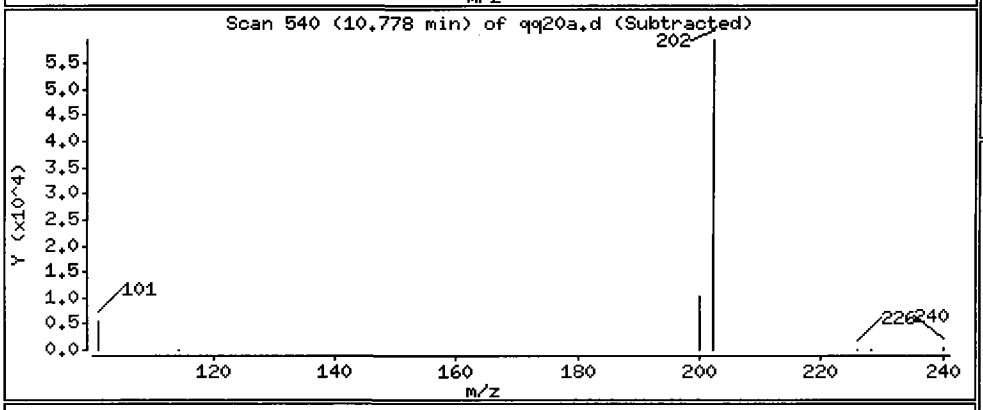
Column diameter: 0.25

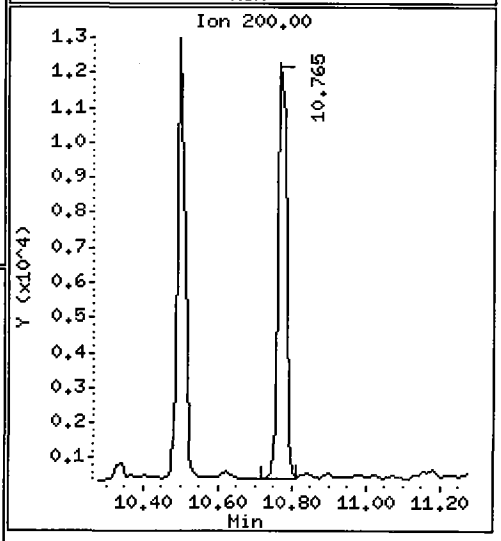
25 Pyrene

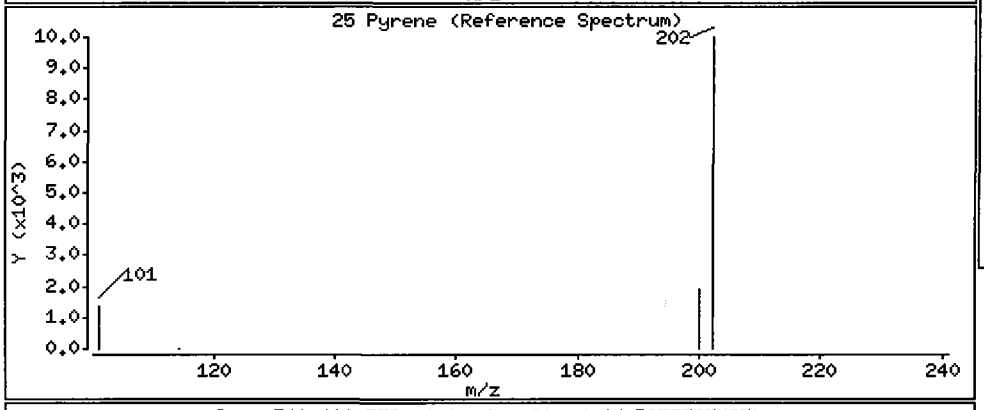
Concentration: 79.1 ug/L

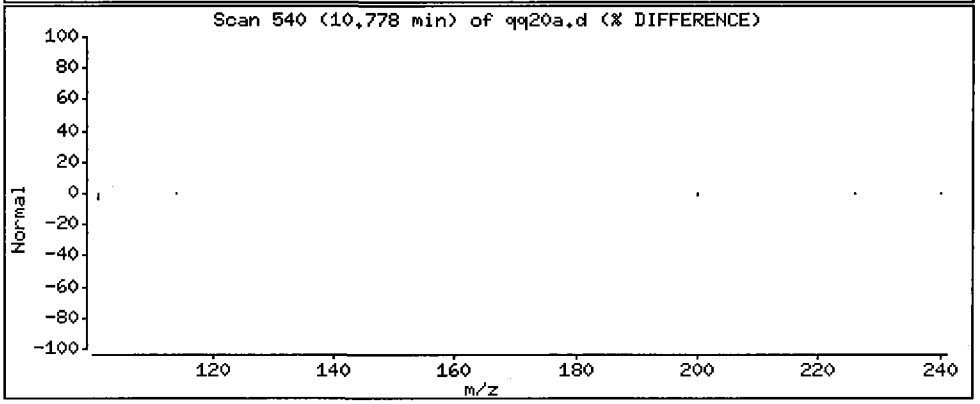












Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

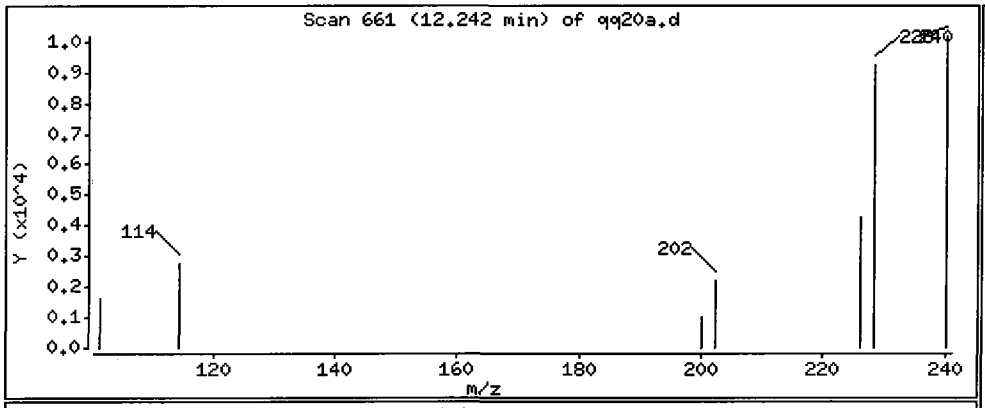
Operator: VTS

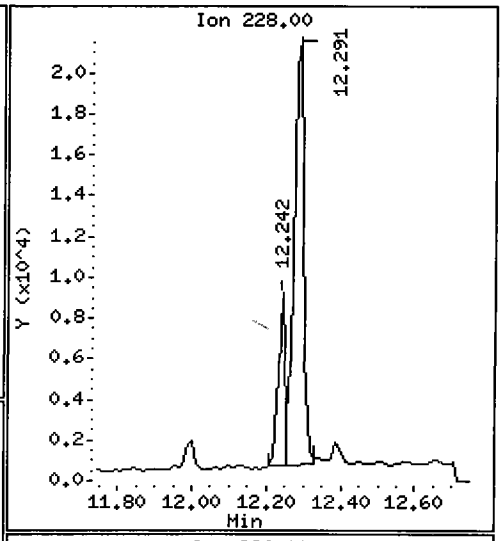
Column phase: ZB-5

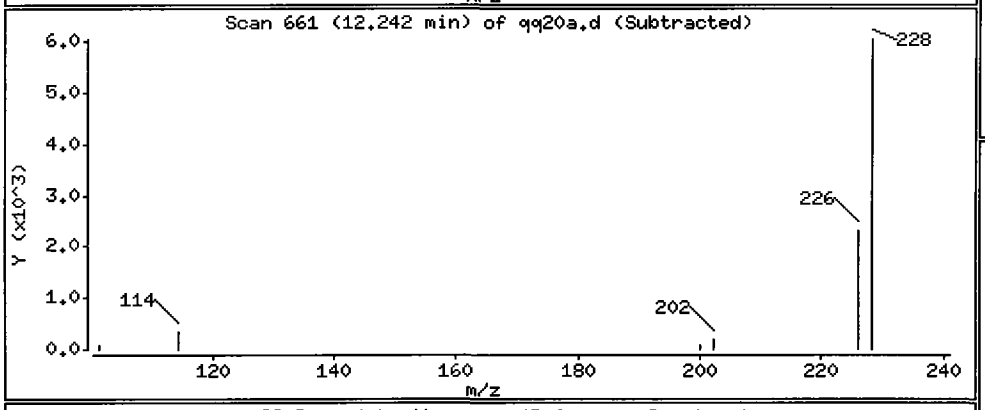
Column diameter: 0.25

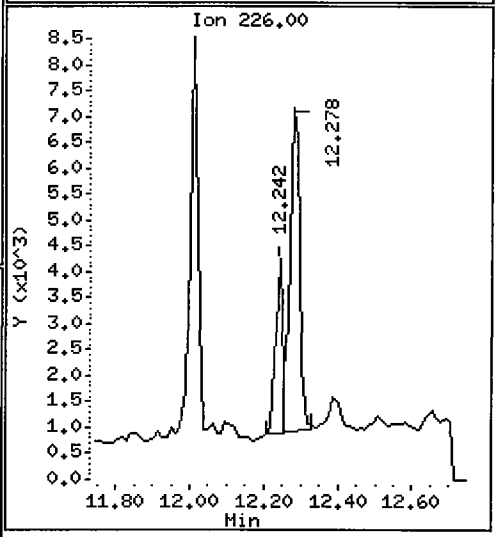
28 Benzo(a)anthracene

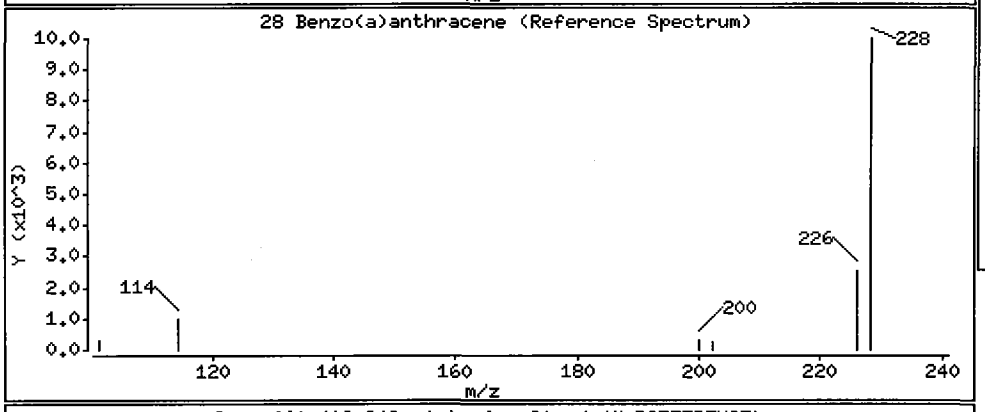
Concentration: 16.6 ug/L

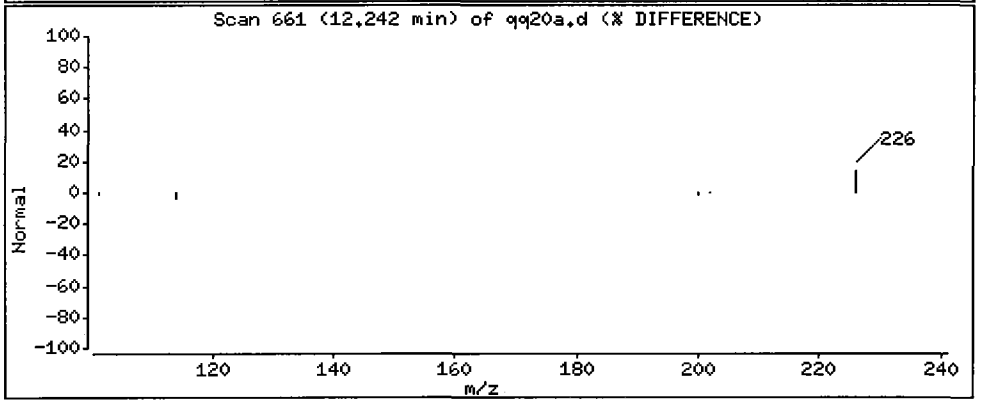












Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

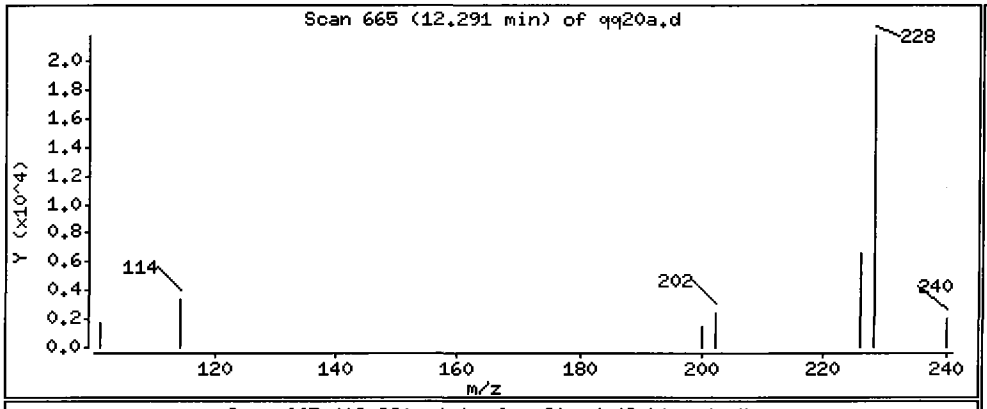
Operator: VTS

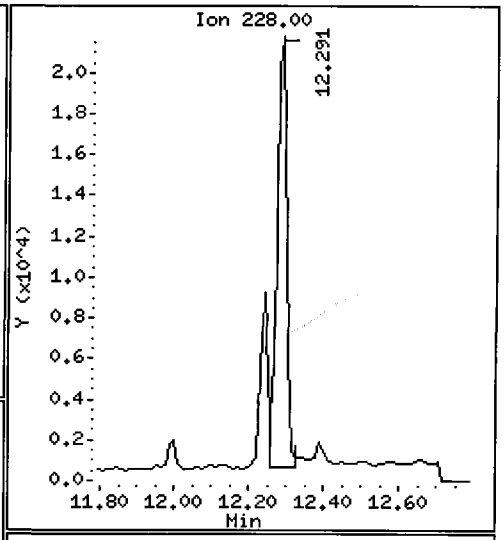
Column phase: ZB-5

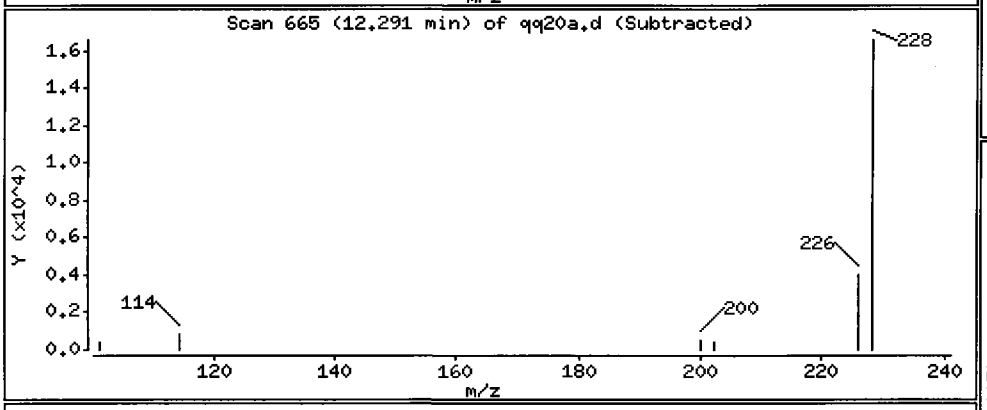
Column diameter: 0.25

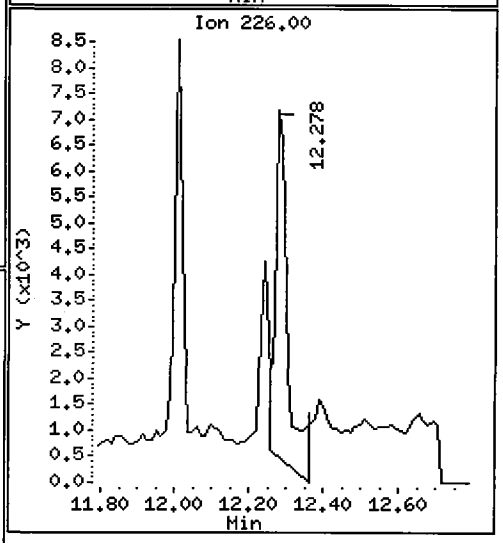
30 Chrysene

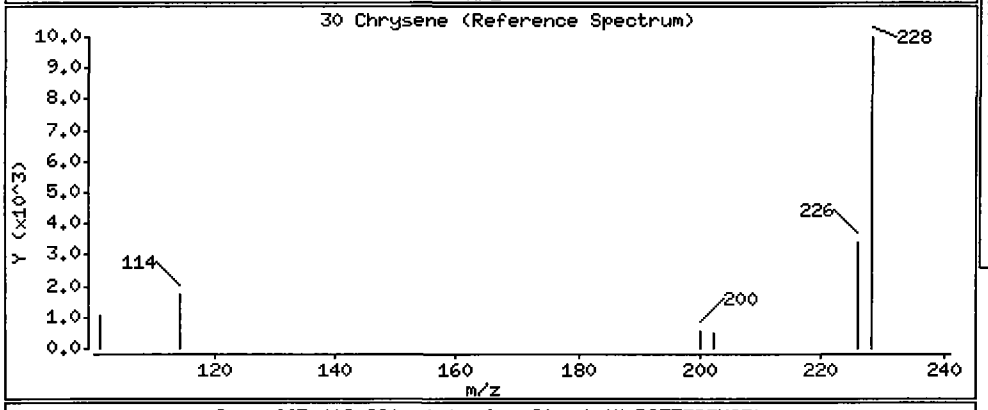
Concentration: 39.1 ug/L

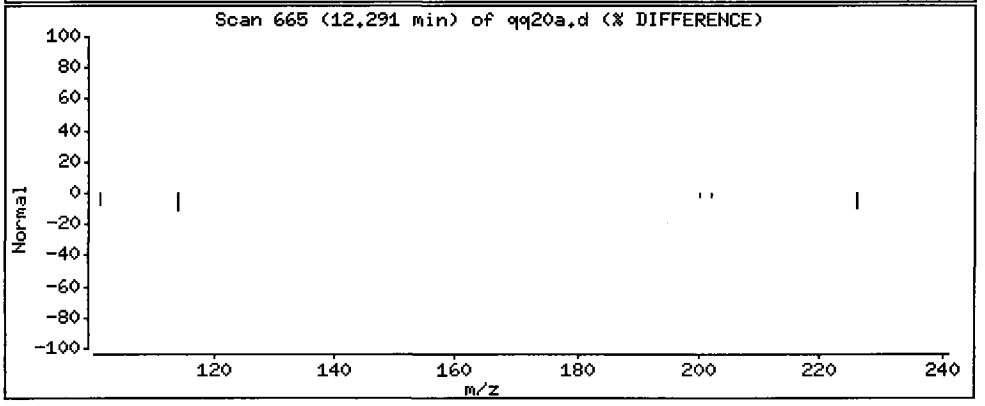












Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

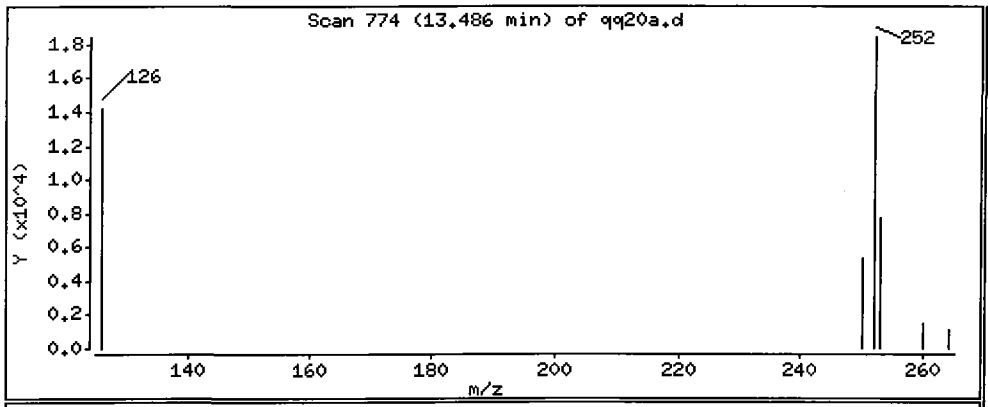
Operator: VTS

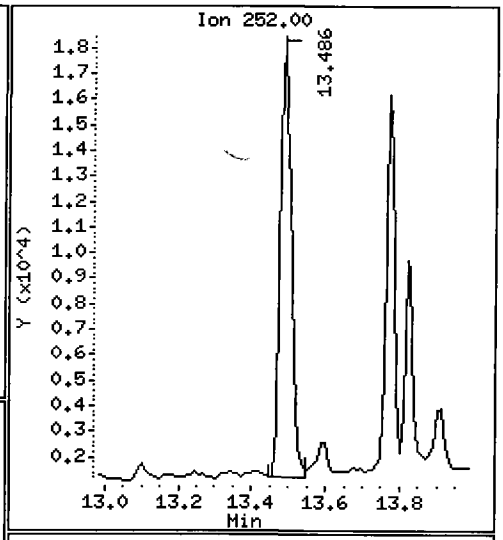
Column phase: ZB-5

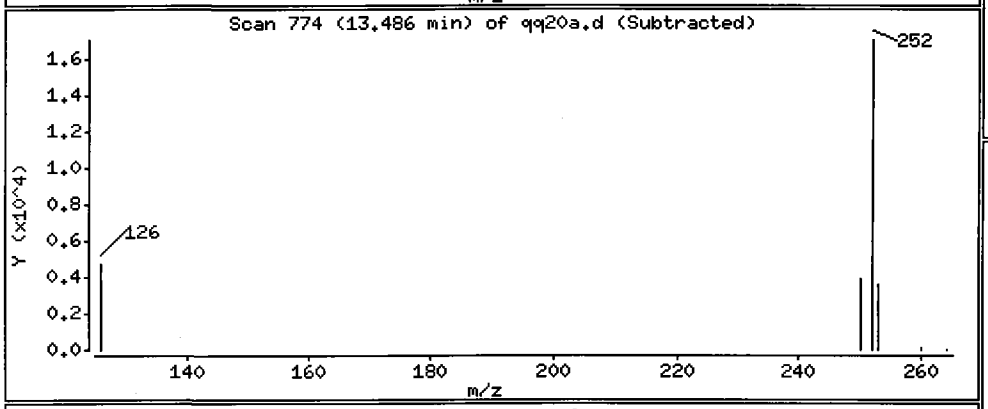
Column diameter: 0.25

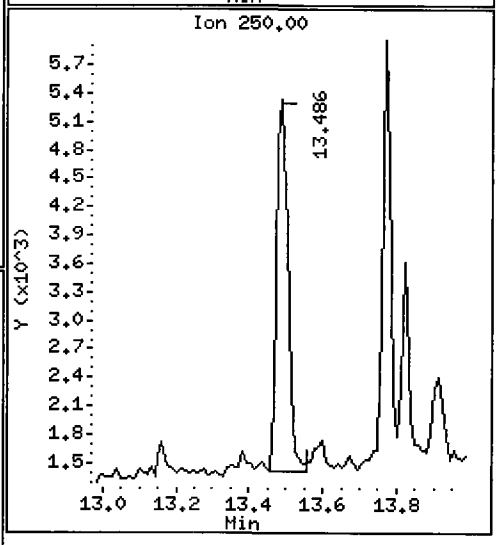
32 Benzo(b)fluoranthene

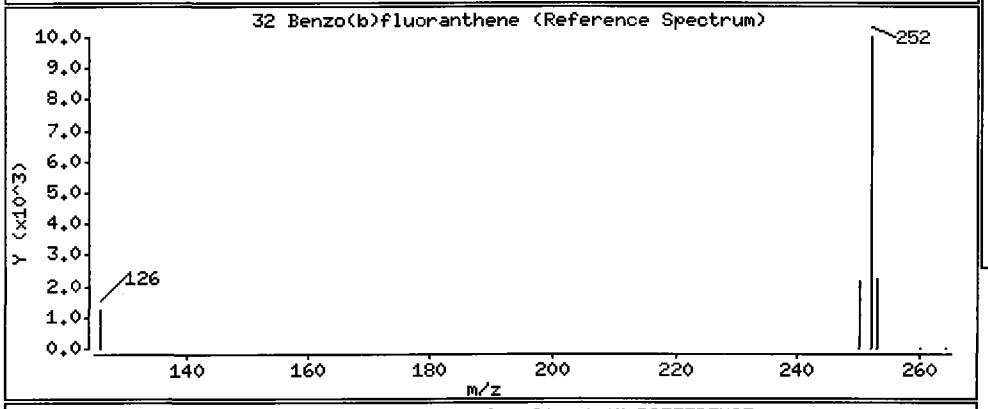
Concentration: 46.6 ug/L

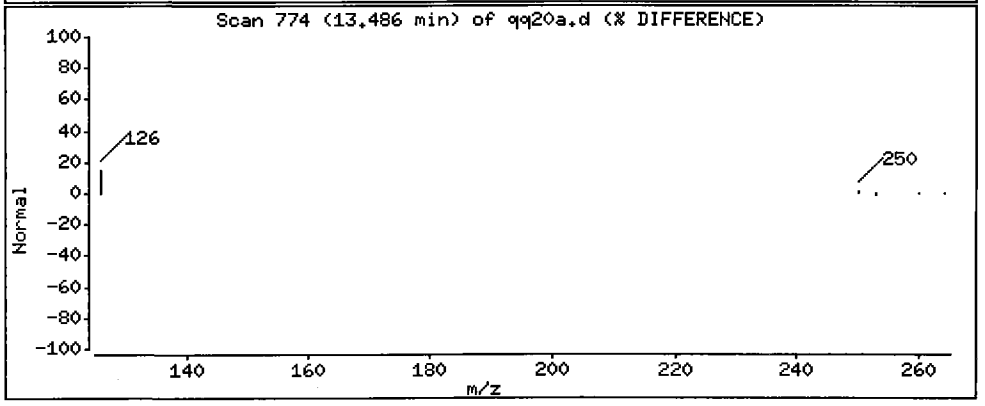












Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

Operator: VTS

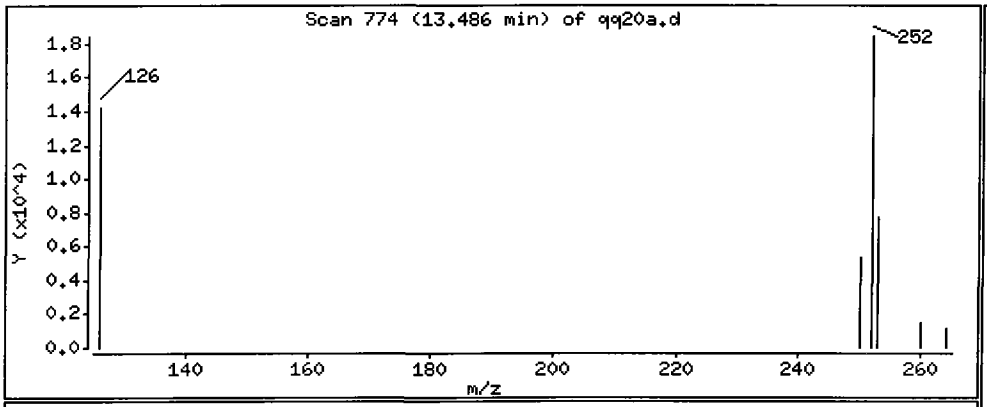
Column phase: ZB-5

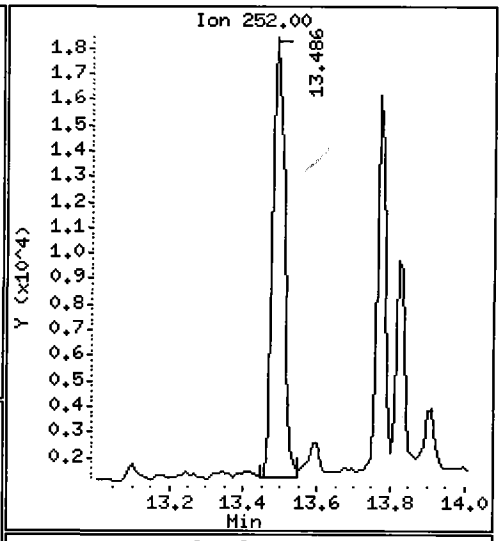
Column diameter: 0.25

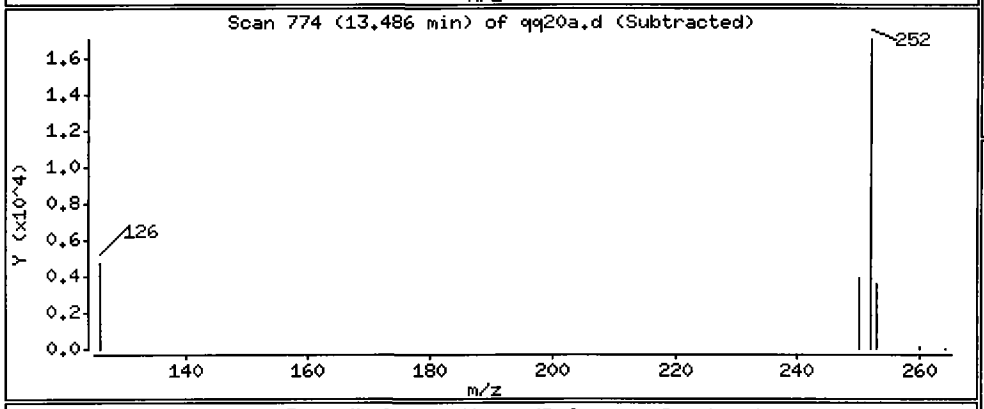
1/2

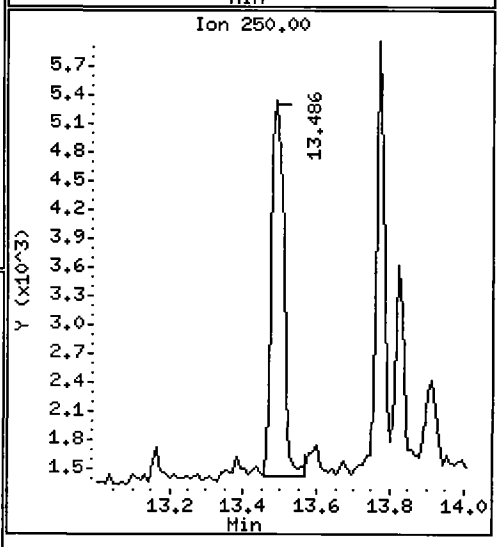
33 Benzo(k)fluoranthene

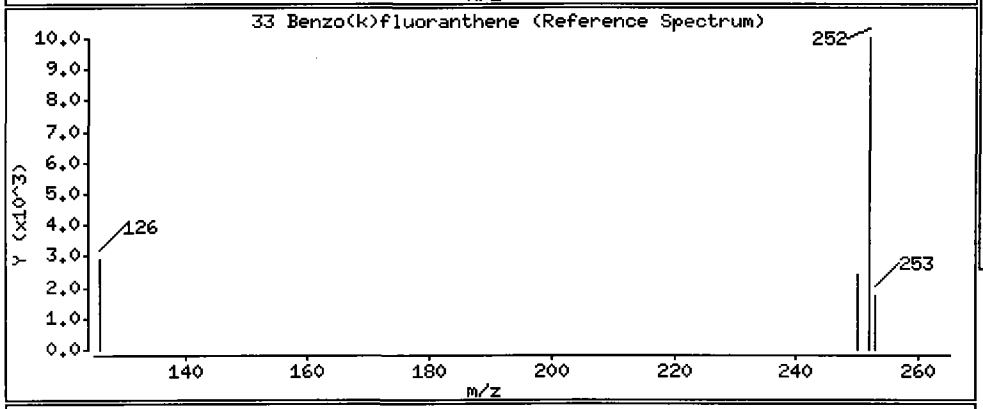
Concentration: 33.9 ug/L

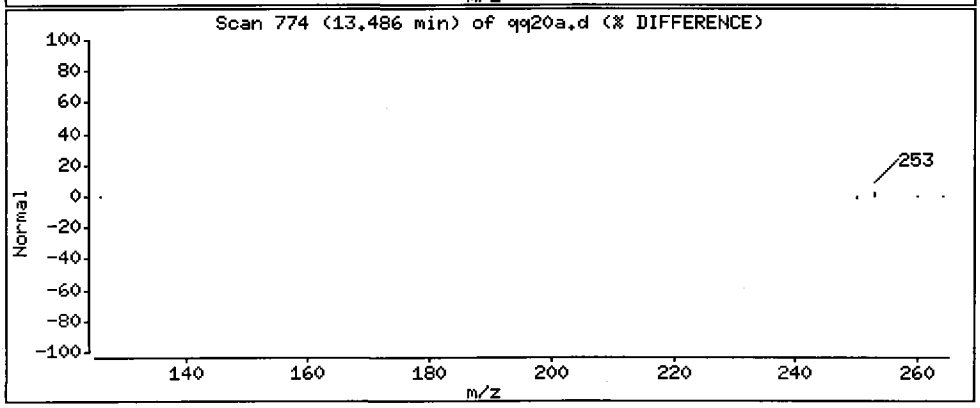












Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

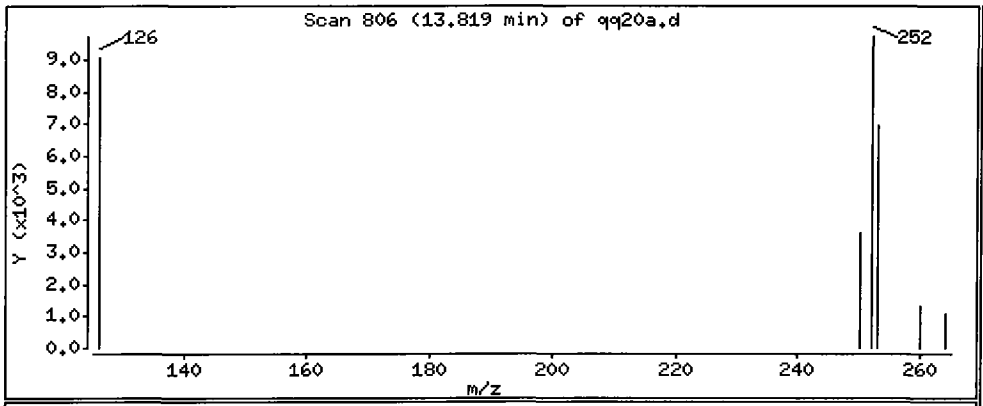
Operator: VTS

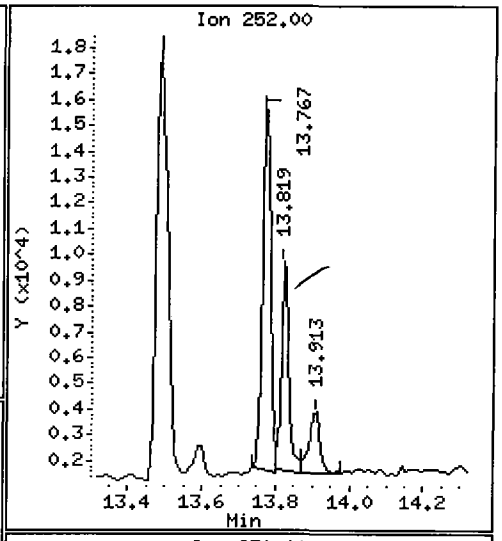
Column phase: ZB-5

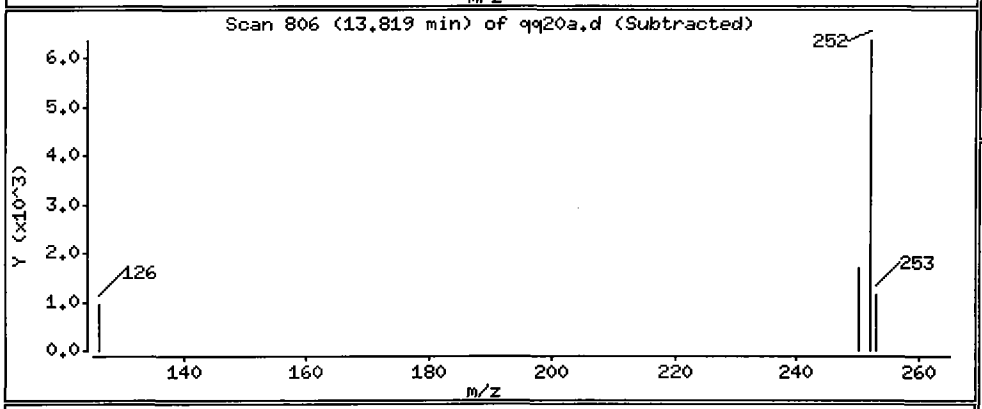
Column diameter: 0.25

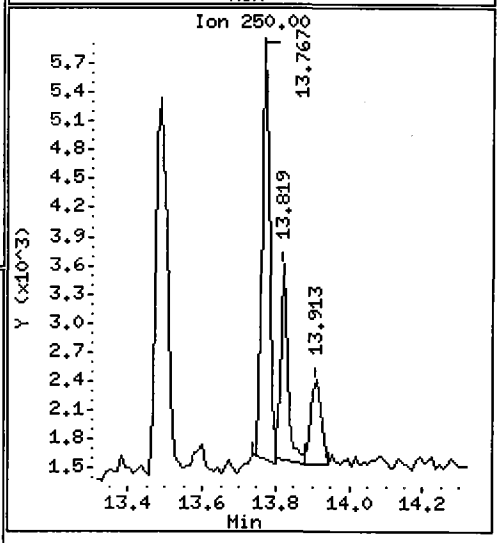
34 Benzo(a)pyrene

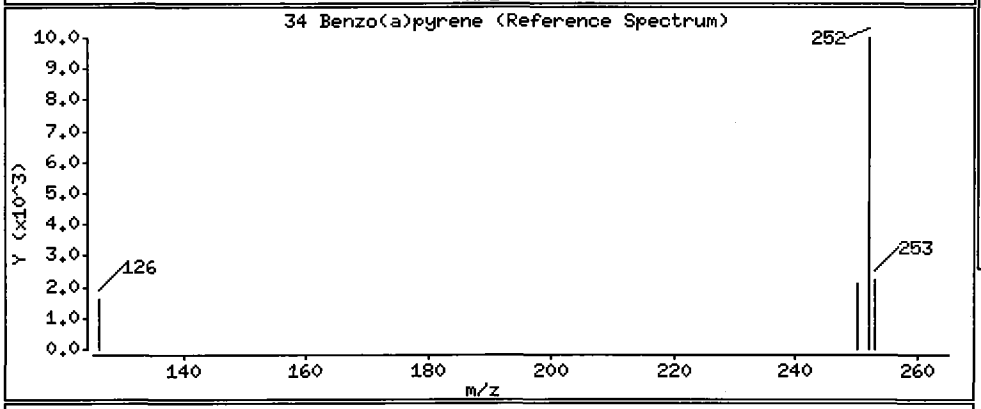
Concentration: 18.5 ug/L

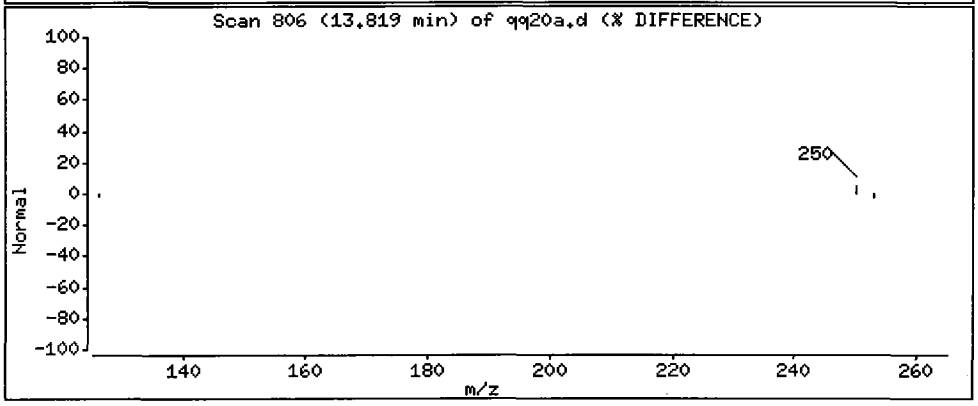












Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

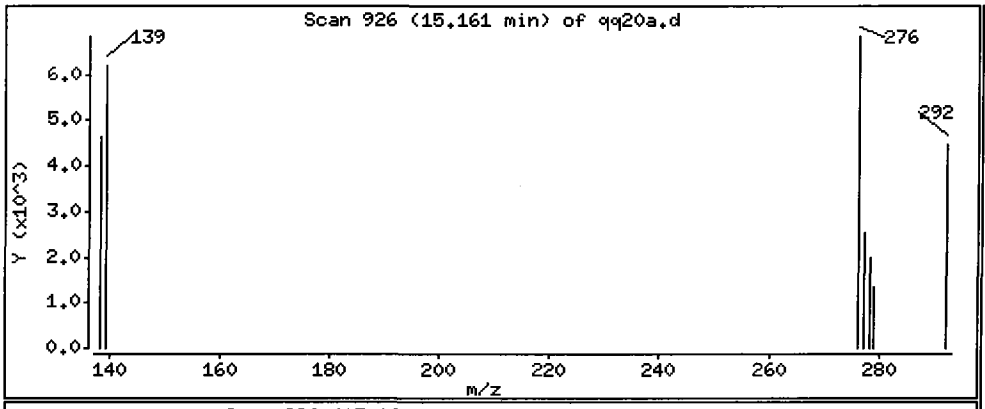
Operator: VTS

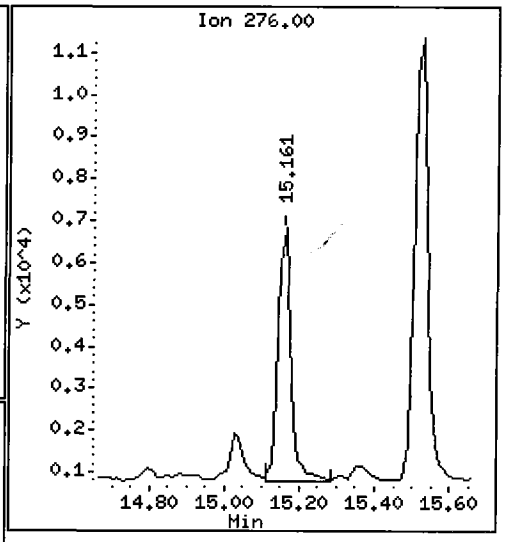
Column phase: ZB-5

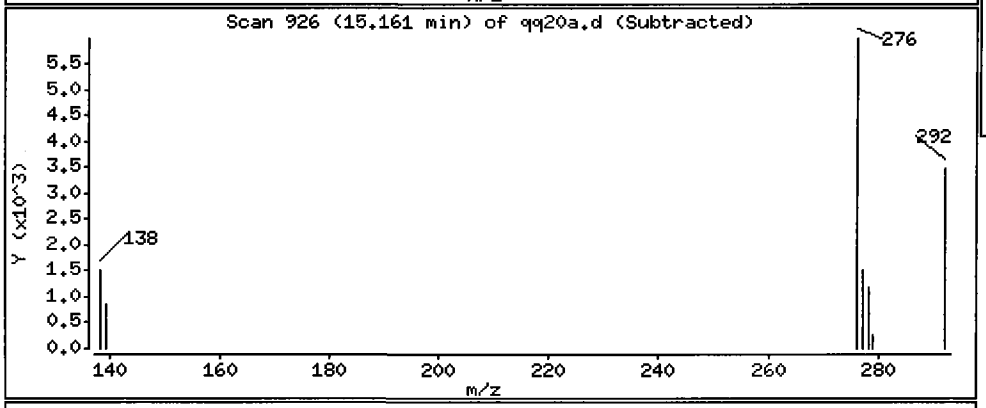
Column diameter: 0.25

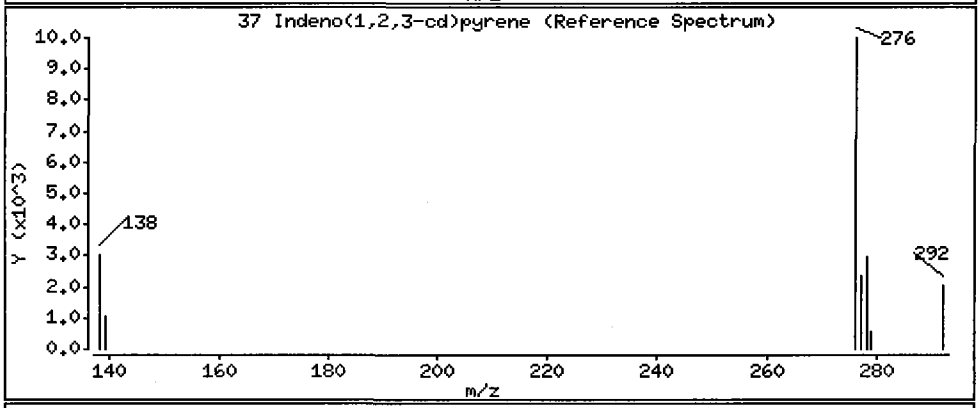
37 Indeno(1,2,3-cd)pyrene

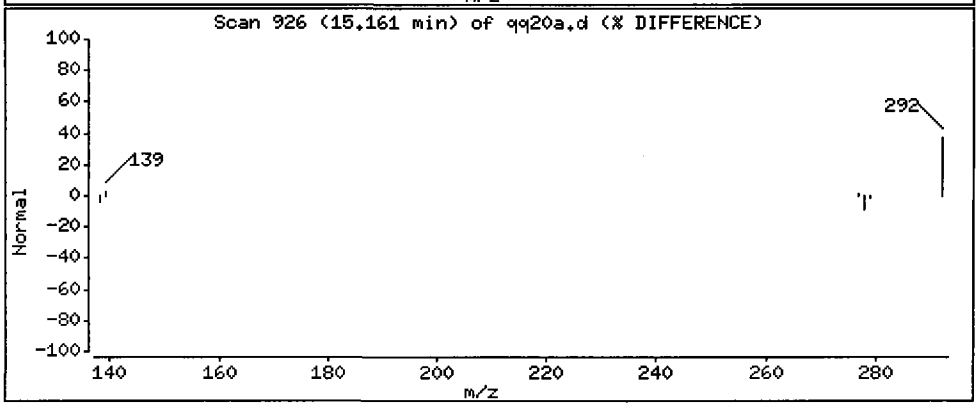
Concentration: 15.1 ug/L











Data File: /chem3/nt8.i/20100402A.b/qq20a.d

Date : 02-APR-2010 18:34

Client ID: CB31A032510COMP

Instrument: nt8.i

Sample Info: QQ20A

Volume Injected (uL): 2.0

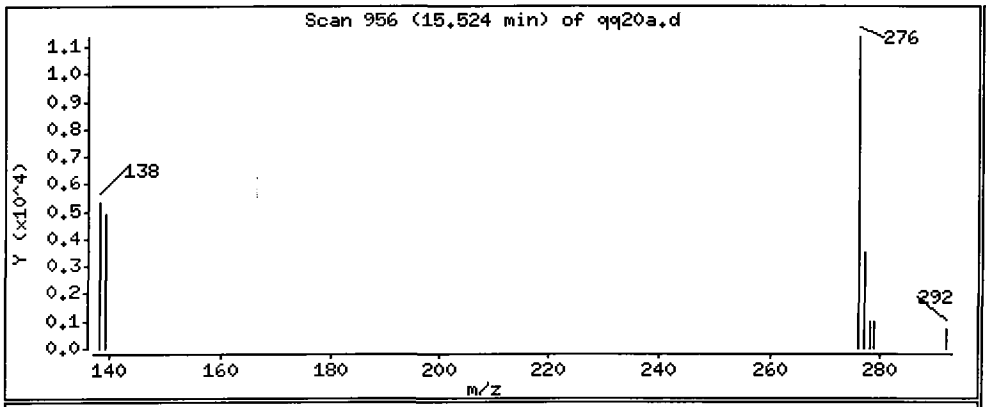
Operator: VTS

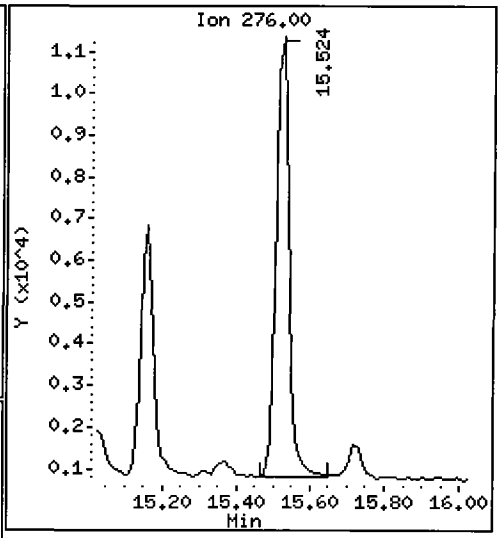
Column phase: ZB-5

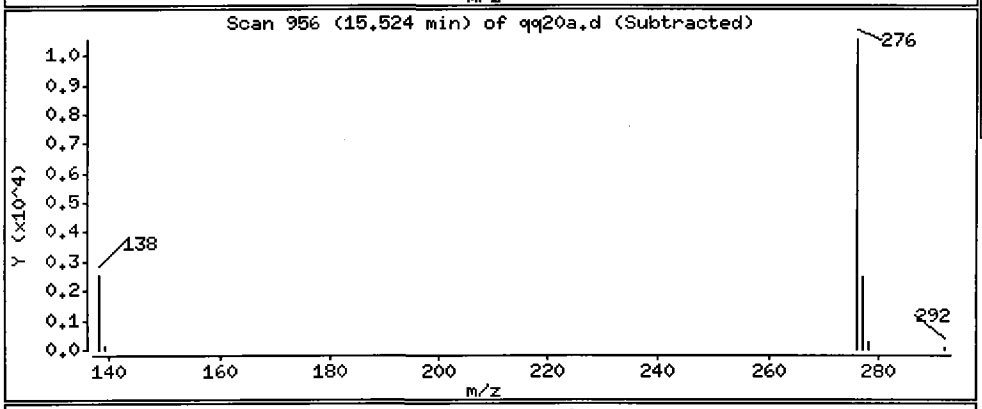
Column diameter: 0.25

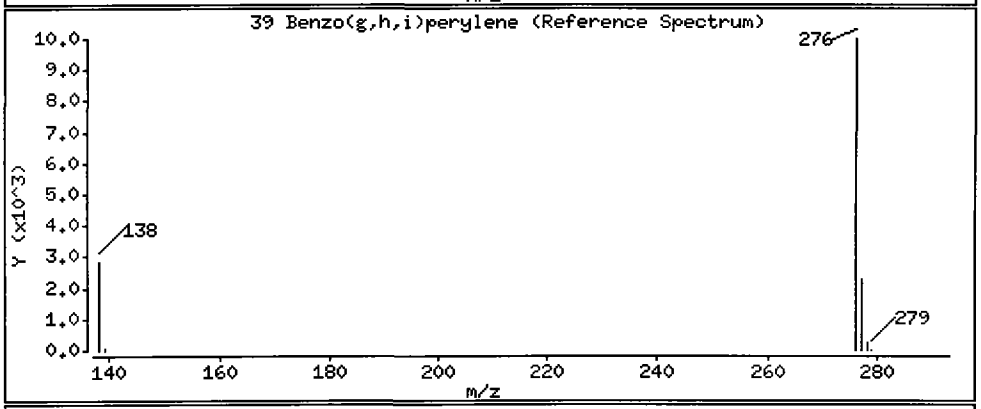
39 Benzo(g,h,i)perylene

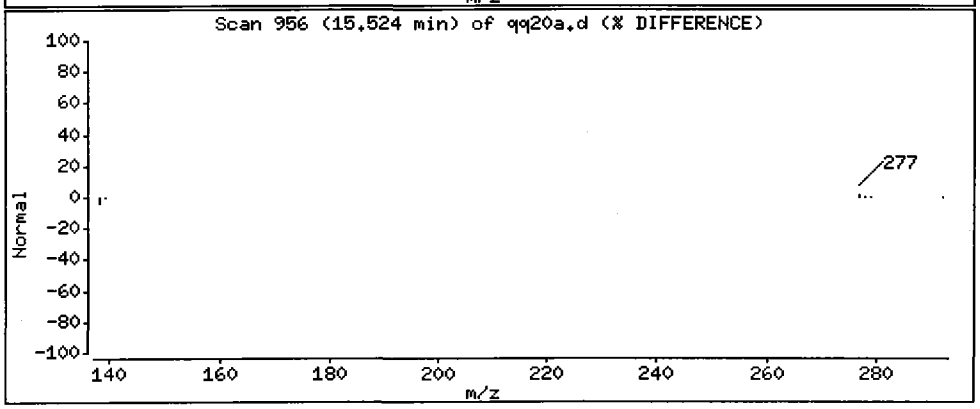
Concentration: 30.7 ug/L



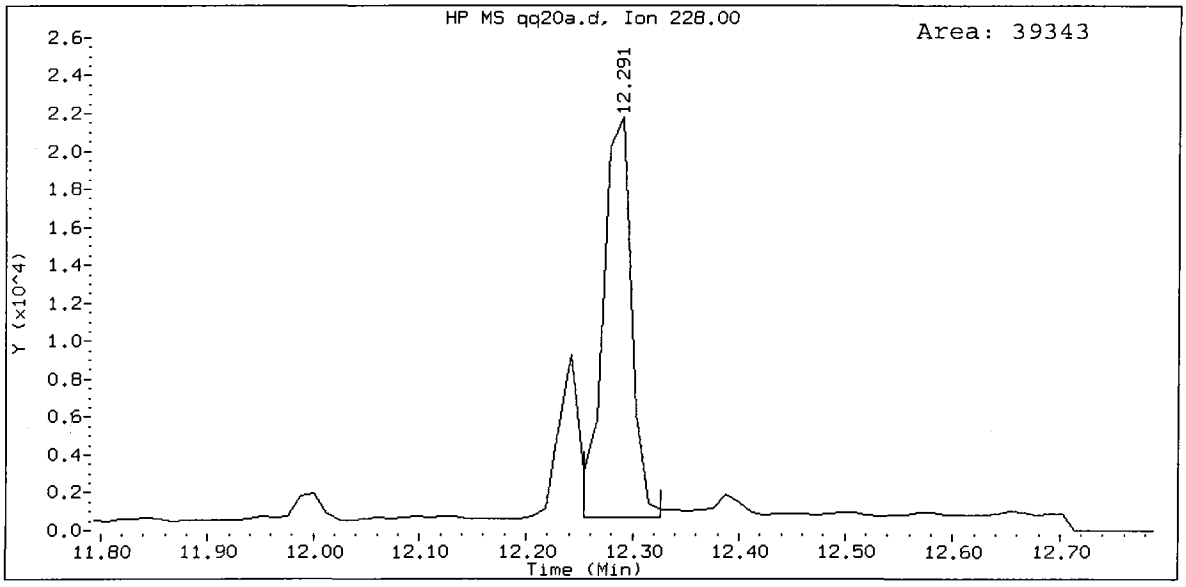


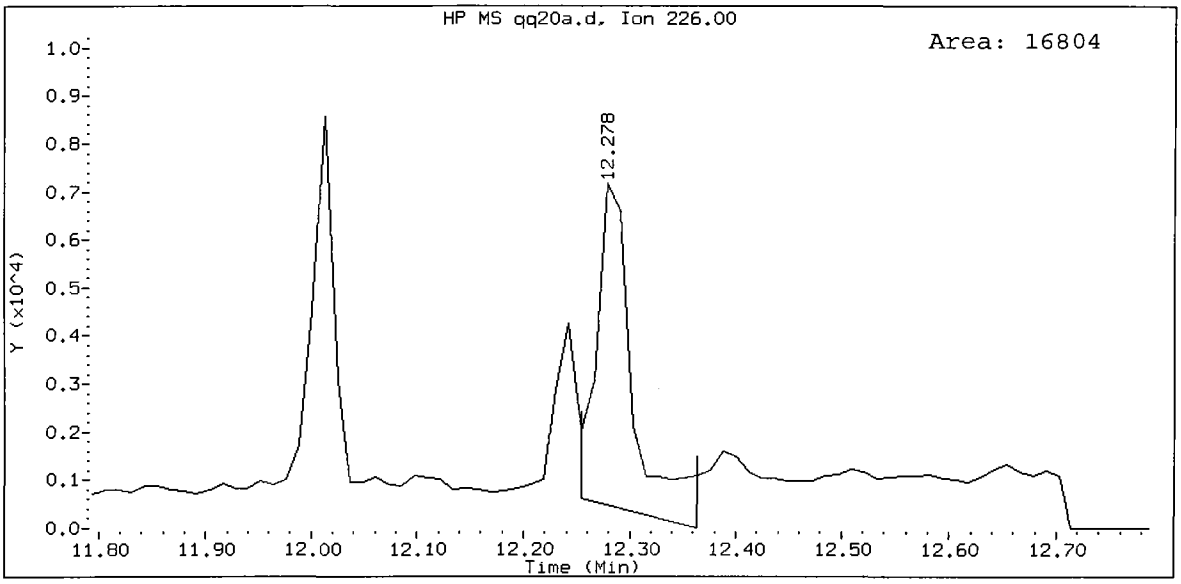




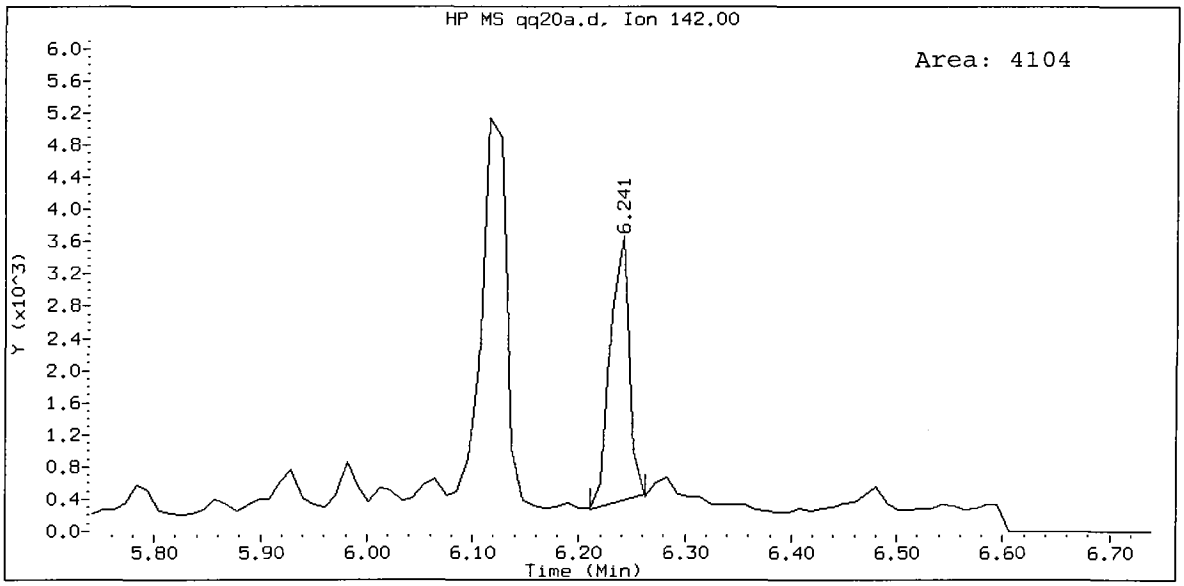


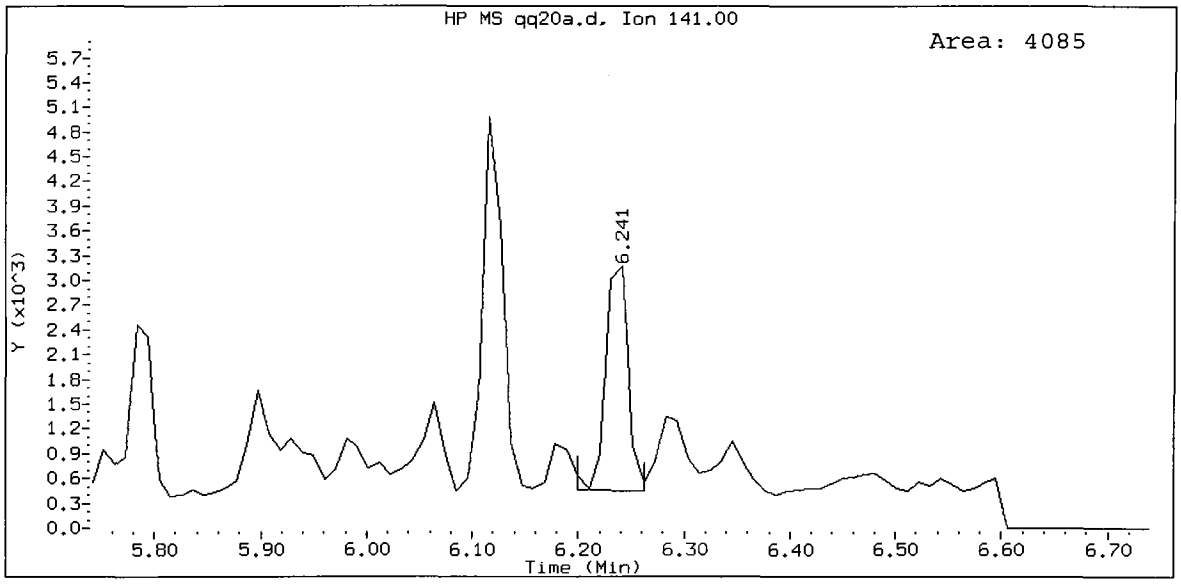
QQ20A, /chem3/nt8.i/20100402A.b/qq20a.d
Chrysene Amount: 39.08





QQ20A, /chem3/nt8.i/20100402A.b/qq20a.d
1-Methylnaphthalene Amount: 5.56





ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB4857032510COMP
SAMPLE

Lab Sample ID: QQ20B
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 19:45
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.016**
91-57-6	**2-Methylnaphthalene**	**0.010**	**0.010**
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.032**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.056**
129-00-0	**Pyrene**	**0.010**	**0.059**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.011**
218-01-9	**Chrysene**	**0.010**	**0.025 Q**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.014**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.014**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.013**
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.020**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	70.3%
d14-Dibenzo(a,h)anthracene	30.0%

YZ 4/3/10

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/qq20b.d
Lab Smp Id: QQ20B Client Smp ID: CB4857032510COMP
Inj Date : 02-APR-2010 19:45
Operator : VTS Inst ID: nt8.i
Smp Info : QQ20B
Misc Info : 10-8031
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	5.377	5.377	(1.000)	196206	200.000	
	5 Naphthalene	128	5.398	5.398	(1.004)	17759	16.0076	16.0
$	6 2-Methylnaphthalene-d10	152	6.085	6.095	(1.132)	129268	210.615	211
	7 2-Methylnaphthalene	142	6.116	6.116	(1.137)	6790	10.0981	10.1
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	7.306	7.306	(1.000)	115775	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	187706	200.000	
	19 Phenanthrene	178	9.059	9.059	(1.003)	33734	31.5970	31.6
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	10.499	10.499	(1.162)	61121	56.2040	56.2
	25 Pyrene	202	10.777	10.777	(1.193)	65963	58.7145	58.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	12.242	12.242	(0.998)	7603	11.4135	11.4
*	29 Chrysene-d12	240	12.266	12.266	(1.000)	111652	200.000	
	30 Chrysene	228	12.290	12.290	(1.002)	24280	25.0187	25.0(M)
	32 Benzo(b)fluoranthene	252	13.485	13.485	(0.971)	24965	30.5286	30.5
	33 Benzo(k)fluoranthene	252	13.485	13.506	(0.971)	24965	22.2013	22.2
	34 Benzo(a)pyrene	252	13.819	13.819	(0.995)	9093	12.7422	12.7
*	35 Perylene-d12	264	13.882	13.882	(1.000)	106602	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	15.161	15.161	(1.092)	8765	9.46366	9.46
$	36 Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	48984	90.0428	90.0
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	15.524	15.524	(1.118)	16454	20.0163	20.0

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: qq20b.d
Lab Smp Id: QQ20B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8031

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Client Smp ID: CB4857032510COMI
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	196206	-10.33
11 Acenaphthene-d10	119440	59720	238880	115775	-3.07
18 Phenanthrene-d10	183479	91740	366958	187706	2.30
29 Chrysene-d12	121669	60834	243338	111652	-8.23
35 Perylene-d12	102197	51098	204394	106602	4.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.38	0.00
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.27	0.00
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ20B
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8031

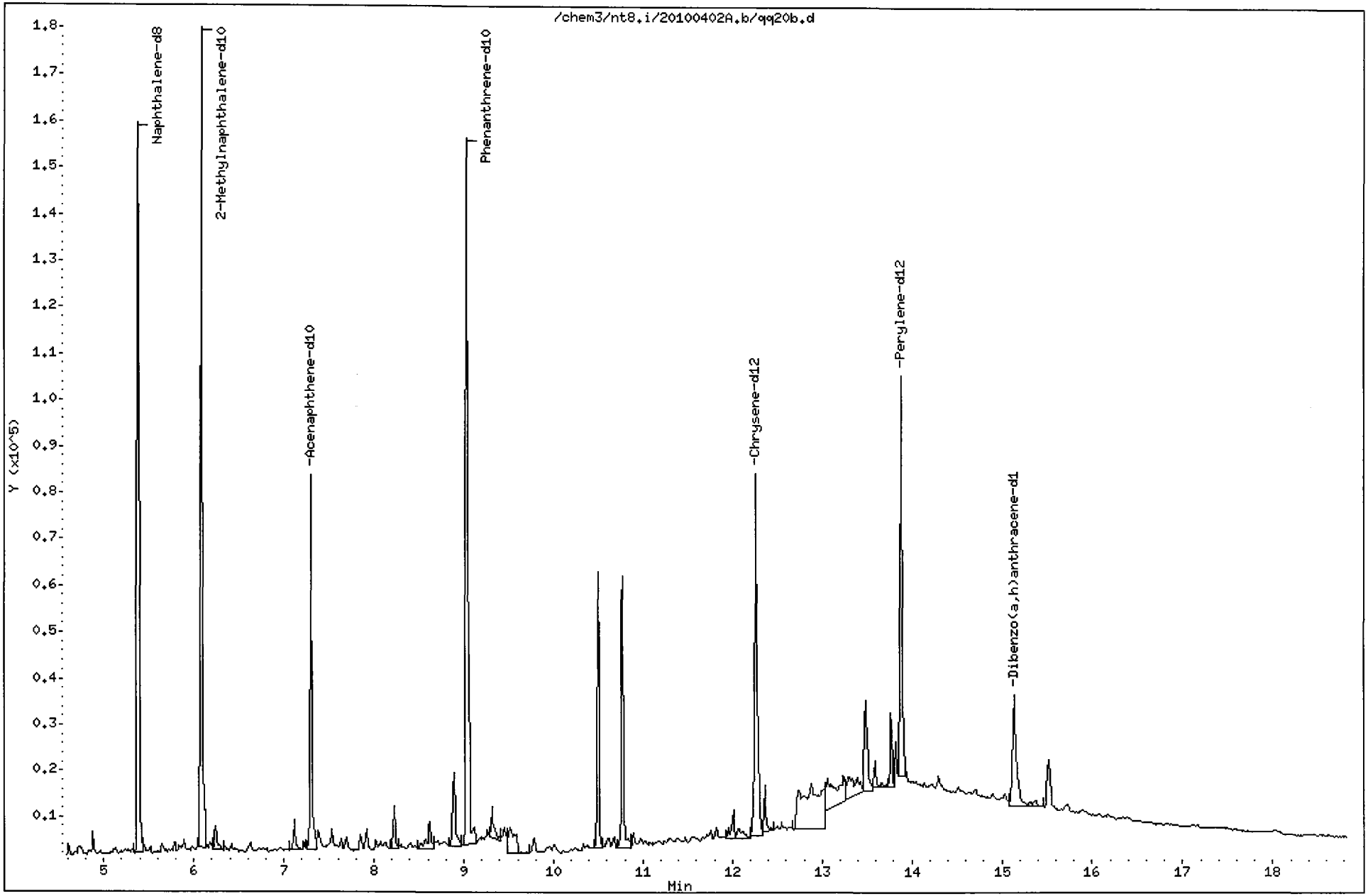
Client SDG: QQ20
Fraction: SV
Client Smp ID: CB4857032510COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	211	70.21	31-109
$ 36 Dibenzo(a,h)anthra	300	90.0	30.01	10-133

Data File: /chem3/nt8.i/20100402A.b/qq20b.d
Date : 02-APR-2010 19:45
Client ID: CB4857032510COMP
Sample Info: QQ20B
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i

Operator: VTS
Column diameter: 0.25



Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

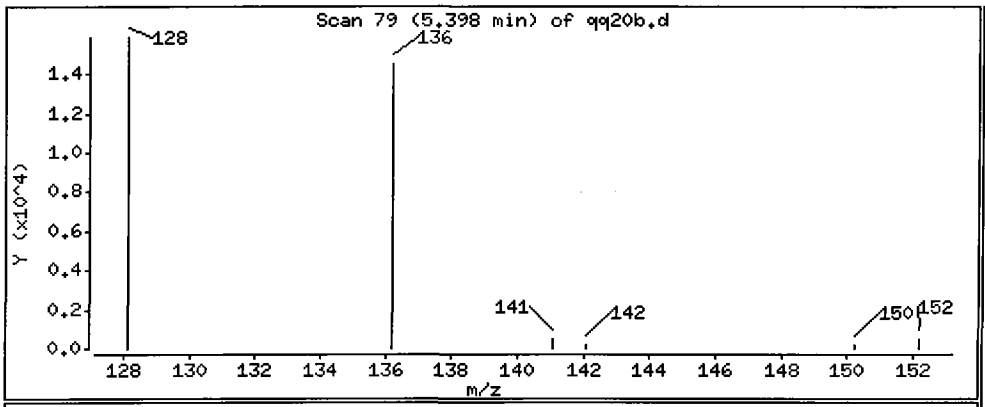
Operator: VTS

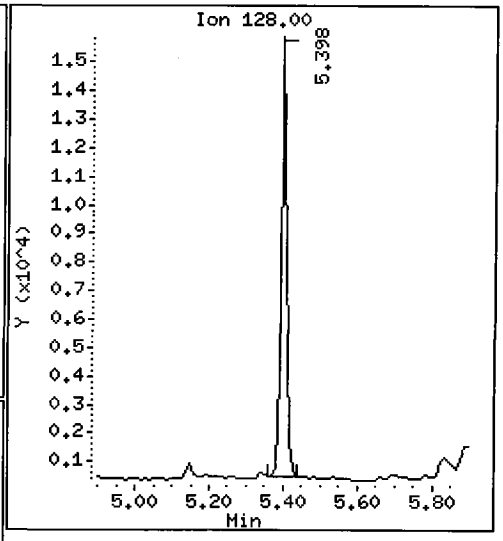
Column phase: ZB-5

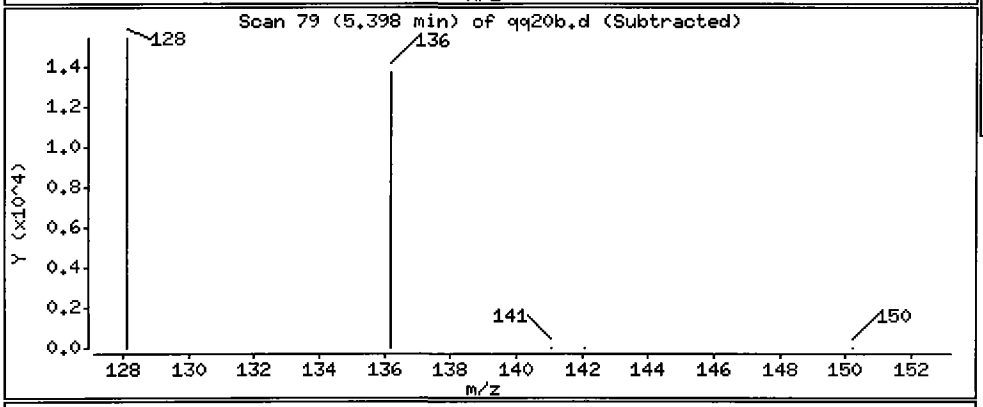
Column diameter: 0.25

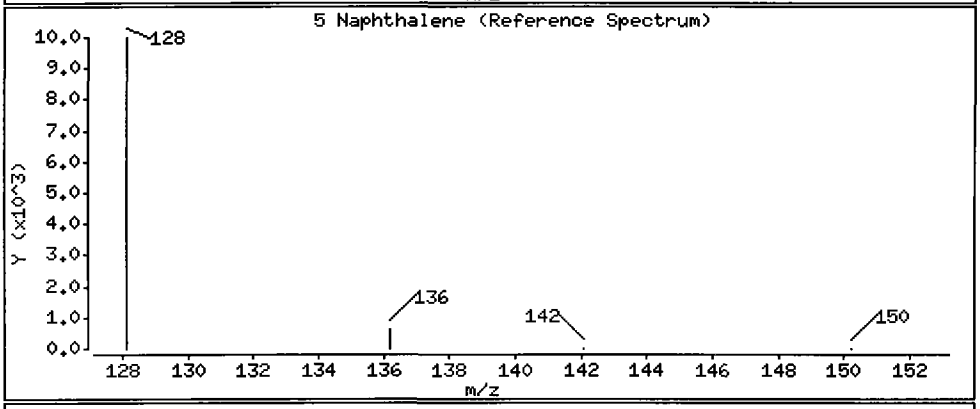
5 Naphthalene

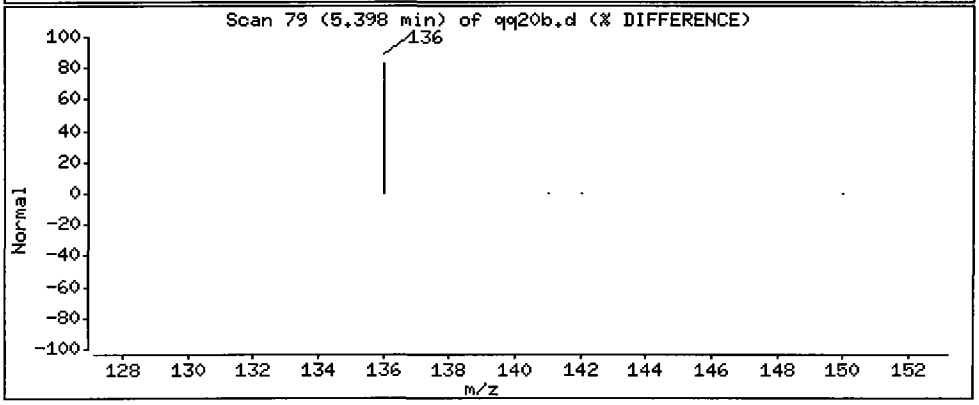
Concentration: 16.0 ug/L











Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

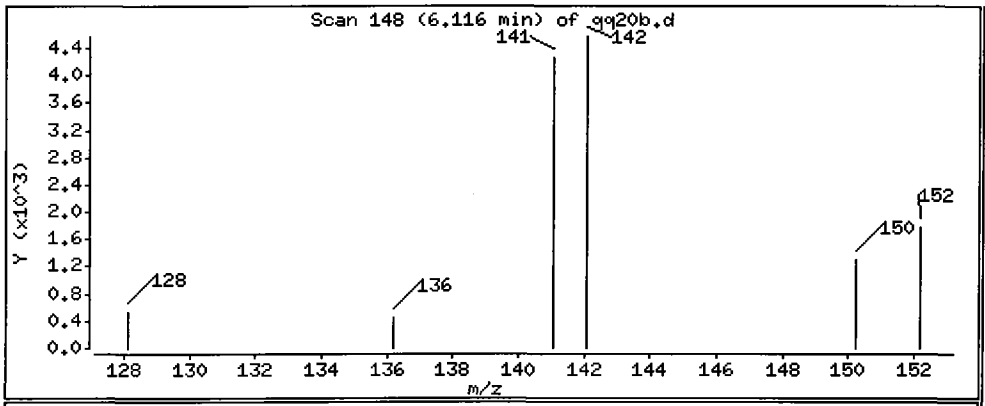
Operator: VTS

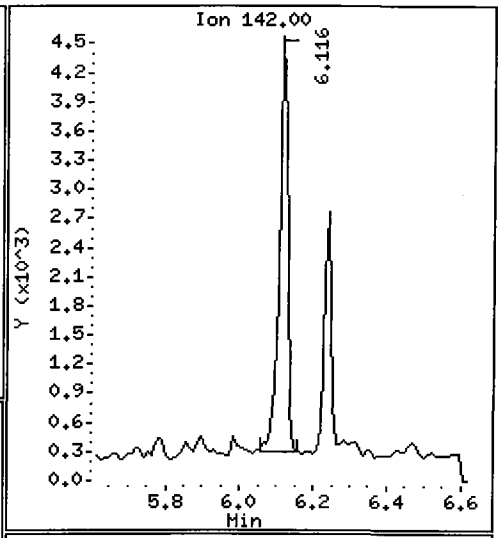
Column phase: ZB-5

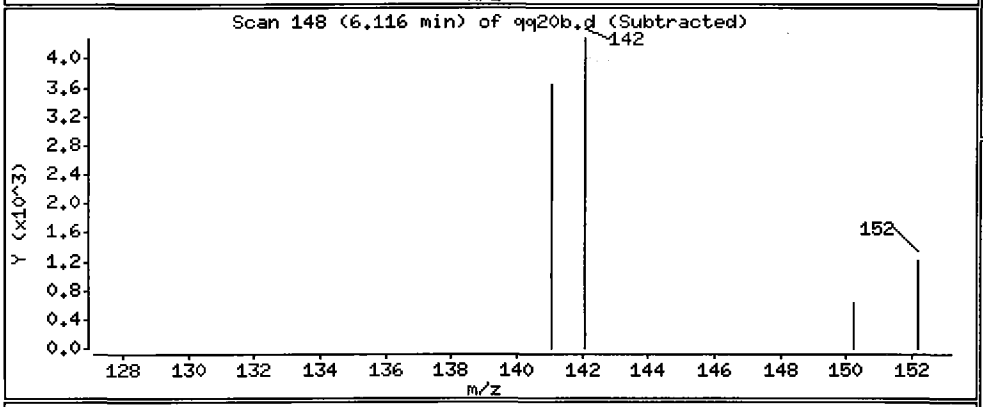
Column diameter: 0.25

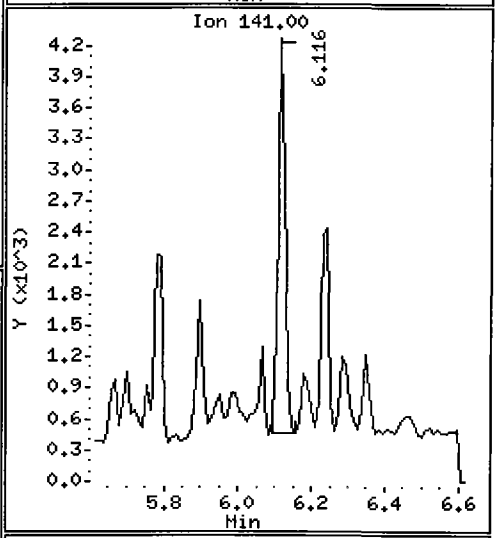
7 2-Methylnaphthalene

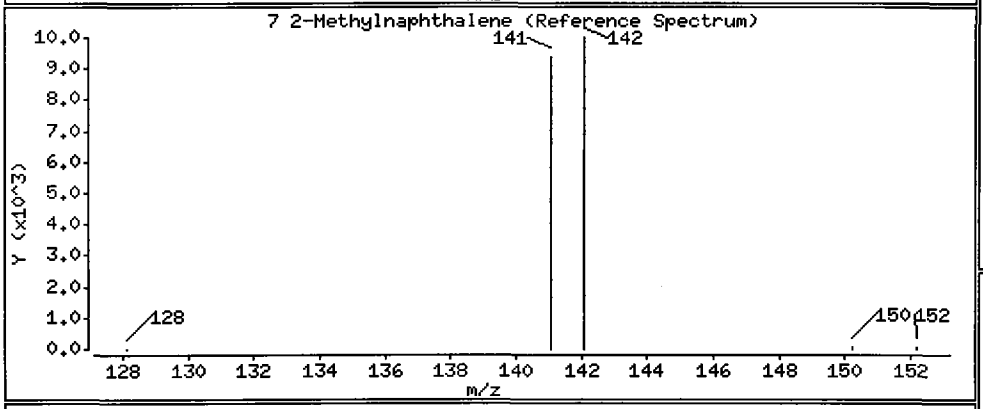
Concentration: 10.1 ug/L

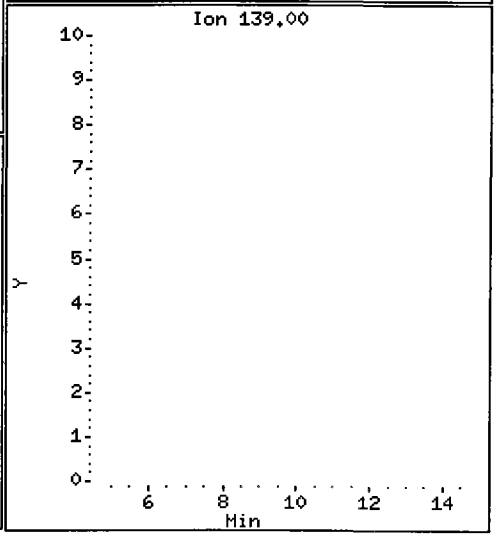


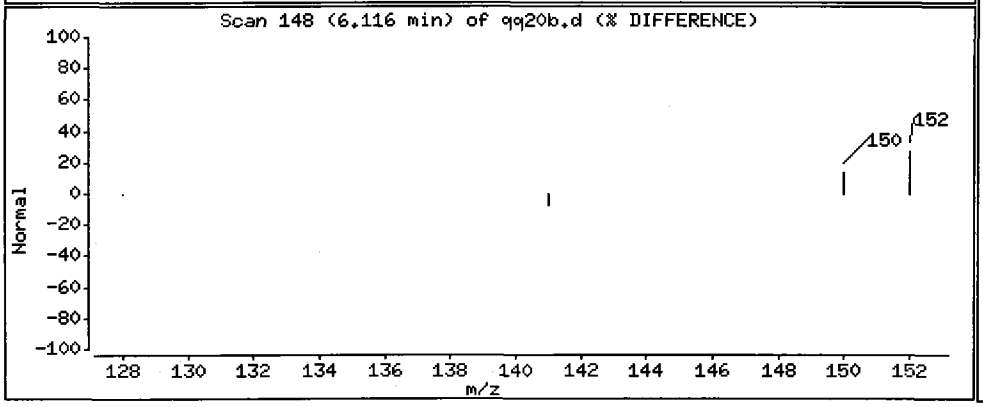












Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

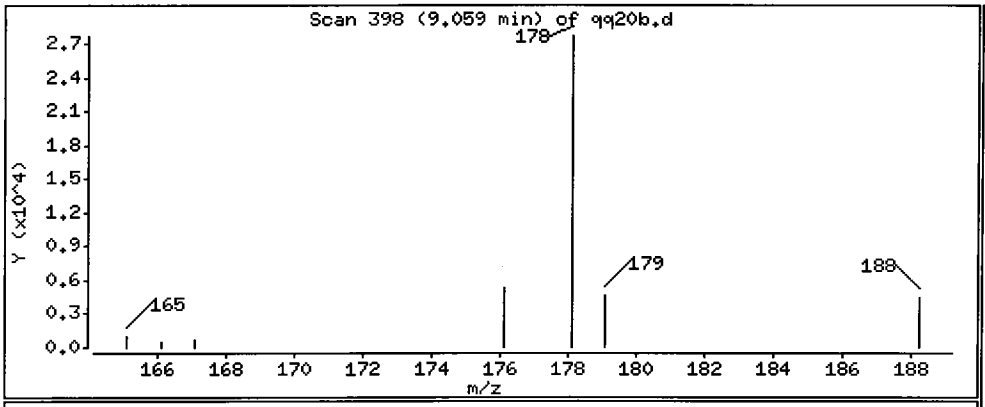
Operator: VTS

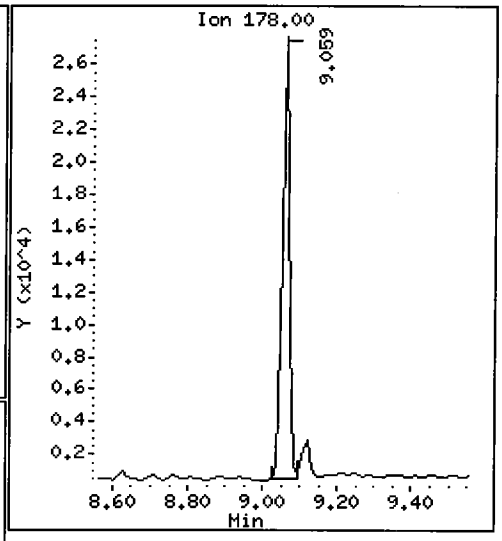
Column phase: ZB-5

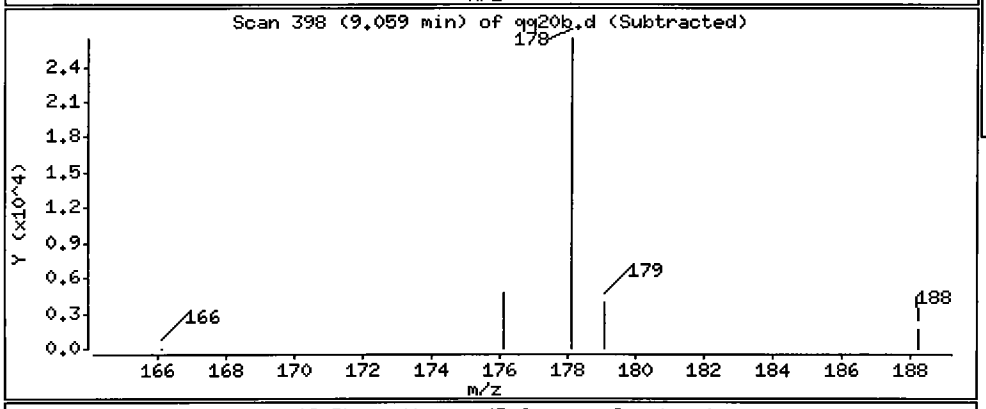
Column diameter: 0.25

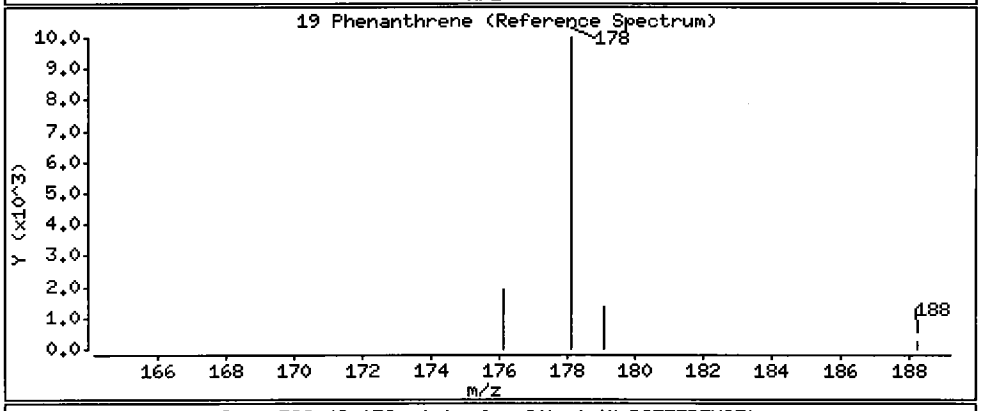
19 Phenanthrene

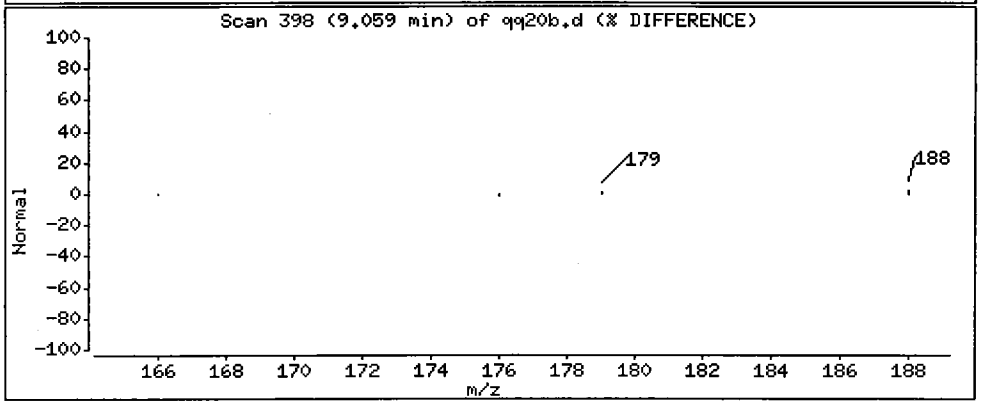
Concentration: 31.6 ug/L











Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

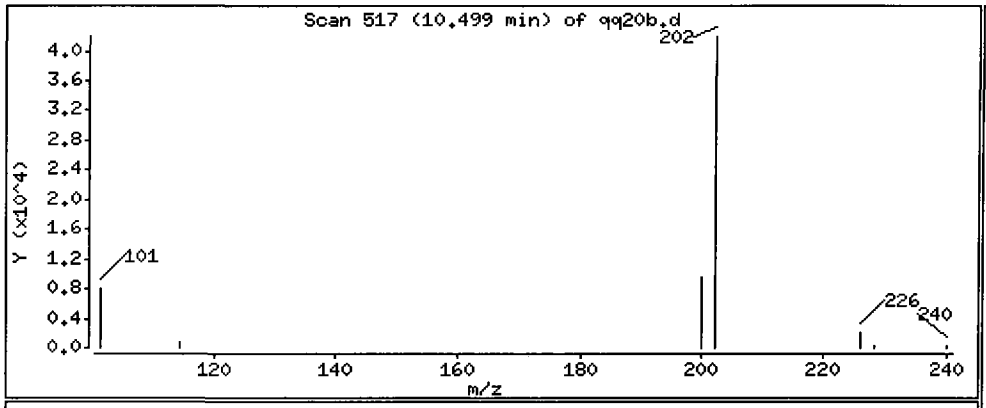
Operator: VTS

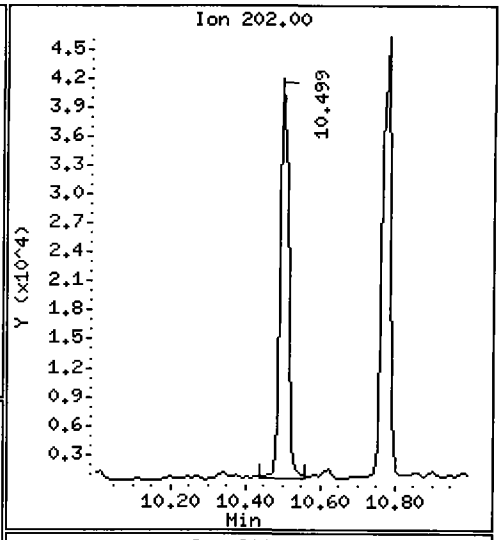
Column phase: ZB-5

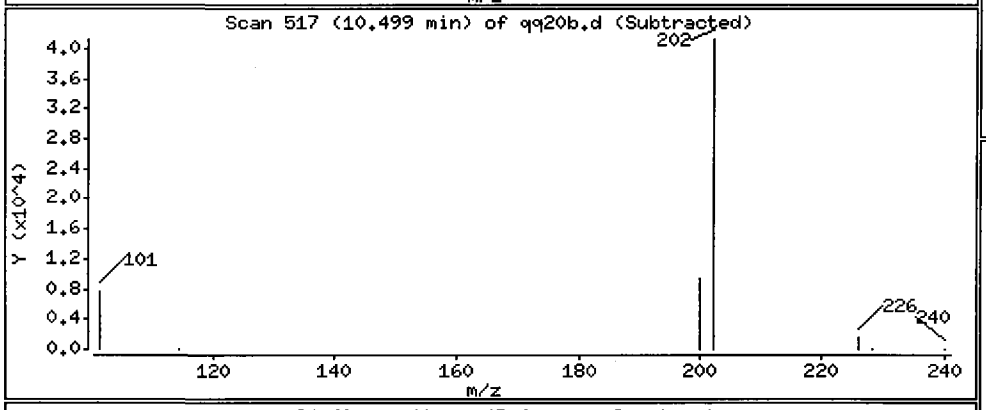
Column diameter: 0.25

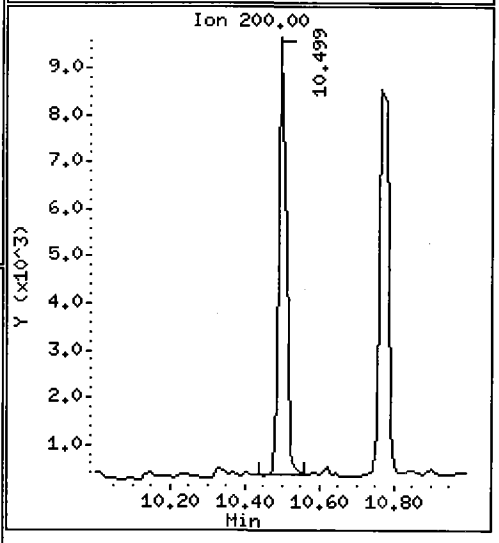
24 Fluoranthene

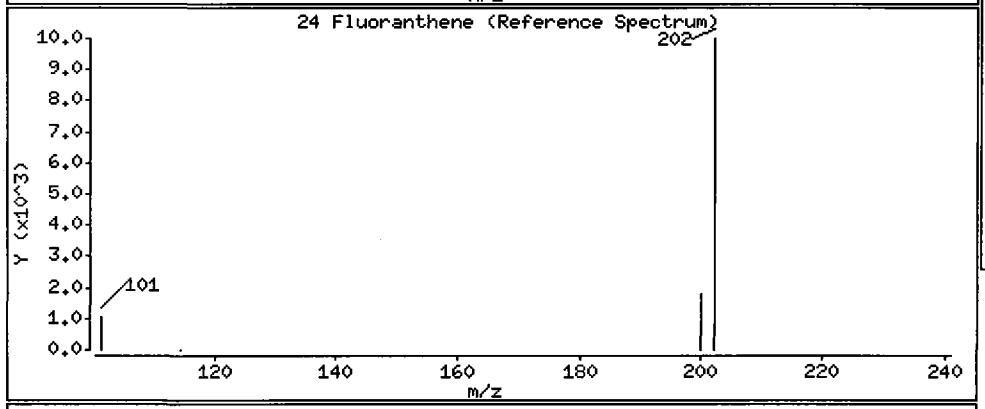
Concentration: 56.2 ug/L

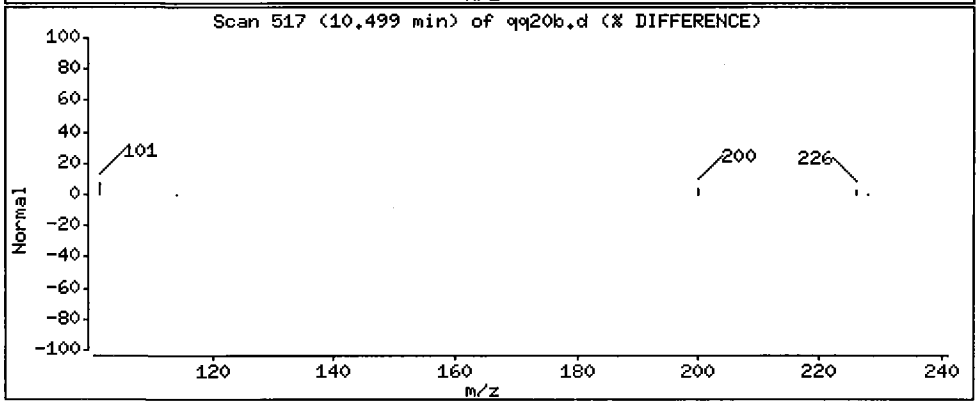












Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

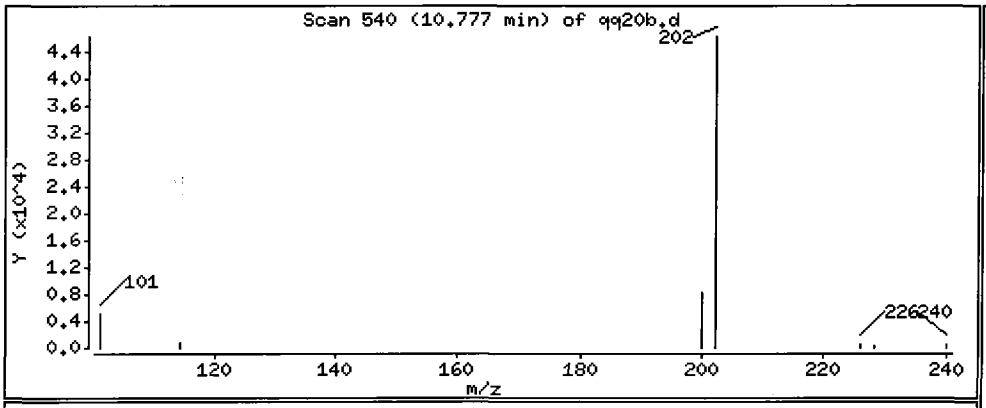
Operator: VTS

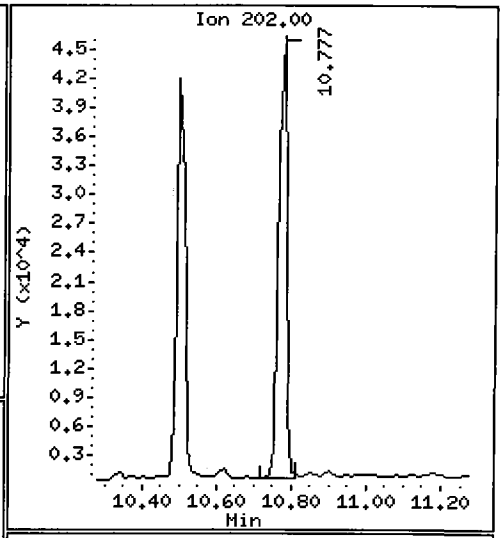
Column phase: ZB-5

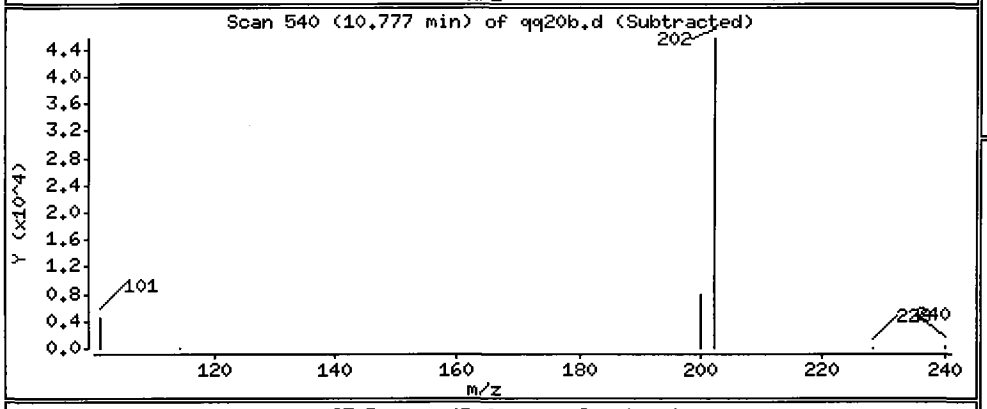
Column diameter: 0.25

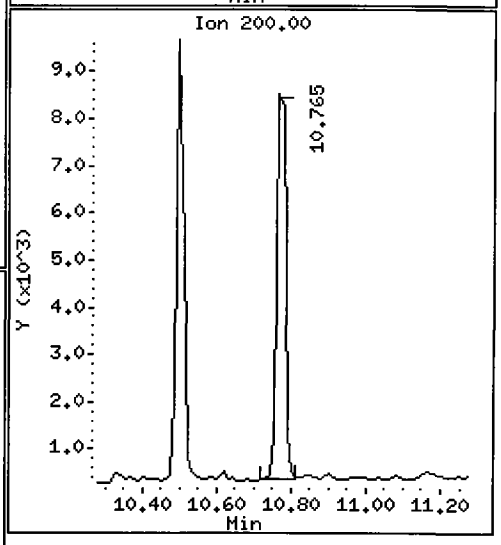
25 Pyrene

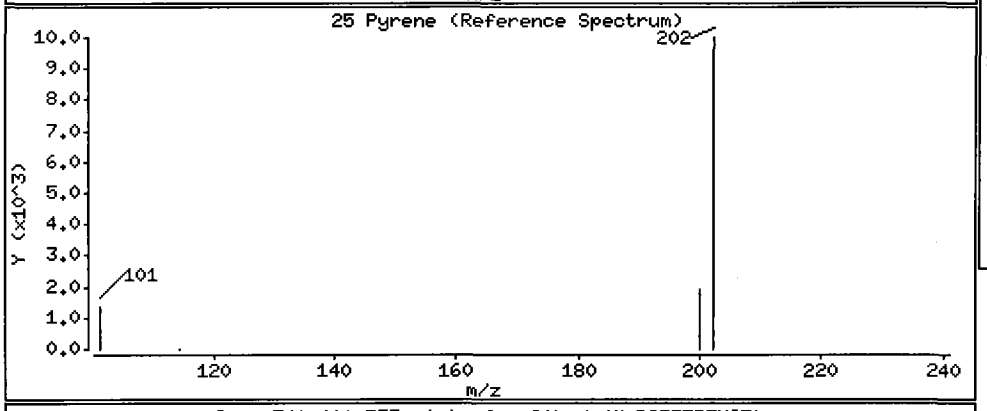
Concentration: 58.7 ug/L

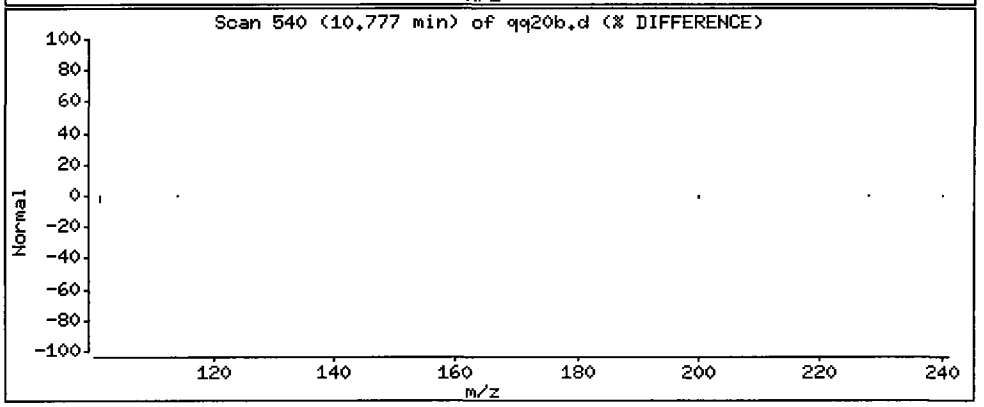












Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

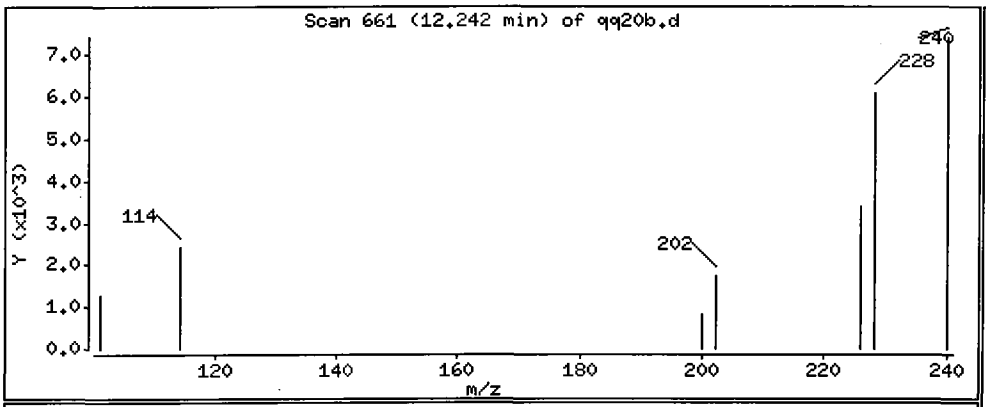
Operator: VTS

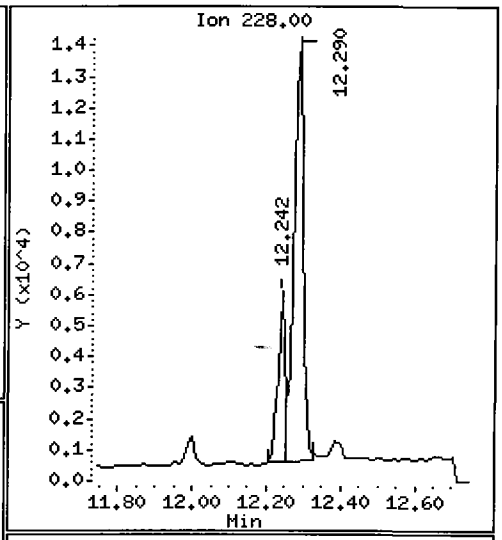
Column phase: ZB-5

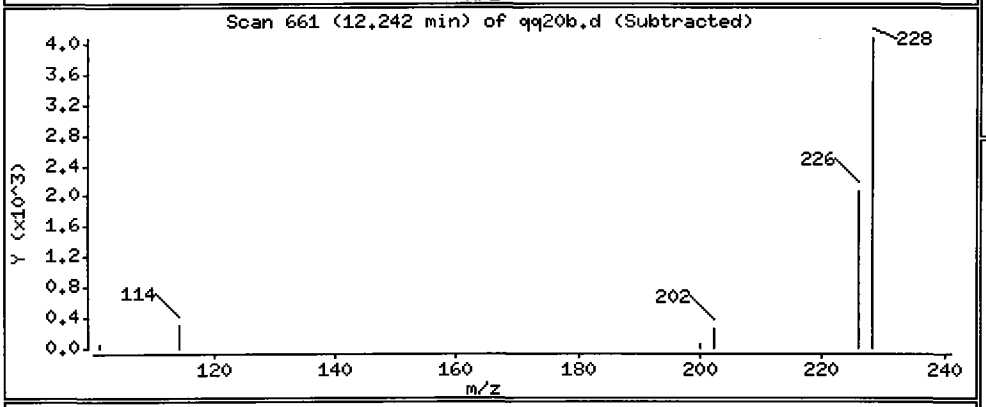
Column diameter: 0.25

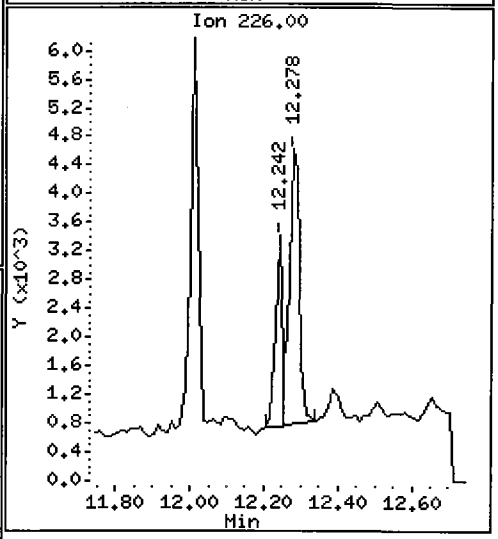
28 Benzo(a)anthracene

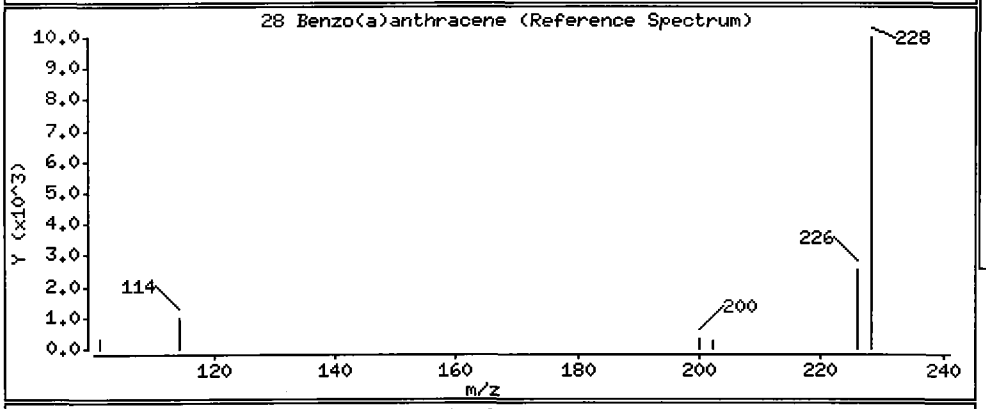
Concentration: 11.4 ug/L

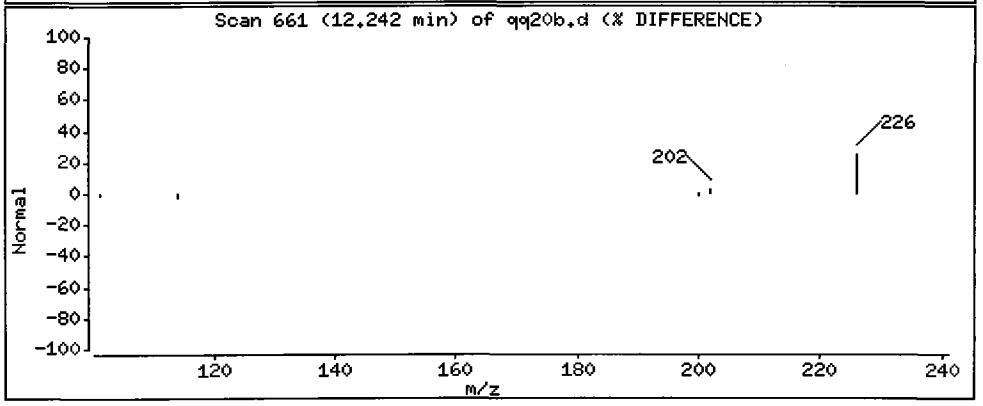












Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

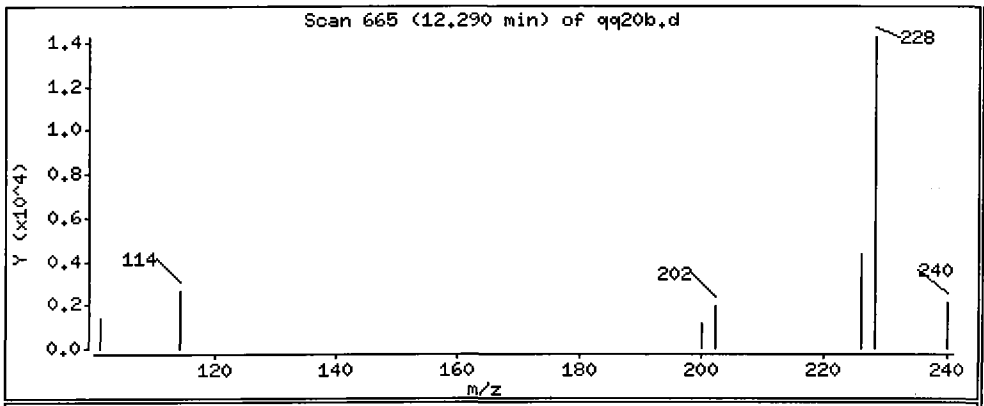
Operator: VTS

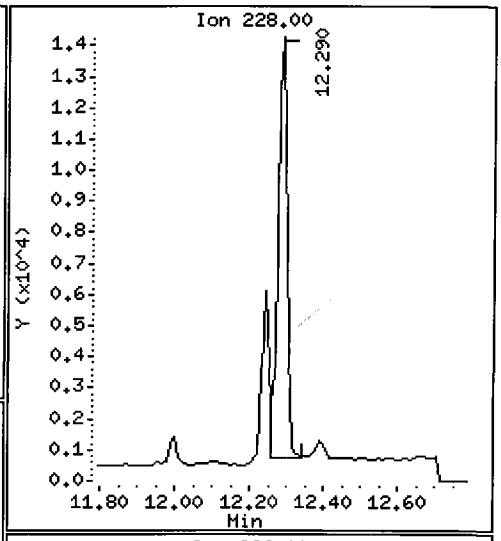
Column phase: ZB-5

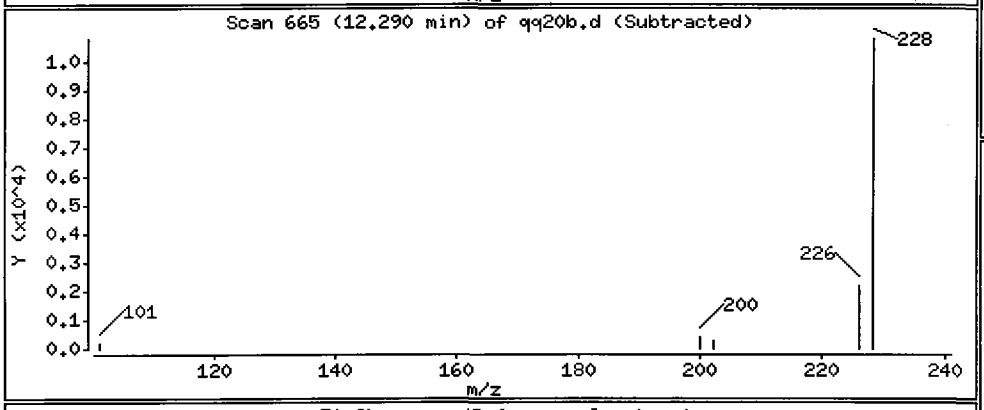
Column diameter: 0.25

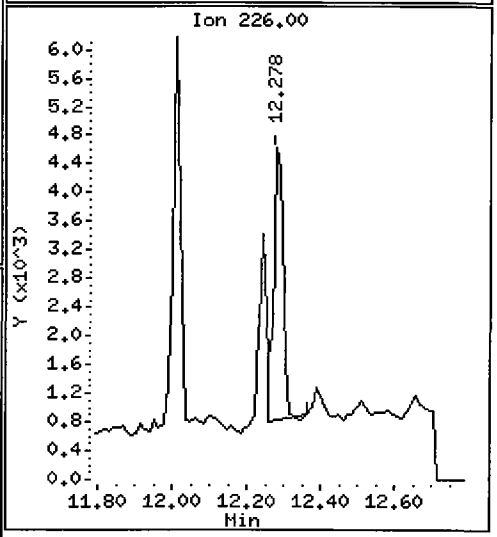
30 Chrysene

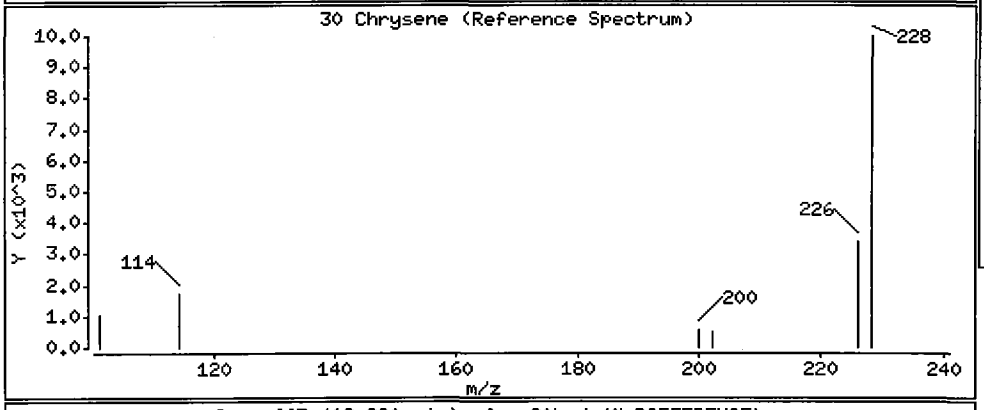
Concentration: 25.0 ug/L

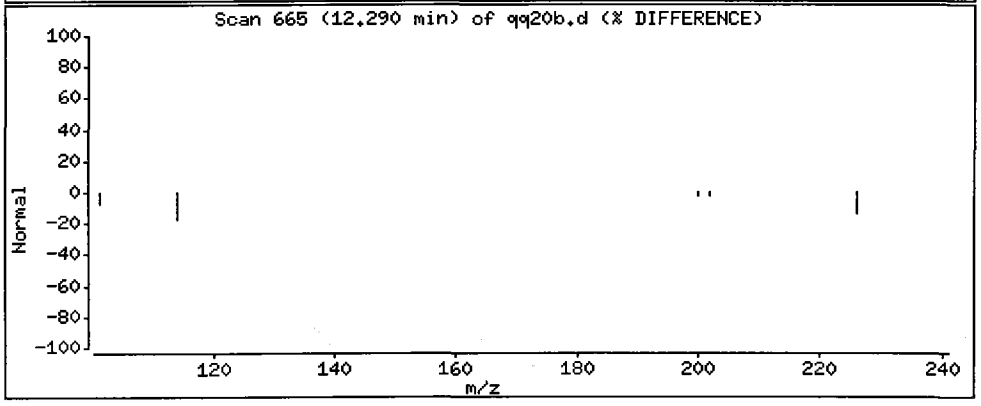












Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

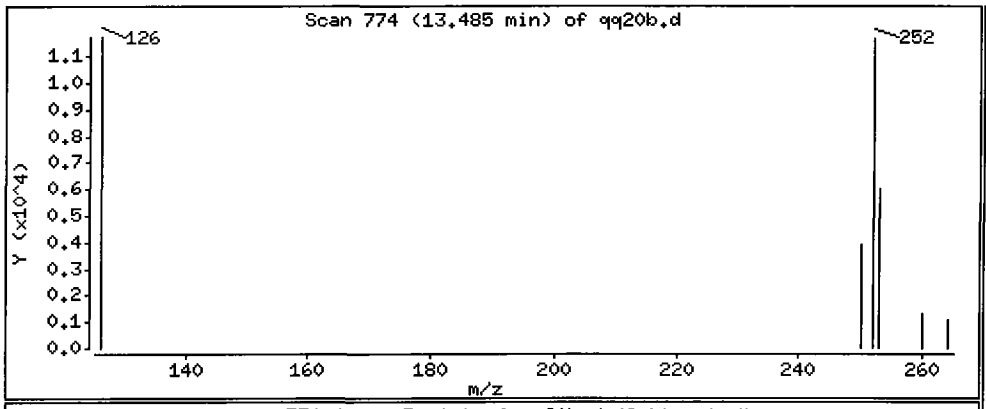
Operator: VTS

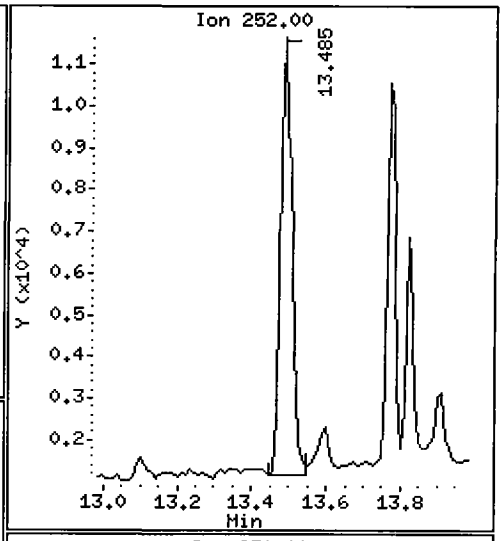
Column phase: ZB-5

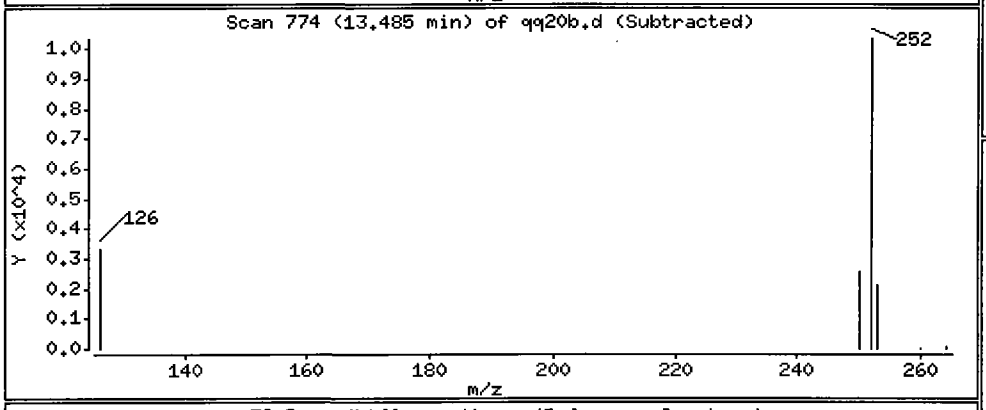
Column diameter: 0.25

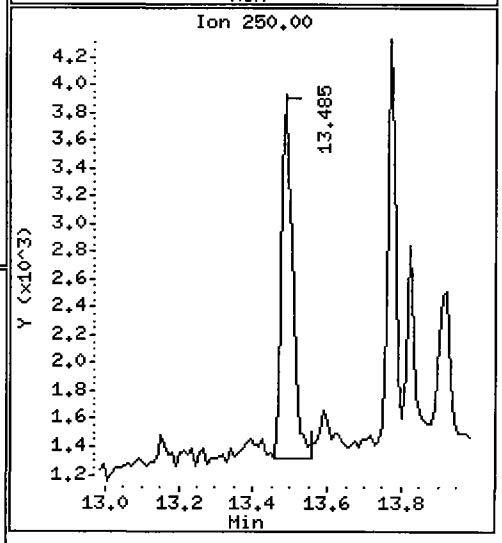
32 Benzo(b)fluoranthene

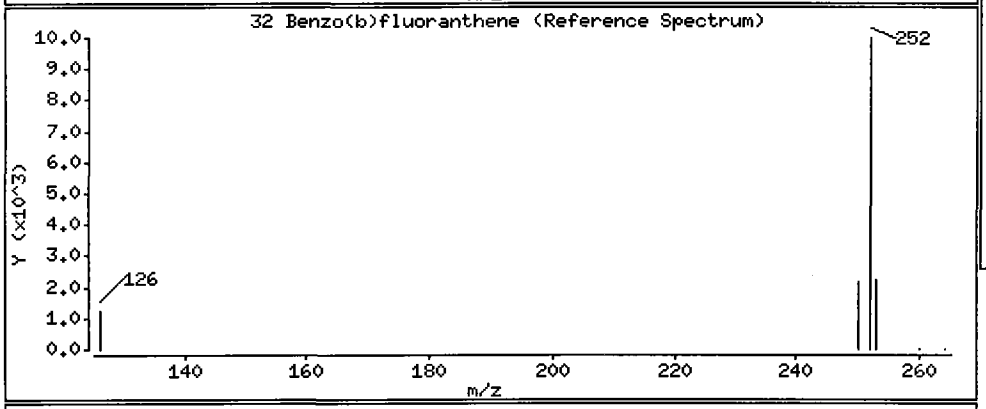
Concentration: 30.5 ug/L

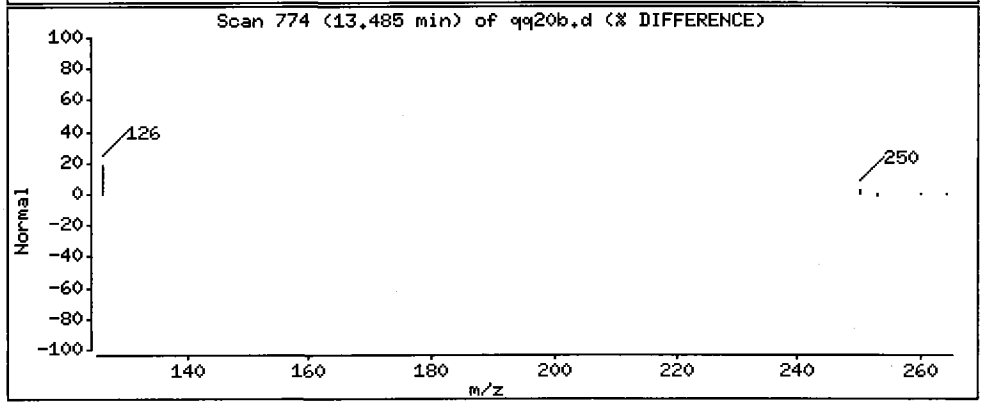












Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

Operator: VTS

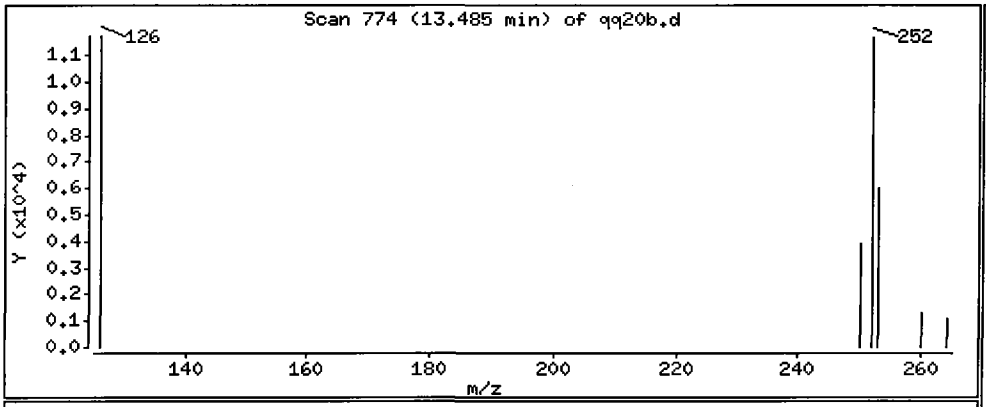
Column phase: ZB-5

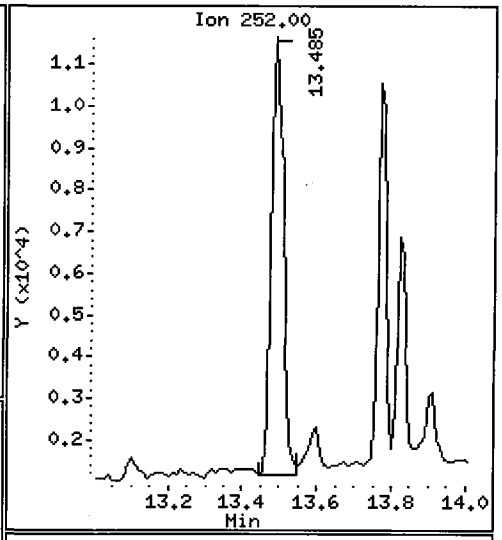
Column diameter: 0.25

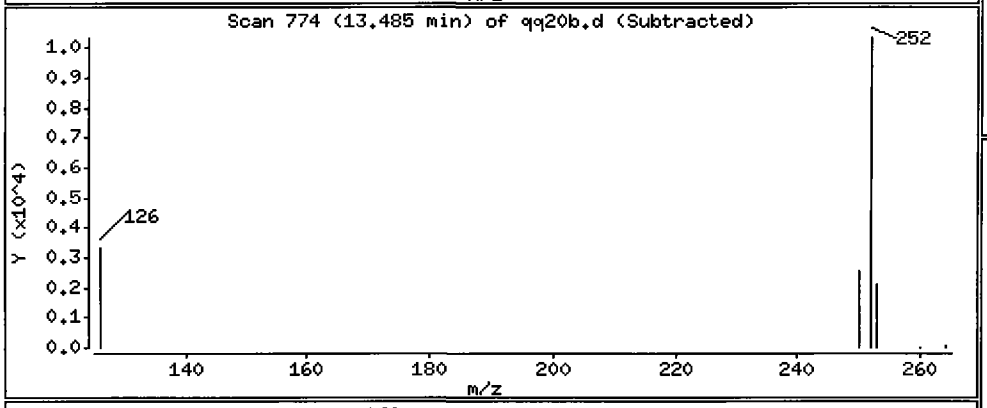
11L

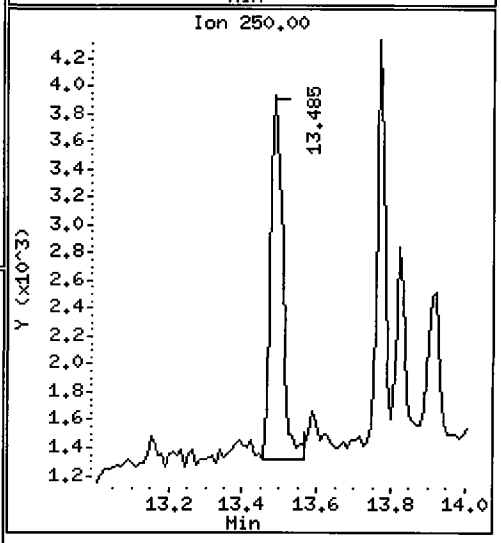
33 Benzo(k)fluoranthene

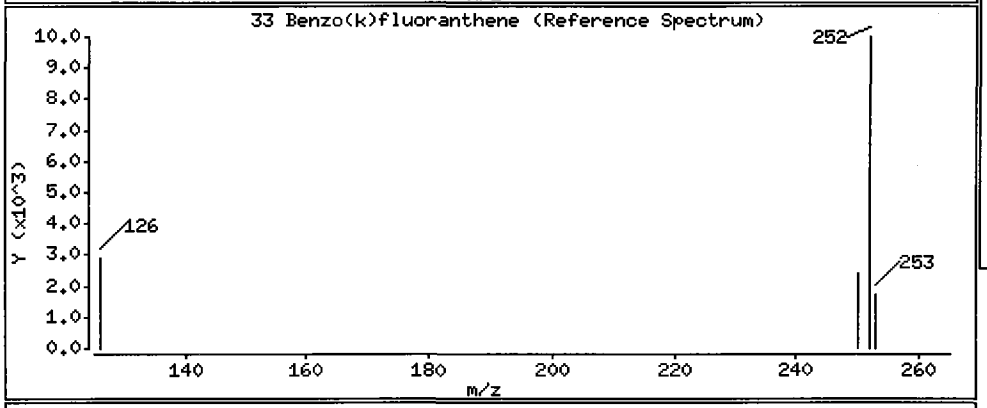
Concentration: 22.2 ug/L

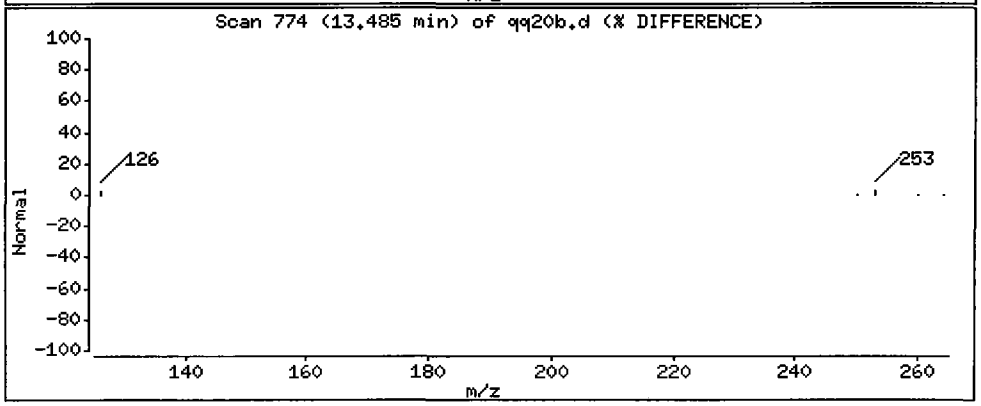












Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

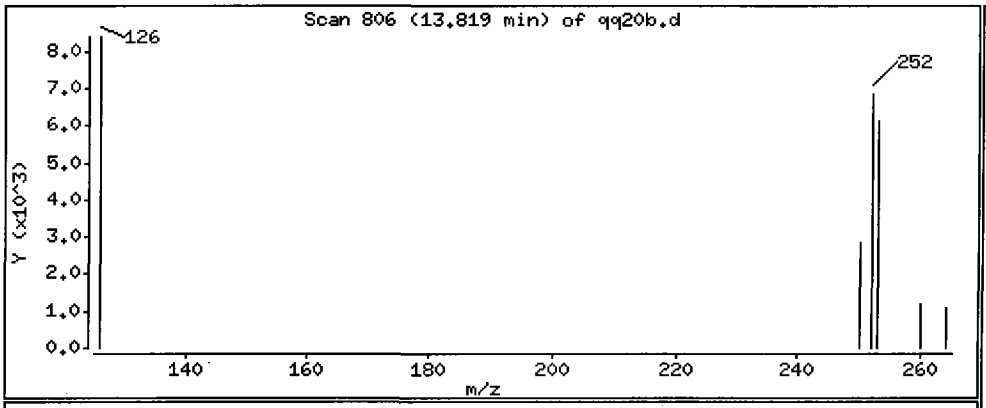
Operator: VTS

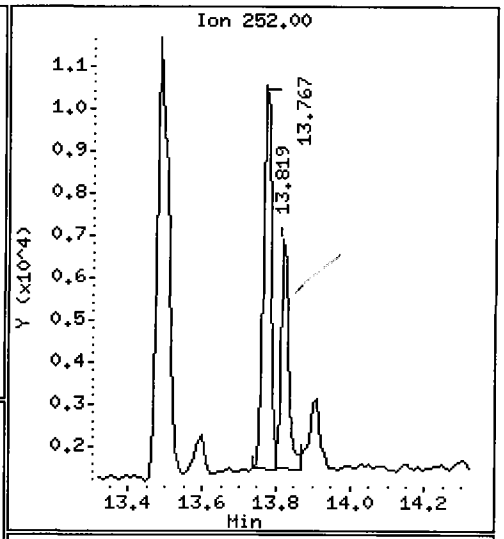
Column phase: ZB-5

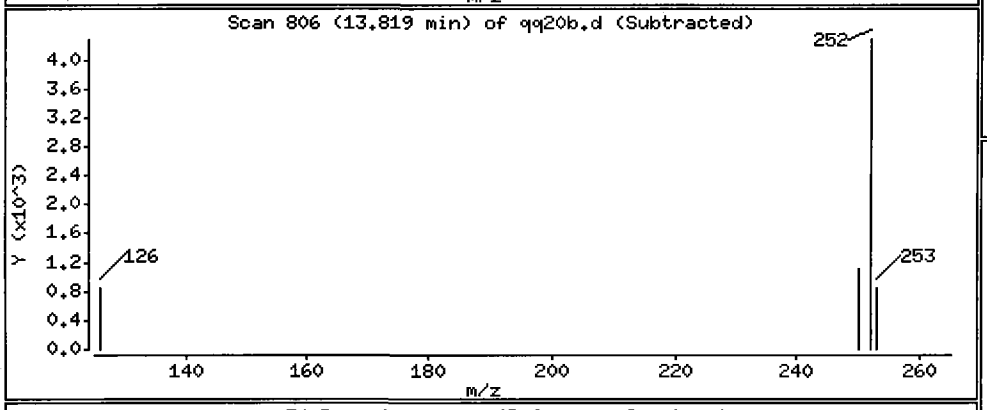
Column diameter: 0.25

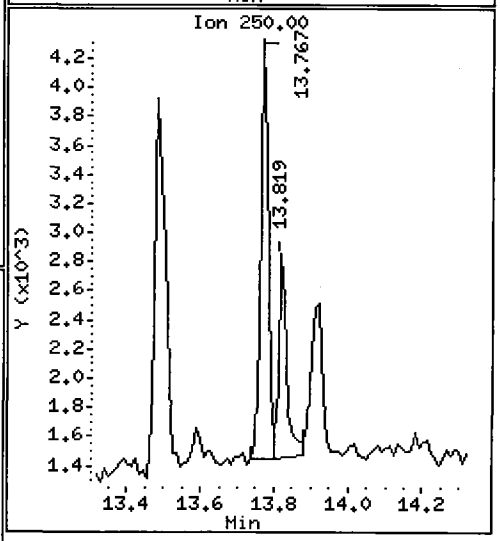
34 Benzo(a)pyrene

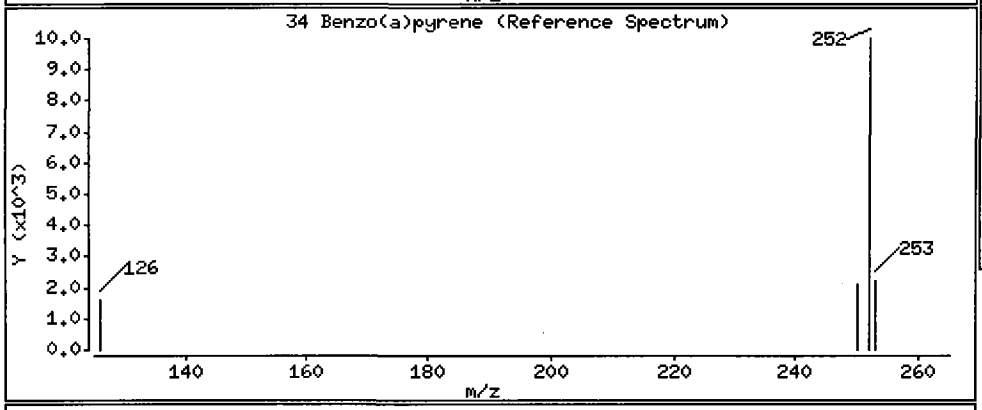
Concentration: 12.7 ug/L

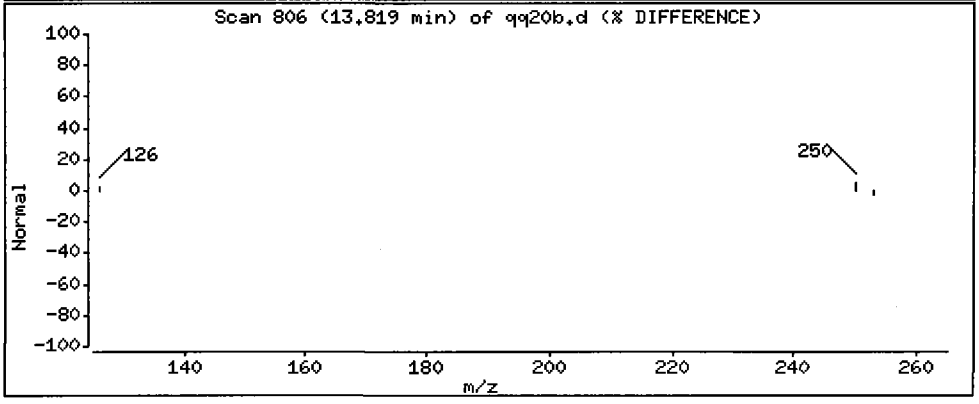












Data File: /chem3/nt8.i/20100402A.b/qq20b.d

Date : 02-APR-2010 19:45

Client ID: CB4857032510COMP

Instrument: nt8.i

Sample Info: QQ20B

Volume Injected (uL): 2.0

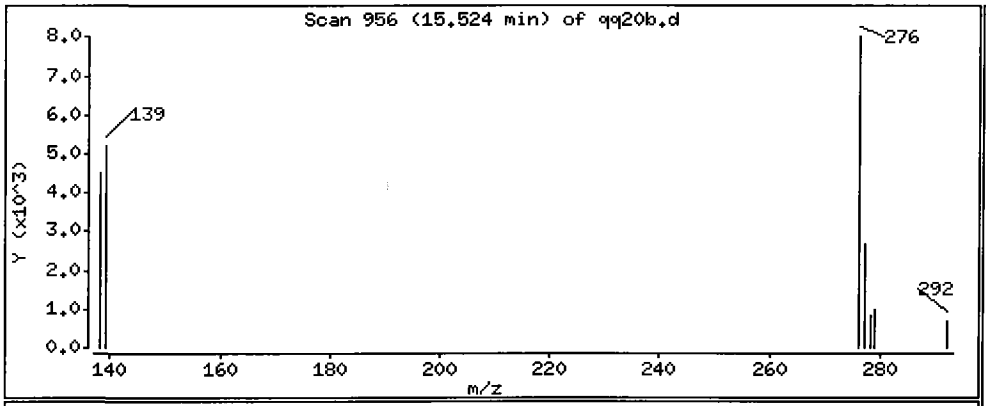
Operator: VTS

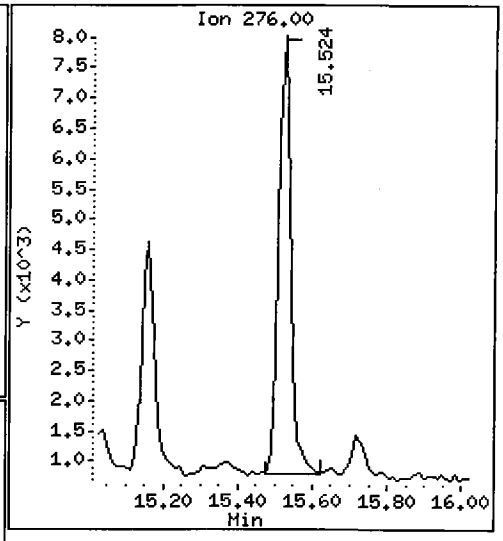
Column phase: ZB-5

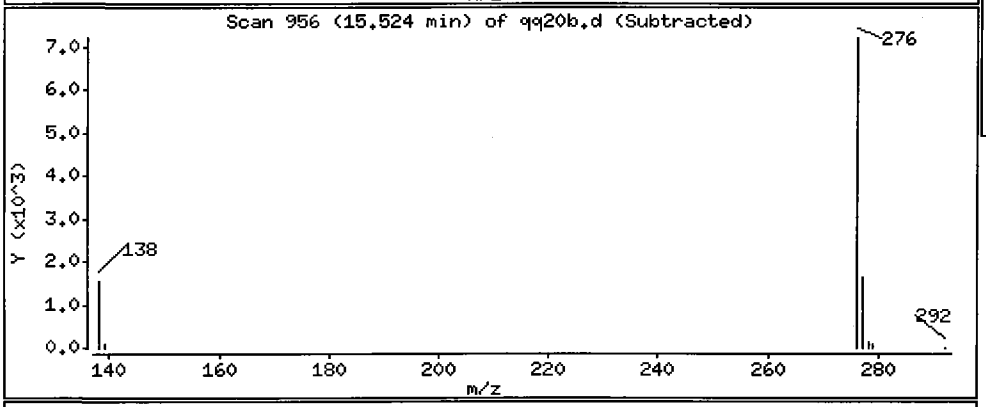
Column diameter: 0.25

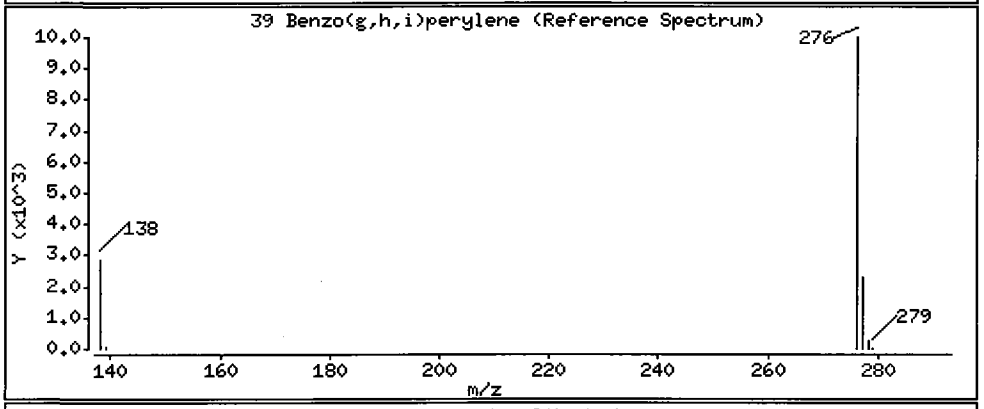
39 Benzo(g,h,i)perylene

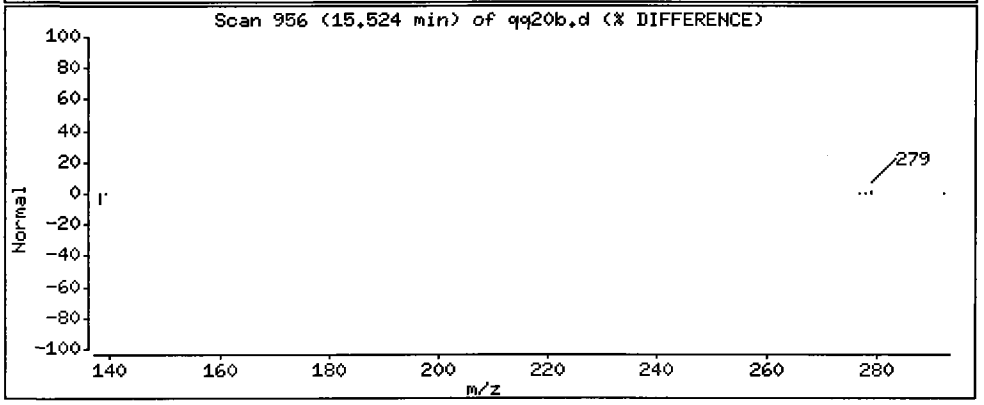
Concentration: 20.0 ug/L



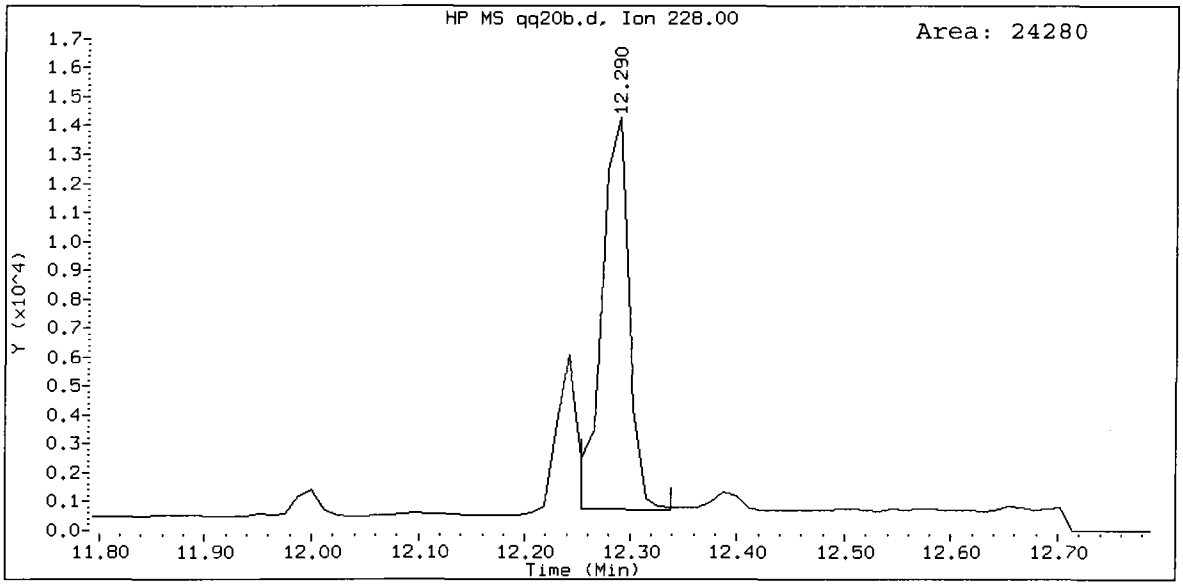


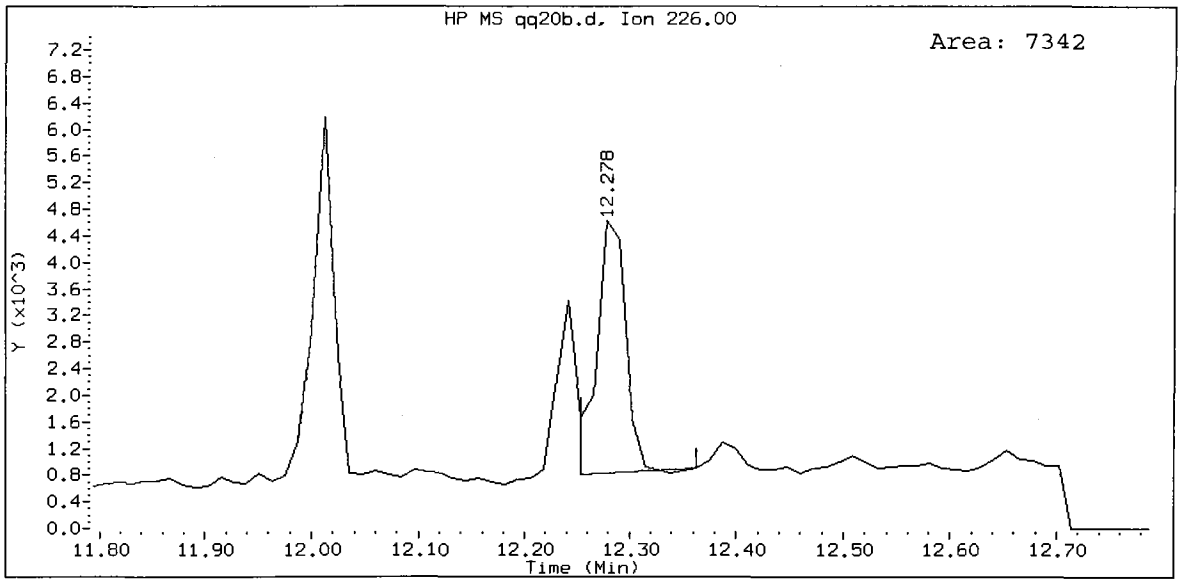






QQ20B, /chem3/nt8.i/20100402A.b/qq20b.d
Chrysene Amount: 25.02





ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB1032510COMP
SAMPLE

Lab Sample ID: QQ20C
LIMS ID: 10-8032
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 20:09
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	< 0.010 U
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	Phenanthrene	0.010	< 0.010 U
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	Fluoranthene	0.010	< 0.010 U
129-00-0	Pyrene	0.010	< 0.010 U
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
205-99-2	Benzo(b)fluoranthene	0.010	< 0.010 U
207-08-9	Benzo(k)fluoranthene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	Benzo(g,h,i)perylene	0.010	< 0.010 U
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	62.7%
d14-Dibenzo(a,h)anthracene	24.8%

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yz 4/13/10

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/qq20c.d
Lab Smp Id: QQ20C Client Smp ID: CB1032510COMP
Inj Date : 02-APR-2010 20:09
Operator : VTS Inst ID: nt8.i
Smp Info : QQ20C
Misc Info : 10-8032
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	5.388	5.377	(1.000)	210555	200.000	
	5 Naphthalene	128	5.398	5.398	(1.002)	10771	9.04714 ✓	9.05
$	6 2-Methylnaphthalene-d10	152	6.085	6.095	(1.129)	123849	188.035 ✓	188
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	7.307	7.306	(1.000)	125046	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	200461	200.000	
	19 Phenanthrene	178	9.059	9.059	(1.003)	8852	7.76369 ✓	7.76
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	10.499	10.499	(1.162)	7648	6.58525 ✓	6.59
	25 Pyrene	202	10.777	10.777	(1.193)	6664	5.55429 ✓	5.55
	28 Benzo(a)anthracene	228	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
* 29 Chrysene-d12	240	12.254	12.266	(1.000)	125127	200.000	
30 Chrysene	228	Compound Not Detected.					
32 Benzo(b)fluoranthene	252	Compound Not Detected.					
33 Benzo(k)fluoranthene	252	Compound Not Detected.					
34 Benzo(a)pyrene	252	Compound Not Detected.					
* 35 Perylene-d12	264	13.882	13.882	(1.000)	114146	200.000	
37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 36 Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	43382	74.4747	74.5
38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: qq20c.d
Lab Smp Id: QQ20C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8032

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Client Smp ID: CB1032510COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	210555	-3.77
11 Acenaphthene-d10	119440	59720	238880	125046	4.69
18 Phenanthrene-d10	183479	91740	366958	200461	9.26
29 Chrysene-d12	121669	60834	243338	125127	2.84
35 Perylene-d12	102197	51098	204394	114146	11.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.39	0.20
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.25	-0.10
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ20C
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8032

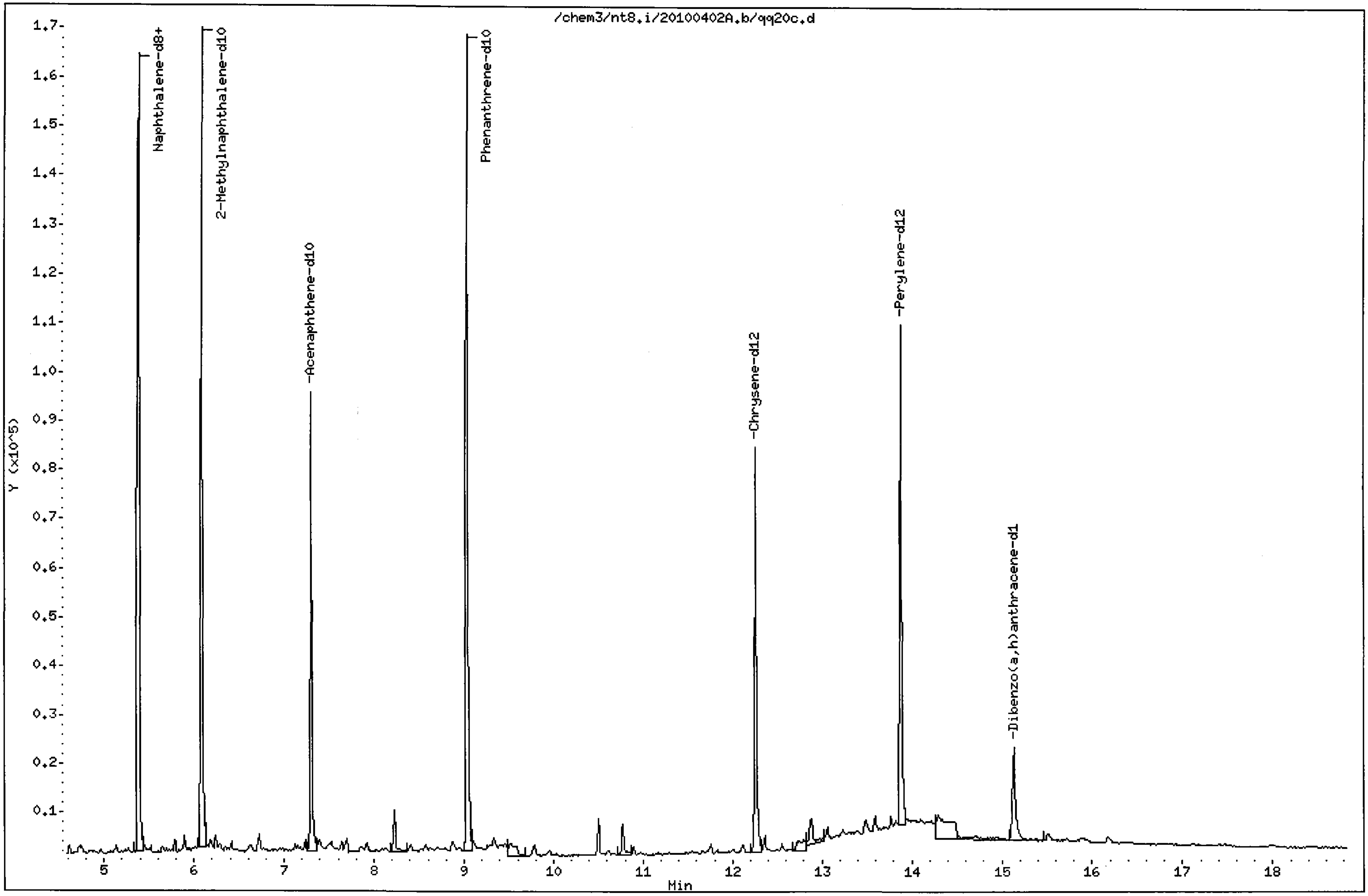
Client SDG: QQ20
Fraction: SV
Client Smp ID: CB1032510COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	188	62.68	31-109
$ 36 Dibenzo(a,h)anthra	300	74.5	24.82	10-133

Data File: /chem3/nt8.i/20100402A.b/qq20c.d
Date : 02-APR-2010 20:09
Client ID: CB1032510COMP
Sample Info: QQ20C
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i

Operator: VTS
Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS

Sample ID: CB101032510COMP
SAMPLE

Lab Sample ID: QQ20D
LIMS ID: 10-8033
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 20:33
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.016**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.032**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.062**
129-00-0	**Pyrene**	**0.010**	**0.064**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.014**
218-01-9	**Chrysene**	**0.010**	**0.031 Q**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.017**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.017**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.015**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.013**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.025**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.7%
d14-Dibenzo(a,h)anthracene	32.7%

Analytical Resources, Inc.

yz 4/12/10

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/qq20d.d
Lab Smp Id: QQ20D Client Smp ID: CB101032510COMP
Inj Date : 02-APR-2010 20:33
Operator : VTS Inst ID: nt8.i
Smp Info : QQ20D
Misc Info : 10-8033
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	5.388	5.377	(1.000)	205919	200.000	
	5 Naphthalene	128	5.398	5.398	(1.002)	18174	15.6090	15.6
$	6 2-Methylnaphthalene-d10	152	6.096	6.095	(1.131)	124720	193.620	194
	7 2-Methylnaphthalene	142	6.127	6.116	(1.137)	6462	9.15702 J	9.16
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	7.307	7.306	(1.000)	117008	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	189751	200.000	
	19 Phenanthrene	178	9.059	9.059	(1.003)	34074	31.5715	31.6
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	10.499	10.499	(1.162)	67738	61.6173	61.6
	25 Pyrene	202	10.777	10.777	(1.193)	72948	64.2322	64.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	12.242	12.242	(0.999)	9443	13.5527	13.6
*	29 Chrysene-d12	240	12.254	12.266	(1.000)	116784	200.000	
	30 Chrysene	228	12.290	12.290	(1.003)	31517	31.0487	31.0(M)
	32 Benzo(b)fluoranthene	252	13.485	13.485	(0.971)	33429	39.2076 16.97	39.2
	33 Benzo(k)fluoranthene	252	13.485	13.506	(0.971)	33624	28.6793 16.97	28.7
	34 Benzo(a)pyrene	252	13.819	13.819	(0.995)	11152	14.9886	15.0
*	35 Perylene-d12	264	13.882	13.882	(1.000)	111146	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	15.161	15.161	(1.092)	12163	12.5956	12.6
$	36 Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	55651	98.1159	98.1
	38 Dibenzo(a,h)anthracene	278	15.173	15.173	(1.093)	4038	5.26328 J	5.26
	39 Benzo(g,h,i)perylene	276	15.524	15.524	(1.118)	21779	25.4110	25.4(M)

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: qq20d.d
Lab Smp Id: QQ20D
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8033

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Client Smp ID: CB101032510COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	205919	-5.89
11 Acenaphthene-d10	119440	59720	238880	117008	-2.04
18 Phenanthrene-d10	183479	91740	366958	189751	3.42
29 Chrysene-d12	121669	60834	243338	116784	-4.01
35 Perylene-d12	102197	51098	204394	111146	8.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.39	0.19
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.25	-0.10
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

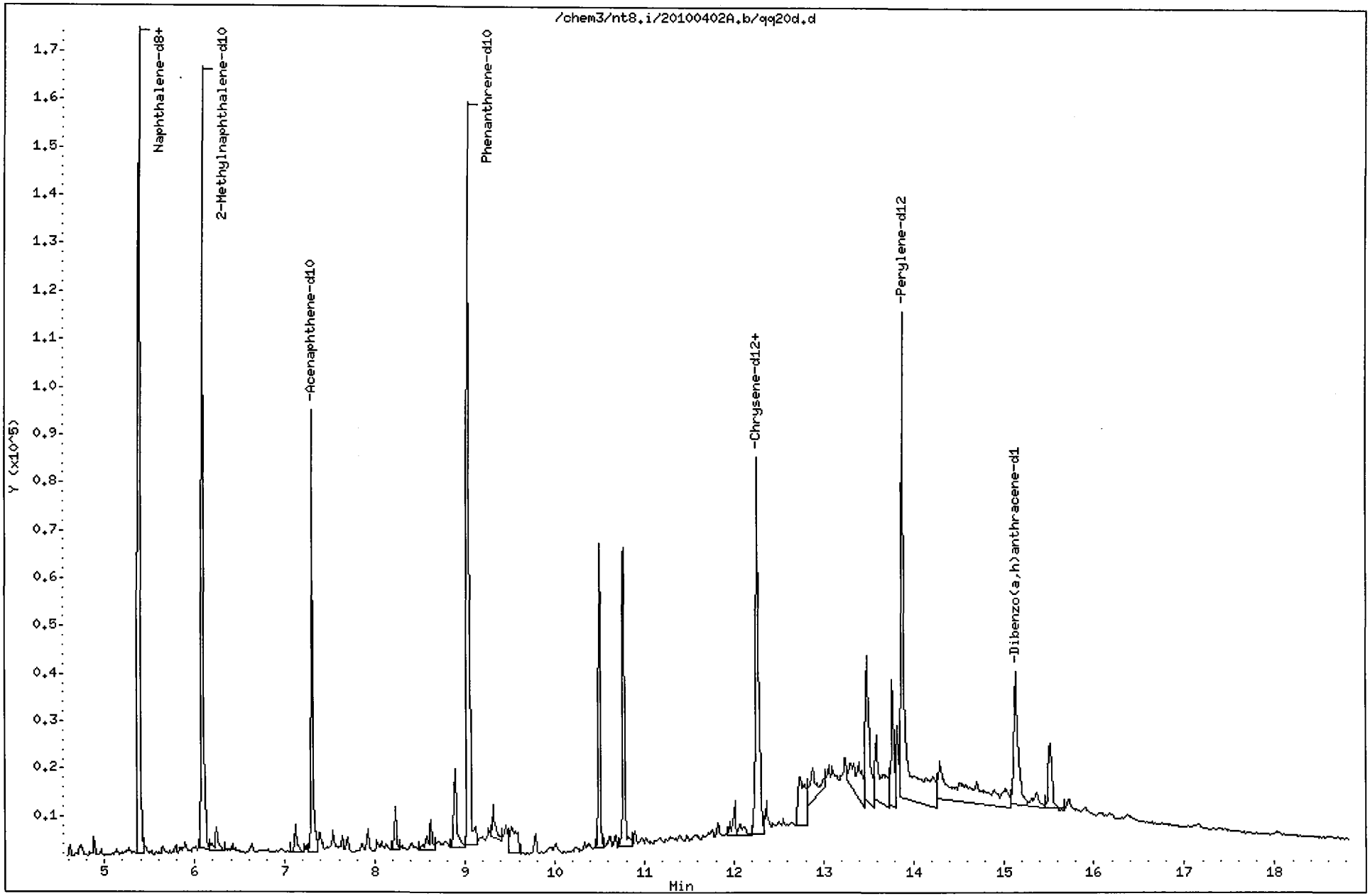
Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ20D
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8033

Client SDG: QQ20
Fraction: SV
Client Smp ID: CB101032510COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	194	64.54	31-109
$ 36 Dibenzo(a,h)anthra	300	98.1	32.71	10-133

Data File: /chem3/nt8.i/20100402A.b/qq20d.d
Date : 02-APR-2010 20:33
Client ID: CB101032510COMP
Sample Info: QQ20D
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i
Operator: VTS
Column diameter: 0.25



Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

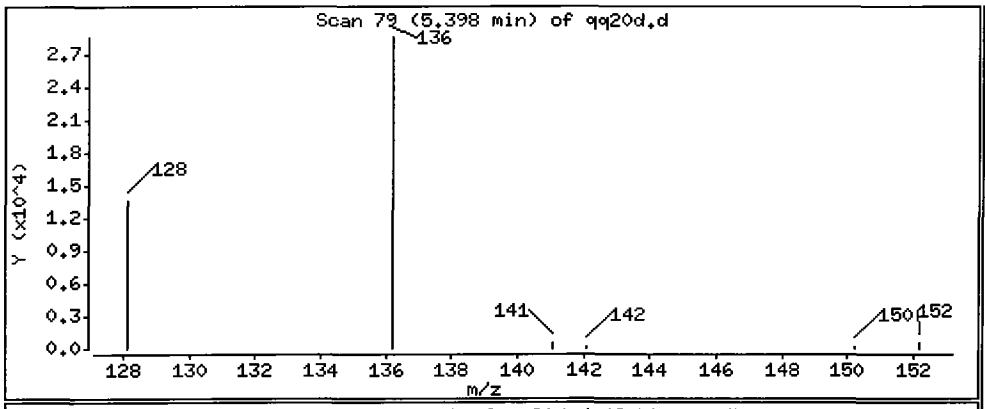
Operator: VTS

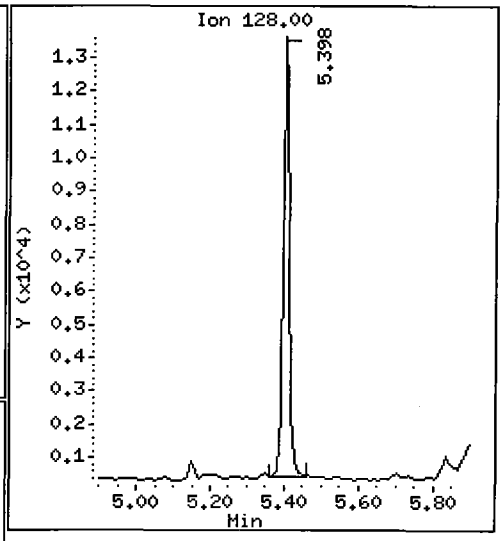
Column phase: ZB-5

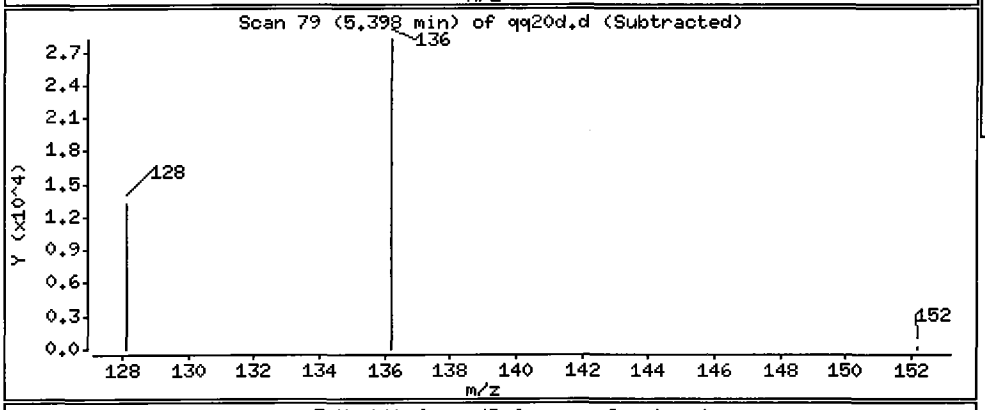
Column diameter: 0.25

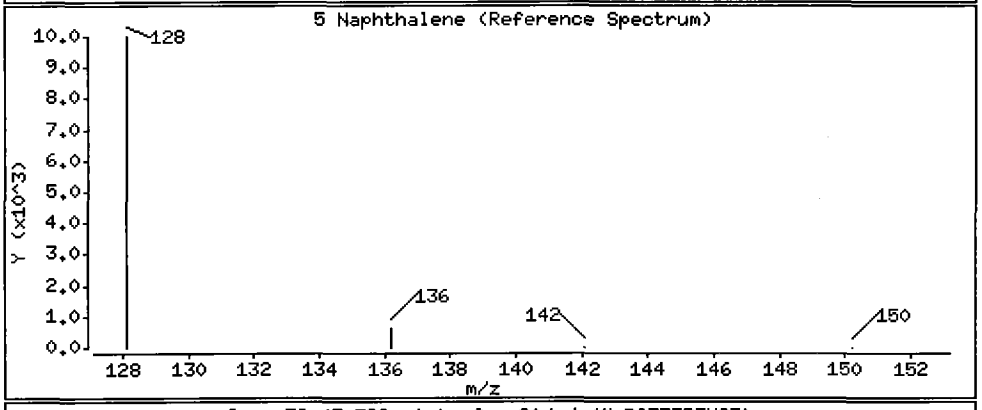
5 Naphthalene

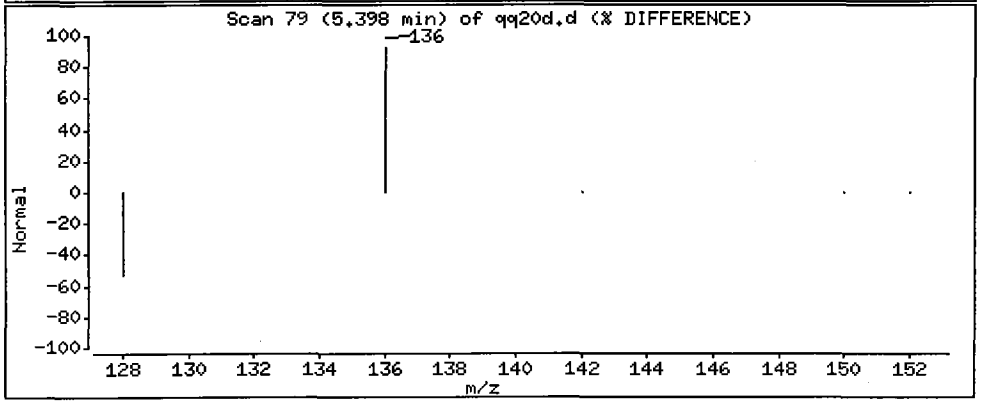
Concentration: 15.6 ug/L











Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

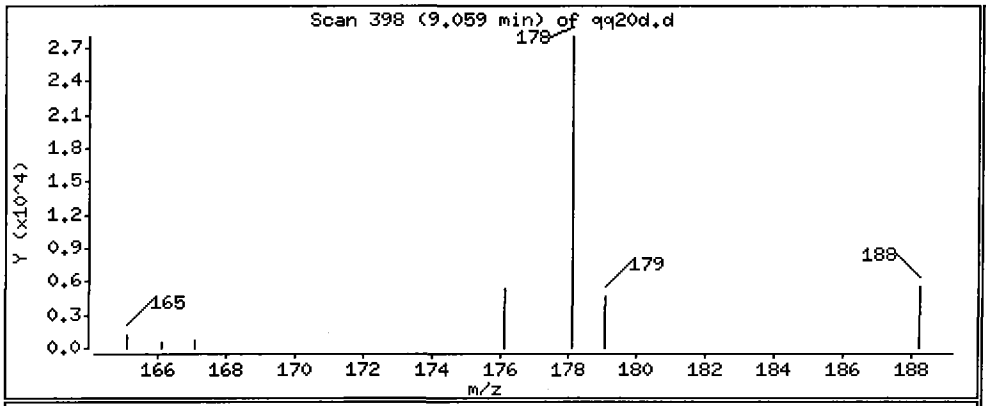
Operator: VTS

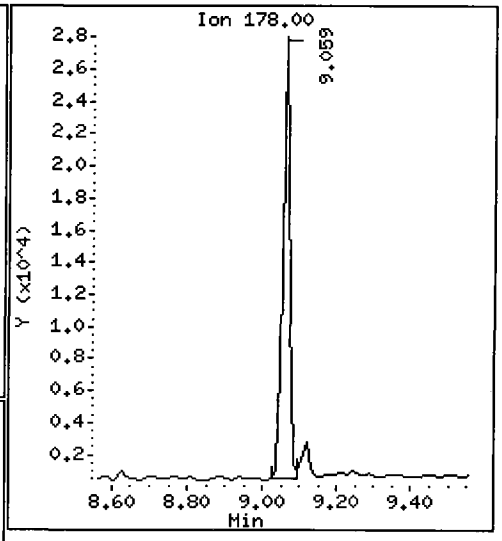
Column phase: ZB-5

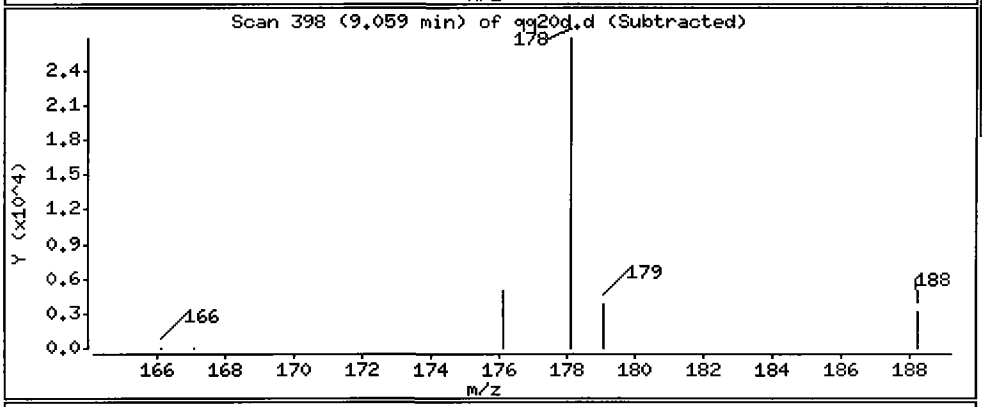
Column diameter: 0.25

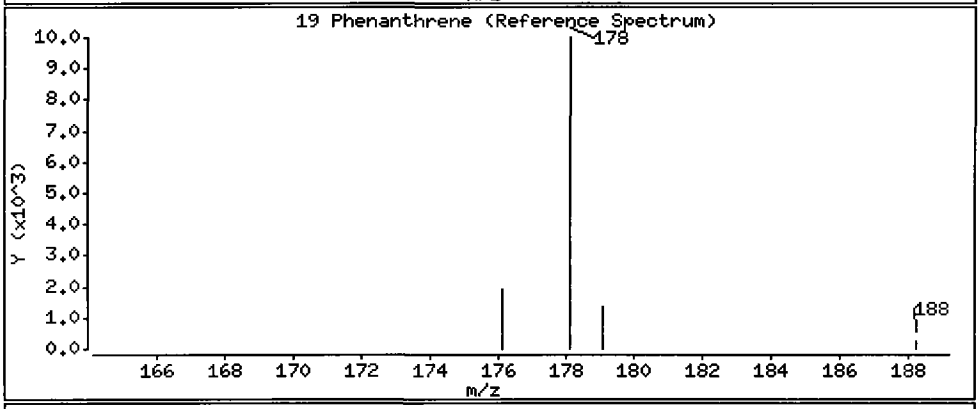
19 Phenanthrene

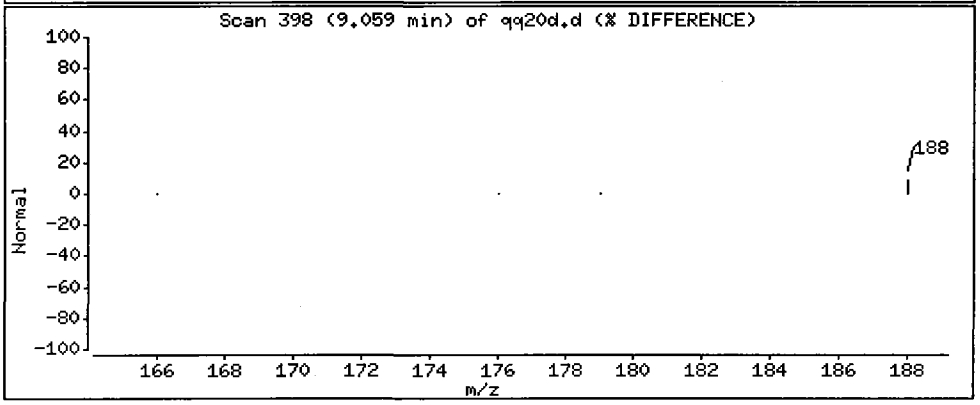
Concentration: 31.6 ug/L











Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

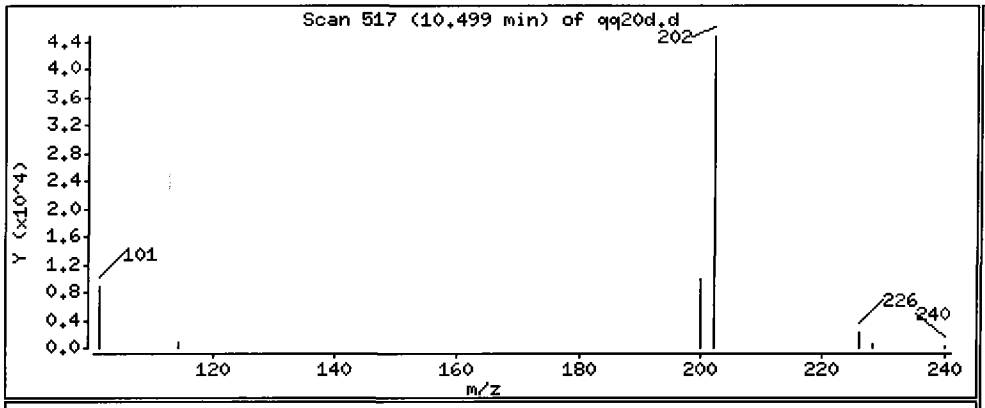
Operator: VTS

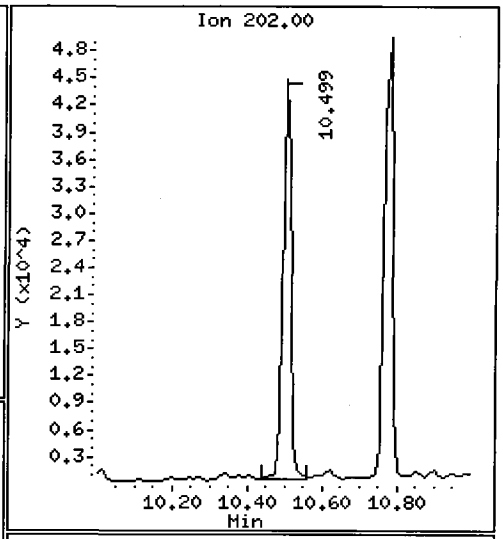
Column phase: ZB-5

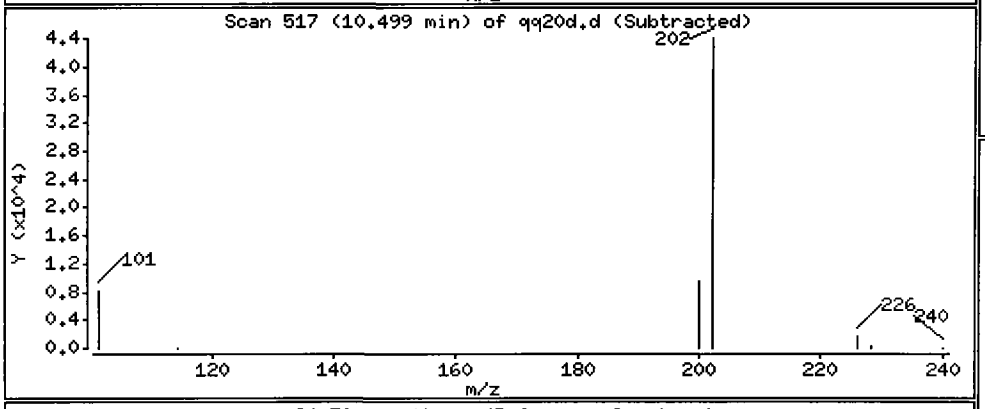
Column diameter: 0.25

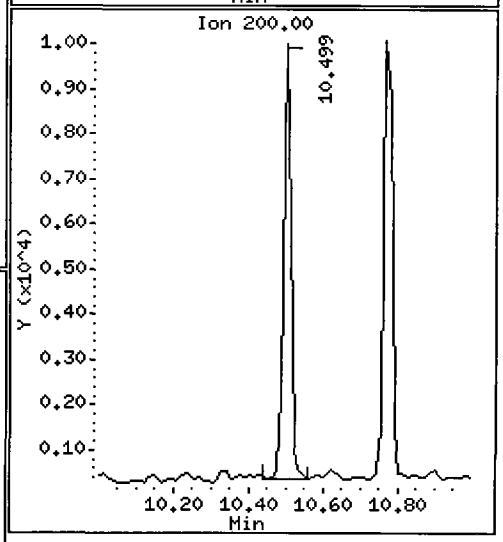
24 Fluoranthene

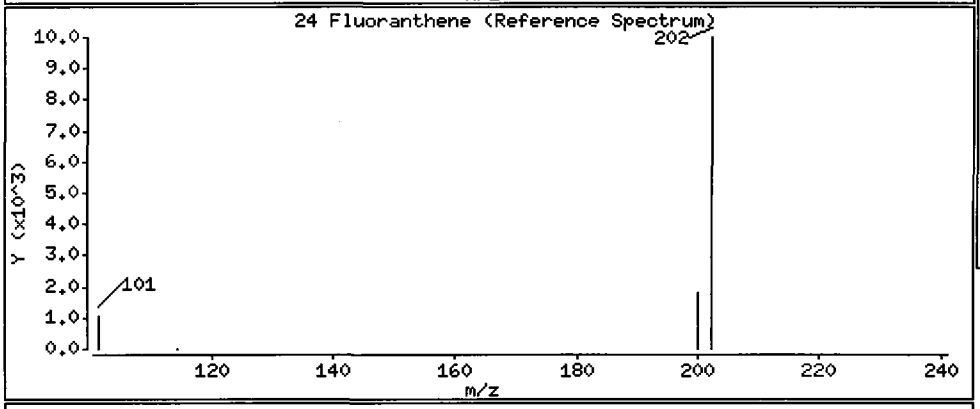
Concentration: 61.6 ug/L

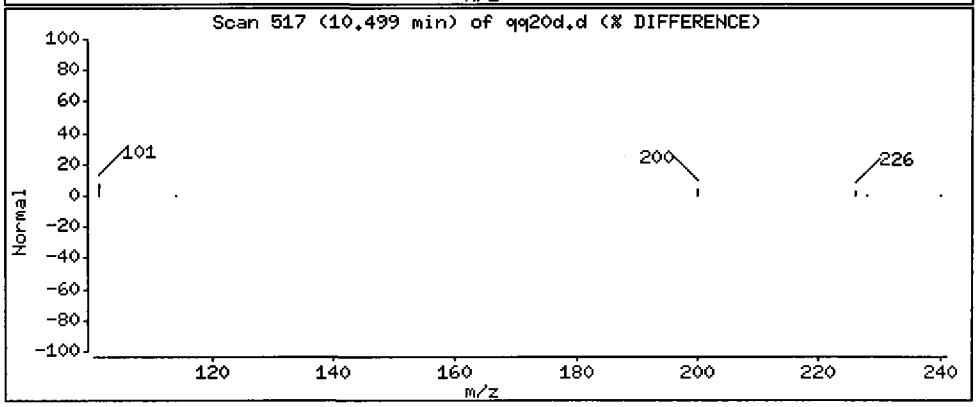












Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

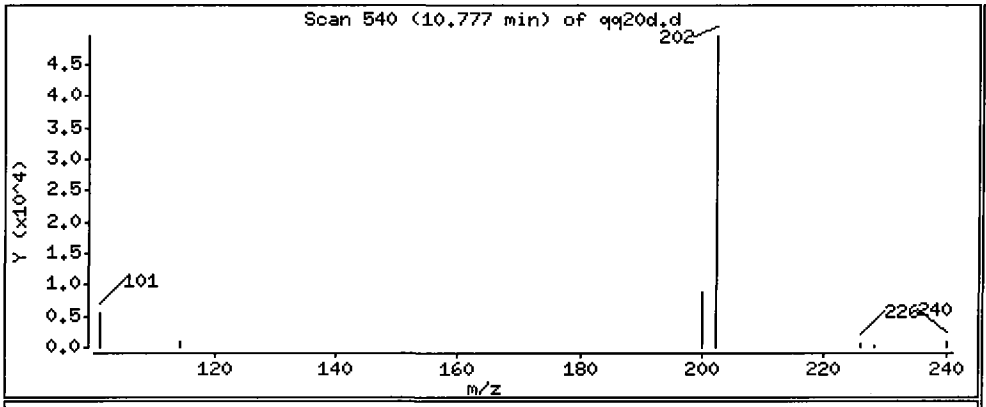
Operator: VTS

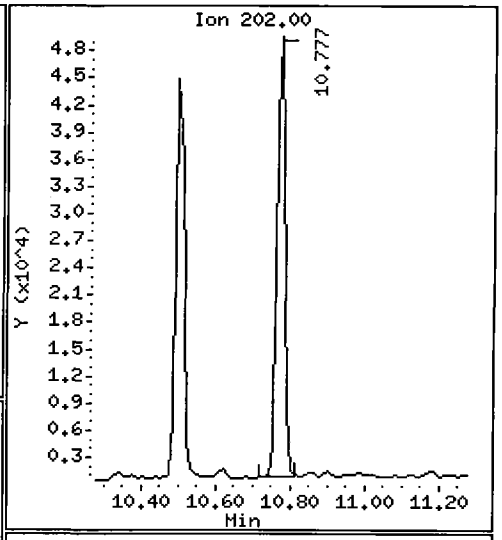
Column phase: ZB-5

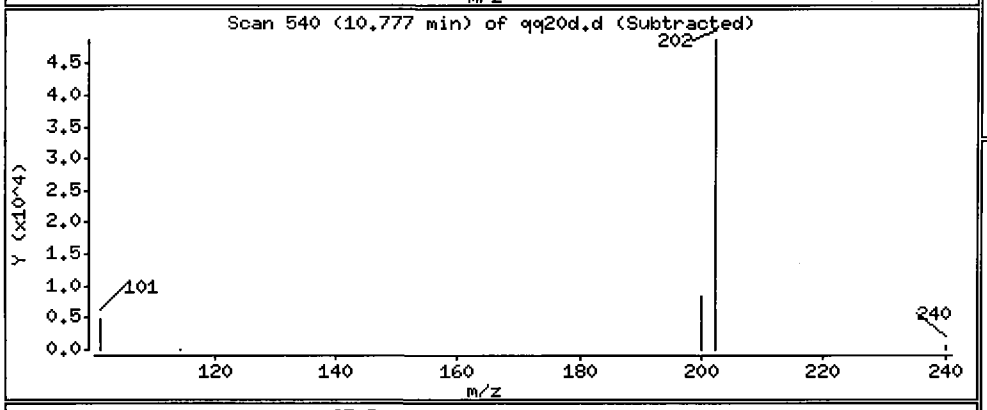
Column diameter: 0.25

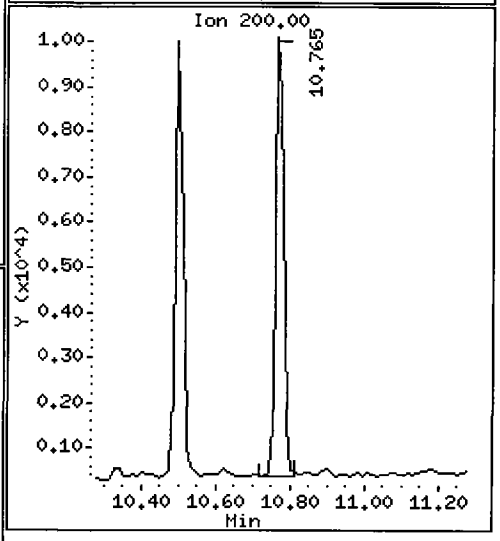
25 Pyrene

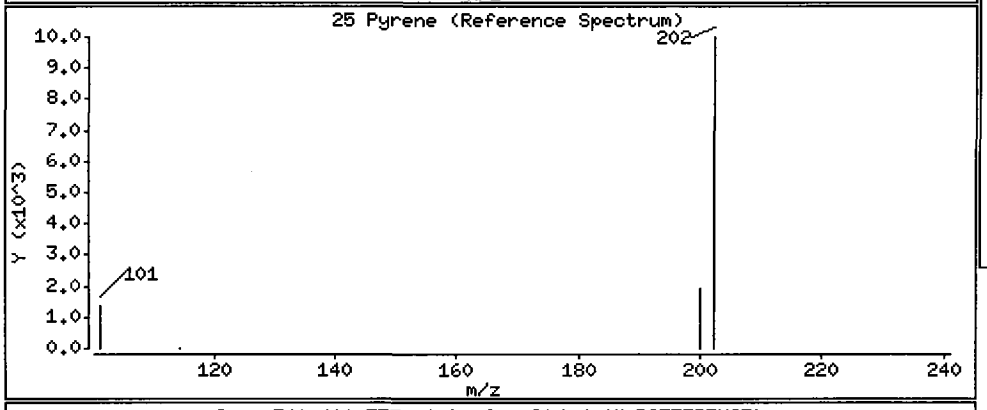
Concentration: 64.2 ug/L

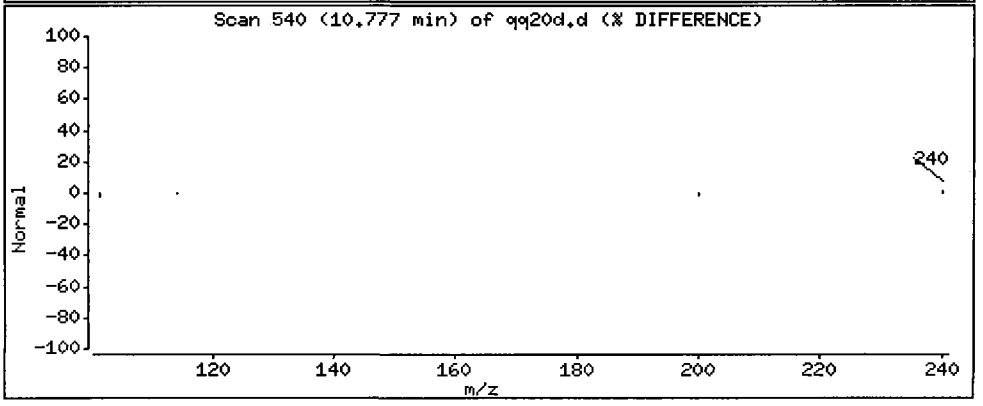












Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

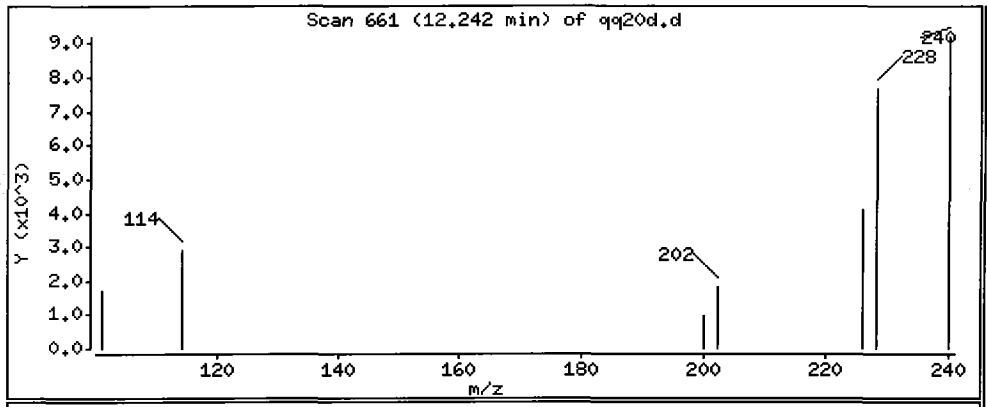
Operator: VTS

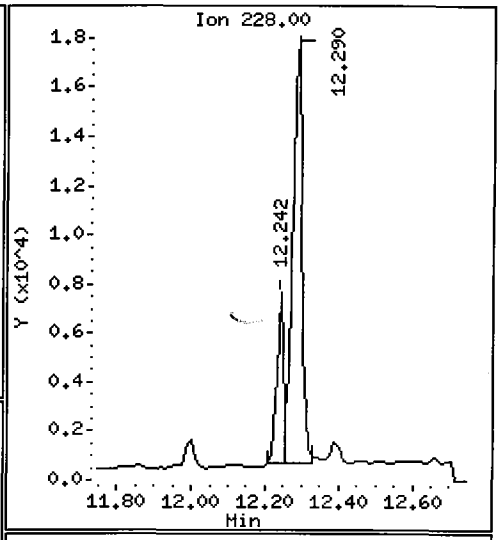
Column phase: ZB-5

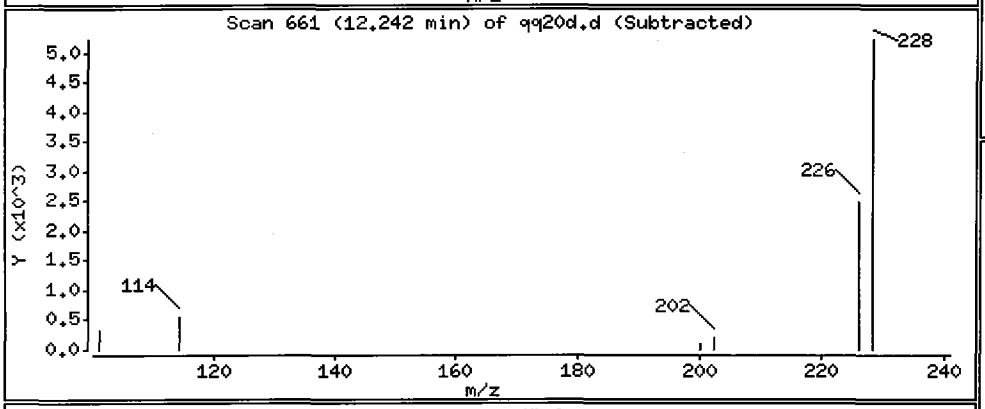
Column diameter: 0.25

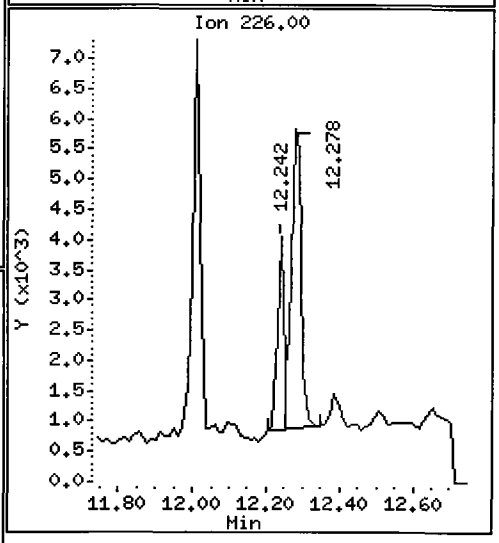
28 Benzo(a)anthracene

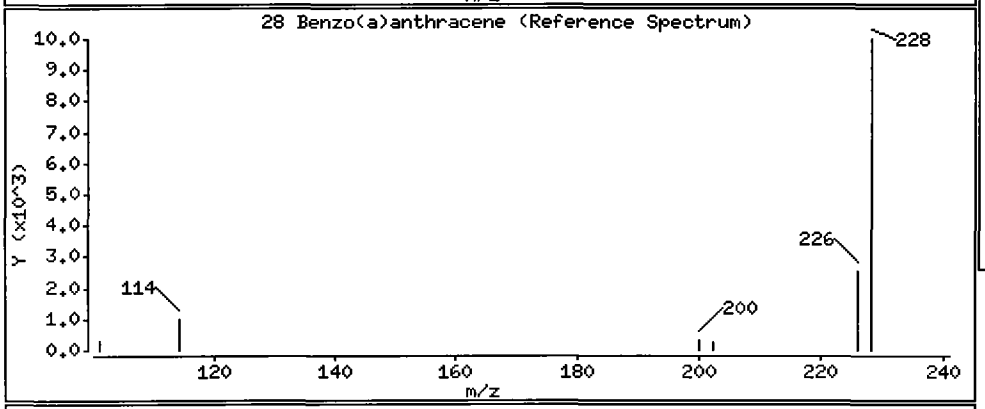
Concentration: 13.6 ug/L

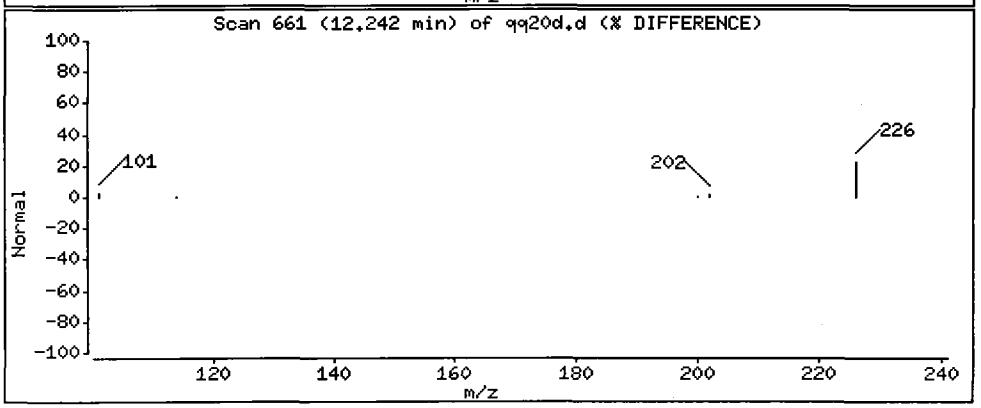












Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

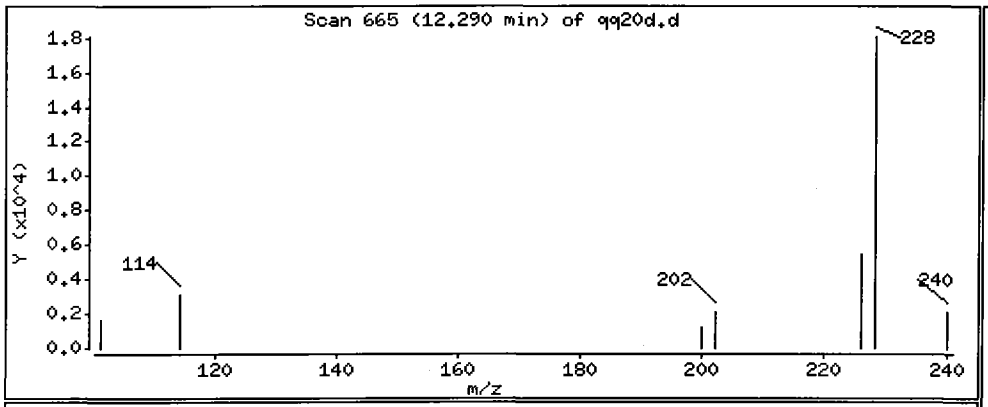
Operator: VTS

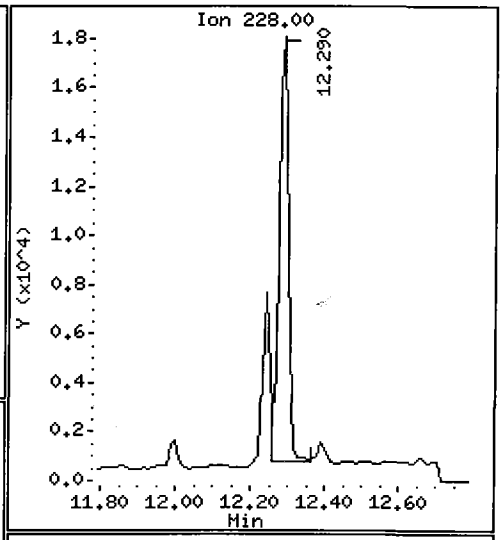
Column phase: ZB-5

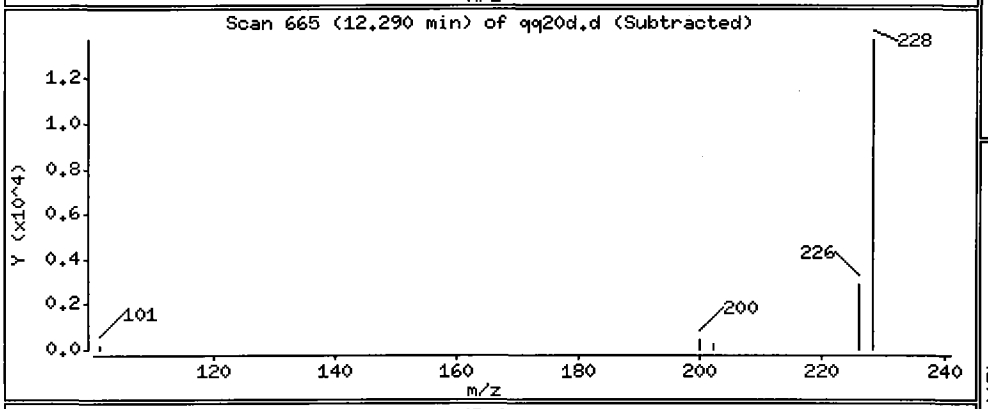
Column diameter: 0.25

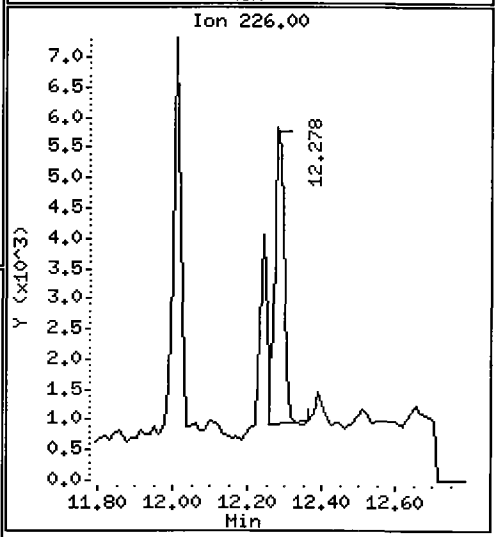
30 Chrysene

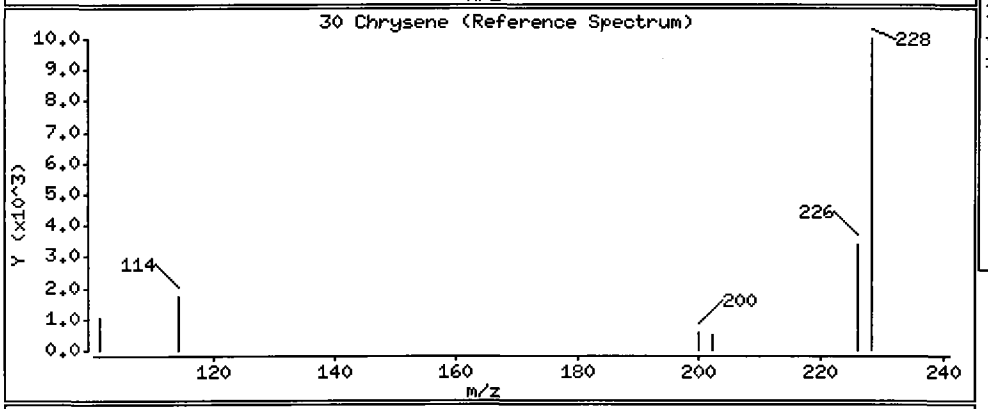
Concentration: 31.0 ug/L

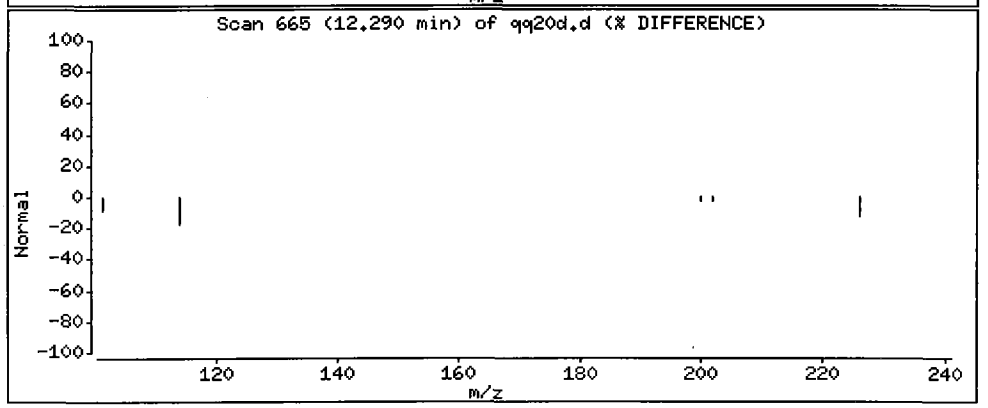












Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

Operator: VTS

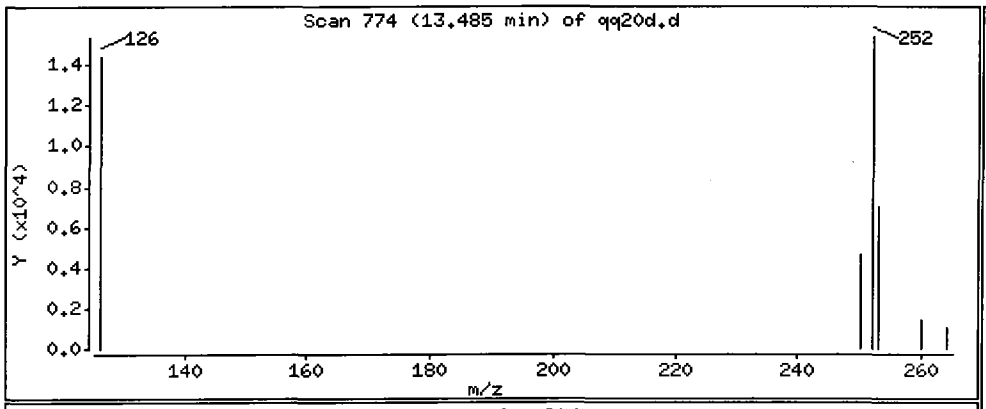
Column phase: ZB-5

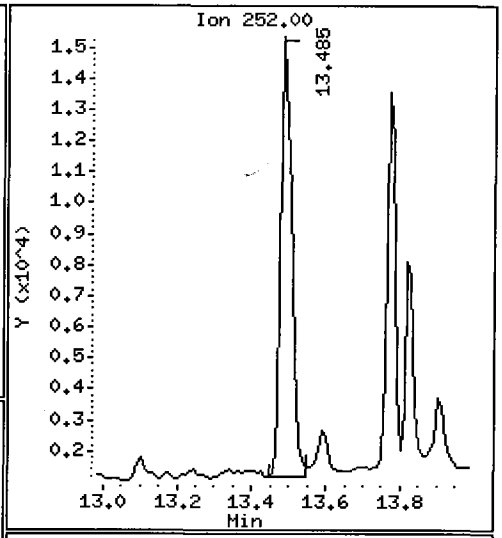
Column diameter: 0.25

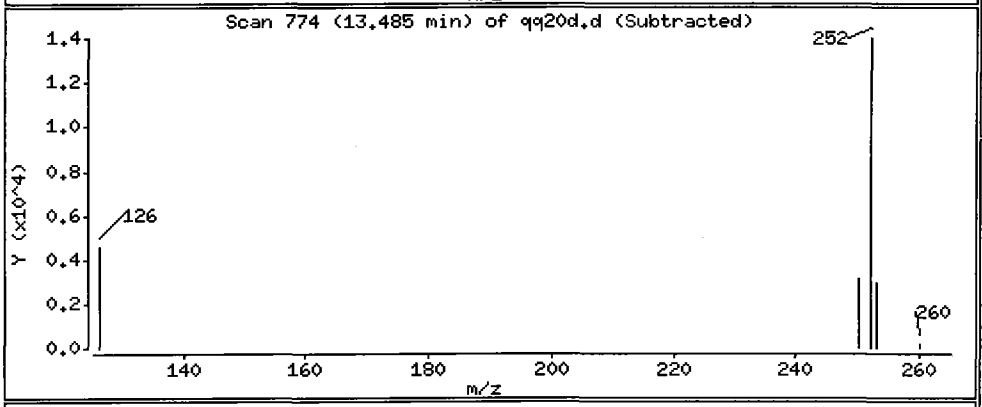
112

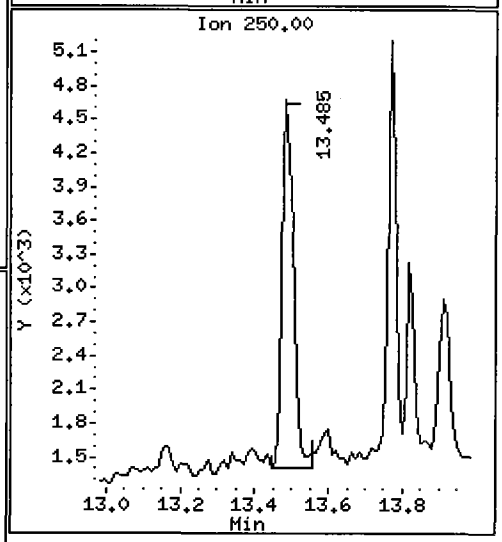
32 Benzo(b)fluoranthene

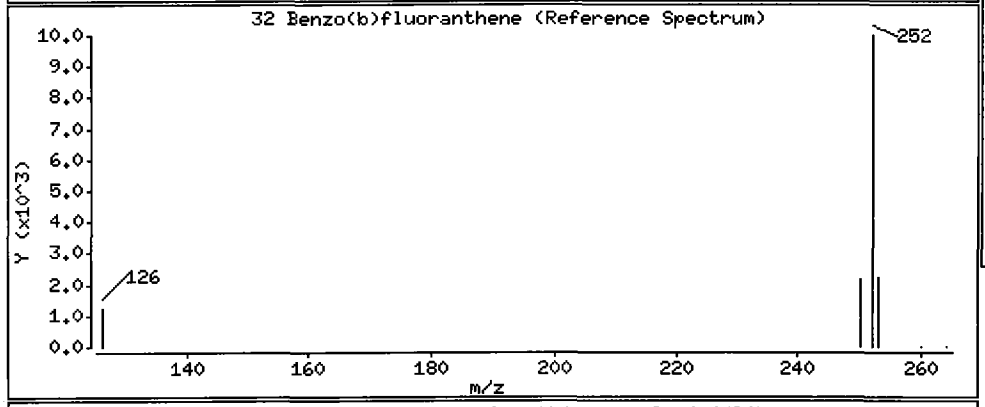
Concentration: 39.2 ug/L

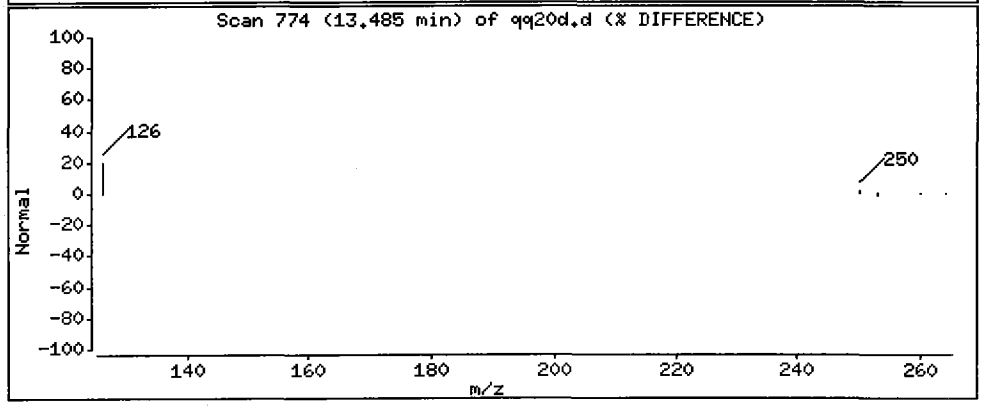












Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

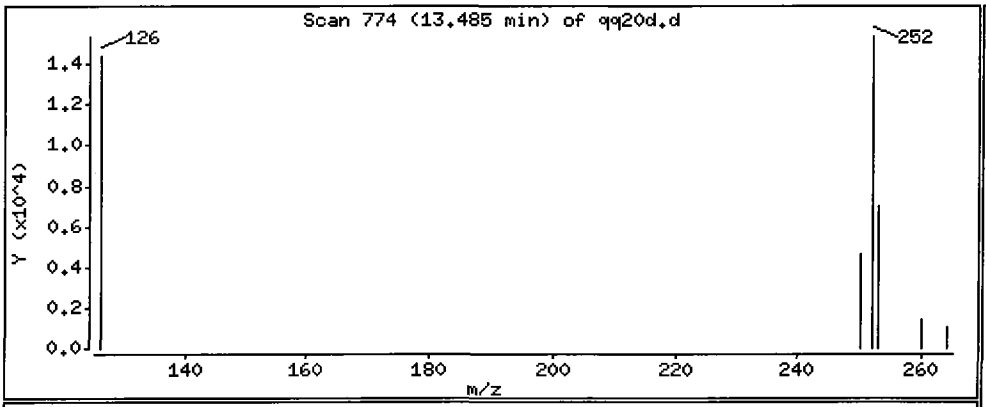
Operator: VTS

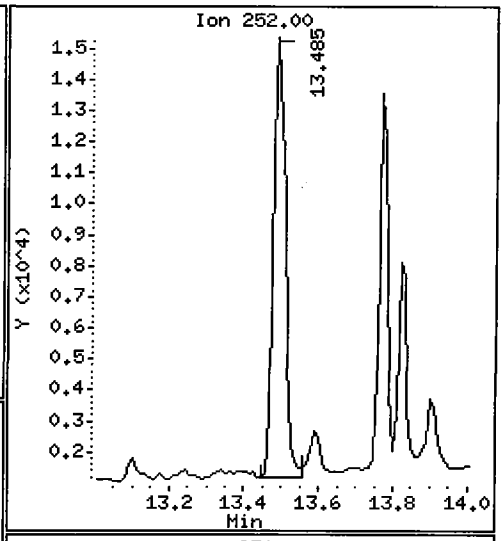
Column phase: ZB-5

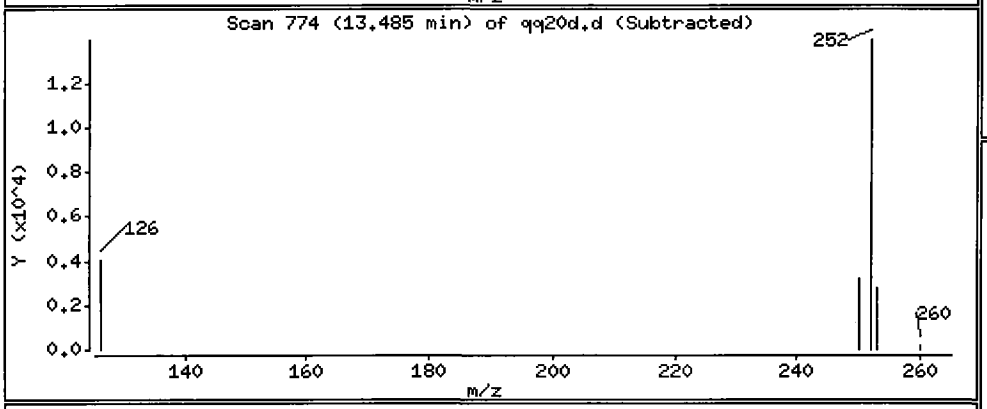
Column diameter: 0.25

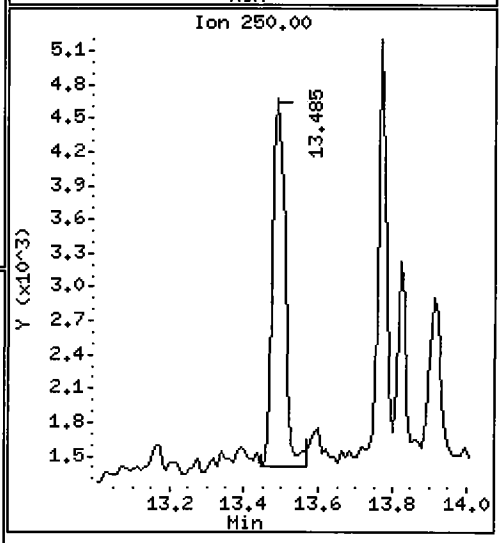
33 Benzo(k)fluoranthene

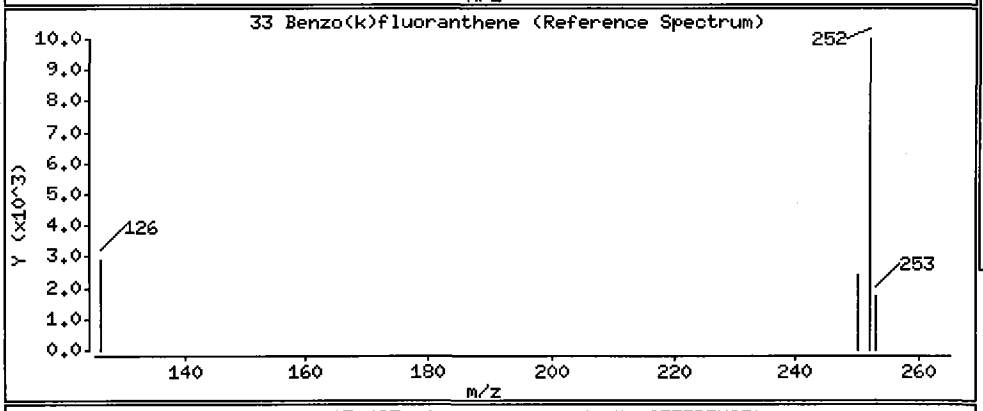
Concentration: 28.7 ug/L

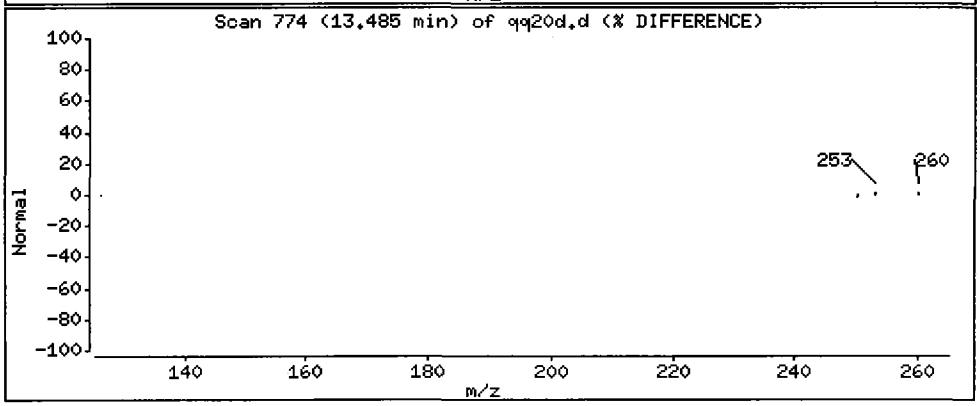












Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

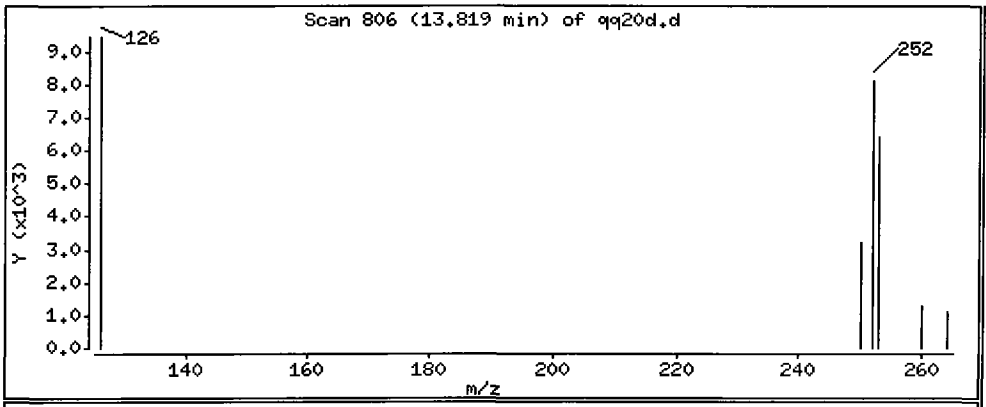
Operator: VTS

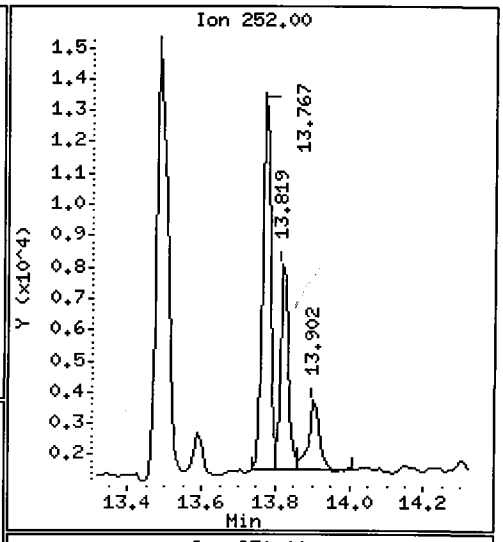
Column phase: ZB-5

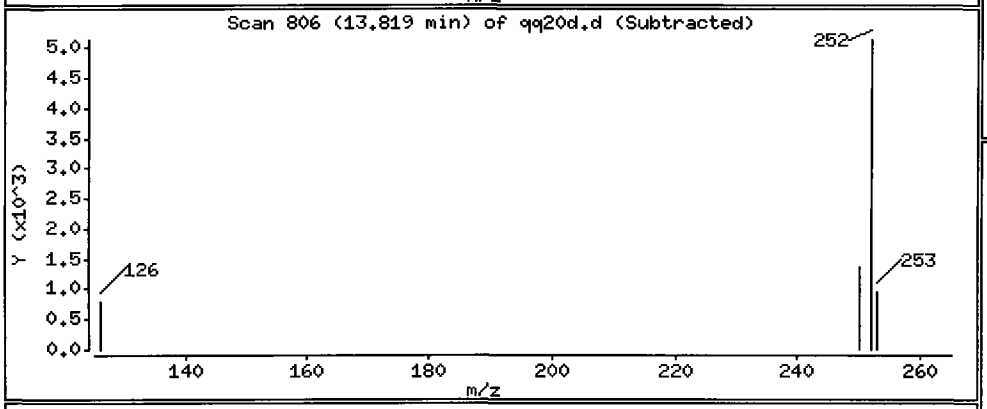
Column diameter: 0.25

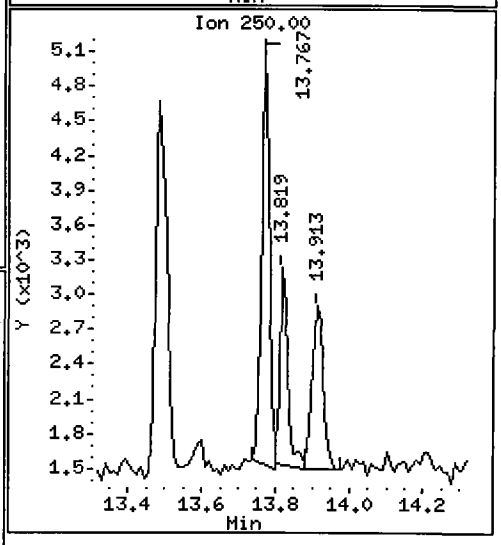
34 Benzo(a)pyrene

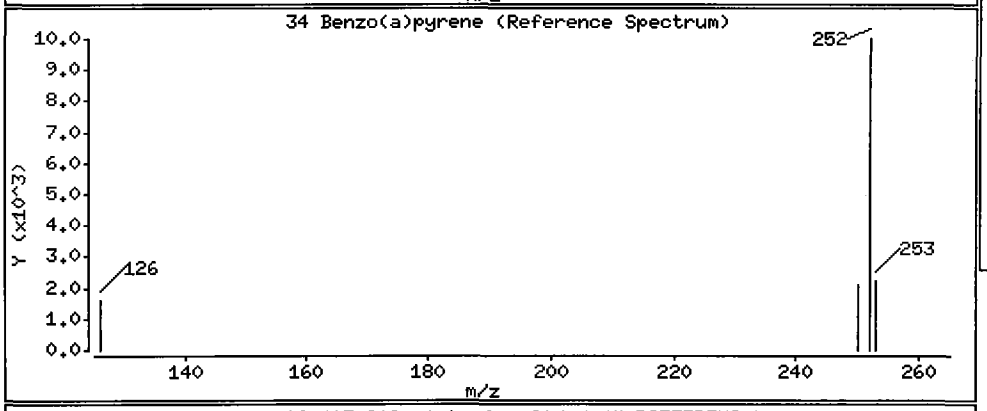
Concentration: 15.0 ug/L

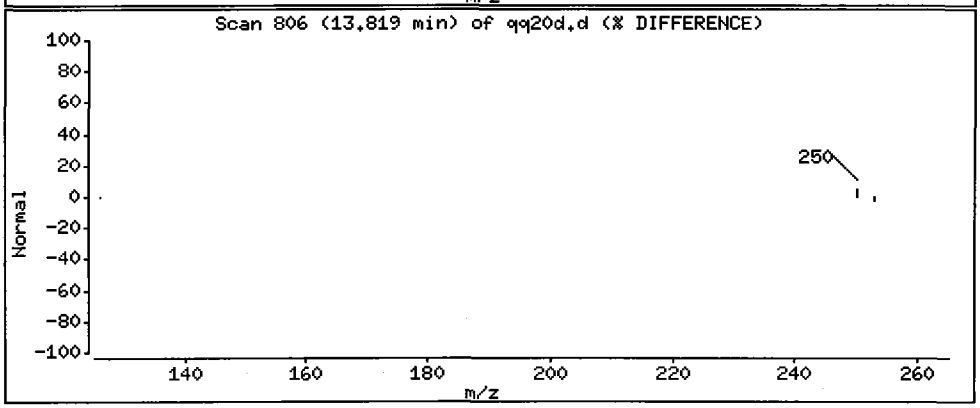












Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

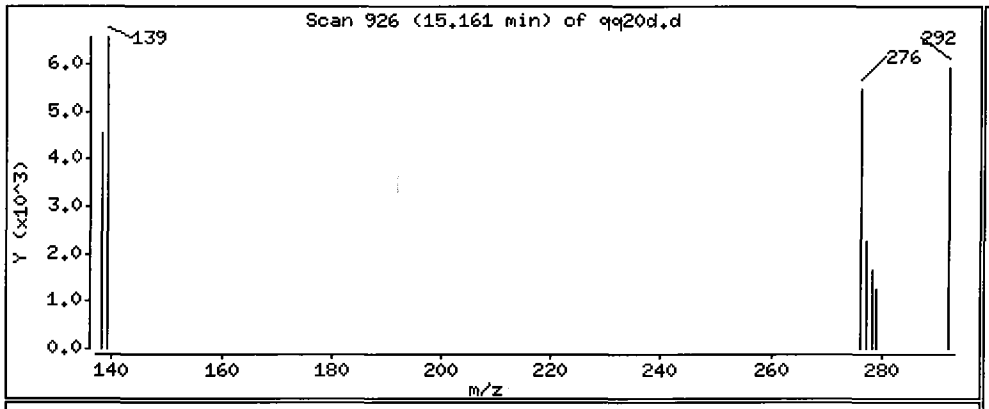
Operator: VTS

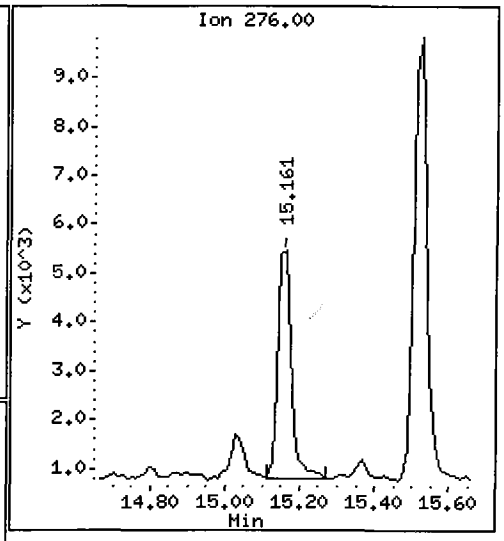
Column phase: ZB-5

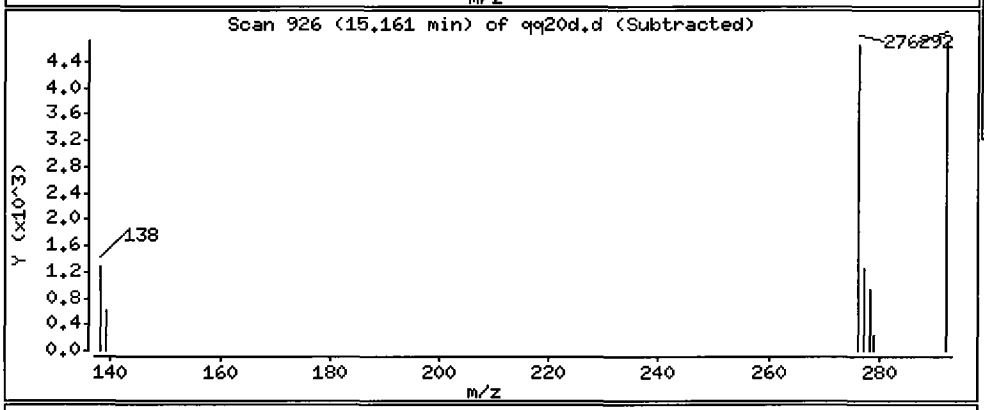
Column diameter: 0.25

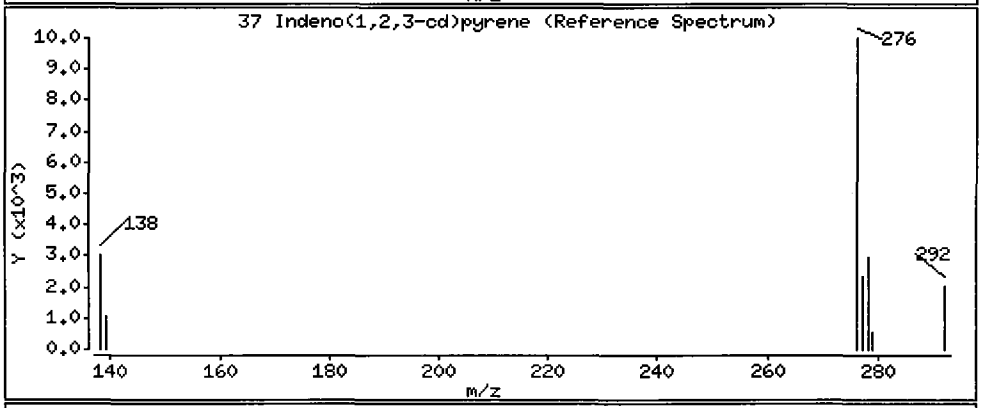
37 Indeno(1,2,3-cd)pyrene

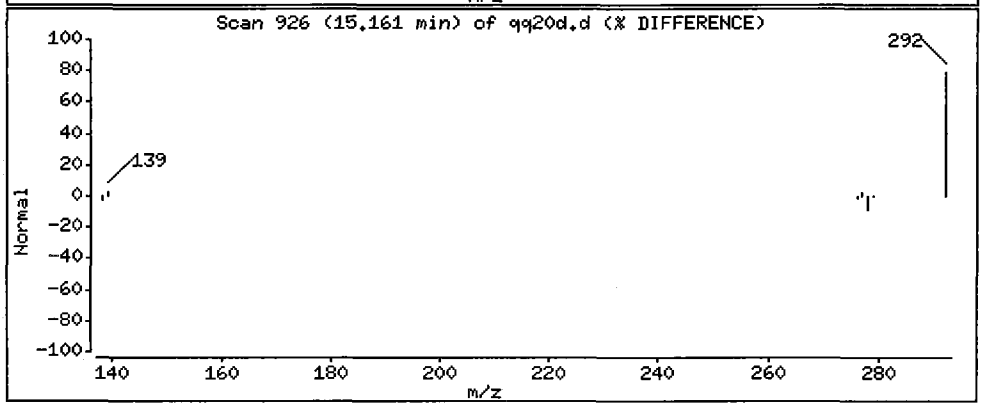
Concentration: 12.6 ug/L











Data File: /chem3/nt8.i/20100402A.b/qq20d.d

Date : 02-APR-2010 20:33

Client ID: CB101032510COMP

Instrument: nt8.i

Sample Info: QQ20D

Volume Injected (uL): 2.0

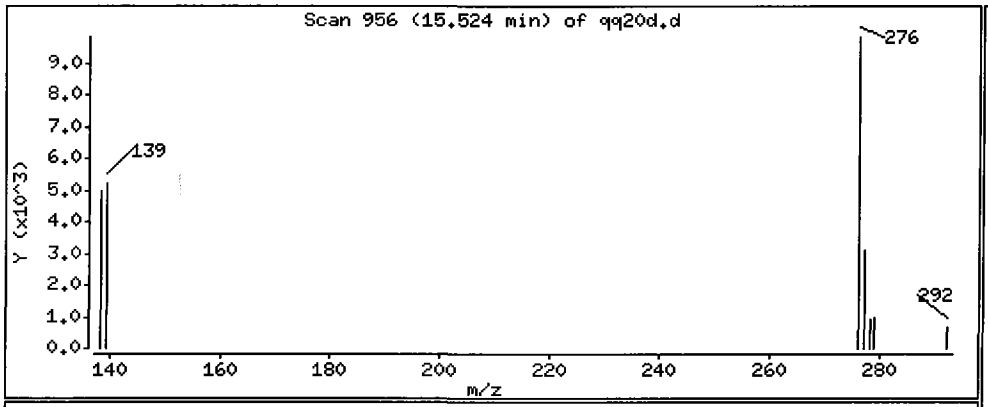
Operator: VTS

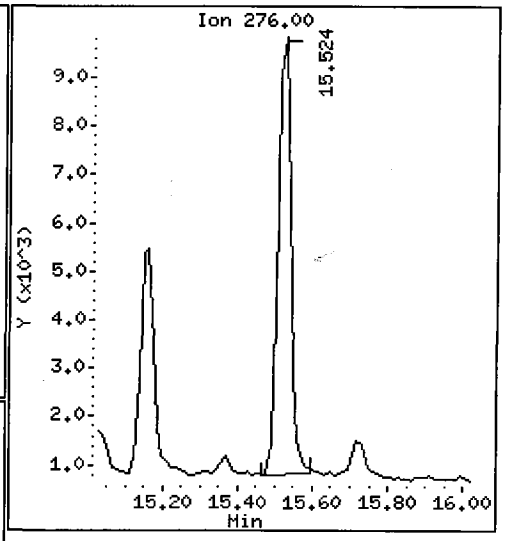
Column phase: ZB-5

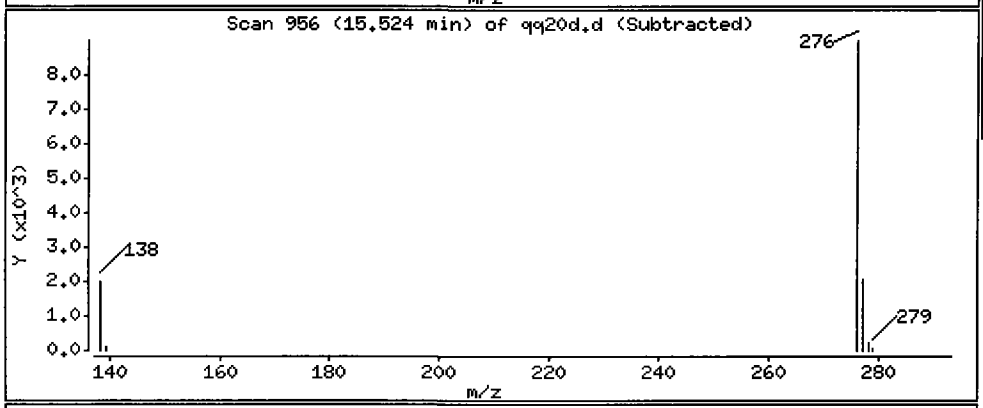
Column diameter: 0.25

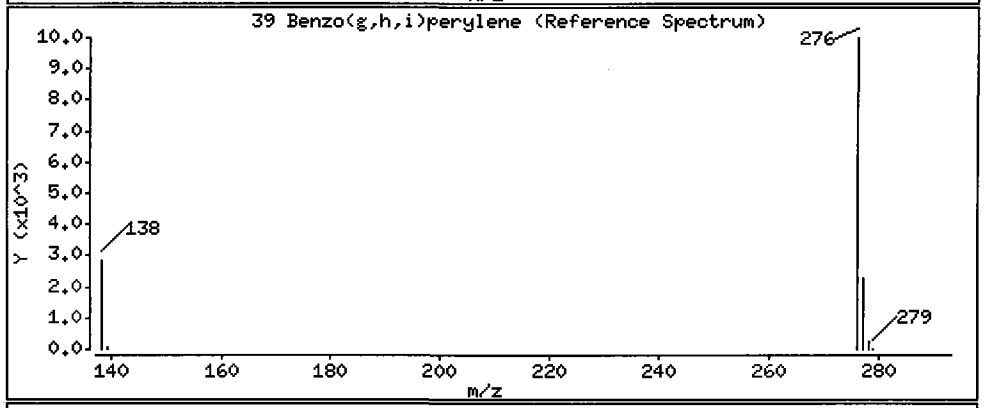
39 Benzo(g,h,i)perylene

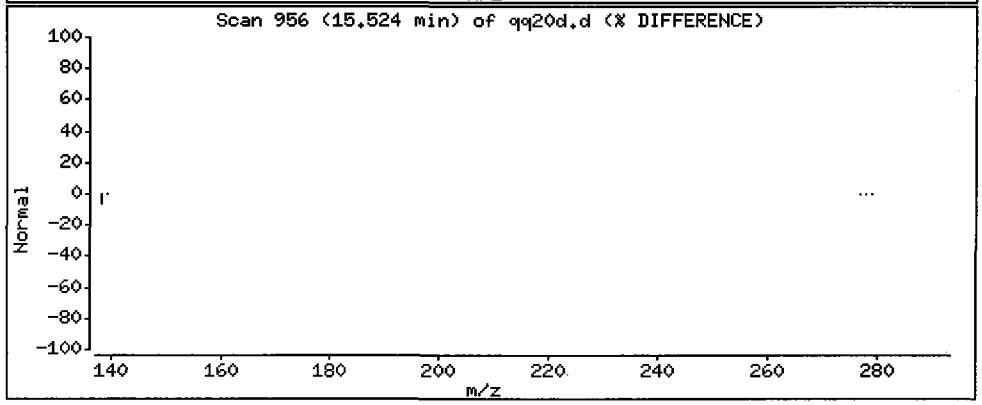
Concentration: 25.4 ug/L



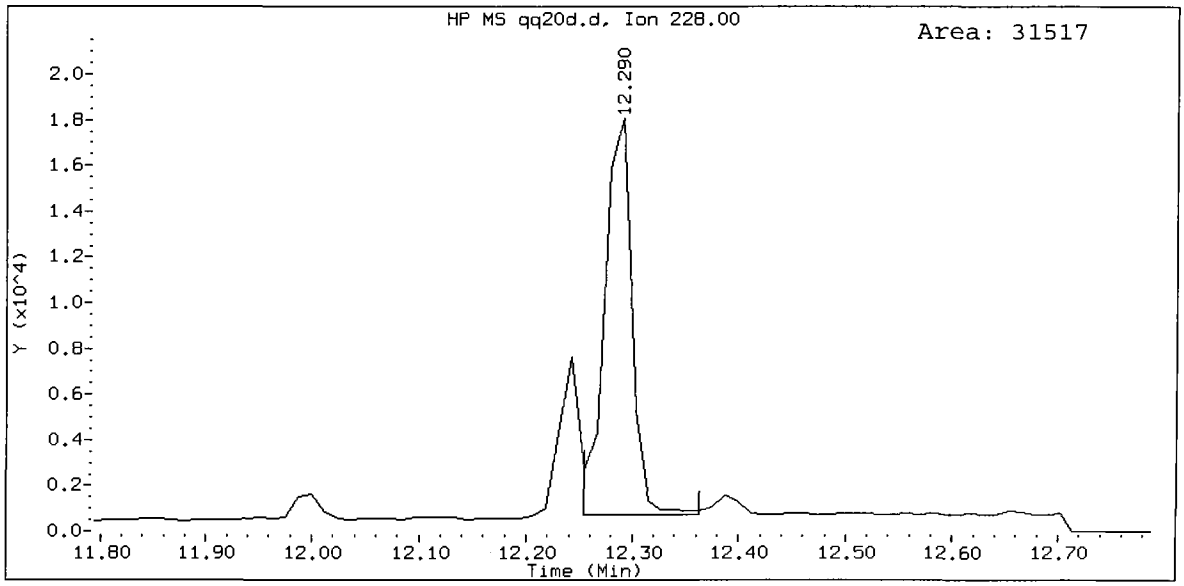


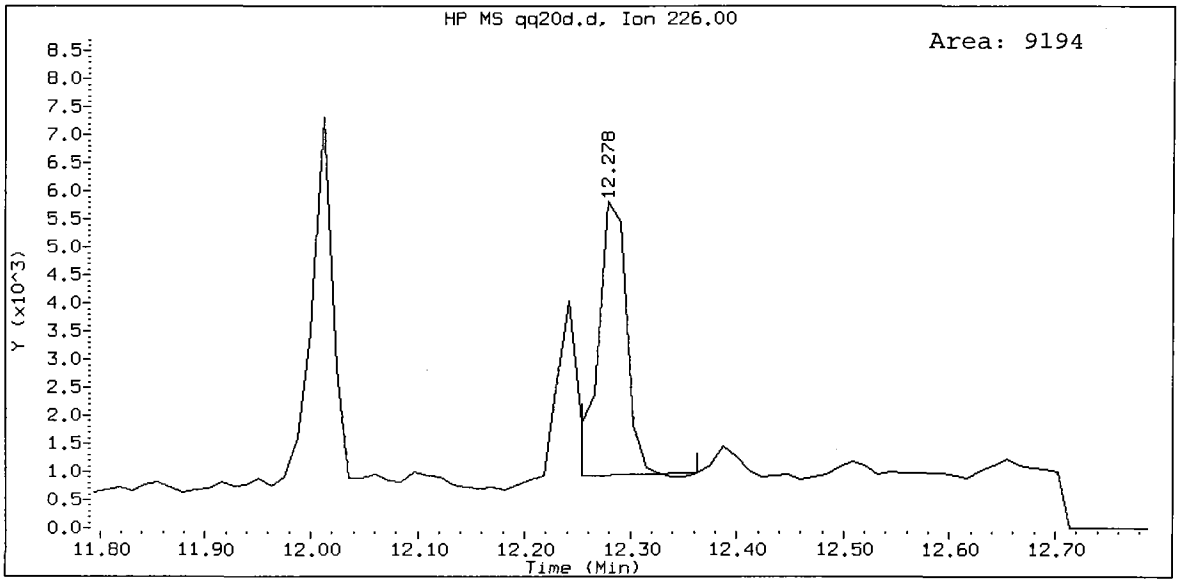




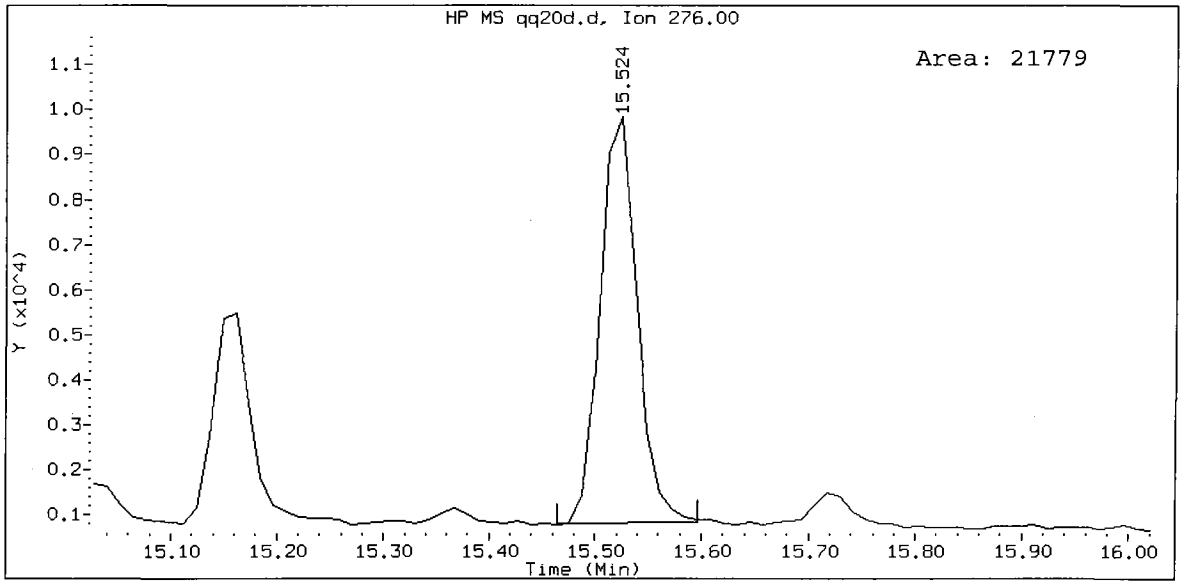


QQ20D, /chem3/nt8.i/20100402A.b/qq20d.d
Chrysene Amount: 31.05





QQ20D, /chem3/nt8.i/20100402A.b/qq20d.d
Benzo(g,h,i)perylene Amount: 25.41



SIM Semivolatile Analysis
Standard Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QQ20 Project: LORA LAKE APARTMENTS

Instrument ID: NT8 Calibration Date: 03/22/10

LAB FILE ID: RRF10 =IC0322C RRF50 =IC0322F RRF100=IC0322E
RRF250=IC0322A RRF500=IC0322D RRF1000=IC0322B

COMPOUND	RRF 10	RRF 50	RRF 100	RRF 250	RRF 500	RRF 1000	___ RRF	%RSD /R^2
Naphthalene	1.301	1.191	1.087	1.088	1.048	1.070	1.131	8.6
2-Methylnaphthalene	0.696	0.708	0.668	0.684	0.674	0.682	0.685	2.1
Acenaphthylene	1.958	1.977	1.822	1.862	1.863	2.065	1.924	4.7
Acenaphthene	1.278	1.274	1.129	1.160	1.167	1.265	1.212	5.5
Dibenzofuran	1.982	1.716	1.471	1.511	1.524	1.609	1.636	11.6
Fluorene	1.348	1.245	1.212	1.253	1.245	1.387	1.282	5.4
Phenanthrene	1.216	1.139	1.078	1.118	1.087	1.188	1.138	4.9
Anthracene	1.334	1.444	1.322	1.282	1.276	1.359	1.336	4.6
Fluoranthene	1.199	1.155	1.094	1.122	1.133	1.248	1.158	4.8
Pyrene	1.223	1.207	1.129	1.162	1.169	1.292	1.197	4.8
Benzo(a)anthracene	1.132	1.101	1.159	1.230	1.200	1.338	1.193	7.1
Chrysene	2.077	1.906	1.774	1.590	1.517	1.566	1.738	12.7
Benzo(b)fluoranthene	1.181	1.313	1.410	1.817	1.857	1.628	1.534	18.0
Benzo(k)fluoranthene	2.257	2.150	1.960	1.825	2.231	2.236	2.110	8.4
Benzo(a)pyrene	1.463	1.280	1.225	1.346	1.271	1.449	1.339	7.4
Indeno(1,2,3-cd)pyrene	1.746	1.709	1.636	1.763	1.677	1.896	1.738	5.2
Dibenzo(a,h)anthracene	1.365	1.356	1.291	1.427	1.339	1.505	1.380	5.4
Benzo(g,h,i)perylene	1.562	1.506	1.475	1.572	1.483	1.654	1.542	4.4
1-Methylnaphthalene	0.759	0.760	0.666	0.684	0.671	0.677	0.703	6.3
2-Methylnaphthalene-d10		0.682	0.611	0.618	0.608	0.610	0.626	5.1
Dibenzo(a,h)anthracene-d14	1.002	1.034	0.966	1.052	0.994	1.076	1.021	4.0

<- Outside QC limits: %RSD <20% or R^2 > 0.990

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2010 15:37
End Cal Date : 22-MAR-2010 17:35
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt8.i/20100322.b/lowsim.m
Cal Date : 24-Mar-2010 08:21 yev
Curve Type : Average

Calibration File Names:
Level 1: /chem3/nt8.i/20100322.b/ic0322c.d
Level 2: /chem3/nt8.i/20100322.b/ic0322f.d
Level 3: /chem3/nt8.i/20100322.b/ic0322e.d
Level 4: /chem3/nt8.i/20100322.b/ic0322a.d
Level 5: /chem3/nt8.i/20100322.b/ic0322d.d
Level 6: /chem3/nt8.i/20100322.b/ic0322b.d

Compound	10.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	___ RRF	% RSD
2 Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Naphthalene	1.30087	1.19111	1.08698	1.08843	1.04784	1.06993	1.13086	8.561
7 2-Methylnaphthalene	0.69584	0.70831	0.66841	0.68378	0.67350	0.68259	0.68540	2.139
8 1-Methylnaphthalene	0.75919	0.76004	0.66619	0.68406	0.67097	0.67728	0.70296	6.302
9 Dimethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Acenaphthylene	1.95822	1.97683	1.82258	1.86188	1.86350	2.06480	1.92463	4.739
12 Acenaphthene	1.27795	1.27454	1.12948	1.16042	1.16704	1.26475	1.21236	5.537
13 Diethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Dibenzofuran	1.98157	1.71586	1.47144	1.51144	1.52446	1.60924	1.63567	11.650
15 Fluorene	1.34781	1.24524	1.21167	1.25301	1.24528	1.38671	1.28162	5.381
17 Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Phenanthrene	1.21620	1.13864	1.07769	1.11793	1.08678	1.18811	1.13756	4.861
20 Anthracene	1.33419	1.44447	1.32173	1.28224	1.27631	1.35864	1.33626	4.606
21 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Fluoranthene	1.19943	1.15528	1.09451	1.12215	1.13298	1.24791	1.15871	4.843
25 Pyrene	1.22266	1.20692	1.12895	1.16228	1.16947	1.29194	1.19703	4.779
26 Butylbenzylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 Bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Benzo(a)anthracene	1.13160	1.10072	1.15874	1.22955	1.20050	1.33839	1.19325	7.110

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2010 15:37
End Cal Date : 22-MAR-2010 17:35
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt8.i/20100322.b/lowsim.m
Cal Date : 24-Mar-2010 08:21 yev
Curve Type : Average

	Compound	10.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
30	Chrysene	2.07690	1.90598	1.77402	1.59047	1.51733	1.56567	1.73839	12.721
31	Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32	Benzo(b)fluoranthene	1.18070	1.31266	1.41033	1.81698	1.85717	1.62751	1.53422	18.025
33	Benzo(k)fluoranthene	2.25725	2.14961	1.95981	1.82464	2.23125	2.23556	2.10968	8.418
34	Benzo(a)pyrene	1.46265	1.28010	1.22465	1.34603	1.27089	1.44870	1.33884	7.361
37	Indeno(1,2,3-cd)pyrene	1.74553	1.70869	1.63576	1.76316	1.67709	1.89556	1.73763	5.182
38	Dibenzo(a,h)anthracene	1.36520	1.35590	1.29123	1.42721	1.33901	1.50464	1.38053	5.433
39	Benzo(g,h,i)perylene	1.56171	1.50646	1.47550	1.57209	1.48321	1.65448	1.54224	4.406
$ 1	D5-Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 6	2-Methylnaphthalene-d10	+++++	0.68204	0.61067	0.61818	0.60774	0.60953	0.62563	5.080
$ 16	2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 23	Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 36	Dibenzo(a,h)anthracene-d14	1.00242	1.03379	0.96554	1.05235	0.99416	1.07554	1.02063	3.983

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt8.i/20100322.b/lowsim.m
Batch File: /chem3/nt8.i/20100322.b
Inst ID: nt8.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	ic0322a	ic0322b	ic0322c	ic0322d	ic0322e	ic0322f
INJ.DATE:	22-MAR-2010	22-MAR-2010	22-MAR-2010	22-MAR-2010	22-MAR-2010	22-MAR-2010
INJ.TIME:	15:37	16:00	16:24	16:48	17:12	17:35

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$	1 D5-Phenol	+++++	+++++	+++++	+++++	+++++	+++++	3.150	2.900-3.400	+++++	+++++
	2 Phenol	+++++	+++++	+++++	+++++	+++++	+++++	3.160	2.910-3.410	+++++	+++++
	3 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	6.639	6.389-6.889	+++++	+++++
*	4 Naphthalene-d8	4.742	4.742	4.742	4.742	4.742	4.742	4.742	4.492-4.992	4.742	0.000
	5 Naphthalene	4.753	4.753	4.753	4.763	4.753	4.763	4.753	4.503-5.003	4.756	0.005
$	6 2-Methylnaphthalene-d1	5.408	5.408	5.408	5.408	5.408	5.408	5.408	5.158-5.658	5.408	0.000
	7 2-Methylnaphthalene	5.440	5.440	5.439	5.439	5.439	5.440	5.440	5.190-5.690	5.439	0.000
	8 1-Methylnaphthalene	5.544	5.544	5.544	5.543	5.543	5.544	5.544	5.294-5.794	5.544	0.000
	9 Dimethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	10.433	10.183-10.683	+++++	+++++
	10 Acenaphthylene	6.379	6.379	6.379	6.379	6.379	6.379	6.379	6.129-6.629	6.379	0.000
*	11 Acenaphthene-d10	6.561	6.561	6.561	6.560	6.560	6.561	6.561	6.311-6.811	6.561	0.000
	12 Acenaphthene	6.585	6.585	6.585	6.585	6.585	6.585	6.585	6.335-6.835	6.585	0.000
	13 Diethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	11.543	11.293-11.793	+++++	+++++
	14 Dibenzofuran	6.778	6.778	6.778	6.778	6.778	6.778	6.778	6.528-7.028	6.778	0.000
	15 Fluorene	7.153	7.153	7.165	7.153	7.153	7.165	7.153	6.903-7.403	7.157	0.006
$	16 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	12.499	12.249-12.749	+++++	+++++
	17 Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	13.381	13.131-13.631	+++++	+++++

Reviewer 1 ______________________ Date: ____________
Reviewer 2 ______________________ Date: ____________

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt8.i/20100322.b/lowsim.m
Batch File: /chem3/nt8.i/20100322.b
Inst ID: nt8.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 18 Phenanthrene-d10	8.241	8.241	8.241	8.241	8.241	8.241	8.241	7.991-8.491	8.241	0.000
19 Phenanthrene	8.265	8.265	8.265	8.265	8.265	8.265	8.265	8.015-8.515	8.265	0.000
20 Anthracene	8.313	8.313	8.325	8.313	8.325	8.325	8.313	8.063-8.563	8.319	0.007
21 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	14.153	13.903-14.403	+++++	+++++
22 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	14.533	14.283-14.783	+++++	+++++
$ 23 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	14.682	14.432-14.932	+++++	+++++
24 Fluoranthene	9.680	9.680	9.692	9.680	9.680	9.680	9.680	9.430-9.930	9.682	0.005
25 Pyrene	9.946	9.934	9.946	9.946	9.946	9.946	9.946	9.696-10.196	9.944	0.005
26 Butylbenzylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	16.528	16.278-16.778	+++++	+++++
27 Bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	17.320	17.070-17.570	+++++	+++++
28 Benzo(a)anthracene	11.399	11.399	11.411	11.399	11.399	11.399	11.399	11.149-11.649	11.401	0.005
* 29 Chrysene-d12	11.423	11.411	11.423	11.423	11.423	11.423	11.423	11.173-11.673	11.421	0.005
30 Chrysene	11.447	11.447	11.447	11.447	11.447	11.447	11.447	11.197-11.697	11.447	0.000
31 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	18.607	18.357-18.857	+++++	+++++
32 Benzo(b)fluoranthene	12.634	12.624	12.645	12.645	12.634	12.634	12.634	12.384-12.884	12.636	0.008
33 Benzo(k)fluoranthene	12.655	12.645	12.655	12.655	12.655	12.655	12.655	12.405-12.905	12.653	0.004
34 Benzo(a)pyrene	12.968	12.958	12.968	12.957	12.968	12.968	12.968	12.718-13.218	12.964	0.005
* 35 Perylene-d12	13.031	13.020	13.030	13.020	13.030	13.031	13.031	12.781-13.281	13.027	0.005
$ 36 Dibenzo(a,h)anthracene	14.031	14.031	14.043	14.030	14.043	14.043	14.031	13.781-14.281	14.037	0.007
37 Indeno(1,2,3-cd)pyrene	14.043	14.043	14.067	14.043	14.055	14.055	14.043	13.793-14.293	14.051	0.010
38 Dibenzo(a,h)anthracene	14.067	14.055	14.079	14.055	14.067	14.067	14.067	13.817-14.317	14.065	0.009
39 Benzo(g,h,i)perylene	14.297	14.285	14.309	14.285	14.297	14.297	14.297	14.047-14.547	14.295	0.009

Analytical Resources, Inc.

YZ 3/24/10

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100322.b/ic0322a.d
Lab Smp Id: IC0322A
Inj Date : 22-MAR-2010 15:37
Operator : VTS Inst ID: nt8.i
Smp Info : IC0322A
Misc Info :
Comment :
Method : /chem3/nt8.i/20100322.b/lowsim.m
Meth Date : 24-Mar-2010 15:22 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 15:37 Cal File: ic0322a.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	4.742	4.742	(1.000)	218805	200.000	
	5 Naphthalene	128	4.753	4.753	(1.002)	297692	250.000	241
$	6 2-Methylnaphthalene-d10	152	5.408	5.408	(1.140)	169075	250.000	247
	7 2-Methylnaphthalene	142	5.440	5.440	(1.147)	187017	250.000	249
	8 1-Methylnaphthalene	142	5.544	5.544	(1.169)	187096	250.000	243
	10 Acenaphthylene	152	6.379	6.379	(0.972)	277978	250.000	242
*	11 Acenaphthene-d10	164	6.561	6.561	(1.000)	119440	200.000	
	12 Acenaphthene	153	6.585	6.585	(1.004)	173250	250.000	239
	14 Dibenzofuran	168	6.778	6.778	(1.033)	225658	250.000	231
	15 Fluorene	166	7.153	7.153	(1.090)	187074	250.000	244
*	18 Phenanthrene-d10	188	8.241	8.241	(1.000)	183479	200.000	
	19 Phenanthrene	178	8.265	8.265	(1.003)	256395	250.000	246
	20 Anthracene	178	8.313	8.313	(1.009)	294079	250.000	240
	24 Fluoranthene	202	9.680	9.680	(1.175)	257364	250.000	242
	25 Pyrene	202	9.946	9.946	(1.207)	266567	250.000	243
	28 Benzo(a)anthracene	228	11.399	11.399	(1.000)	186997	250.000	258
*	29 Chrysene-d12	240	11.423	11.423	(1.000)	121669	200.000	(M)
	30 Chrysene	228	11.447	11.447	(1.000)	241888	250.000	229
	32 Benzo(b)fluoranthene	252	12.634	12.655	(1.000)	232113	250.000	296
	33 Benzo(k)fluoranthene	252	12.655	12.655	(1.000)	233091	250.000	216(M)
	34 Benzo(a)pyrene	252	12.968	12.968	(1.000)	171950	250.000	251
*	35 Perylene-d12	264	13.031	13.020	(1.000)	102197	200.000	(M)
	37 Indeno(1,2,3-cd)pyrene	276	14.043	14.055	(1.000)	225237	250.000	254
$	36 Dibenzo(a,h)anthracene-d14	292	14.031	14.043	(1.000)	134434	250.000	258
	38 Dibenzo(a,h)anthracene	278	14.067	14.067	(1.000)	182321	250.000	258
	39 Benzo(g,h,i)perylene	276	14.297	14.297	(1.000)	200828	250.000	255

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: ic0322a.d
Lab Smp Id: IC0322A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100322.b/lowsim.m
Misc Info:

Calibration Date: 22-MAR-2010
Calibration Time: 17:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	218805	0.00
11 Acenaphthene-d10	119440	59720	238880	119440	0.00
18 Phenanthrene-d10	183479	91740	366958	183479	0.00
29 Chrysene-d12	121669	60834	243338	121669	0.00
35 Perylene-d12	102197	51098	204394	102197	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	4.74	4.24	5.24	4.74	0.00
11 Acenaphthene-d10	6.56	6.06	7.06	6.56	0.00
18 Phenanthrene-d10	8.24	7.74	8.74	8.24	0.00
29 Chrysene-d12	11.42	10.92	11.92	11.42	0.00
35 Perylene-d12	13.02	12.52	13.52	13.03	0.08

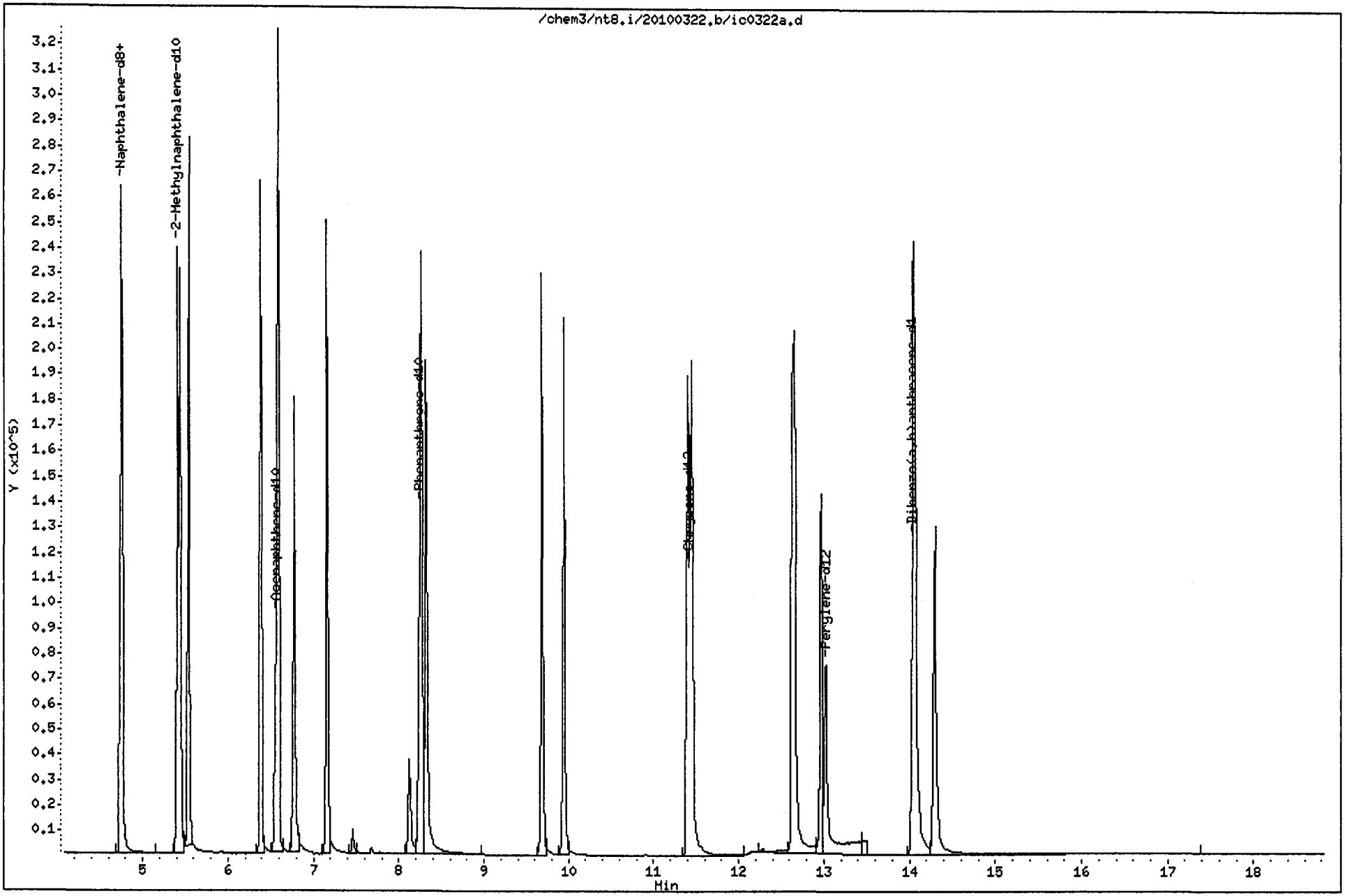
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt8.i/20100322.b/ic0322a.d
Date : 22-MAR-2010 15:37
Client ID:
Sample Info: IC0322A

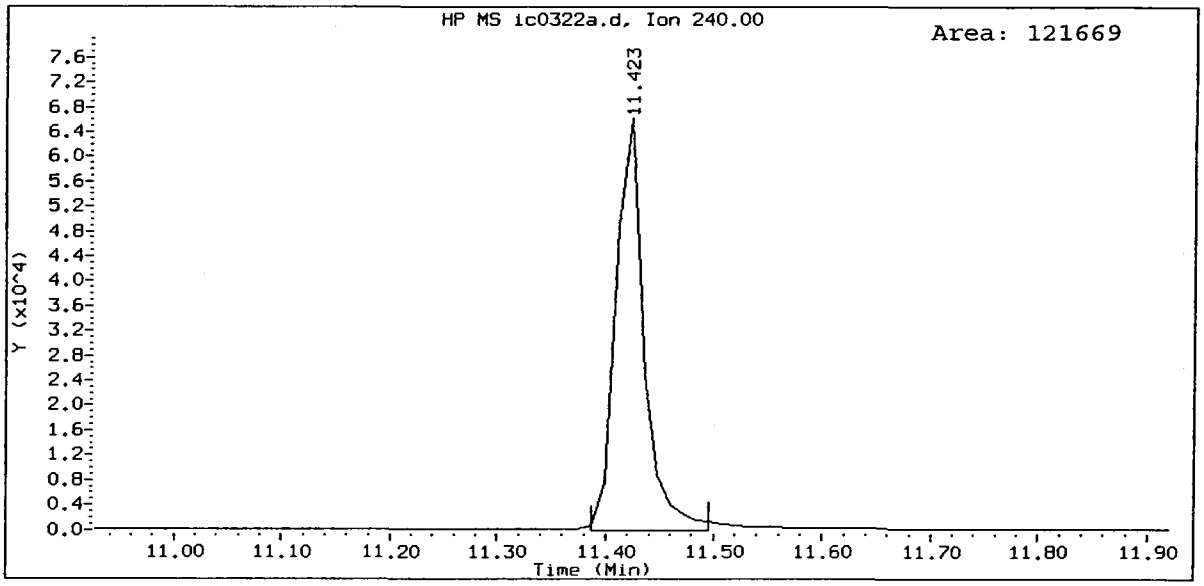
Instrument: nt8.i

Operator: VTS
Column diameter: 0.25

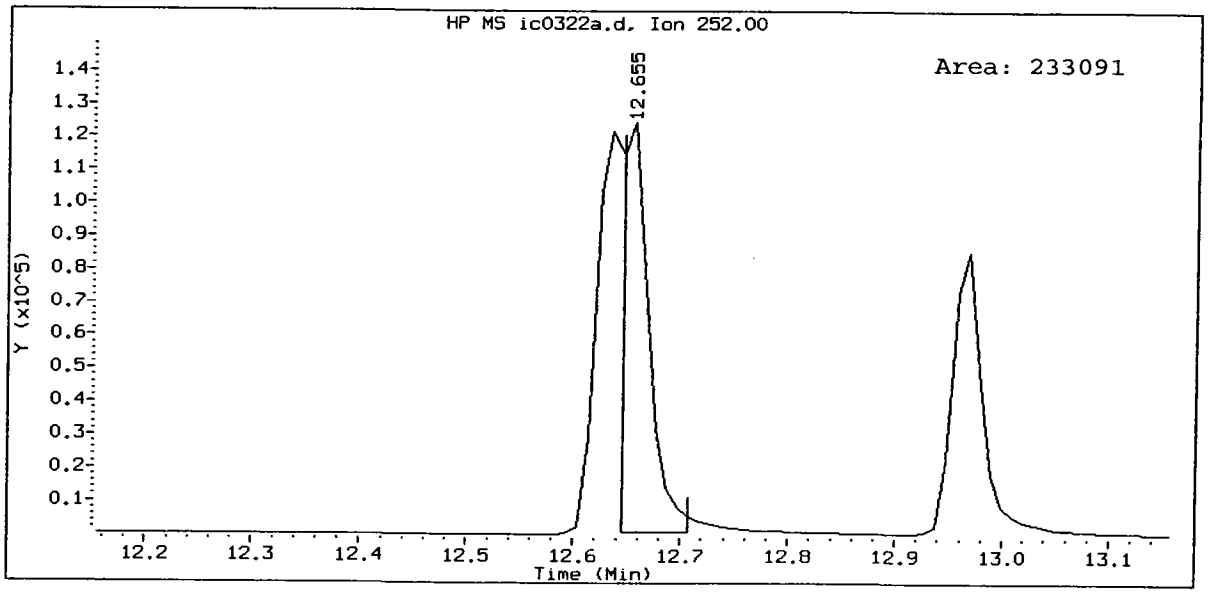
Column phase: ZB-5

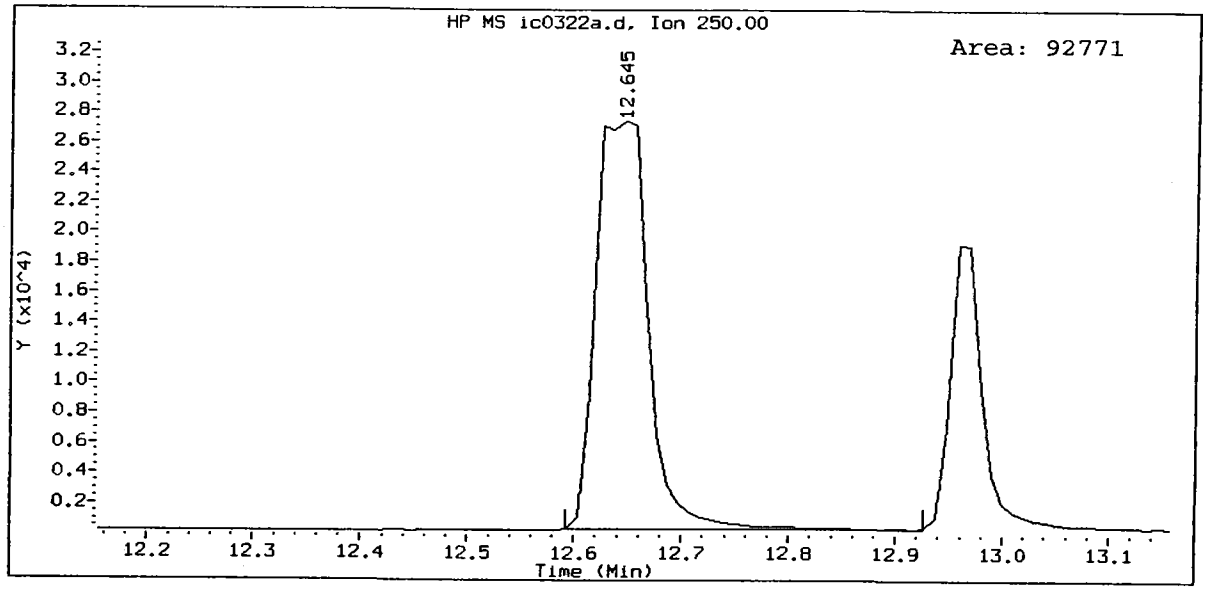


IC0322A, /chem3/nt8.i/20100322.b/ic0322a.d
Chrysene-d12 Amount: 200.00

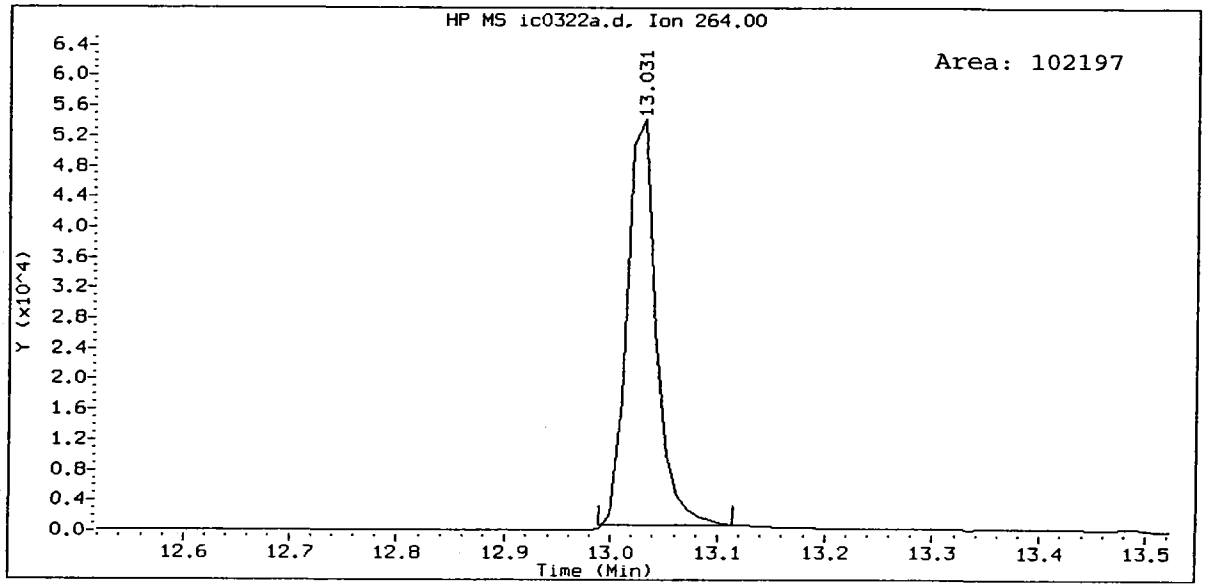


IC0322A, /chem3/nt8.i/20100322.b/ic0322a.d
Benzo(k)fluoranthene Amount: 216.22





IC0322A, /chem3/nt8.i/20100322.b/ic0322a.d
Perylene-d12 Amount: 200.00



Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM YZ 3/24/10

Data file : /chem3/nt8.i/20100322.b/ic0322b.d
Lab Smp Id: IC0322B
Inj Date : 22-MAR-2010 16:00
Operator : VTS
Inst ID: nt8.i
Smp Info : IC0322B
Misc Info :
Comment :
Method : /chem3/nt8.i/20100322.b/lowsim.m
Meth Date : 24-Mar-2010 15:22 yev
Quant Type: ISTD
Cal Date : 22-MAR-2010 16:00
Cal File: ic0322b.d
Als bottle: 3
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: pna1mn.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable — Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	4.742	4.742	(1.000)	229256	200.000	
	5 Naphthalene	128	4.753	4.753	(1.002)	1226442	1000.00	946
$	6 2-Methylnaphthalene-d10	152	5.408	5.408	(1.140)	698696	1000.00	974
	7 2-Methylnaphthalene	142	5.440	5.440	(1.147)	782438	1000.00	996
	8 1-Methylnaphthalene	142	5.544	5.544	(1.169)	776347	1000.00	963
	10 Acenaphthylene	152	6.379	6.379	(0.972)	1196007	1000.00	1070(A)
*	11 Acenaphthene-d10	164	6.561	6.561	(1.000)	115847	200.000	
	12 Acenaphthene	153	6.585	6.585	(1.004)	732585	1000.00	1040(A)
	14 Dibenzofuran	168	6.778	6.778	(1.033)	932130	1000.00	984
	15 Fluorene	166	7.153	7.153	(1.090)	803229	1000.00	1080(A)
*	18 Phenanthrene-d10	188	8.241	8.241	(1.000)	179911	200.000	
	19 Phenanthrene	178	8.265	8.265	(1.003)	1068770	1000.00	1040(A)
	20 Anthracene	178	8.313	8.313	(1.009)	1222168	1000.00	1020(A)
	24 Fluoranthene	202	9.680	9.680	(1.175)	1122568	1000.00	1080(A)
	25 Pyrene	202	9.934	9.946	(1.206)	1162167	1000.00	1080(A)
	28 Benzo(a)anthracene	228	11.399	11.399	(0.999)	861117	1000.00	1120(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	29 Chrysene-d12	240	11.411	11.423	(1.000)	128680	200.000	
	30 Chrysene	228	11.447	11.447	(1.003)	1007351	1000.00	901
	32 Benzo(b)fluoranthene	252	12.624	12.655	(0.970)	885080	1000.00	1060(AM)
	33 Benzo(k)fluoranthene	252	12.645	12.655	(0.971)	1215751	1000.00	1060(AM)
	34 Benzo(a)pyrene	252	12.958	12.968	(0.995)	787838	1000.00	1080(A)
*	35 Perylene-d12	264	13.020	13.020	(1.000)	108765	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	14.043	14.055	(1.079)	1030855	1000.00	1090(A)
$	36 Dibenzo(a,h)anthracene-d14	292	14.031	14.043	(1.078)	584903	1000.00	1050(A)
	38 Dibenzo(a,h)anthracene	278	14.055	14.067	(1.079)	818261	1000.00	1090(A)
	39 Benzo(g,h,i)perylene	276	14.285	14.297	(1.097)	899747	1000.00	1070(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: ic0322b.d
Lab Smp Id: IC0322B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100322.b/lowsim.m
Misc Info:

Calibration Date: 22-MAR-2010
Calibration Time: 17:59

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	229256	4.78
11 Acenaphthene-d10	119440	59720	238880	115847	-3.01
18 Phenanthrene-d10	183479	91740	366958	179911	-1.94
29 Chrysene-d12	121669	60834	243338	128680	5.76
35 Perylene-d12	102197	51098	204394	108765	6.43

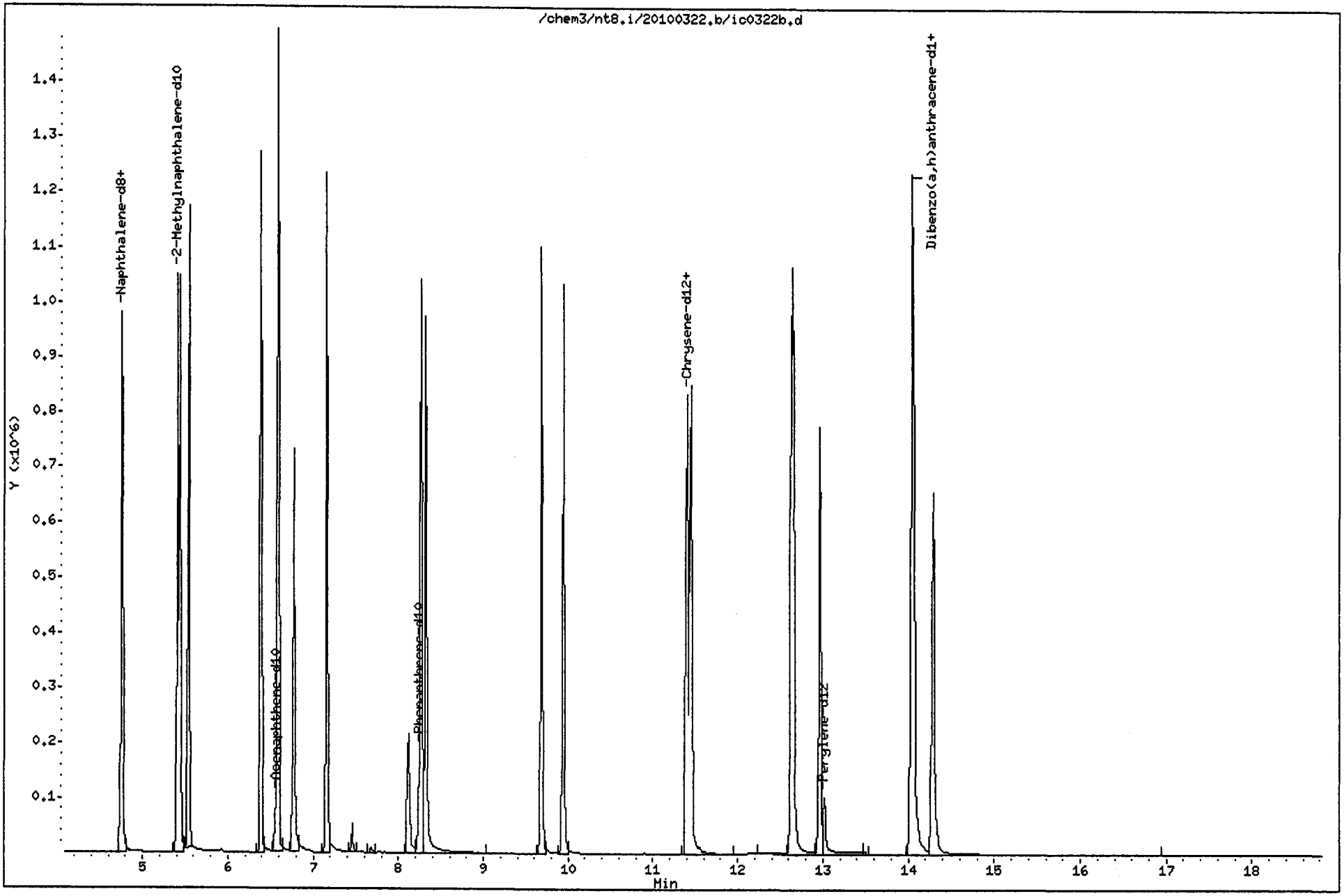
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	4.74	4.24	5.24	4.74	0.00
11 Acenaphthene-d10	6.56	6.06	7.06	6.56	0.00
18 Phenanthrene-d10	8.24	7.74	8.74	8.24	0.00
29 Chrysene-d12	11.42	10.92	11.92	11.41	-0.11
35 Perylene-d12	13.02	12.52	13.52	13.02	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

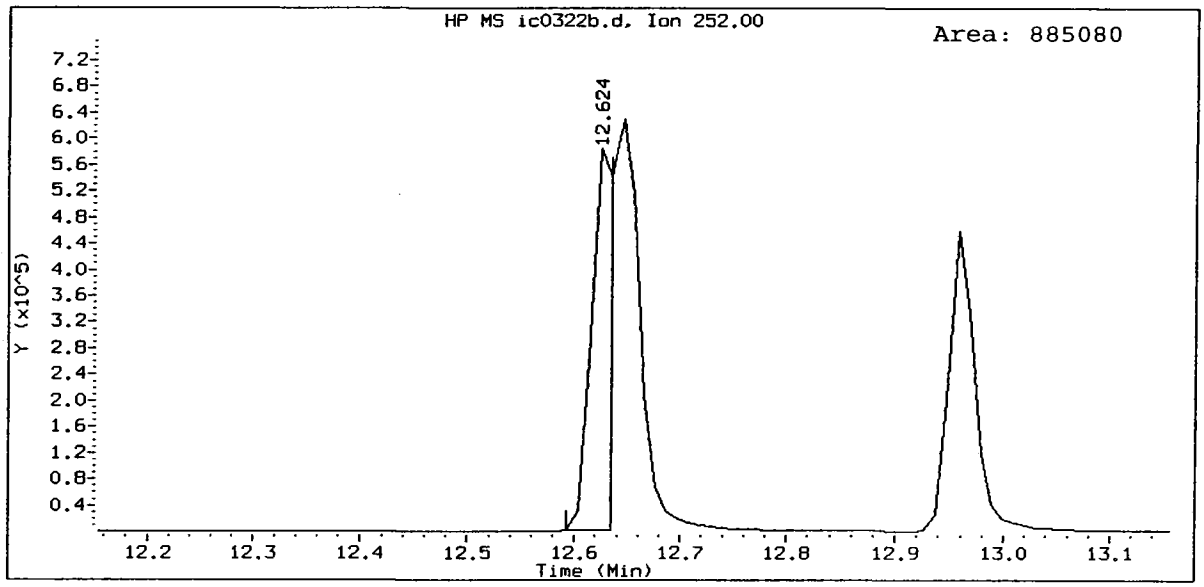
Data File: /chem3/nt8.i/20100322.b/ic0322b.d
Date : 22-MAR-2010 16:00
Client ID:
Sample Info: IC0322B
Volume Injected (uL): 2.0
Column phase: ZB-5

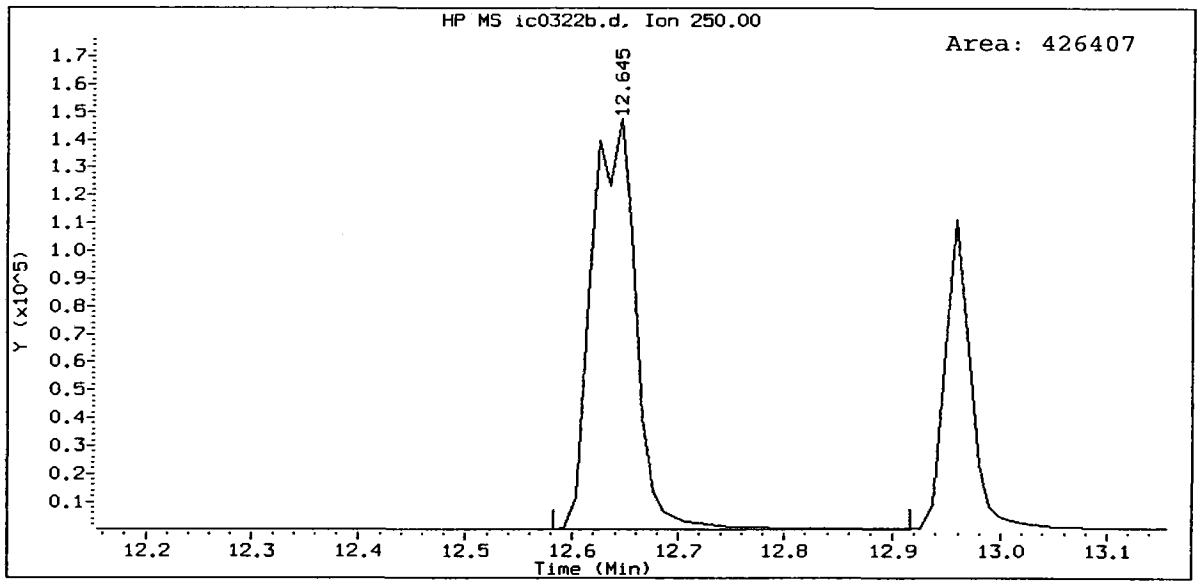
Instrument: nt8.i

Operator: VTS
Column diameter: 0.25

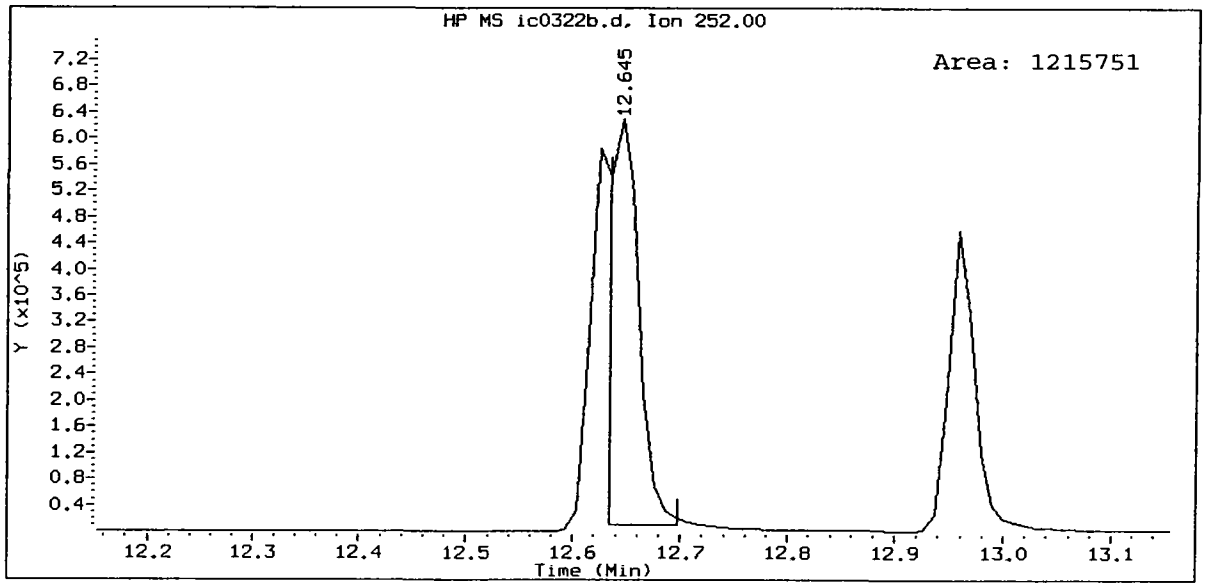


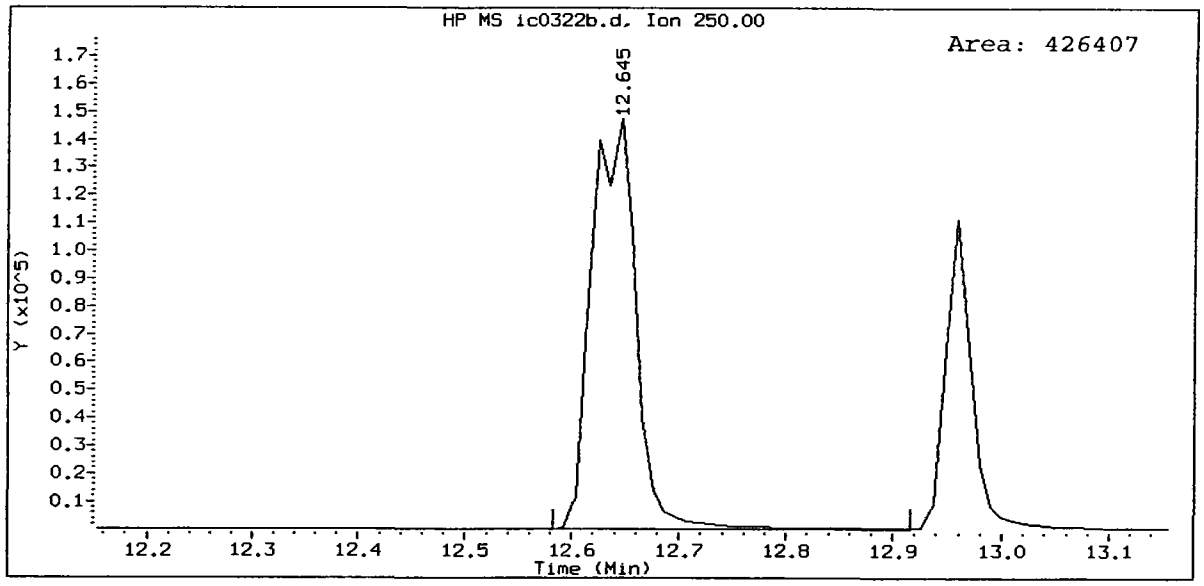
IC0322B, /chem3/nt8.i/20100322.b/ic0322b.d
Benzo(b)fluoranthene Amount: 1060.80





IC0322B, /chem3/nt8.i/20100322.b/ic0322b.d
Benzo(k)fluoranthene Amount: 1059.66





Analytical Resources, Inc. YZ 3/24/10

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100322.b/ic0322c.d
Lab Smp Id: IC0322C
Inj Date : 22-MAR-2010 16:24
Operator : VTS Inst ID: nt8.i
Smp Info : IC0322C
Misc Info :
Comment :
Method : /chem3/nt8.i/20100322.b/lowsim.m
Meth Date : 24-Mar-2010 15:22 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 16:24 Cal File: ic0322c.d
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	4.742	4.742	(1.000)	191625	200.000	
	5 Naphthalene	128	4.753	4.753	(1.002)	12464	10.0000	11.5
$	6 2-Methylnaphthalene-d10	152	5.408	5.408	(1.140)	6149	10.0000	10.3
	7 2-Methylnaphthalene	142	5.439	5.440	(1.147)	6667	10.0000	10.2
	8 1-Methylnaphthalene	142	5.544	5.544	(1.169)	7274	10.0000	10.8
	10 Acenaphthylene	152	6.379	6.379	(0.972)	10147	10.0000	10.2
*	11 Acenaphthene-d10	164	6.561	6.561	(1.000)	103635	200.000	
	12 Acenaphthene	153	6.585	6.585	(1.004)	6622	10.0000	10.5
	14 Dibenzofuran	168	6.778	6.778	(1.033)	10268	10.0000	12.1
	15 Fluorene	166	7.165	7.153	(1.092)	6984	10.0000	10.5
*	18 Phenanthrene-d10	188	8.241	8.241	(1.000)	161026	200.000	(M)
	19 Phenanthrene	178	8.265	8.265	(1.000)	9792	10.0000	10.7
	20 Anthracene	178	8.325	8.313	(1.000)	10742	10.0000	9.98
	24 Fluoranthene	202	9.692	9.680	(1.000)	9657	10.0000	10.4
	25 Pyrene	202	9.946	9.946	(1.000)	9844	10.0000	10.2
	28 Benzo(a)anthracene	228	11.411	11.399	(1.000)	5667	10.0000	9.48
*	29 Chrysene-d12	240	11.423	11.423	(1.000)	100159	200.000	(M)
	30 Chrysene	228	11.447	11.447	(1.000)	10401	10.0000	11.9
	32 Benzo(b)fluoranthene	252	12.645	12.655	(1.000)	5113	10.0000	7.70(M)
	33 Benzo(k)fluoranthene	252	12.655	12.655	(1.000)	9775	10.0000	10.7(M)
	34 Benzo(a)pyrene	252	12.968	12.968	(1.000)	6334	10.0000	10.9
*	35 Perylene-d12	264	13.030	13.020	(1.000)	86610	200.000	(M)
	37 Indeno(1,2,3-cd)pyrene	276	14.067	14.055	(1.000)	7559	10.0000	10.0
$	36 Dibenzo(a,h)anthracene-d14	292	14.043	14.043	(1.000)	4341	10.0000	9.82
	38 Dibenzo(a,h)anthracene	278	14.079	14.067	(1.000)	5912	10.0000	9.89
	39 Benzo(g,h,i)perylene	276	14.309	14.297	(1.000)	6763	10.0000	10.1

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: ic0322c.d
Lab Smp Id: IC0322C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100322.b/lowsim.m
Misc Info:

Calibration Date: 22-MAR-2010
Calibration Time: 17:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	191625	-12.42
11 Acenaphthene-d10	119440	59720	238880	103635	-13.23
18 Phenanthrene-d10	183479	91740	366958	161026	-12.24
29 Chrysene-d12	121669	60834	243338	100159	-17.68
35 Perylene-d12	102197	51098	204394	86610	-15.25

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	4.74	4.24	5.24	4.74	0.00
11 Acenaphthene-d10	6.56	6.06	7.06	6.56	0.00
18 Phenanthrene-d10	8.24	7.74	8.74	8.24	0.00
29 Chrysene-d12	11.42	10.92	11.92	11.42	0.00
35 Perylene-d12	13.02	12.52	13.52	13.03	0.08

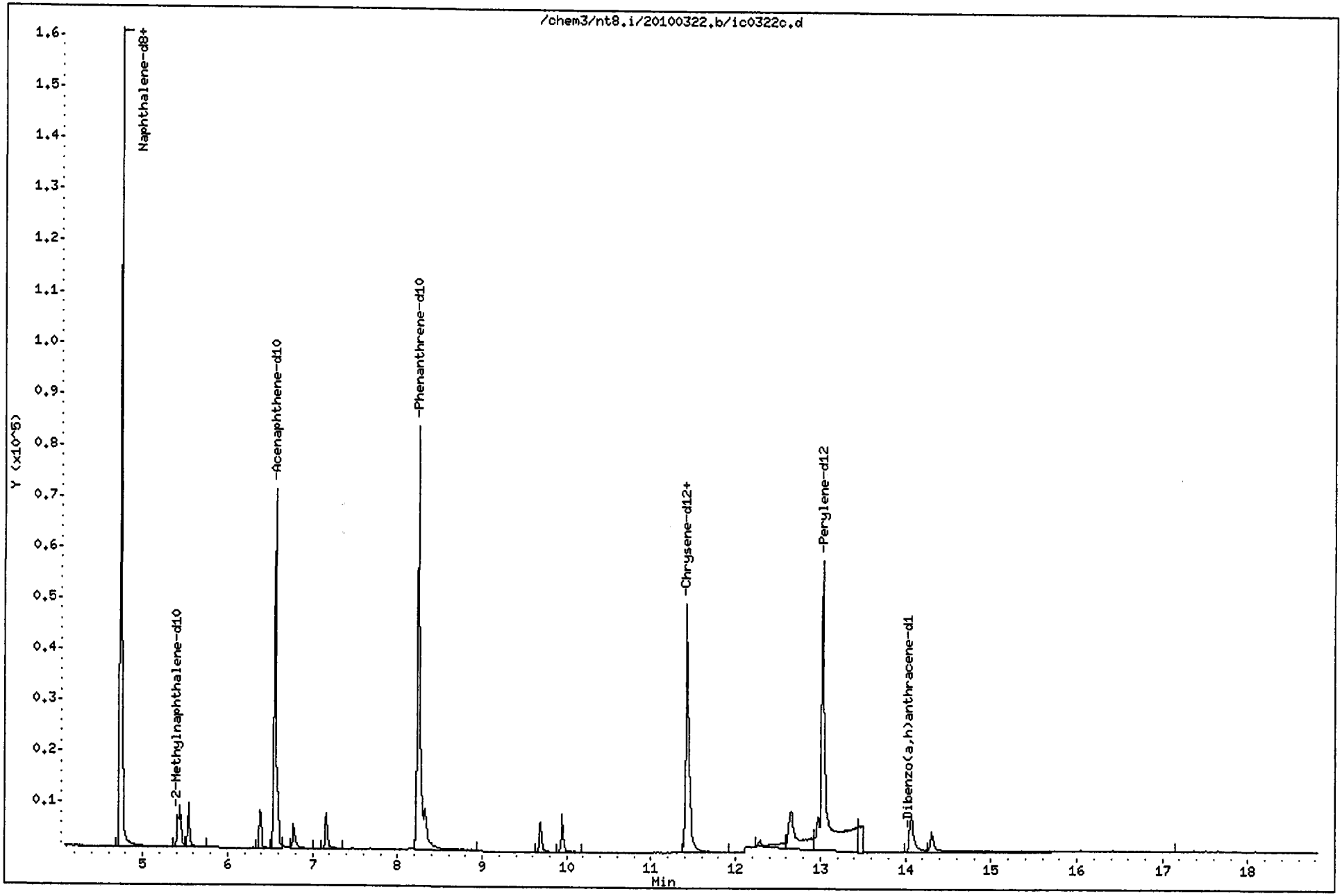
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt8.i/20100322.b/ic0322c.d
Date : 22-MAR-2010 16:24
Client ID:
Sample Info: IC0322C

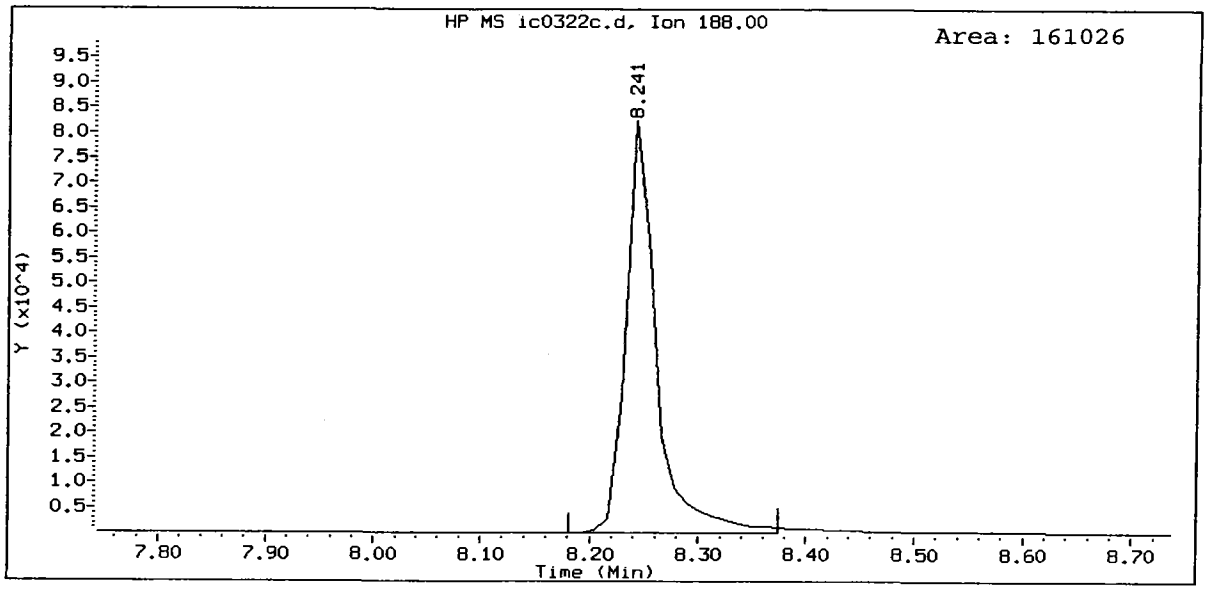
Column phase: ZB-5

Instrument: nt8.i

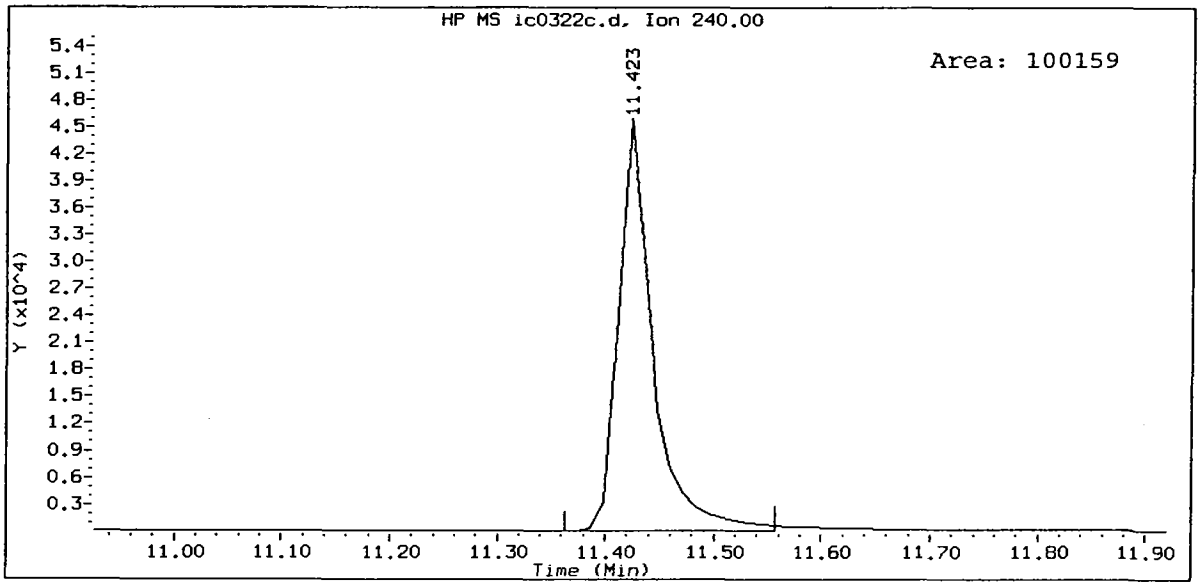
Operator: VTS
Column diameter: 0.25



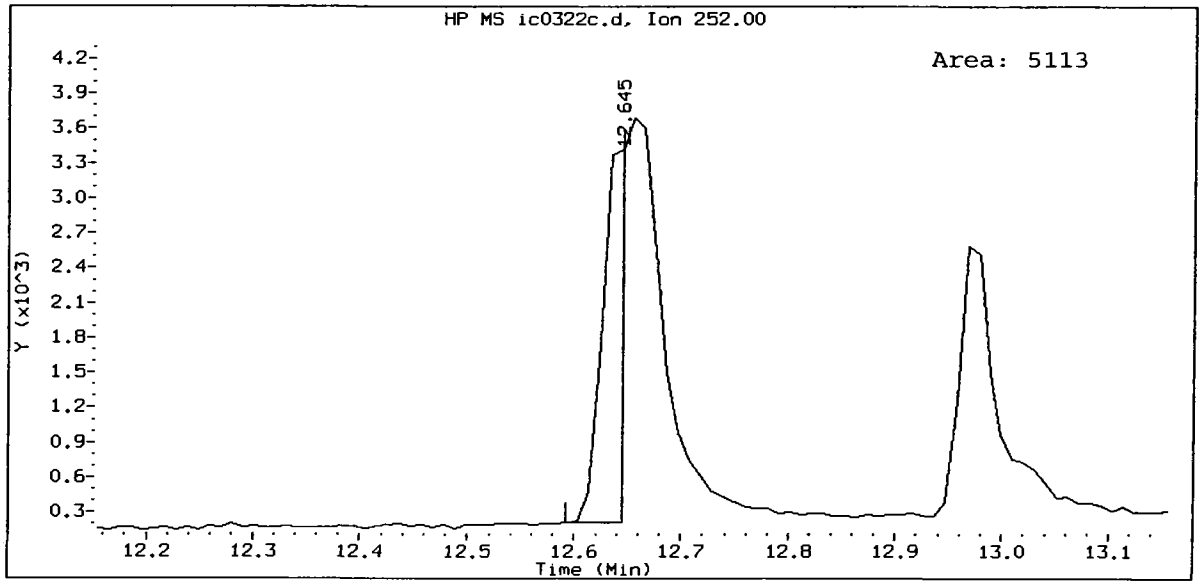
IC0322C, /chem3/nt8.i/20100322.b/ic0322c.d
Phenanthrene-d10 Amount: 200.00

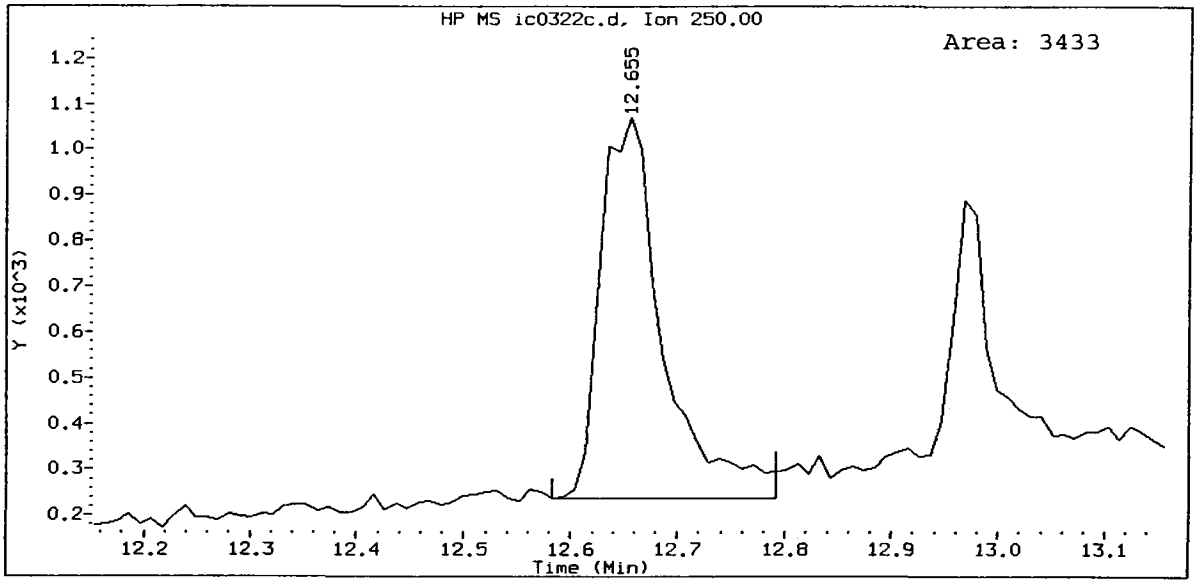


IC0322C, /chem3/nt8.i/20100322.b/ic0322c.d
Chrysene-d12 Amount: 200.00

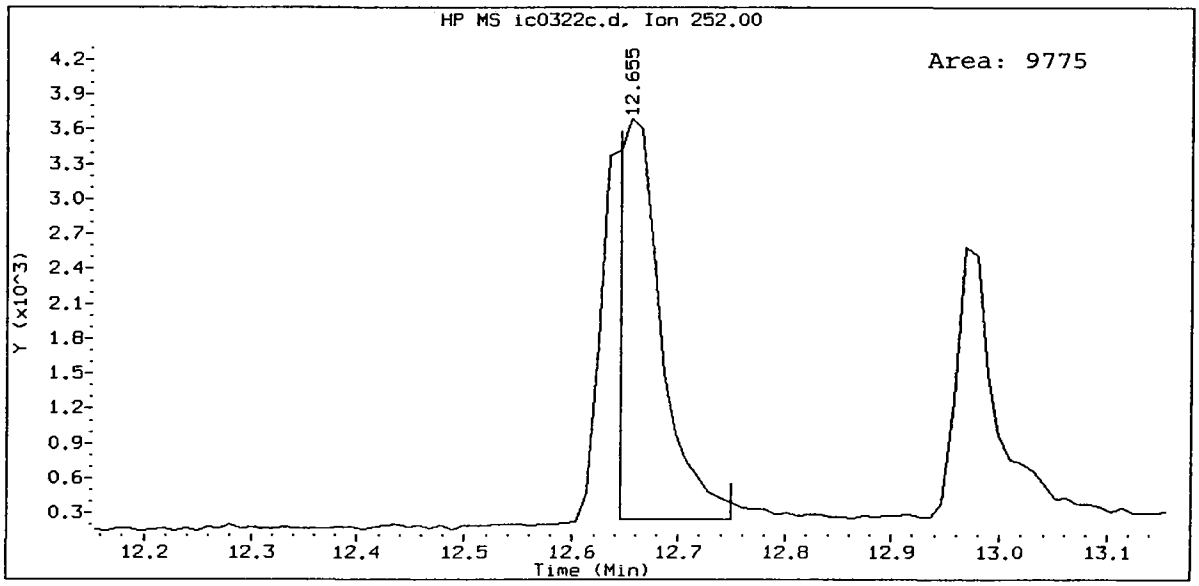


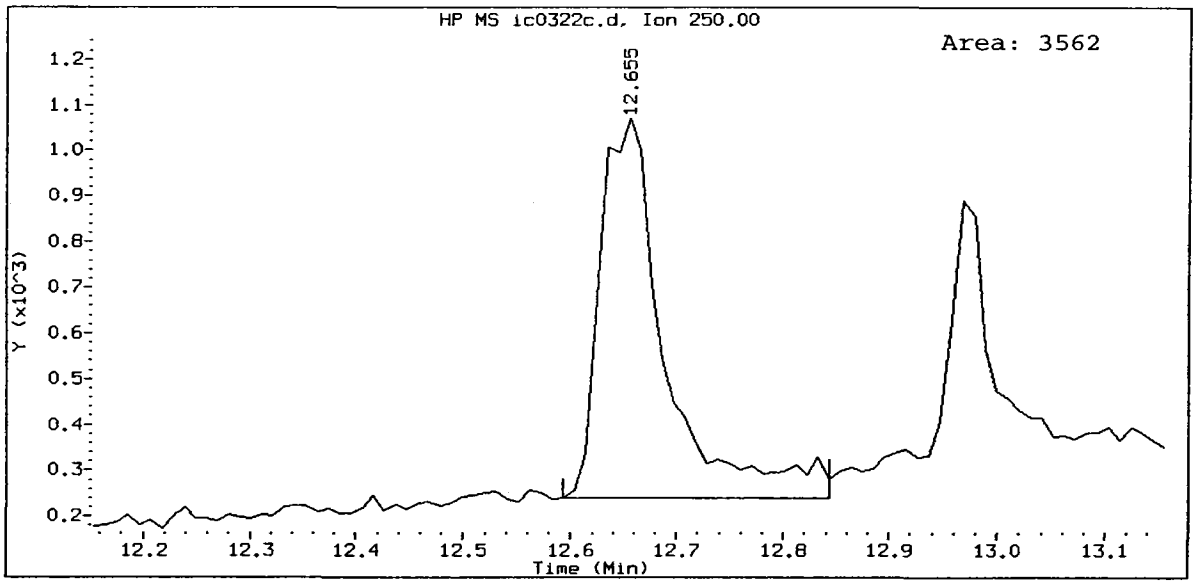
IC0322C, /chem3/nt8.i/20100322.b/ic0322c.d
Benzo(b)fluoranthene Amount: 7.70



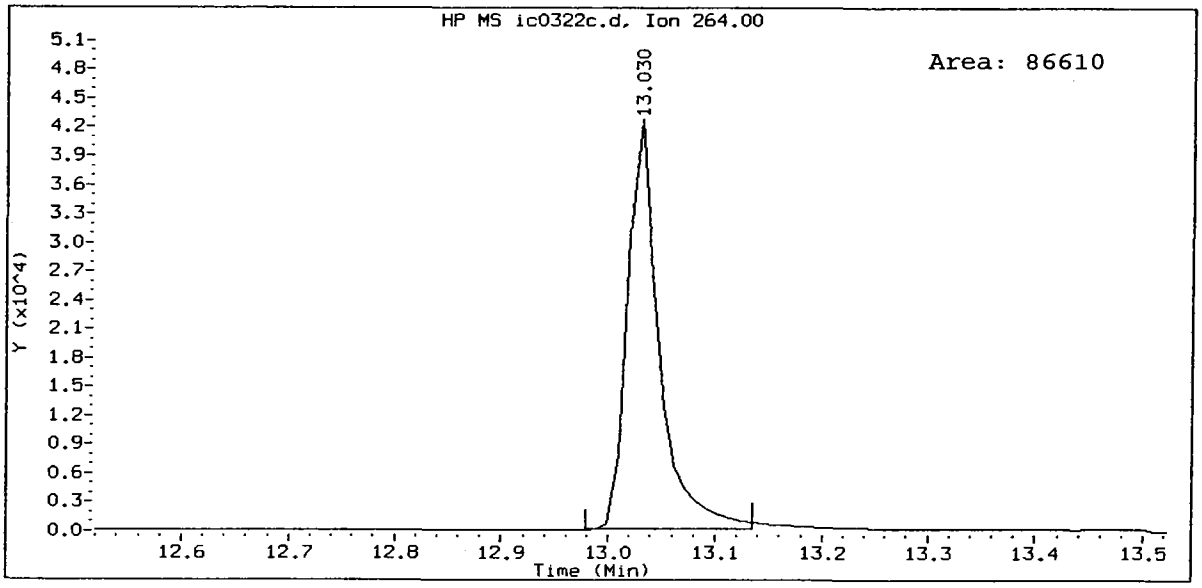


IC0322C, /chem3/nt8.i/20100322.b/ic0322c.d
Benzo(k)fluoranthene Amount: 10.70





IC0322C, /chem3/nt8.i/20100322.b/ic0322c.d
Perylene-d12 Amount: 200.00



Analytical Resources, Inc.

YZ 3/24/10

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100322.b/ic0322d.d
Lab Smp Id: IC0322D
Inj Date : 22-MAR-2010 16:48
Operator : VTS Inst ID: nt8.i
Smp Info : IC0322D
Misc Info :
Comment :
Method : /chem3/nt8.i/20100322.b/lowsim.m
Meth Date : 24-Mar-2010 15:22 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 16:48 Cal File: ic0322d.d
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	4.742	4.742	(1.000)	215378	200.000	
	5 Naphthalene	128	4.763	4.753	(1.004)	564203	500.000	463
$	6 2-Methylnaphthalene-d10	152	5.408	5.408	(1.140)	327233	500.000	486
	7 2-Methylnaphthalene	142	5.439	5.440	(1.147)	362643	500.000	491
	8 1-Methylnaphthalene	142	5.543	5.544	(1.169)	361282	500.000	477
	10 Acenaphthylene	152	6.379	6.379	(0.972)	532467	500.000	484
*	11 Acenaphthene-d10	164	6.560	6.561	(1.000)	114294	200.000	
	12 Acenaphthene	153	6.585	6.585	(1.004)	333464	500.000	481
	14 Dibenzofuran	168	6.778	6.778	(1.033)	435591	500.000	466
	15 Fluorene	166	7.153	7.153	(1.090)	355819	500.000	486
*	18 Phenanthrene-d10	188	8.241	8.241	(1.000)	177085	200.000	
	19 Phenanthrene	178	8.265	8.265	(1.003)	481130	500.000	478
	20 Anthracene	178	8.313	8.313	(1.009)	565040	500.000	478
	24 Fluoranthene	202	9.680	9.680	(1.175)	501583	500.000	489
	25 Pyrene	202	9.946	9.946	(1.207)	517737	500.000	488
	28 Benzo(a)anthracene	228	11.399	11.399	(0.998)	369969	500.000	503

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	29 Chrysene-d12	240	11.423	11.423	(1.000)	123272	200.000	
	30 Chrysene	228	11.447	11.447	(1.002)	467610	500.000	436
	32 Benzo(b)fluoranthene	252	12.645	12.655	(0.971)	492286	500.000	605(M)
	33 Benzo(k)fluoranthene	252	12.655	12.655	(0.972)	591442	500.000	529
	34 Benzo(a)pyrene	252	12.957	12.968	(0.995)	336877	500.000	475
*	35 Perylene-d12	264	13.020	13.020	(1.000)	106029	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	14.043	14.055	(1.079)	444550	500.000	483
$	36 Dibenzo(a,h)anthracene-d14	292	14.030	14.043	(1.078)	263525	500.000	487
	38 Dibenzo(a,h)anthracene	278	14.055	14.067	(1.079)	354934	500.000	485
	39 Benzo(g,h,i)perylene	276	14.285	14.297	(1.097)	393159	500.000	481

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: ic0322d.d
Lab Smp Id: IC0322D
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100322.b/lowsim.m
Misc Info:

Calibration Date: 22-MAR-2010
Calibration Time: 17:59

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	215378	-1.57
11 Acenaphthene-d10	119440	59720	238880	114294	-4.31
18 Phenanthrene-d10	183479	91740	366958	177085	-3.48
29 Chrysene-d12	121669	60834	243338	123272	1.32
35 Perylene-d12	102197	51098	204394	106029	3.75

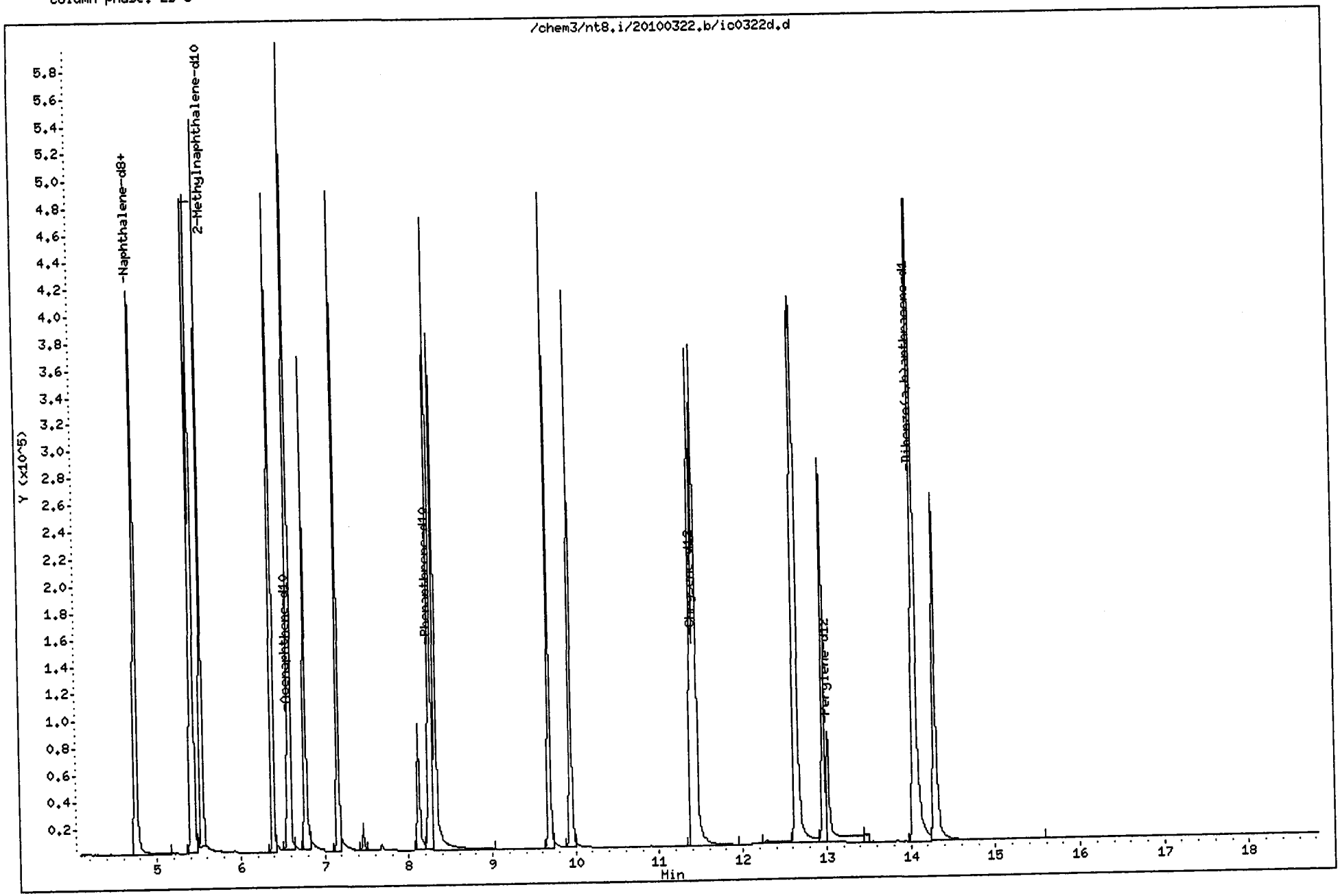
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	4.74	4.24	5.24	4.74	0.00
11 Acenaphthene-d10	6.56	6.06	7.06	6.56	0.00
18 Phenanthrene-d10	8.24	7.74	8.74	8.24	0.00
29 Chrysene-d12	11.42	10.92	11.92	11.42	0.00
35 Perylene-d12	13.02	12.52	13.52	13.02	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

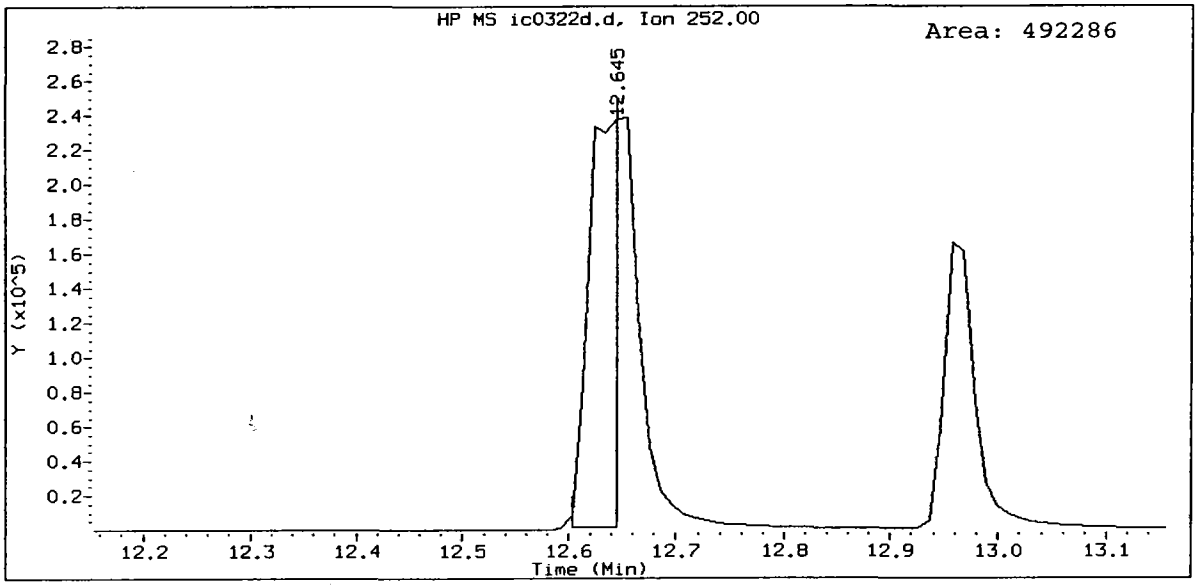
Data File: /chem3/nt8.i/20100322.b/ic0322d.d
Date : 22-MAR-2010 16:48
Client ID:
Sample Info: IC0322D
Volume Injected (uL): 2.0
Column phase: ZB-5

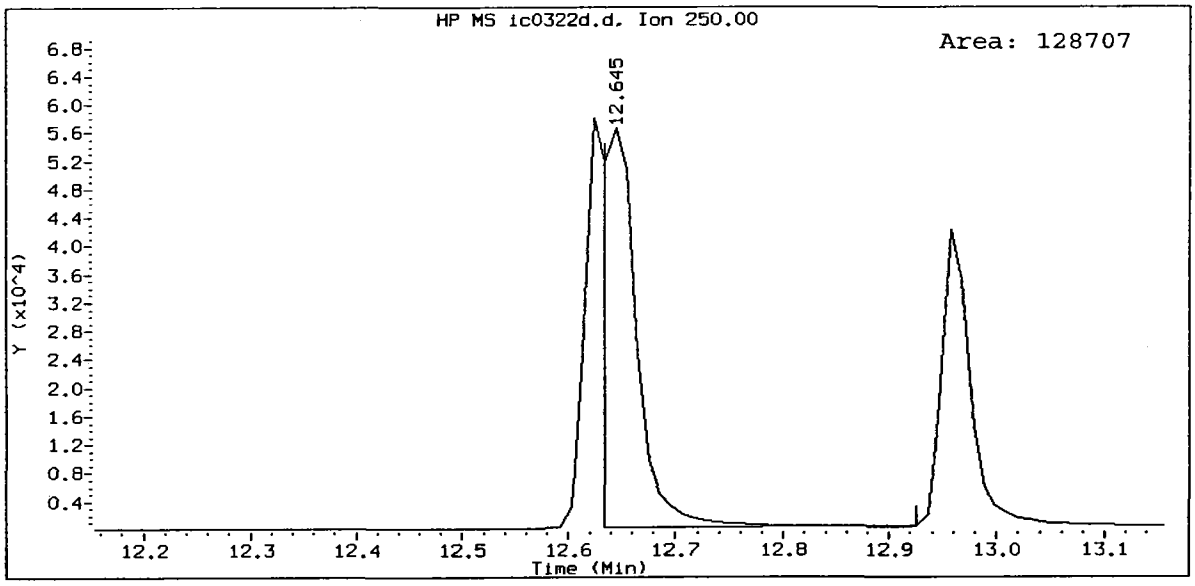
Instrument: nt8.i

Operator: VTS
Column diameter: 0.25



IC0322D, /chem3/nt8.i/20100322.b/ic0322d.d
Benzo(b)fluoranthene Amount: 605.25





Analytical Resources, Inc.

YZ 3/24/10

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100322.b/ic0322e.d
Lab Smp Id: IC0322E
Inj Date : 22-MAR-2010 17:12
Operator : VTS
Inst ID: nt8.i
Smp Info : IC0322E
Misc Info :
Comment :
Method : /chem3/nt8.i/20100322.b/lowsim.m
Meth Date : 24-Mar-2010 15:22 yev
Quant Type: ISTD
Cal Date : 22-MAR-2010 17:12
Cal File: ic0322e.d
Als bottle: 6
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: pnalmn.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable

Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	4.742	4.742	(1.000)	203071	200.000	
	5 Naphthalene	128	4.753	4.753	(1.002)	110367	100.000	96.1
$	6 2-Methylnaphthalene-d10	152	5.408	5.408	(1.140)	62005	100.000	97.6
	7 2-Methylnaphthalene	142	5.439	5.440	(1.147)	67867	100.000	97.5
	8 1-Methylnaphthalene	142	5.543	5.544	(1.169)	67642	100.000	94.8
	10 Acenaphthylene	152	6.379	6.379	(0.972)	99612	100.000	94.7
*	11 Acenaphthene-d10	164	6.560	6.561	(1.000)	109309	200.000	
	12 Acenaphthene	153	6.585	6.585	(1.004)	61731	100.000	93.2
	14 Dibenzofuran	168	6.778	6.778	(1.033)	80421	100.000	90.0
	15 Fluorene	166	7.153	7.153	(1.090)	66223	100.000	94.5
*	18 Phenanthrene-d10	188	8.241	8.241	(1.000)	165597	200.000	
	19 Phenanthrene	178	8.265	8.265	(1.003)	89231	100.000	94.7
	20 Anthracene	178	8.325	8.313	(1.010)	109437	100.000	98.9
	24 Fluoranthene	202	9.680	9.680	(1.175)	90624	100.000	94.5
	25 Pyrene	202	9.946	9.946	(1.207)	93475	100.000	94.3
	28 Benzo(a)anthracene	228	11.399	11.399	(1.000)	59839	100.000	97.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	29 Chrysene-d12	240	11.423	11.423	(1.000)	103283	200.000	(M)
	30 Chrysene	228	11.447	11.447	(1.000)	91613	100.000	102
	32 Benzo(b)fluoranthene	252	12.634	12.655	(1.000)	67198	100.000	91.9(M)
	33 Benzo(k)fluoranthene	252	12.655	12.655	(0.971)	93379	100.000	92.9(M)
	34 Benzo(a)pyrene	252	12.968	12.968	(1.000)	58351	100.000	91.5
*	35 Perylene-d12	264	13.030	13.020	(1.000)	95294	200.000	(M)
	37 Indeno(1,2,3-cd)pyrene	276	14.055	14.055	(1.000)	77939	100.000	94.1
$	36 Dibenzo(a,h)anthracene-d14	292	14.043	14.043	(1.000)	46005	100.000	94.6
	38 Dibenzo(a,h)anthracene	278	14.067	14.067	(1.000)	61523	100.000	93.5
	39 Benzo(g,h,i)perylene	276	14.297	14.297	(1.000)	70303	100.000	95.7

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: ic0322e.d
Lab Smp Id: IC0322E
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100322.b/lowsim.m
Misc Info:

Calibration Date: 22-MAR-2010
Calibration Time: 17:59

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	203071	-7.19
11 Acenaphthene-d10	119440	59720	238880	109309	-8.48
18 Phenanthrene-d10	183479	91740	366958	165597	-9.75
29 Chrysene-d12	121669	60834	243338	103283	-15.11
35 Perylene-d12	102197	51098	204394	95294	-6.75

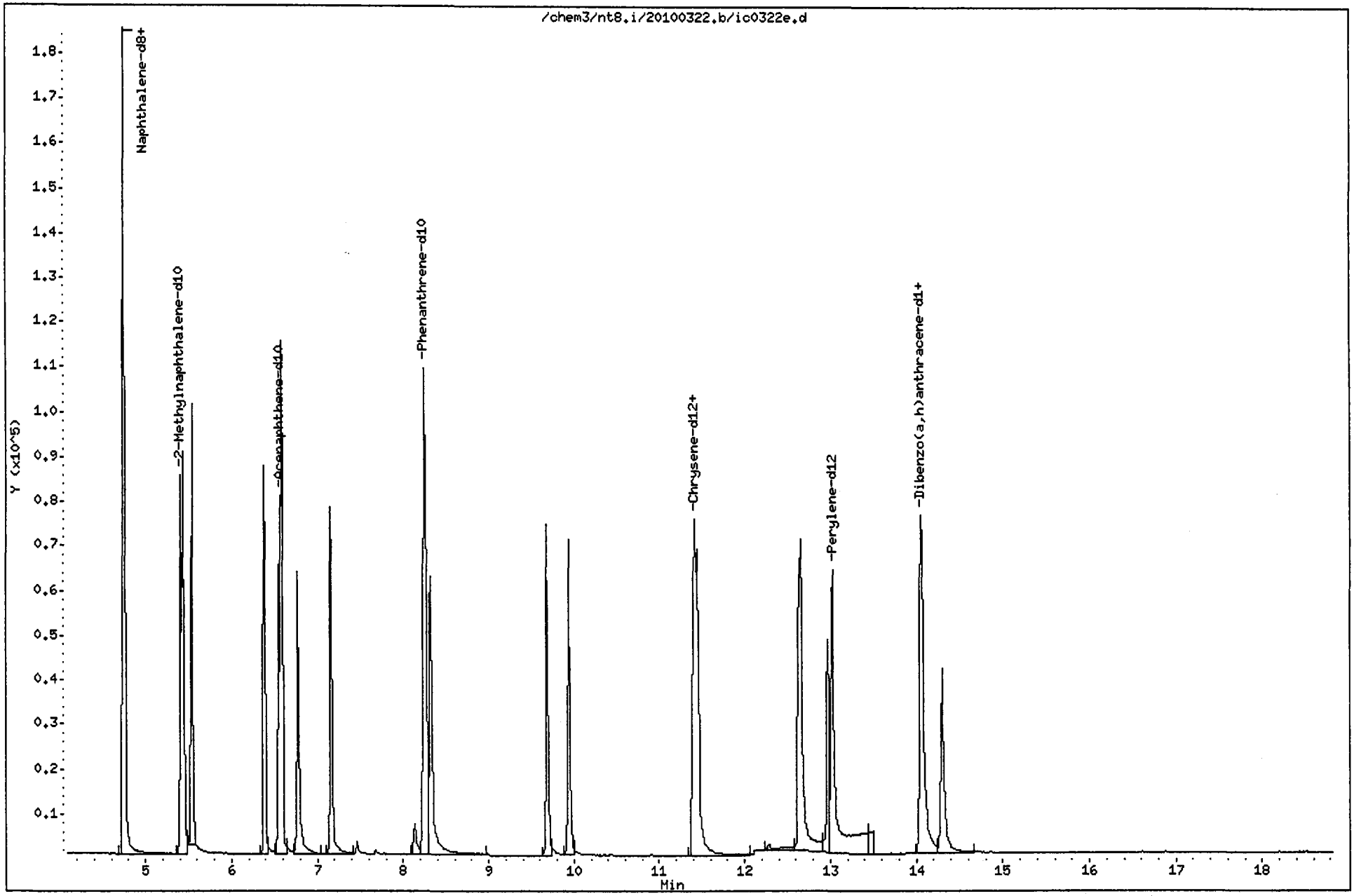
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	4.74	4.24	5.24	4.74	-0.01
11 Acenaphthene-d10	6.56	6.06	7.06	6.56	0.00
18 Phenanthrene-d10	8.24	7.74	8.74	8.24	0.00
29 Chrysene-d12	11.42	10.92	11.92	11.42	0.00
35 Perylene-d12	13.02	12.52	13.52	13.03	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

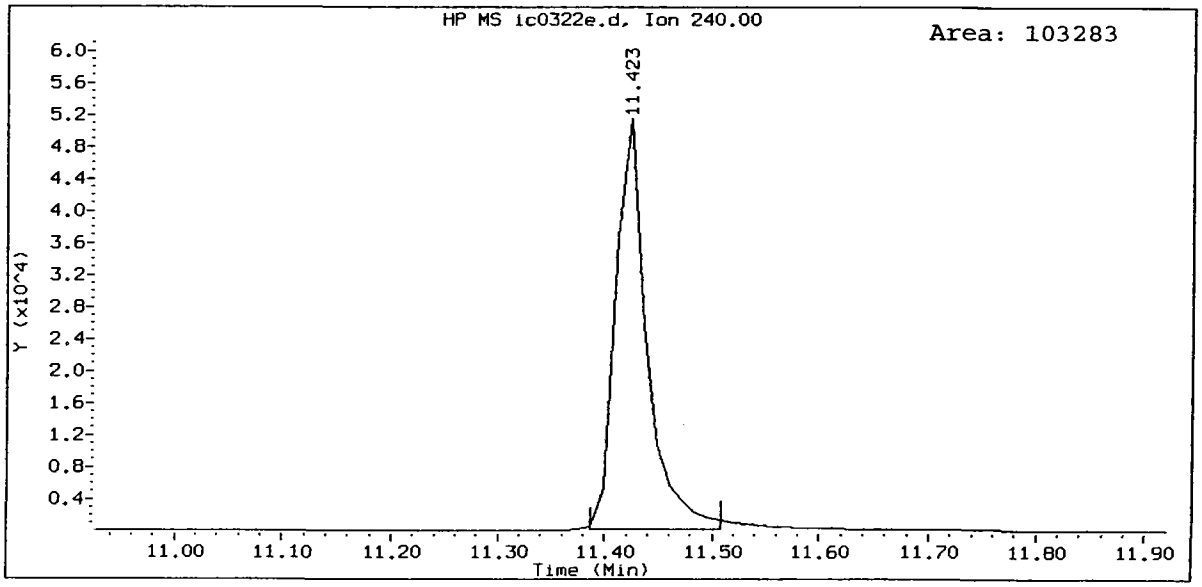
Data File: /chem3/nt8.i/20100322.b/ic0322e.d
Date : 22-MAR-2010 17:12
Client ID:
Sample Info: IC0322E
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i

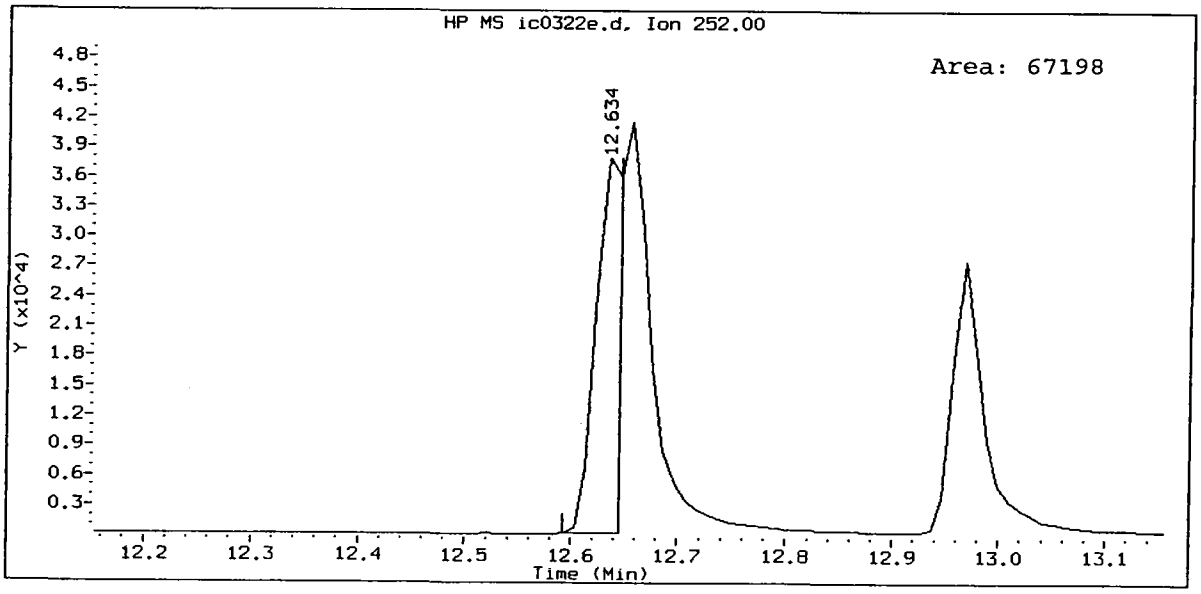
Operator: VTS
Column diameter: 0.25

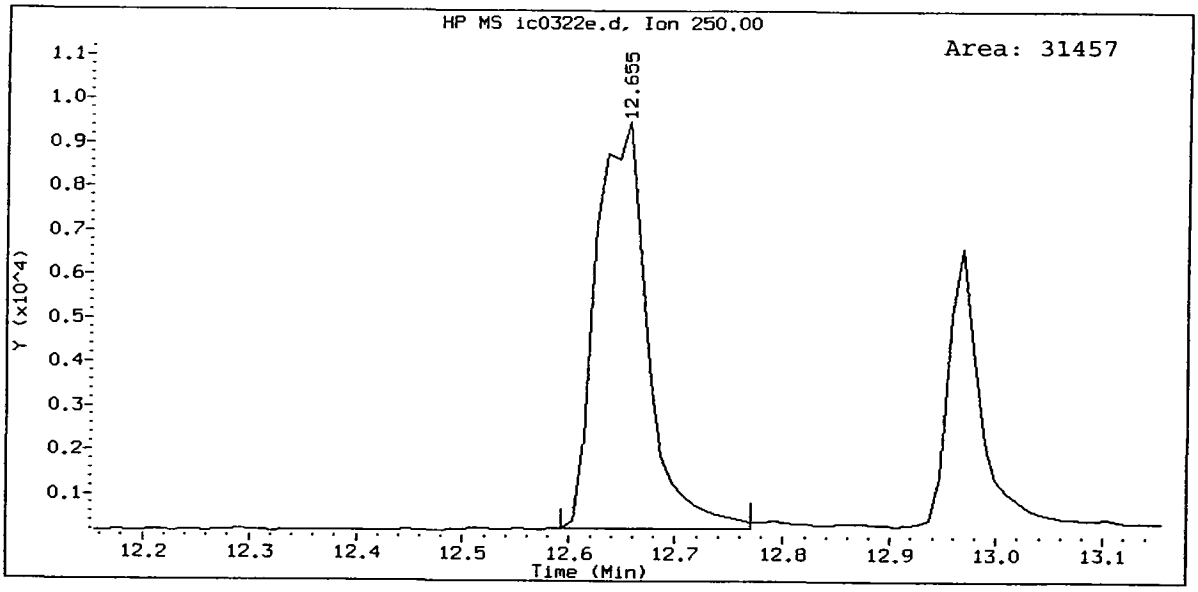


IC0322E, /chem3/nt8.i/20100322.b/ic0322e.d
Chrysene-d12 Amount: 200.00

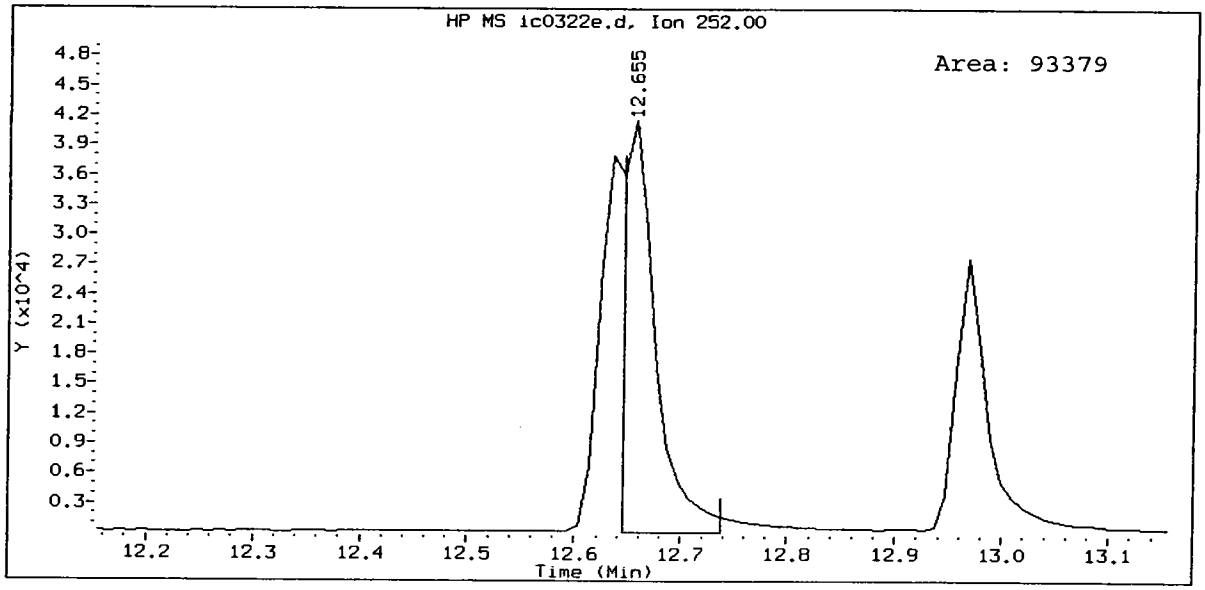


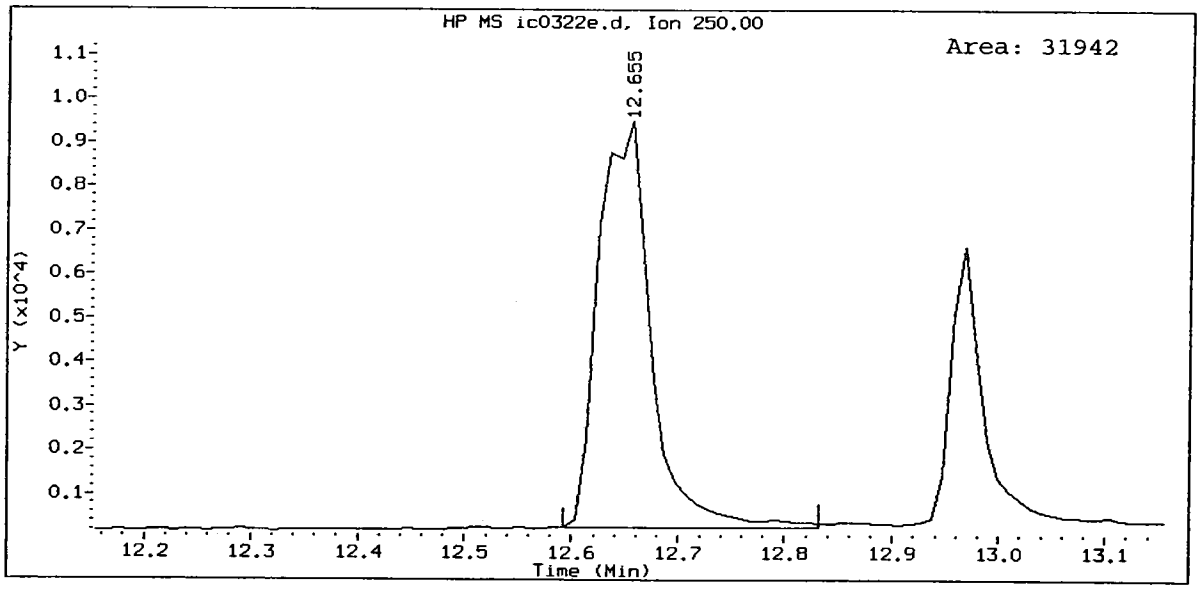
IC0322E, /chem3/nt8.i/20100322.b/ic0322e.d
Benzo(b)fluoranthene Amount: 91.92



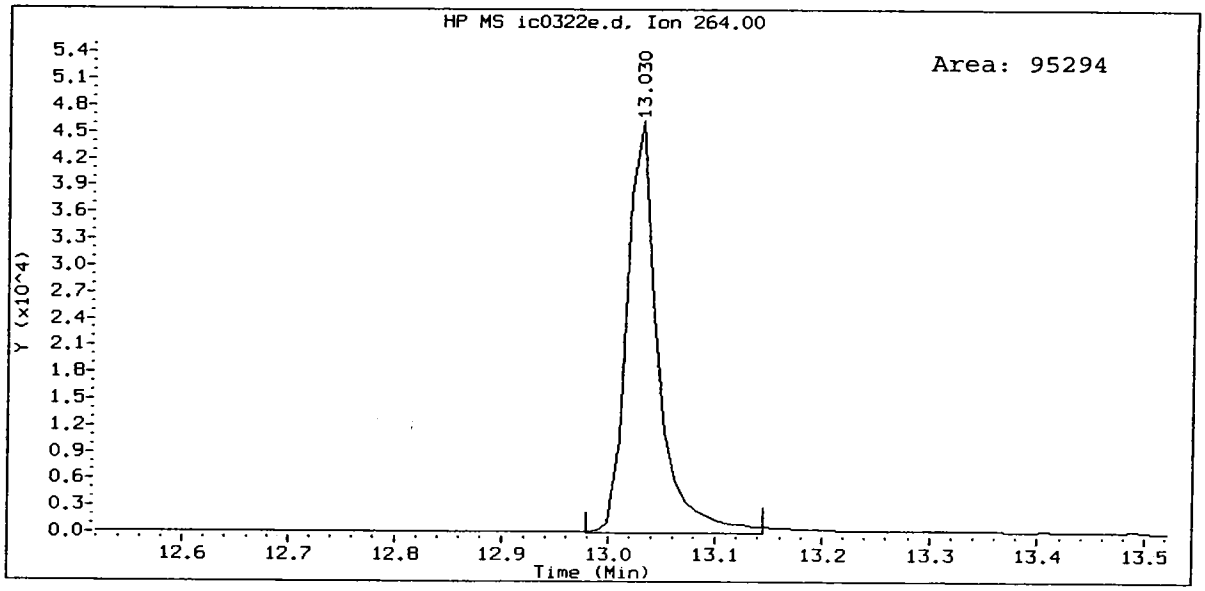


IC0322E, /chem3/nt8.i/20100322.b/ic0322e.d
Benzo(k)fluoranthene Amount: 92.90





IC0322E, /chem3/nt8.i/20100322.b/ic0322e.d
Perylene-d12 Amount: 200.00



YZ 3/24/10

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100322.b/ic0322f.d
Lab Smp Id: IC0322F
Inj Date : 22-MAR-2010 17:35
Operator : VTS Inst ID: nt8.i
Smp Info : IC0322F
Misc Info :
Comment :
Method : /chem3/nt8.i/20100322.b/lowsim.m
Meth Date : 24-Mar-2010 15:22 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	4.742	4.742	(1.000)	196247	200.000	
	5 Naphthalene	128	4.763	4.753	(1.004)	58438	50.0000	52.7(M)
$	6 2-Methylnaphthalene-d10	152	5.408	5.408	(1.140)	33462	50.0000	54.5
	7 2-Methylnaphthalene	142	5.440	5.440	(1.147)	34751	50.0000	51.7
	8 1-Methylnaphthalene	142	5.544	5.544	(1.169)	37289	50.0000	54.1
	10 Acenaphthylene	152	6.379	6.379	(0.972)	52221	50.0000	51.4
*	11 Acenaphthene-d10	164	6.561	6.561	(1.000)	105666	200.000	
	12 Acenaphthene	153	6.585	6.585	(1.004)	33669	50.0000	52.6
	14 Dibenzofuran	168	6.778	6.778	(1.033)	45327	50.0000	52.5
	15 Fluorene	166	7.165	7.153	(1.092)	32895	50.0000	48.6
*	18 Phenanthrene-d10	188	8.241	8.241	(1.000)	155775	200.000	
	19 Phenanthrene	178	8.265	8.265	(1.003)	44343	50.0000	50.0
	20 Anthracene	178	8.325	8.313	(1.010)	56253	50.0000	54.0
	24 Fluoranthene	202	9.680	9.680	(1.175)	44991	50.0000	49.9
	25 Pyrene	202	9.946	9.946	(1.207)	47002	50.0000	50.4
	28 Benzo(a)anthracene	228	11.399	11.399	(1.000)	28374	50.0000	46.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)
*	29 Chrysene-d12	240	11.423	11.423	(1.000)	103111	200.000	(M)
	30 Chrysene	228	11.447	11.447	(1.000)	49132	50.0000	54.8
	32 Benzo(b)fluoranthene	252	12.634	12.655	(0.970)	29476	50.0000	42.8(M)
	33 Benzo(k)fluoranthene	252	12.655	12.655	(0.971)	48270	50.0000	50.9(M)
	34 Benzo(a)pyrene	252	12.968	12.968	(0.995)	28745	50.0000	47.8
*	35 Perylene-d12	264	13.031	13.020	(1.000)	89821	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	14.055	14.055	(1.079)	38369	50.0000	49.2
$	36 Dibenzo(a,h)anthracene-d14	292	14.043	14.043	(1.078)	23214	50.0000	50.6
	38 Dibenzo(a,h)anthracene	278	14.067	14.067	(1.080)	30447	50.0000	49.1
	39 Benzo(g,h,i)perylene	276	14.297	14.297	(1.097)	33828	50.0000	48.8

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: ic0322f.d
Lab Smp Id: IC0322F
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100322.b/lowsim.m
Misc Info:

Calibration Date: 22-MAR-2010
Calibration Time: 17:59

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	196247	-10.31
11 Acenaphthene-d10	119440	59720	238880	105666	-11.53
18 Phenanthrene-d10	183479	91740	366958	155775	-15.10
29 Chrysene-d12	121669	60834	243338	103111	-15.25
35 Perylene-d12	102197	51098	204394	89821	-12.11

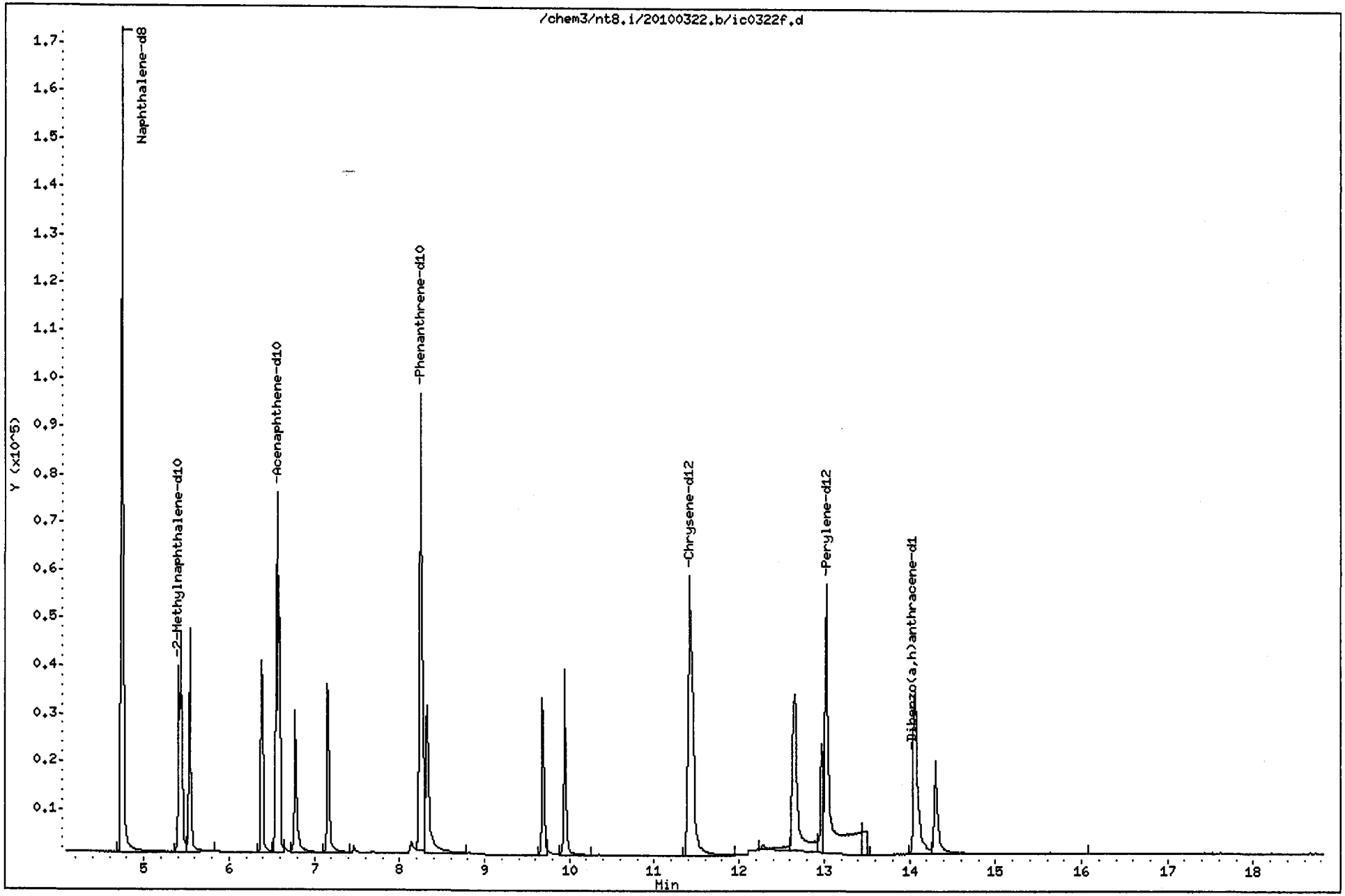
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	4.74	4.24	5.24	4.74	0.00
11 Acenaphthene-d10	6.56	6.06	7.06	6.56	0.00
18 Phenanthrene-d10	8.24	7.74	8.74	8.24	0.00
29 Chrysene-d12	11.42	10.92	11.92	11.42	0.00
35 Perylene-d12	13.02	12.52	13.52	13.03	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

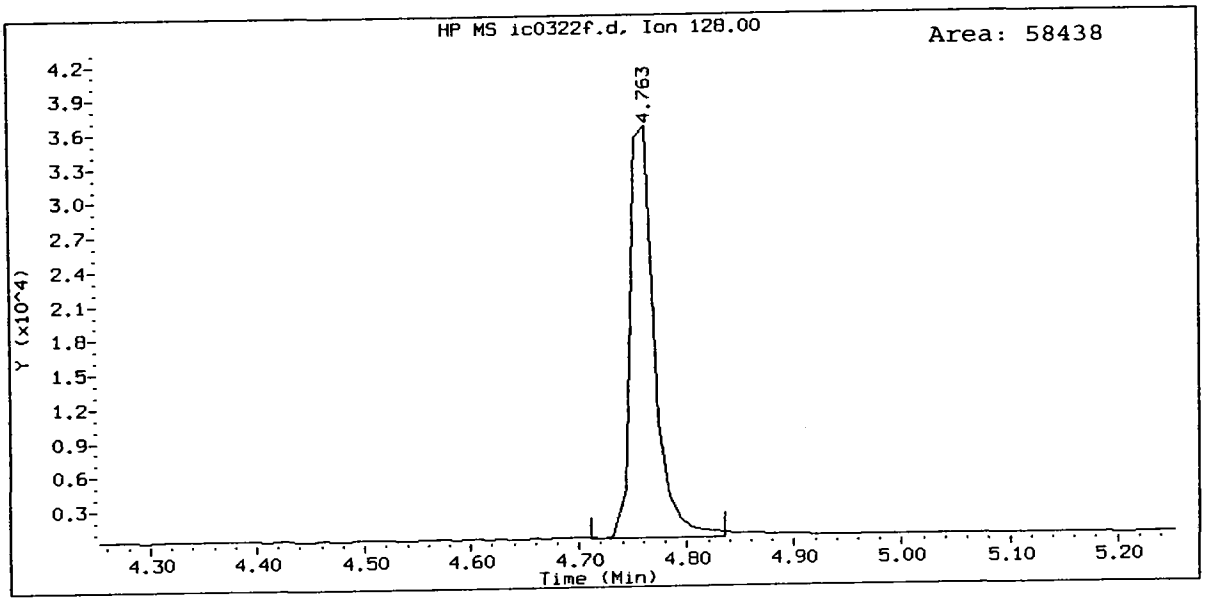
Data File: /chem3/nt8.i/20100322.b/ic0322f.d
Date : 22-MAR-2010 17:35
Client ID:
Sample Info: IC0322F
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i

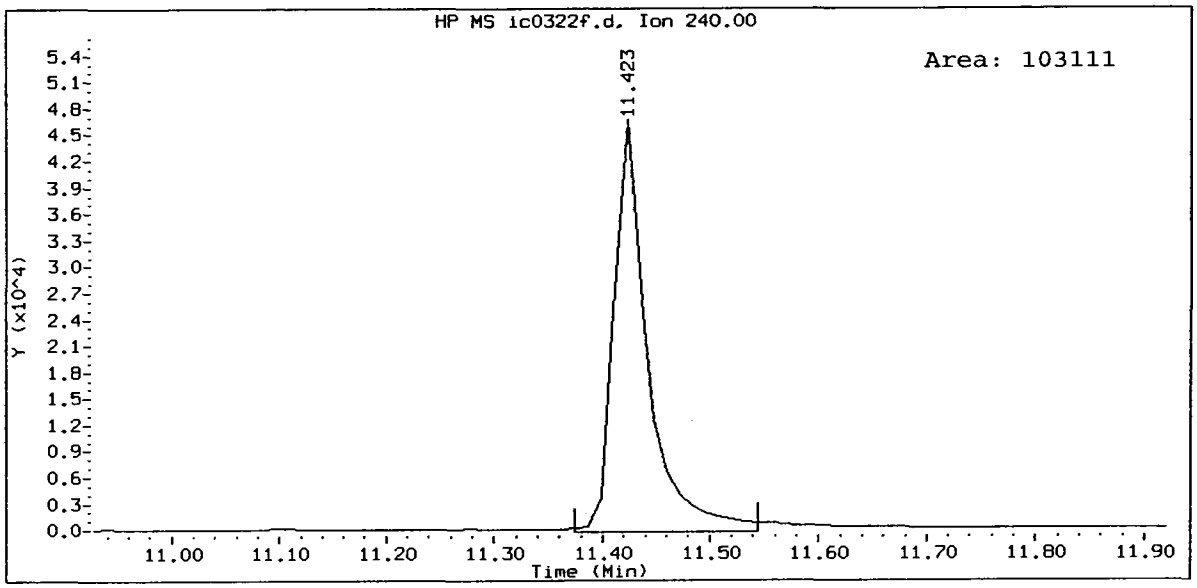
Operator: VTS
Column diameter: 0.25



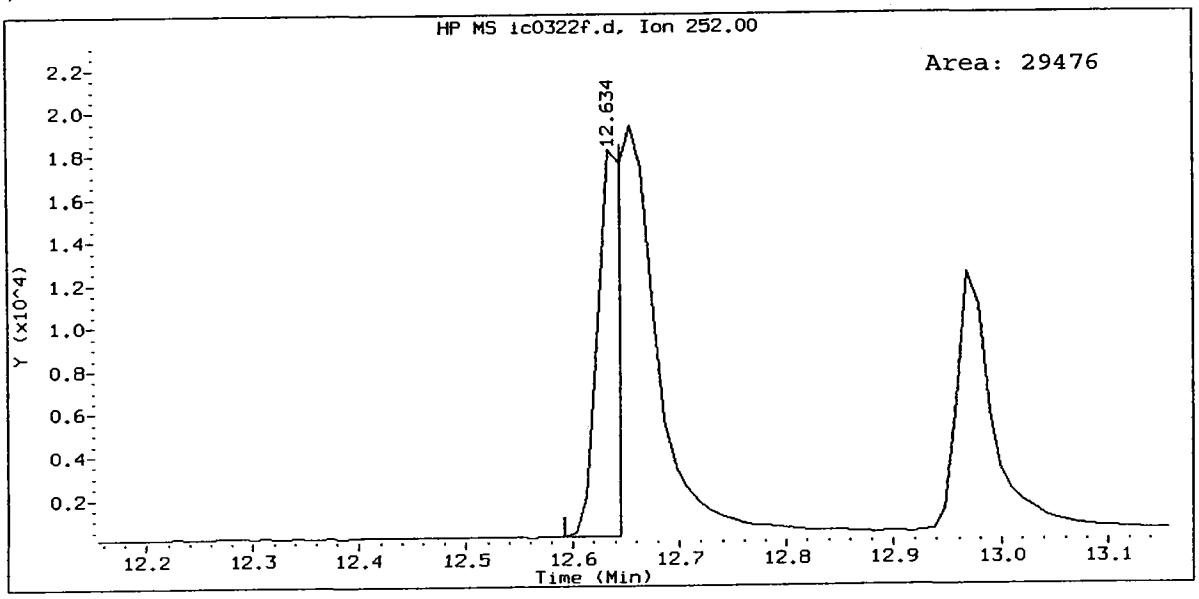
IC0322F, /chem3/nt8.i/20100322.b/ic0322f.d
Naphthalene Amount: 52.66

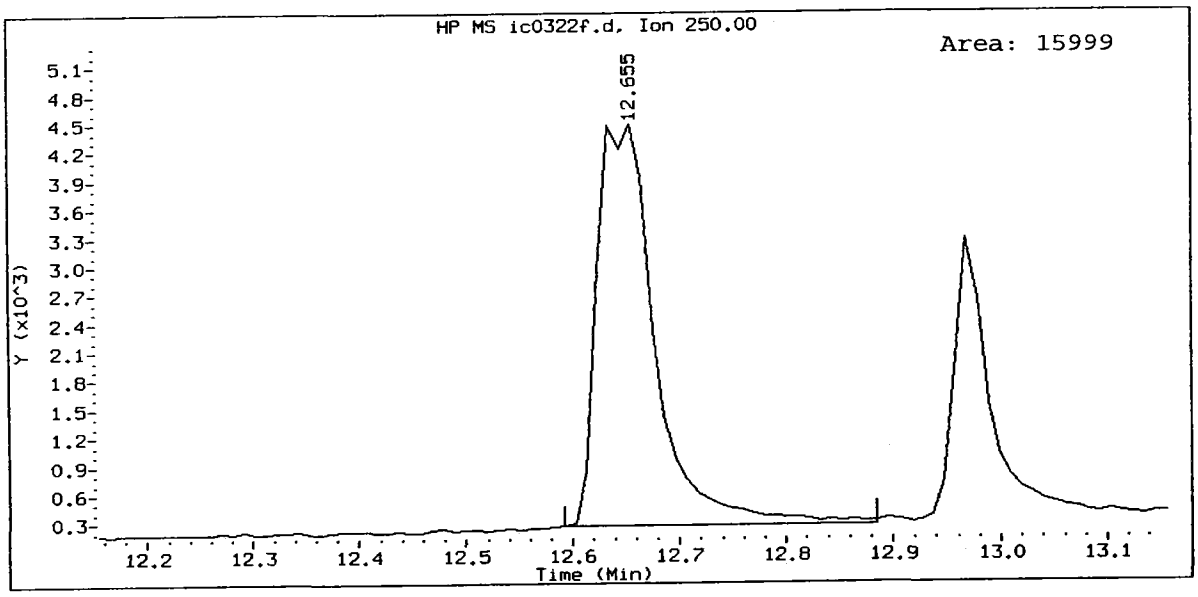


IC0322F, /chem3/nt8.i/20100322.b/ic0322f.d
Chrysene-d12 Amount: 200.00

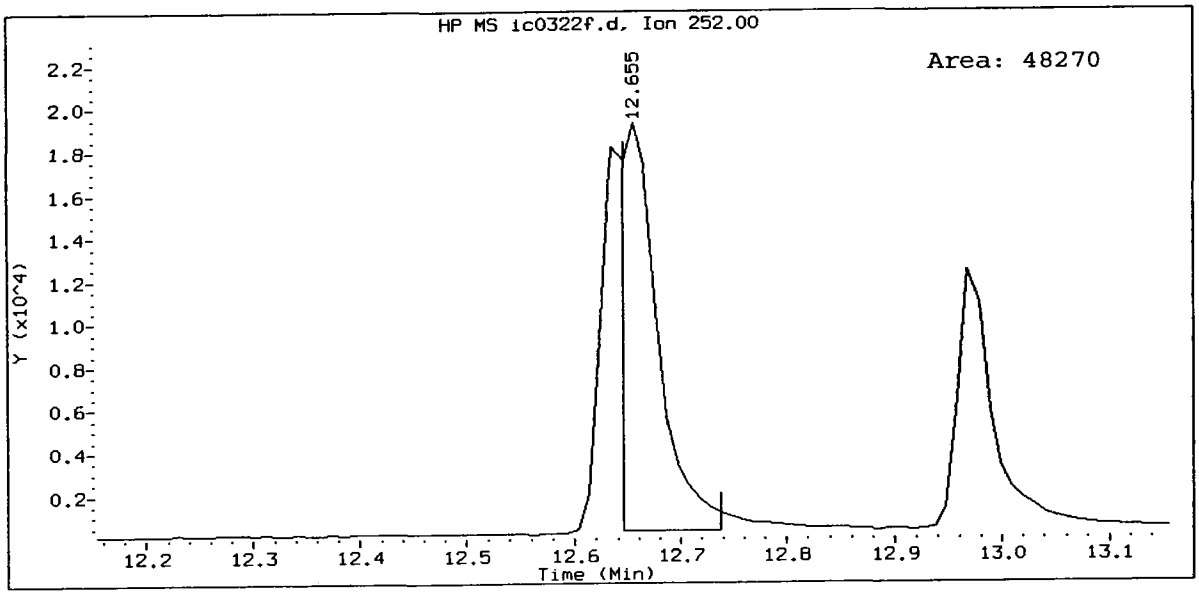


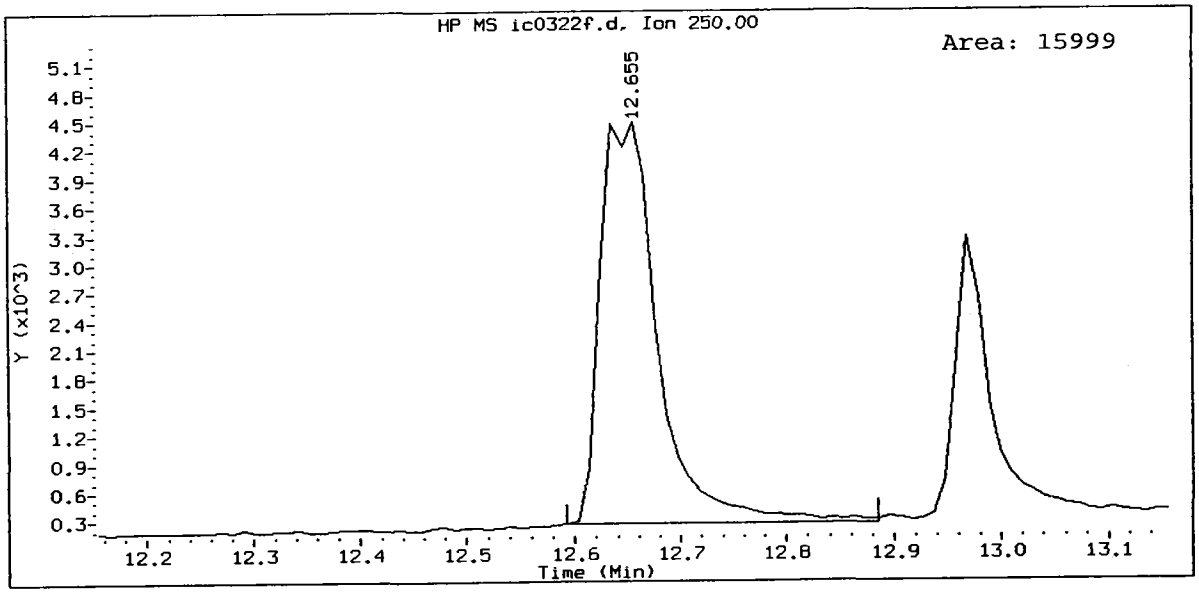
IC0322F, /chem3/nt8.i/20100322.b/ic0322f.d
Benzo(b)fluoranthene Amount: 42.78





IC0322F, /chem3/nt8.i/20100322.b/ic0322f.d
Benzo(k)fluoranthene Amount: 50.95





Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt8.i
Lab File ID: ic0322icv.d
Analysis Type:
Lab Sample ID: IC0322ICV
Method: /chem3/nt8.i/20100322.b/lowsim.m

Injection Date: 22-MAR-2010 17:59
Init. Cal. Date(s): 22-MAR-2010 22-MAR-2010
Init. Cal. Times: 15:37 17:35
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
5 Naphthalene	1.13086	1.07188	0.010	-5.21566	20.00000	Averaged	
$ 6 2-Methylnaphthalene-d10	0.62563	++++	0.010	++++	20.00000	Averaged	<-
7 2-Methylnaphthalene	0.68540	0.66402	0.010	-3.12005	20.00000	Averaged	
8 1-Methylnaphthalene	0.70296	0.62711	0.010	-10.78952	20.00000	Averaged	
10 Acenaphthylene	1.92463	1.84810	0.010	-3.97665	20.00000	Averaged	
12 Acenaphthene	1.21236	1.12190	0.010	-7.46159	20.00000	Averaged	
14 Dibenzofuran	1.63567	1.61780	0.010	-1.09224	20.00000	Averaged	
15 Fluorene	1.28162	1.28541	0.010	0.29596	20.00000	Averaged	
19 Phenanthrene	1.13756	1.05790	0.010	-7.00293	20.00000	Averaged	
20 Anthracene	1.33626	1.16976	0.010	-12.46021	20.00000	Averaged	
24 Fluoranthene	1.15871	1.02583	0.010	-11.46848	20.00000	Averaged	
25 Pyrene	1.19703	1.08690	0.010	-9.20048	20.00000	Averaged	
28 Benzo(a)anthracene	1.19325	1.16664	0.010	-2.22993	20.00000	Averaged	
30 Chrysene	1.73839	1.61602	0.010	-7.03960	20.00000	Averaged	
32 Benzo(b)fluoranthene	1.53422	3.10943	0.010	103	20.00000	Averaged	<-
33 Benzo(k)fluoranthene	2.10968	3.10943	0.010	47.38849	20.00000	Averaged	<-
34 Benzo(a)pyrene	1.33884	1.37486	0.010	2.69050	20.00000	Averaged	
37 Indeno(1,2,3-cd)pyrene	1.73763	1.68606	0.010	-2.96800	20.00000	Averaged	
$ 36 Dibenzo(a,h)anthracene-d14	1.02063	++++	0.010	++++	20.00000	Averaged	<-
38 Dibenzo(a,h)anthracene	1.38053	1.32571	0.010	-3.97094	20.00000	Averaged	
39 Benzo(g,h,i)perylene	1.54224	1.54178	0.010	-0.03019	20.00000	Averaged	

Analytical Resources, Inc.

YE 3/24/10

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100322.b/ic0322icv.d
Lab Smp Id: IC0322ICV
Inj Date : 22-MAR-2010 17:59
Operator : VTS
Smp Info : IC0322ICV
Misc Info :
Comment :
Method : /chem3/nt8.i/20100322.b/lowsim.m
Meth Date : 24-Mar-2010 15:22 yev
Cal Date : 22-MAR-2010 17:35
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 3.50

Inst ID: nt8.i

Quant Type: ISTD
Cal File: ic0322f.d
Continuing Calibration Sample

Compound Sublist: pnalmn.sub

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
* 4 Naphthalene-d8	136	4.742	4.742	(1.000)	200151	200.000	
5 Naphthalene	128	4.753	4.753	(1.002)	268172	250.000	237
$ 6 2-Methylnaphthalene-d10	152	Compound Not Detected.					
7 2-Methylnaphthalene	142	5.440	5.440	(1.147)	166130	250.000	242
8 1-Methylnaphthalene	142	5.544	5.544	(1.169)	156896	250.000	223
10 Acenaphthylene	152	6.379	6.379	(0.972)	245707	250.000	240
* 11 Acenaphthene-d10	164	6.561	6.561	(1.000)	106361	200.000	
12 Acenaphthene	153	6.585	6.585	(1.004)	149158	250.000	231
14 Dibenzofuran	168	6.778	6.778	(1.033)	215089	250.000	247
15 Fluorene	166	7.153	7.153	(1.090)	170897	250.000	251
* 18 Phenanthrene-d10	188	8.241	8.241	(1.000)	169703	200.000	
19 Phenanthrene	178	8.265	8.265	(1.003)	224410	250.000	232
20 Anthracene	178	8.313	8.313	(1.009)	248140	250.000	219
24 Fluoranthene	202	9.680	9.680	(1.175)	217607	250.000	221
25 Pyrene	202	9.946	9.946	(1.207)	230563	250.000	227
28 Benzo(a)anthracene	228	11.399	11.399	(0.998)	154479	250.000	244
* 29 Chrysene-d12	240	11.423	11.423	(1.000)	105931	200.000	
30 Chrysene	228	11.447	11.447	(1.002)	213983	250.000	232
32 Benzo(b)fluoranthene	252	12.655	12.655	(1.000)	335702	250.000	507 218
33 Benzo(k)fluoranthene	252	12.655	12.655	(1.000)	335702	250.000	368 218
34 Benzo(a)pyrene	252	12.968	12.968	(1.000)	148433	250.000	257
* 35 Perylene-d12	264	13.020	13.020	(1.000)	86370	200.000	(M)
37 Indeno(1,2,3-cd)pyrene	276	14.055	14.055	(1.000)	182031	250.000	243
$ 36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
38 Dibenzo(a,h)anthracene	278	14.067	14.067	(1.000)	143127	250.000	240
39 Benzo(g,h,i)perylene	276	14.297	14.297	(1.000)	166454	250.000	250

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: ic0322icv.d
Lab Smp Id: IC0322ICV
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100322.b/lowsim.m
Misc Info:

Calibration Date: 22-MAR-2010
Calibration Time: 15:37
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

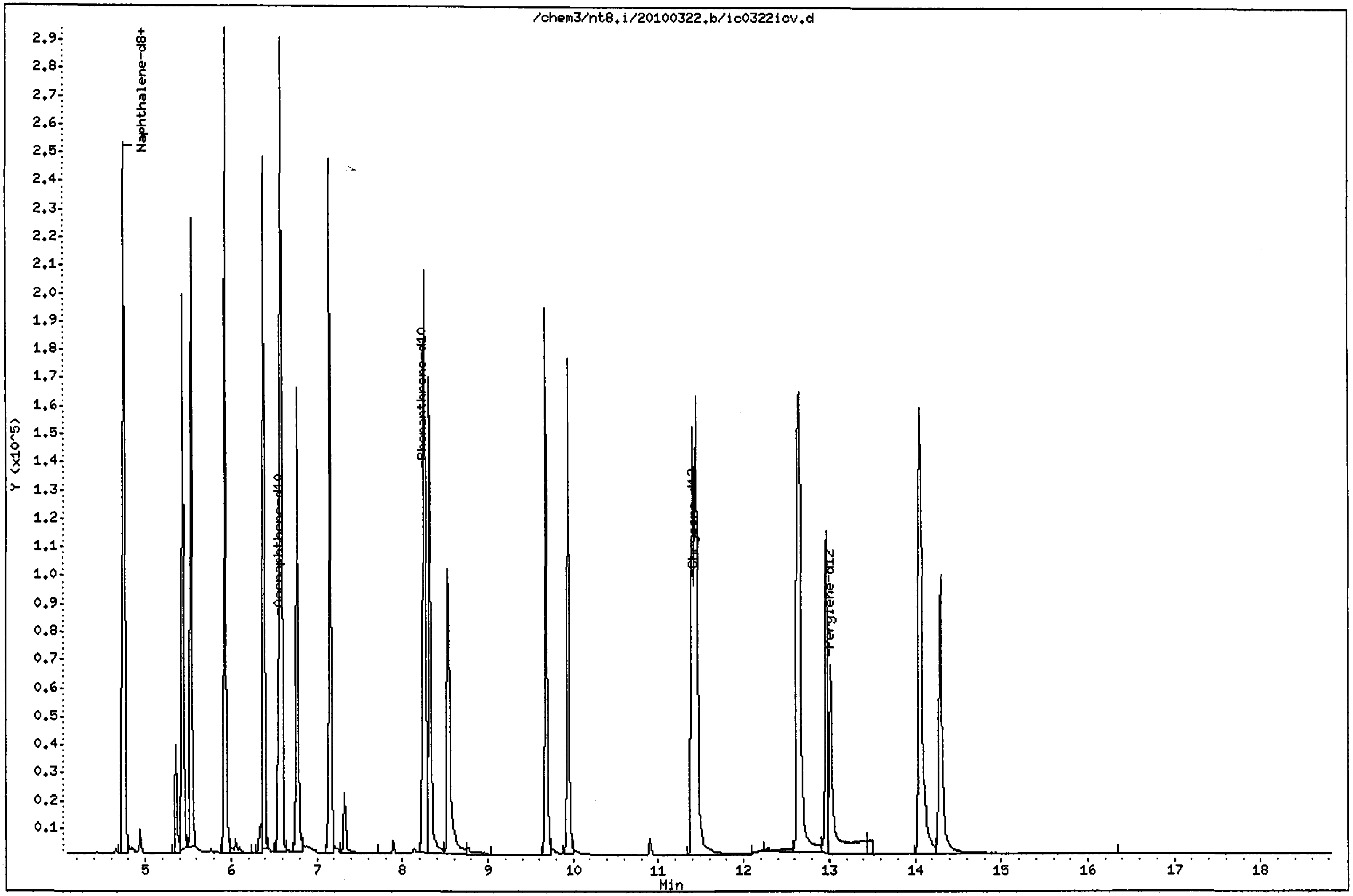
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	200151	-8.53
11 Acenaphthene-d10	119440	59720	238880	106361	-10.95
18 Phenanthrene-d10	183479	91740	366958	169703	-7.51
29 Chrysene-d12	121669	60834	243338	105931	-12.94
35 Perylene-d12	102197	51098	204394	86370	-15.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	4.74	4.24	5.24	4.74	0.00
11 Acenaphthene-d10	6.56	6.06	7.06	6.56	0.00
18 Phenanthrene-d10	8.24	7.74	8.74	8.24	0.00
29 Chrysene-d12	11.42	10.92	11.92	11.42	0.00
35 Perylene-d12	13.02	12.52	13.52	13.02	0.00

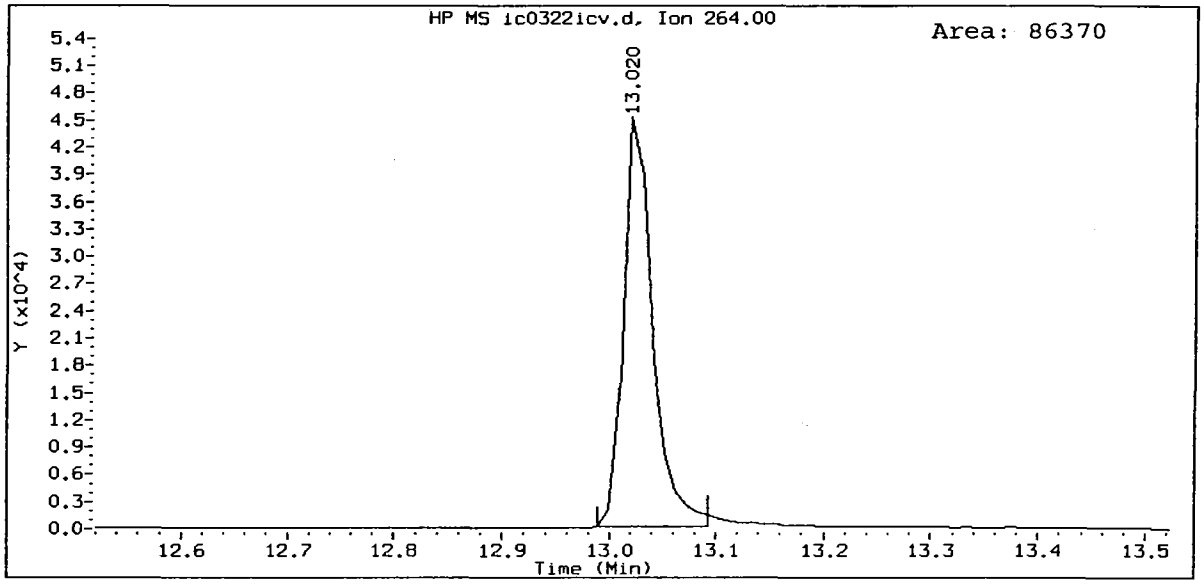
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt8.i/20100322.b/ic0322icv.d
Date : 22-MAR-2010 17:59
Client ID:
Sample Info: IC0322ICV
Column phase: ZB-5

Instrument: nt8.i
Operator: VTS
Column diameter: 0.25



IC0322ICV, /chem3/nt8.i/20100322.b/ic0322icv.d
Perylene-d12 Amount: 200.00



7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QQ20 Project: LORA LAKE APARTMENTS

Instrument ID: NT8 Cont. Calib. Date: 04/02/10

Init. Calib. Date: 03/22/10 Cont. Calib. Time: 1354

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
Naphthalene	1.131	1.105	0.700	AVRG	-2.3	
2-Methylnaphthalene	0.685	0.767	0.400	AVRG	12.0	
Acenaphthylene	1.924	1.956	0.900	AVRG	1.7	
Acenaphthene	1.212	1.190	0.900	AVRG	-1.8	
Dibenzofuran	1.636	1.611	0.800	AVRG	-1.5	
Fluorene	1.282	1.346	0.900	AVRG	5.0	
Phenanthrene	1.138	1.211	0.700	AVRG	6.4	
Anthracene	1.336	1.191	0.700	AVRG	-10.8	
Fluoranthene	1.158	1.201	0.600	AVRG	3.7	
Pyrene	1.197	1.245	0.600	AVRG	4.0	
Benzo(a)anthracene	1.193	1.414	0.800	AVRG	18.5	
Chrysene	1.738	1.368	0.700	AVRG	-21.3	<-
Benzo(b)fluoranthene	1.534	1.738	0.700	AVRG	13.3	
Benzo(k)fluoranthene	2.110	1.703	0.700	AVRG	-19.3	
Benzo(a)pyrene	1.339	1.264	0.700	AVRG	-5.6	
Indeno(1,2,3-cd)pyrene	1.738	1.557	0.500	AVRG	-10.4	
Dibenzo(a,h)anthracene	1.380	1.263	0.400	AVRG	-8.5	
Benzo(g,h,i)perylene	1.542	1.350	0.500	AVRG	-12.4	
1-Methylnaphthalene	0.703	0.753	0.010	AVRG	7.1	
2-Methylnaphthalene-d10	0.626	0.696	0.010	AVRG	11.2	
Dibenzo(a,h)anthracene-d14	1.021	0.910	0.010	AVRG	-10.9	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt8.i Injection Date: 02-APR-2010 13:54
Lab File ID: cc0402a.d Init. Cal. Date(s): 22-MAR-2010 22-MAR-2010
Analysis Type: Init. Cal. Times: 15:37 17:35
Lab Sample ID: CC0402A Quant Type: ISTD
Method: /chem3/nt8.i/20100402A.b/lowsim.m

COMPOUND	RRF / AMOUNT	RF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
5 Naphthalene	1.13086	1.10538	0.010	-2.25345	20.00000	Averaged	
$ 6 2-Methylnaphthalene-d10	0.62563	0.69655	0.010	11.33496	20.00000	Averaged	
7 2-Methylnaphthalene	0.68540	0.76667	0.010	11.85617	20.00000	Averaged	
8 1-Methylnaphthalene	0.70296	0.75286	0.010	7.09941	20.00000	Averaged	
10 Acenaphthylene	1.92463	1.95581	0.010	1.62003	20.00000	Averaged	
12 Acenaphthene	1.21236	1.19032	0.010	-1.81795	20.00000	Averaged	
14 Dibenzofuran	1.63567	1.61092	0.010	-1.51280	20.00000	Averaged	
15 Fluorene	1.28162	1.34588	0.010	5.01412	20.00000	Averaged	
19 Phenanthrene	1.13756	1.21075	0.010	6.43446	20.00000	Averaged	
20 Anthracene	1.33626	1.19068	0.010	-10.89495	20.00000	Averaged	
24 Fluoranthene	1.15871	1.20145	0.010	3.68818	20.00000	Averaged	
25 Pyrene	1.19703	1.24480	0.010	3.99063	20.00000	Averaged	
28 Benzo(a)anthracene	1.19325	1.41442	0.010	18.53545	20.00000	Averaged	
30 Chrysene	1.73839	1.36812	0.010	-21.29980	20.00000	Averaged	<-
32 Benzo(b)fluoranthene	1.53422	1.73855	0.010	13.31786	20.00000	Averaged	
33 Benzo(k)fluoranthene	2.10968	1.70297	0.010	-19.27859	20.00000	Averaged	
34 Benzo(a)pyrene	1.33884	1.26374	0.010	-5.60888	20.00000	Averaged	
37 Indeno(1,2,3-cd)pyrene	1.73763	1.55672	0.010	-10.41129	20.00000	Averaged	
$ 36 Dibenzo(a,h)anthracene-d14	1.02063	0.91014	0.010	-10.82615	20.00000	Averaged	
38 Dibenzo(a,h)anthracene	1.38053	1.26283	0.010	-8.52594	20.00000	Averaged	
39 Benzo(g,h,i)perylene	1.54224	1.35057	0.010	-12.42792	20.00000	Averaged	

YZ 04/03/10

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/cc0402a.d
Lab Smp Id: CC0402A
Inj Date : 02-APR-2010 13:54
Operator : VTS Inst ID: nt8.i
Smp Info : CC0402A
Misc Info :
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	5.377	5.377	(1.000)	227349	200.000	
	5 Naphthalene	128	5.398	5.398	(1.004)	314133	250.000	244
$	6 2-Methylnaphthalene-d10	152	6.095	6.095	(1.134)	197949	250.000	278
	7 2-Methylnaphthalene	142	6.116	6.116	(1.137)	217876	250.000	280
	8 1-Methylnaphthalene	142	6.241	6.241	(1.161)	213953	250.000	268
	10 Acenaphthylene	152	7.125	7.125	(0.975)	332816	250.000	254
*	11 Acenaphthene-d10	164	7.306	7.306	(1.000)	136134	200.000	
	12 Acenaphthene	153	7.331	7.331	(1.003)	202554	250.000	245
	14 Dibenzofuran	168	7.524	7.524	(1.030)	274127	250.000	246
	15 Fluorene	166	7.923	7.923	(1.084)	229025	250.000	263
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	216975	200.000	
	19 Phenanthrene	178	9.059	9.059	(1.003)	328379	250.000	266
	20 Anthracene	178	9.108	9.108	(1.008)	322934	250.000	223
	24 Fluoranthene	202	10.499	10.499	(1.162)	325855	250.000	259
	25 Pyrene	202	10.777	10.777	(1.193)	337614	250.000	260
	28 Benzo(a)anthracene	228	12.242	12.242	(0.998)	227400	250.000	296
*	29 Chrysene-d12	240	12.266	12.266	(1.000)	128618	200.000	
	30 Chrysene	228	12.290	12.290	(1.002)	219956	250.000	197(M)
	32 Benzo(b)fluoranthene	252	13.485	13.485	(0.971)	235641	250.000	283
	33 Benzo(k)fluoranthene	252	13.506	13.506	(0.973)	230818	250.000	202
	34 Benzo(a)pyrene	252	13.819	13.819	(0.995)	171286	250.000	236
*	35 Perylene-d12	264	13.882	13.882	(1.000)	108431	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	15.161	15.161	(1.092)	210996	250.000	224
$	36 Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	123359	250.000	223
	38 Dibenzo(a,h)anthracene	278	15.173	15.173	(1.093)	171162	250.000	229
	39 Benzo(g,h,i)perylene	276	15.524	15.524	(1.118)	183055	250.000	219

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: cc0402a.d
Lab Smp Id: CC0402A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info:

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	227349	3.90
11 Acenaphthene-d10	119440	59720	238880	136134	13.98
18 Phenanthrene-d10	183479	91740	366958	216975	18.26
29 Chrysene-d12	121669	60834	243338	128618	5.71
35 Perylene-d12	102197	51098	204394	108431	6.10

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.38	0.00
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.27	0.00
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

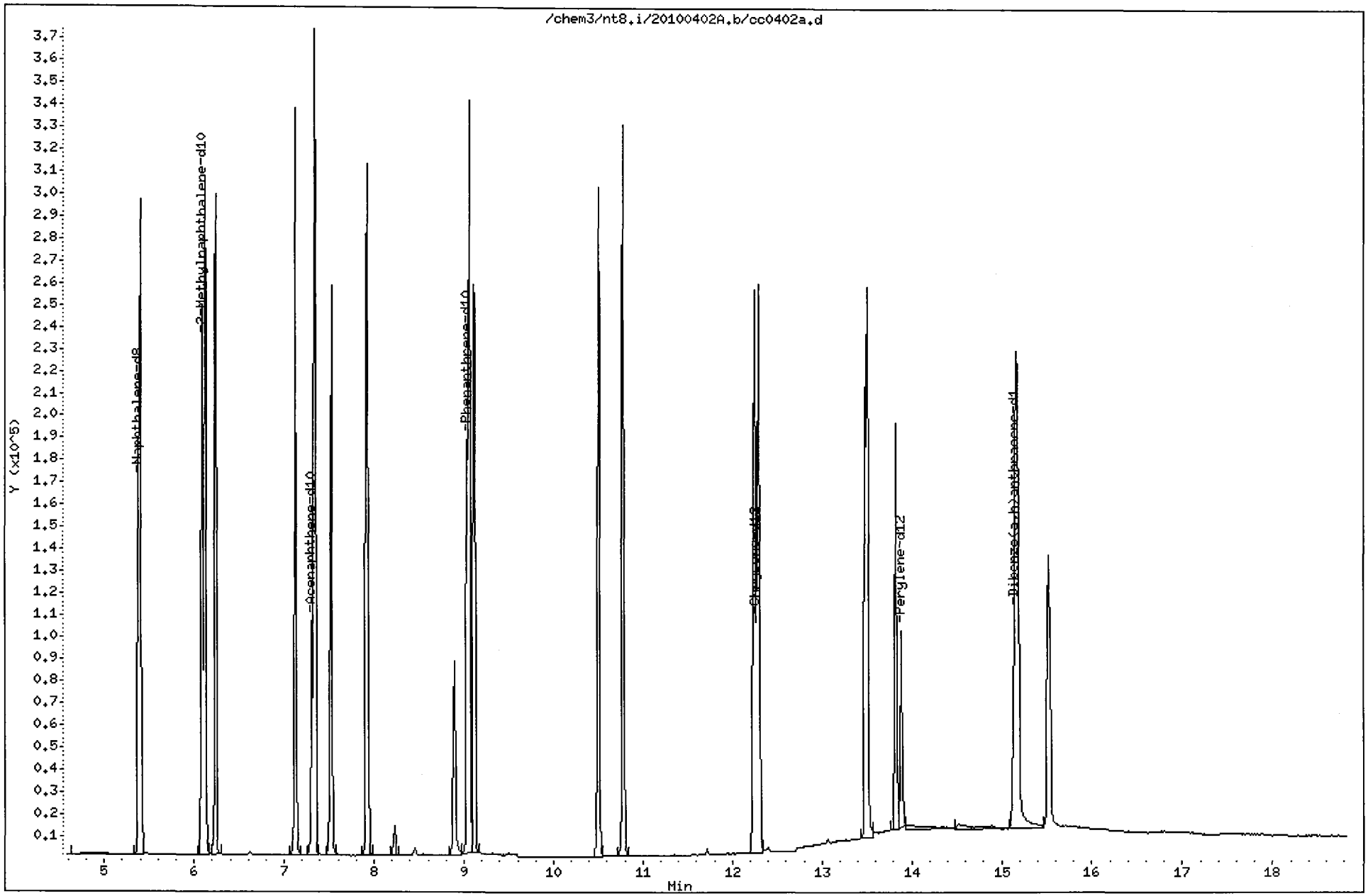
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt8.i/20100402A.b/cc0402a.d
Date : 02-APR-2010 13:54
Client ID:
Sample Info: CC0402A

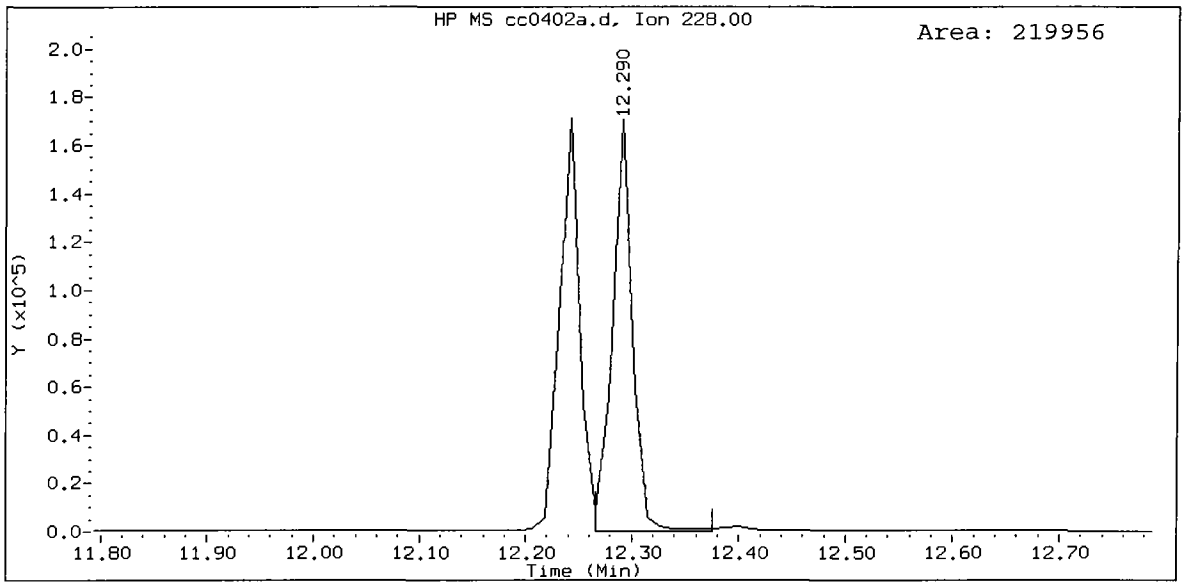
Instrument: nt8.i

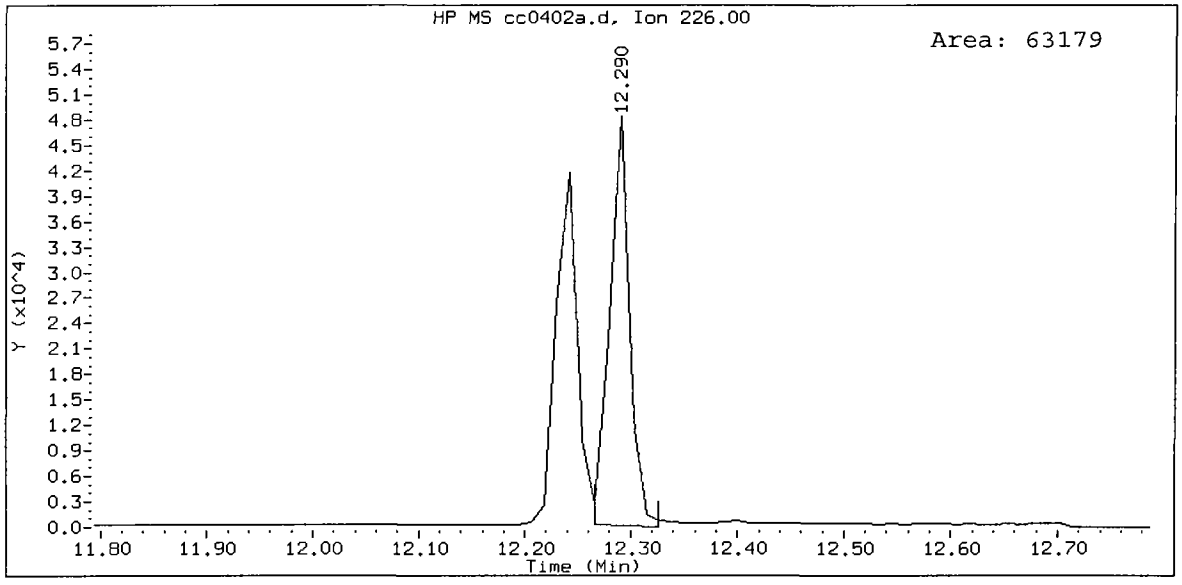
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5



CC0402A, /chem3/nt8.i/20100402A.b/cc0402a.d
Chrysene Amount: 196.75





SIM Semivolatile Analysis
QC Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Data File: /chem3/nt8.i/20100322.b/df0322a.d

Date : 22-MAR-2010 15:21

Client ID:

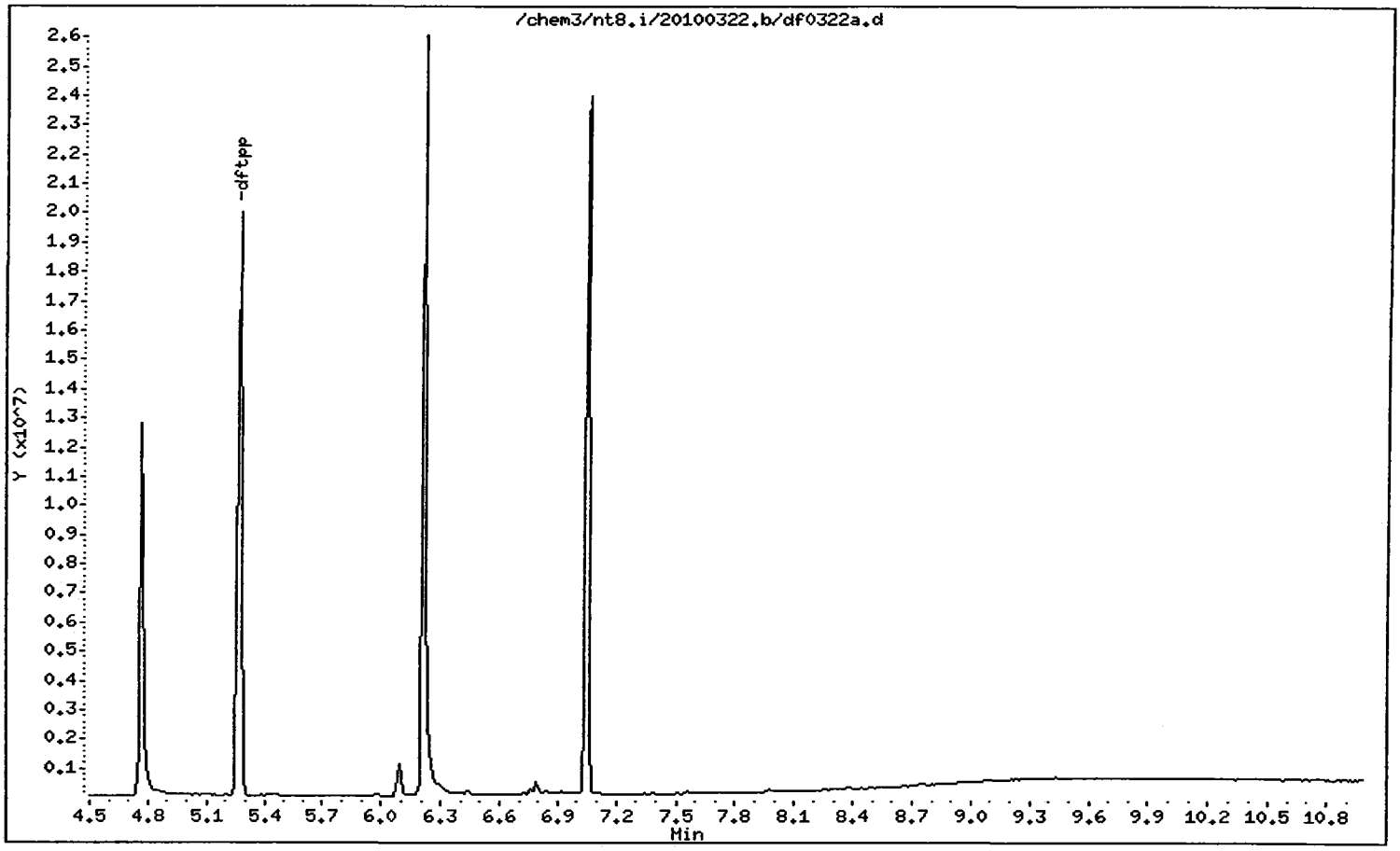
Instrument: nt8.i

Sample Info: DF0322A

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem3/nt8.i/20100322.b/df0322a.d

Date : 22-MAR-2010 15:21

Client ID:

Instrument: nt8.i

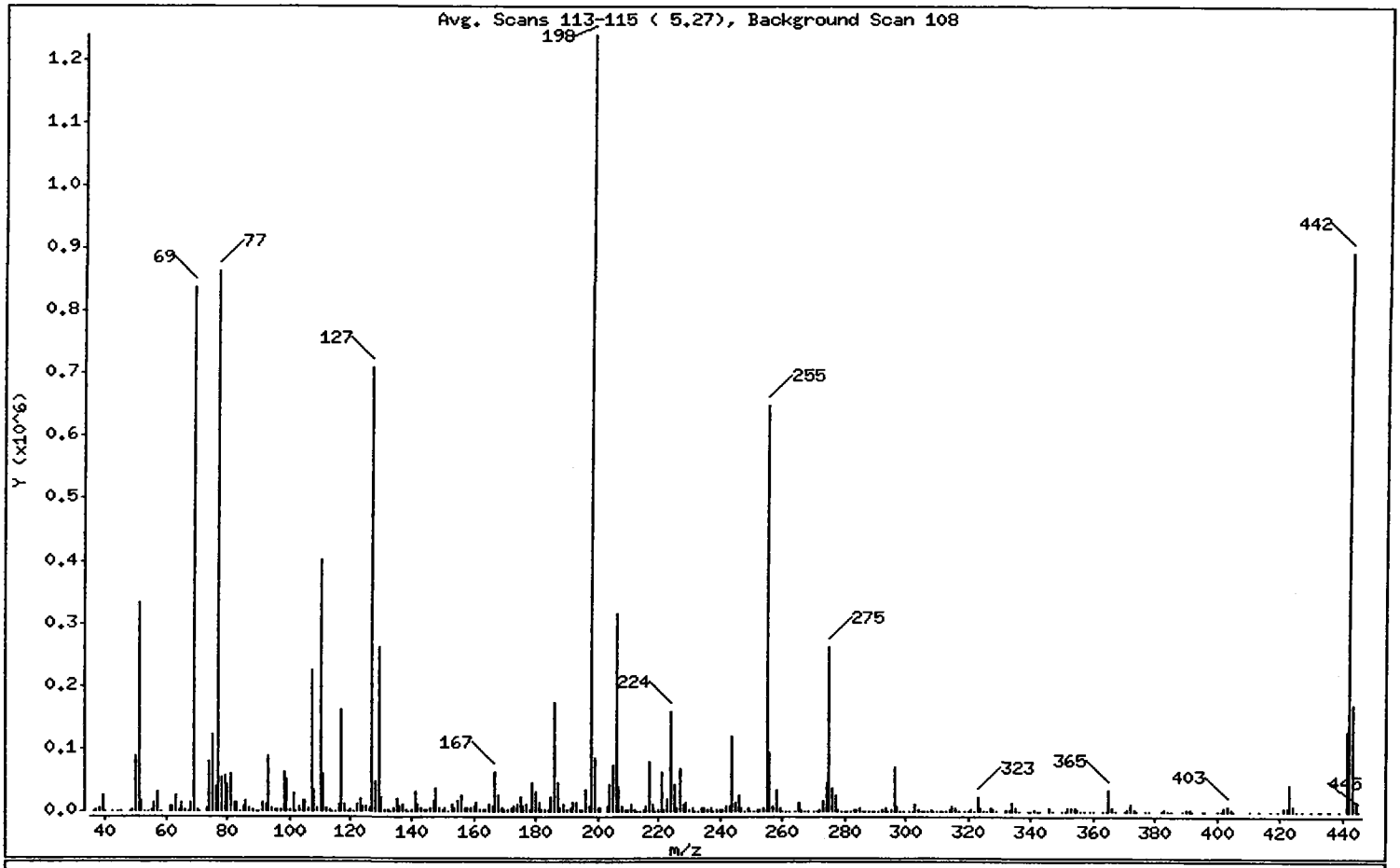
Sample Info: DF0322A

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	26.99
68	Less than 2.00% of mass 69	1.22 (1.81)
69	Mass 69 relative abundance	67.49
70	Less than 2.00% of mass 69	0.28 (0.41)
127	10.00 - 80.00% of mass 198	57.18
197	Less than 2.00% of mass 198	0.69
199	5.00 - 9.00% of mass 198	6.91
275	10.00 - 60.00% of mass 198	21.19
365	Greater than 1.00% of mass 198	2.84
441	0.01 - 24.00% of mass 442	10.27 (14.22)
442	50.00 - 200.00% of mass 198	72.25
443	15.00 - 24.00% of mass 442	13.81 (19.11)

Data File: /chem3/nt8.i/20100322.b/df0322a.d

Date : 22-MAR-2010 15:21

Client ID:

Instrument: nt8.i

Sample Info: DF0322A

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0322a.d

Spectrum: Avg. Scans 113-115 (5.27), Background Scan 108

Location of Maximum: 198.00

Number of points: 353

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	430	132.00	2565	222.00	1747	314.00	4245
37.00	1435	133.00	916	223.00	18536	315.00	7777
38.00	4744	134.00	6317	224.00	160384	316.00	4791
39.00	26688	135.00	19536	225.00	41480	317.00	955
40.00	840	136.00	9102	226.00	4655	319.00	103
42.00	199	137.00	11370	227.00	68896	320.00	311
44.00	801	138.00	2837	228.00	10425	321.00	2366
45.00	912	139.00	1326	229.00	13328	322.00	1396
48.00	463	140.00	3502	230.00	2114	323.00	23360
49.00	2168	141.00	31776	231.00	5543	324.00	5006
50.00	88760	142.00	11171	232.00	893	325.00	146
51.00	334464	143.00	6012	233.00	1386	326.00	1203
52.00	17976	144.00	2066	234.00	4526	327.00	4823
53.00	1124	145.00	2113	235.00	5340	328.00	1488
54.00	10	146.00	5268	236.00	3365	329.00	565
55.00	1973	147.00	15779	237.00	5310	332.00	1617
56.00	13845	148.00	38352	238.00	923	333.00	1979
57.00	31640	149.00	5435	239.00	2203	334.00	15011
58.00	975	150.00	2085	240.00	2063	335.00	5178
61.00	7619	151.00	6136	241.00	2982	336.00	385
62.00	9485	152.00	583	242.00	8119	339.00	638
63.00	25344	153.00	10477	243.00	8179	340.00	270
64.00	3915	154.00	6507	244.00	120480	341.00	2696
65.00	13622	155.00	17168	245.00	14830	342.00	962
66.00	1570	156.00	24864	246.00	26224	343.00	109
67.00	1358	157.00	5373	247.00	5108	346.00	5782
68.00	15144	158.00	4874	248.00	1143	347.00	919
69.00	836288	159.00	4607	249.00	5709	350.00	340
70.00	3413	160.00	9603	250.00	861	351.00	415
71.00	349	161.00	15254	251.00	1374	352.00	6460
73.00	4913	162.00	4109	252.00	2259	353.00	4965
74.00	78832	163.00	1612	253.00	2841	354.00	6874
75.00	122064	164.00	2333	254.00	6910	355.00	1605
76.00	39824	165.00	10895	255.00	648192	356.00	142
77.00	863552	166.00	8906	256.00	93936	357.00	84

Data File: /chem3/nt8.i/20100322.b/df0322a.d

Date : 22-MAR-2010 15:21

Client ID:

Instrument: nt8.i

Sample Info: DF0322A

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0322a.d
Spectrum: Avg. Scans 113-115 (5.27), Background Scan 108
Location of Maximum: 198.00
Number of points: 353

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	55272	167.00	62360	257.00	7135	359.00	598
79.00	56816	168.00	26496	258.00	35048	360.00	151
80.00	44080	169.00	5249	259.00	6565	363.00	350
81.00	60160	170.00	2432	260.00	1317	364.00	139
82.00	14525	171.00	2814	261.00	1300	365.00	35216
83.00	15338	172.00	6199	262.00	254	366.00	5681
84.00	1316	173.00	7549	264.00	327	367.00	426
85.00	8177	174.00	12707	265.00	14222	370.00	1053
86.00	15944	175.00	22128	266.00	2009	371.00	2143
87.00	6313	176.00	7128	267.00	684	372.00	12467
88.00	3384	177.00	10865	268.00	794	373.00	3399
89.00	530	178.00	3647	270.00	1067	374.00	90
90.00	392	179.00	45984	271.00	1015	377.00	505
91.00	13064	180.00	32632	272.00	1544	378.00	251
92.00	11909	181.00	14851	273.00	18232	382.00	130
93.00	86984	182.00	2689	274.00	45200	383.00	3279
94.00	5134	183.00	2159	275.00	262592	384.00	915
95.00	2326	184.00	3610	276.00	35872	385.00	300
96.00	3321	185.00	22312	277.00	25448	389.00	141
97.00	1468	186.00	174016	278.00	3817	390.00	1711
98.00	63104	187.00	46592	279.00	816	391.00	1476
99.00	51928	188.00	4669	280.00	109	392.00	1067
100.00	3835	189.00	10497	281.00	243	395.00	250
101.00	29536	190.00	2187	282.00	816	396.00	155
102.00	1012	191.00	5562	283.00	3063	400.00	186
103.00	9598	192.00	13283	284.00	1744	401.00	534
104.00	18008	193.00	15037	285.00	4371	402.00	4662
105.00	17104	194.00	3706	286.00	575	403.00	7230
106.00	4800	195.00	1956	287.00	147	404.00	2346
107.00	223808	196.00	34800	288.00	593	405.00	622
108.00	33176	197.00	8489	289.00	939	410.00	235
109.00	6044	198.00	1239040	290.00	620	413.00	152
110.00	400640	199.00	85640	291.00	798	417.00	96
111.00	59912	200.00	5929	292.00	1542	419.00	115
112.00	6235	201.00	5688	293.00	5126	421.00	6004

Date : 22-MAR-2010 15:21

Client ID:

Instrument: nt8.i

Sample Info: DF0322A

Operator: VTS

Column phase: ZB-5msi

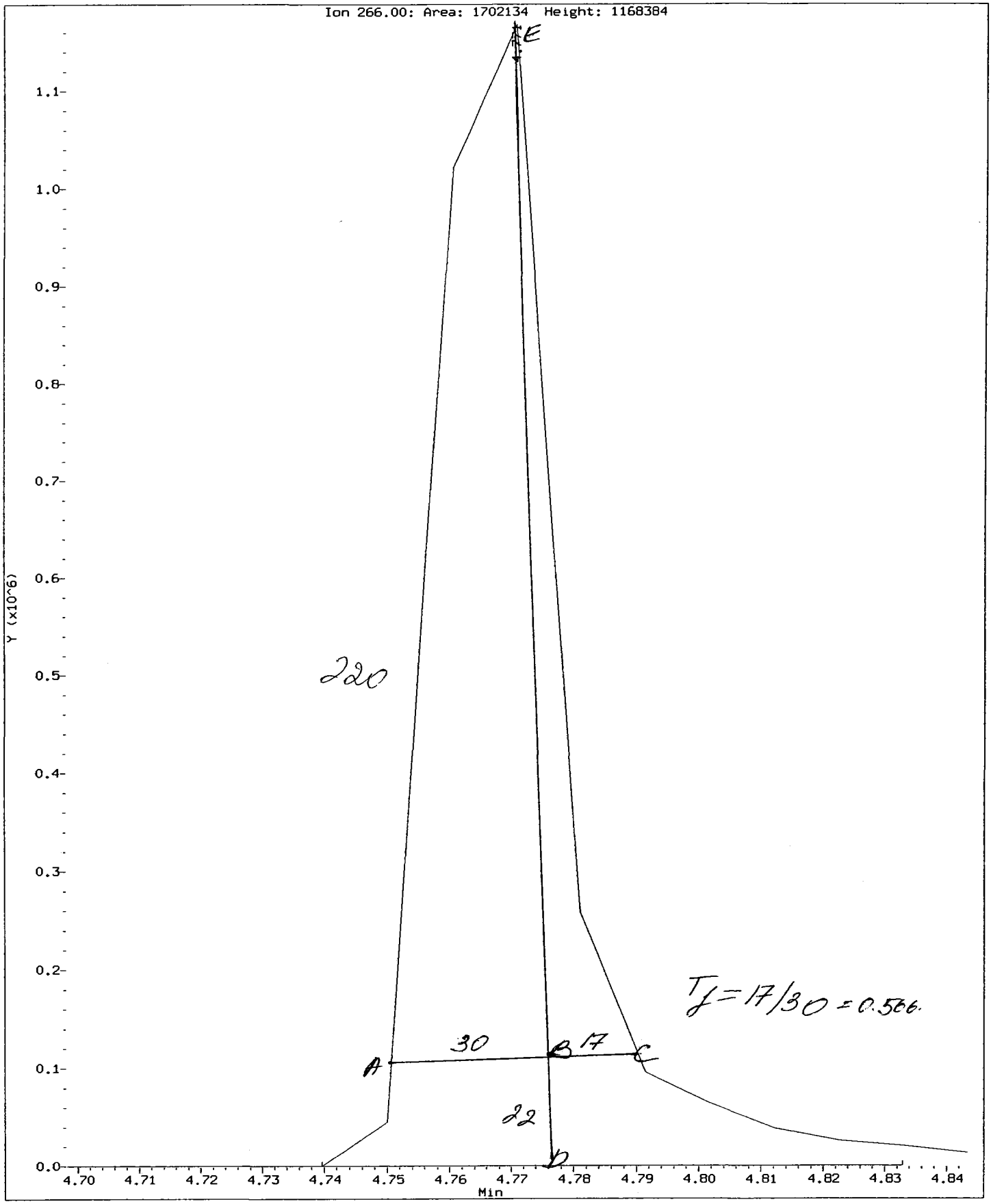
Column diameter: 0.25

Data File: df0322a.d
Spectrum: Avg. Scans 113-115 (5.27), Background Scan 108
Location of Maximum: 198.00
Number of points: 353

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	2319	203.00	8455	294.00	1177	422.00	6216
114.00	747	204.00	43264	295.00	1580	423.00	43536
115.00	1010	205.00	72664	296.00	72440	424.00	8689
116.00	11011	206.00	315648	297.00	8458	425.00	1180
117.00	161792	207.00	38576	298.00	757	427.00	88
118.00	10809	208.00	9566	299.00	515	430.00	393
119.00	1258	209.00	3433	301.00	1412	432.00	151
120.00	2523	210.00	1723	302.00	1119	433.00	712
121.00	980	211.00	12195	303.00	10451	435.00	87
122.00	12525	212.00	1727	304.00	2253	436.00	116
123.00	19848	213.00	1051	305.00	330	439.00	437
124.00	8038	214.00	397	306.00	127	441.00	127280
125.00	7872	215.00	3382	307.00	86	442.00	895232
126.00	4556	216.00	7474	308.00	1592	443.00	171072
127.00	708480	217.00	80424	309.00	642	444.00	17176
128.00	48416	218.00	10797	310.00	1289	445.00	1069
129.00	261248	219.00	1243	311.00	151		
130.00	22104	220.00	1486	312.00	249		
131.00	3483	221.00	61776	313.00	750		

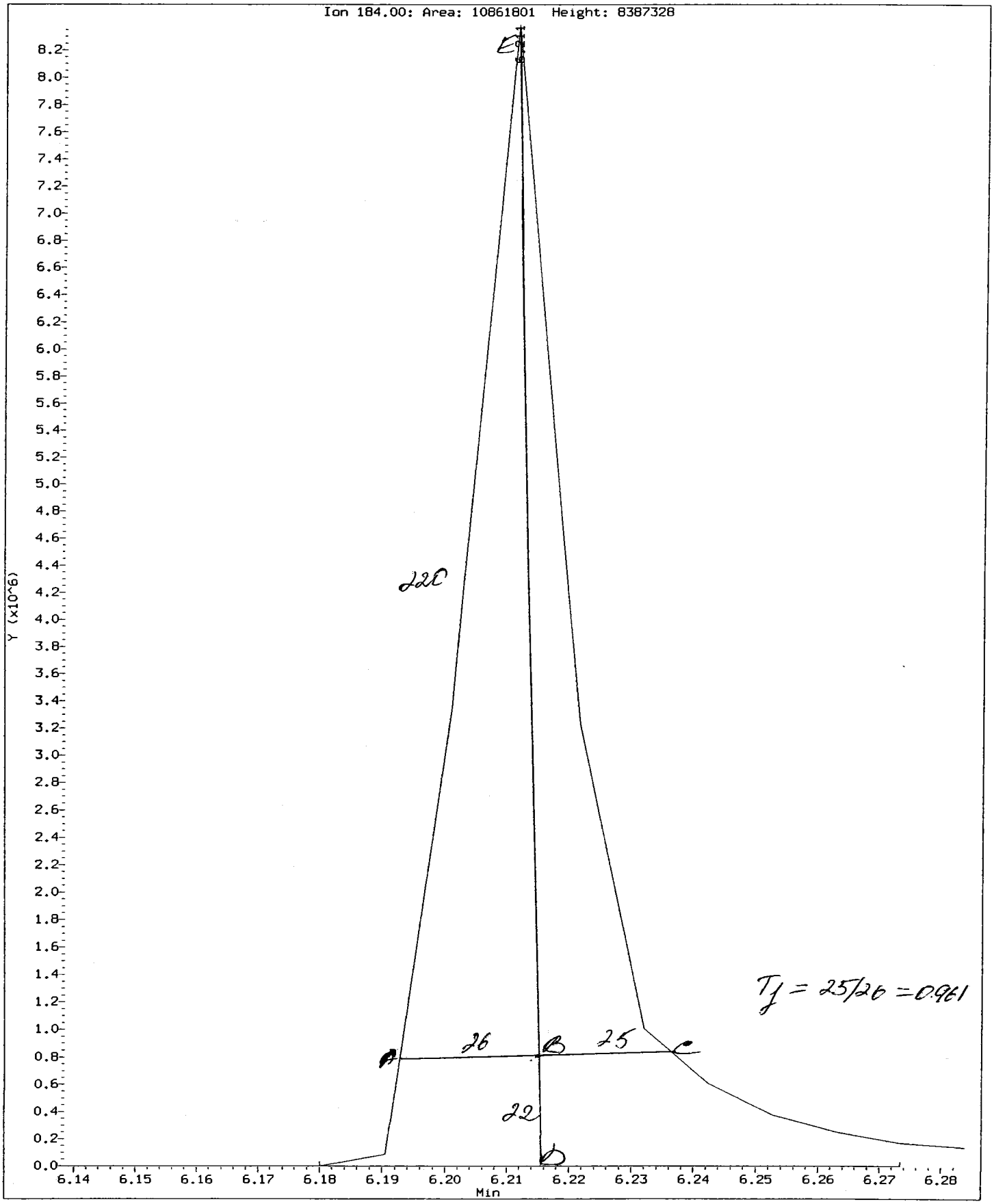
Data File: /chem3/nt8.i/20100322.b/ddt.b/df0322a.d
Injection Date: 22-MAR-2010 15:21
Instrument: nt8.i
Client Sample ID:

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt8.i/20100322.b/ddt.b/df0322a.d
Injection Date: 22-MAR-2010 15:21
Instrument: nt8.i
Client Sample ID:

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt8.i/20100322.b/ddt.b/df0322a.d ARI ID: DF0322A
Method: /chem3/nt8.i/20100322.b/ddt.b/sw846ddt.m Misc:
Analysis Date: 22-MAR-2010 15:21 Instrument: nt8.i

COMPOUND	RT	AREA
Pentachlorophenol	4.771	1702134
Benzidine	6.211	10861801
4,4'-DDE	6.439	19091
4,4'-DDD	6.792	113198
4,4'-DDT	7.051	5594630

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 19091 + 113198) * 100}{(\ 19091 + 113198 + 5594630)}$$

DDT Percent Breakdown = 2.3 %

Data File: /chem3/nt8.i/20100402A.b/df0402a.d

Date : 02-APR-2010 13:38

Client ID:

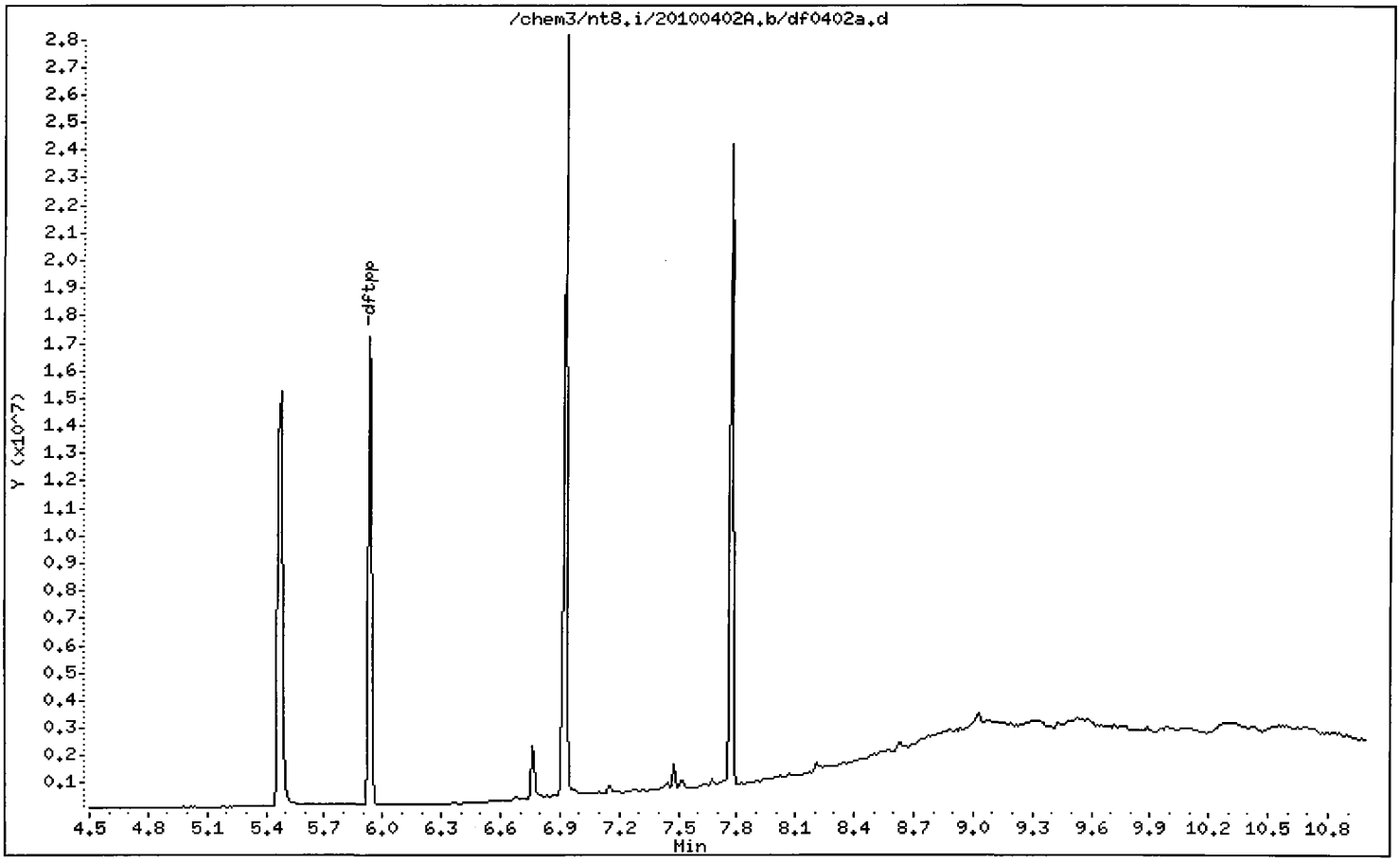
Instrument: nt8.i

Sample Info: DF0402A

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem3/nt8.i/20100402A.b/df0402a.d

Date : 02-APR-2010 13:38

Client ID:

Instrument: nt8.i

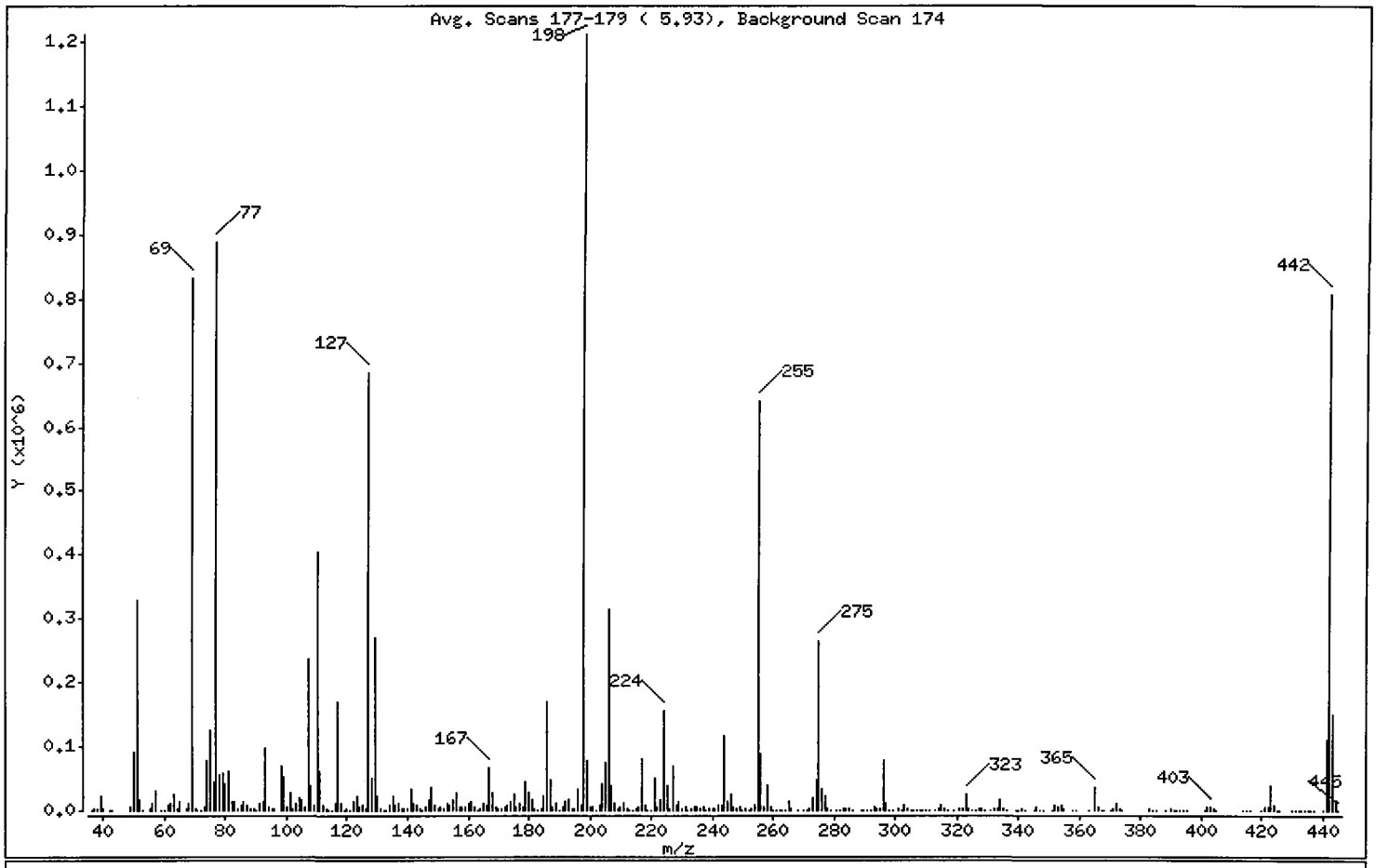
Sample Info: DF0402A

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	27.10
68	Less than 2.00% of mass 69	0.95 (1.38)
69	Mass 69 relative abundance	68.69
70	Less than 2.00% of mass 69	0.27 (0.39)
127	10.00 - 80.00% of mass 198	56.63
197	Less than 2.00% of mass 198	0.74
199	5.00 - 9.00% of mass 198	6.40
275	10.00 - 60.00% of mass 198	21.78
365	Greater than 1.00% of mass 198	2.89
441	0.01 - 24.00% of mass 442	9.11 (13.68)
442	50.00 - 200.00% of mass 198	66.58
443	15.00 - 24.00% of mass 442	12.51 (18.79)

Date : 02-APR-2010 13:38

Client ID: Instrument: nt8.i

Sample Info: DF0402A

Operator: VTS

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0402a.d
Spectrum: Avg. Scans 177-179 (5.93), Background Scan 174
Location of Maximum: 198.00
Number of points: 345

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	183	133.00	210	220.00	1161	314.00	3497
37.00	1714	134.00	7631	221.00	50040	315.00	8613
38.00	3731	135.00	22176	222.00	4402	316.00	4109
39.00	23088	136.00	7441	223.00	17816	317.00	1125
40.00	1744	137.00	11109	224.00	157056	319.00	123
42.00	808	138.00	2527	225.00	39184	321.00	2643
43.00	141	139.00	1394	226.00	4005	322.00	1456
49.00	4186	140.00	3525	227.00	70976	323.00	25048
50.00	91120	141.00	34176	228.00	9731	324.00	4121
51.00	328320	142.00	9798	229.00	13850	325.00	598
52.00	17296	143.00	8647	230.00	1805	326.00	379
53.00	798	144.00	2387	231.00	5654	327.00	4113
55.00	2331	145.00	721	232.00	674	328.00	1887
56.00	11843	146.00	5622	233.00	1926	329.00	736
57.00	31440	147.00	17760	234.00	5075	331.00	388
59.00	833	148.00	37192	235.00	5513	332.00	1678
60.00	340	149.00	7238	236.00	3631	333.00	2215
61.00	7511	150.00	2328	237.00	4467	334.00	16664
62.00	9875	151.00	4479	238.00	885	335.00	3800
63.00	25224	152.00	2545	239.00	2967	336.00	505
64.00	3697	153.00	10175	240.00	2679	339.00	621
65.00	12539	154.00	8399	241.00	3487	340.00	157
67.00	2273	155.00	17864	242.00	8274	341.00	3040
68.00	11519	156.00	27336	243.00	7048	342.00	957
69.00	832064	157.00	4505	244.00	116456	345.00	305
70.00	3268	158.00	5908	245.00	14974	346.00	4875
71.00	758	159.00	4661	246.00	24720	347.00	1071
72.00	252	160.00	10048	247.00	4516	348.00	284
73.00	5485	161.00	13907	248.00	1460	351.00	568
74.00	78936	162.00	4363	249.00	4999	352.00	7499
75.00	125944	163.00	461	250.00	442	353.00	4925
76.00	44144	164.00	2138	251.00	1418	354.00	8112
77.00	887360	165.00	10648	252.00	1353	355.00	1508
78.00	56488	166.00	7760	253.00	2637	358.00	138
79.00	58704	167.00	65992	254.00	8022	359.00	572

Data File: /chem3/nt8.i/20100402A.b/df0402a.d

Date : 02-APR-2010 13:38

Client ID:

Instrument: nt8.i

Sample Info: DF0402A

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0402a.d
Spectrum: Avg. Scans 177-179 (5.93), Background Scan 174
Location of Maximum: 198.00
Number of points: 345

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	41672	168.00	28000	255.00	639808	363.00	120
81.00	61136	169.00	5056	256.00	88560	365.00	34992
82.00	14209	170.00	1474	257.00	6500	366.00	5549
83.00	14801	171.00	2601	258.00	38368	367.00	264
84.00	2099	172.00	5965	259.00	5556	368.00	228
85.00	7671	173.00	7256	260.00	749	370.00	624
86.00	15127	174.00	14363	261.00	663	371.00	2024
87.00	7732	175.00	25312	262.00	338	372.00	9797
88.00	3104	176.00	5540	263.00	628	373.00	3673
89.00	1473	177.00	11270	264.00	724	374.00	103
90.00	79	178.00	4403	265.00	13245	383.00	2882
91.00	11737	179.00	45736	266.00	1973	384.00	969
92.00	14185	180.00	28776	268.00	222	385.00	757
93.00	97184	181.00	15959	270.00	669	388.00	101
94.00	6373	182.00	2919	271.00	526	390.00	2060
95.00	3242	183.00	1136	272.00	2356	391.00	737
96.00	3354	184.00	4046	273.00	18176	392.00	485
98.00	69040	185.00	23312	274.00	47384	393.00	232
99.00	52496	186.00	168576	275.00	263872	394.00	107
100.00	4962	187.00	48536	276.00	33152	395.00	204
101.00	28624	188.00	5183	277.00	22488	401.00	665
102.00	1684	189.00	10539	278.00	3734	402.00	4946
103.00	10206	190.00	1203	279.00	1235	403.00	6783
104.00	18376	191.00	4309	281.00	94	404.00	2586
105.00	17624	192.00	15142	282.00	313	405.00	93
106.00	6941	193.00	16784	283.00	3367	414.00	117
107.00	237056	194.00	3560	284.00	1981	415.00	321
108.00	38176	195.00	1677	285.00	3943	416.00	272
109.00	8267	196.00	34048	286.00	628	420.00	104
110.00	403392	197.00	9020	289.00	1188	421.00	5987
111.00	60280	198.00	1211392	290.00	480	422.00	5124
112.00	7779	199.00	77536	291.00	336	423.00	39752
113.00	3030	200.00	5876	292.00	984	424.00	9554
114.00	300	201.00	4914	293.00	5607	425.00	692
115.00	1126	202.00	183	294.00	1844	426.00	552

Date : 02-APR-2010 13:38

Client ID: Instrument: nt8.i

Sample Info: DF0402A

Operator: VTS

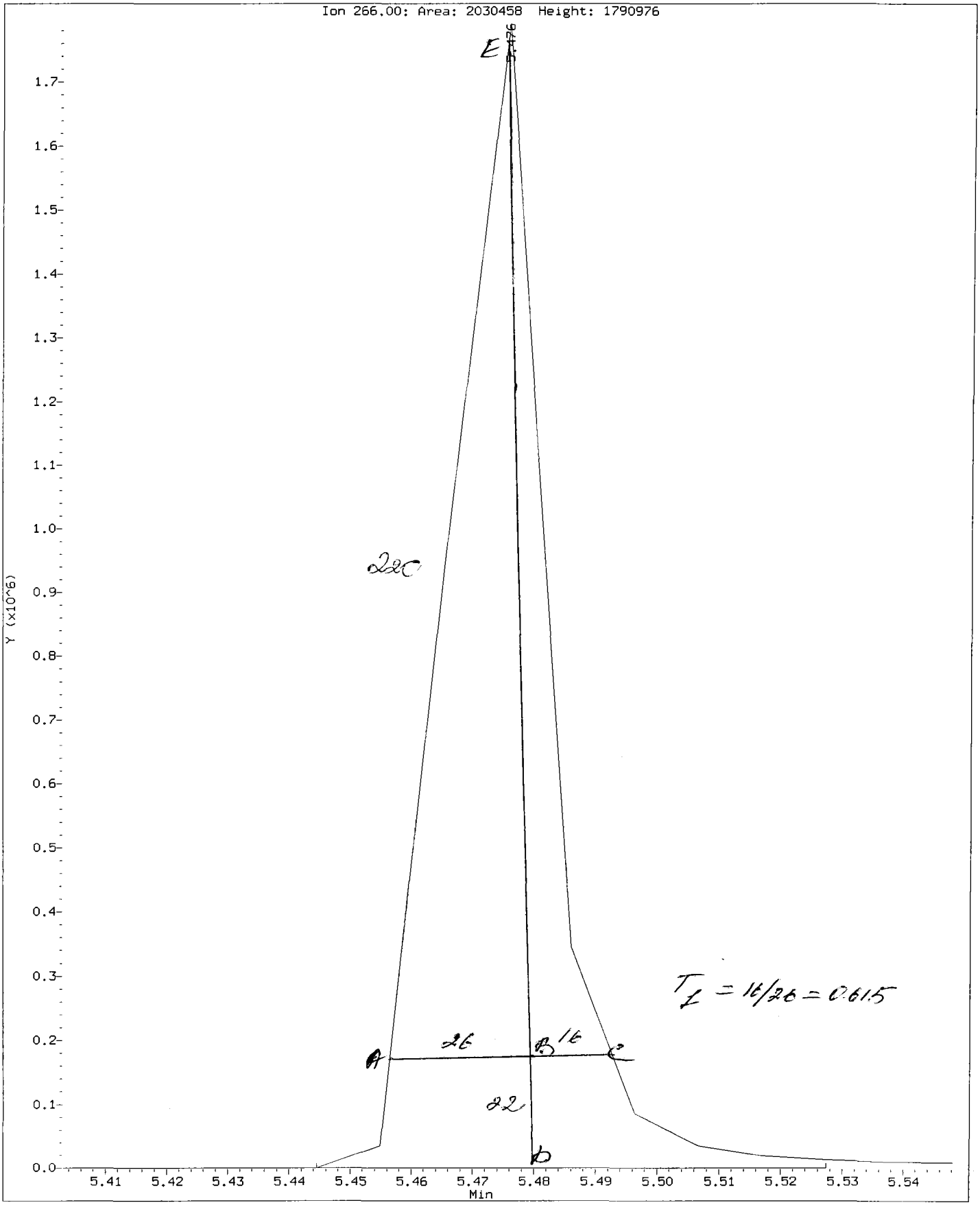
Column phase: ZB-5msi Column diameter: 0.25

Data File: df0402a.d
Spectrum: Avg. Scans 177-179 (5.93), Background Scan 174
Location of Maximum: 198.00
Number of points: 345

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	10811	203.00	8315	295.00	2014	430.00	416
117.00	169920	204.00	42576	296.00	77640	431.00	540
118.00	12220	205.00	74424	297.00	11181	432.00	108
119.00	1073	206.00	313920	298.00	1081	433.00	607
120.00	2650	207.00	38576	299.00	85	434.00	669
121.00	819	208.00	10180	301.00	1458	435.00	304
122.00	13602	209.00	2560	302.00	1362	436.00	400
123.00	21568	210.00	4354	303.00	8228	437.00	89
124.00	6872	211.00	11067	304.00	2812	440.00	226
125.00	8438	212.00	1552	305.00	193	441.00	110336
126.00	3626	213.00	1120	306.00	87	442.00	806592
127.00	686016	214.00	550	307.00	114	443.00	151552
128.00	50656	215.00	4010	308.00	1298	444.00	15063
129.00	270720	216.00	6760	309.00	1293	445.00	1239
130.00	22696	217.00	81504	310.00	901		
131.00	3339	218.00	9240	311.00	237		
132.00	1201	219.00	997	313.00	1392		

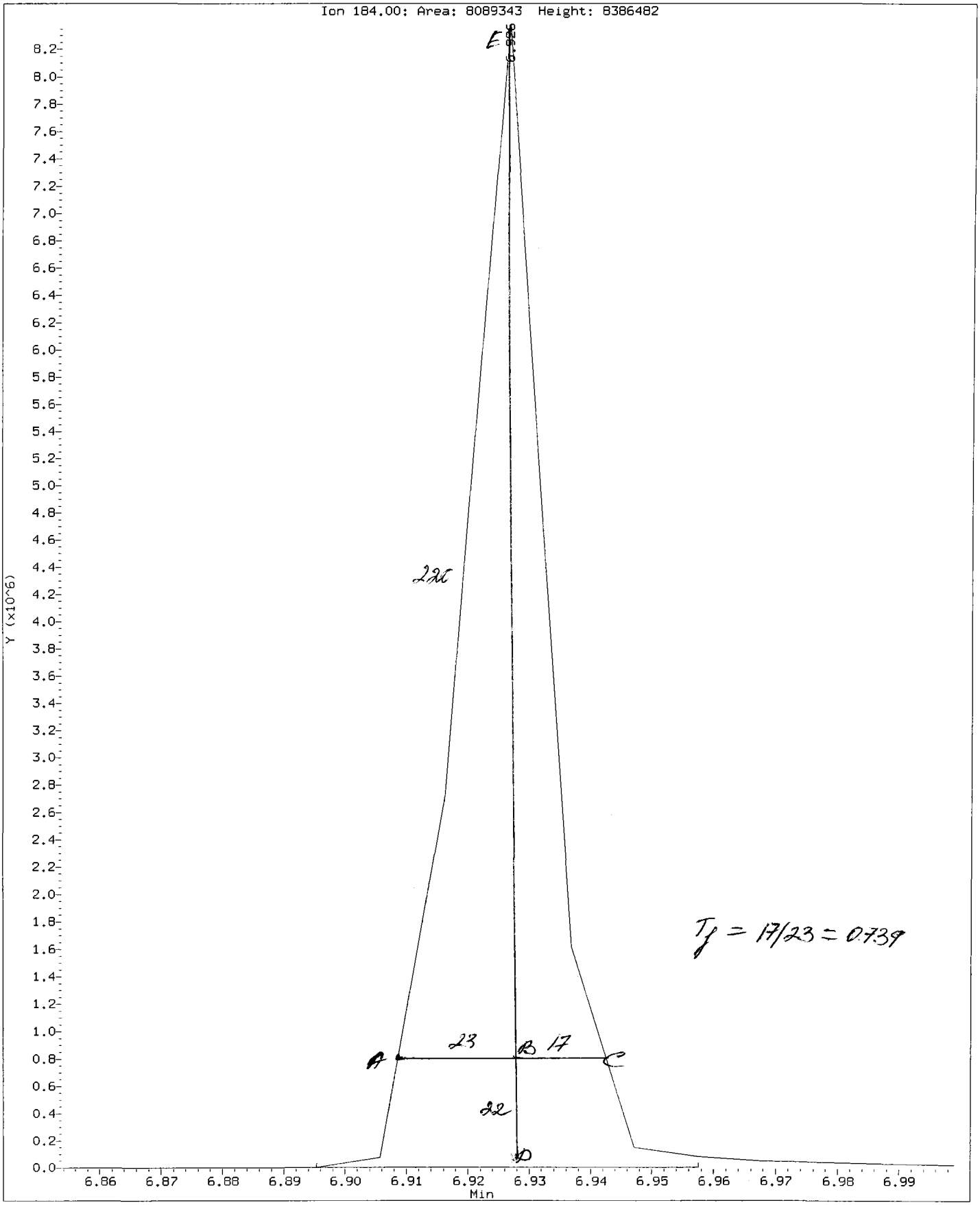
Data File: /chem3/nt8.i/20100402A.b/ddt.b/df0402a.d
Injection Date: 02-APR-2010 13:38
Instrument: nt8.i
Client Sample ID:

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt8.i/20100402A.b/ddt.b/df0402a.d
Injection Date: 02-APR-2010 13:38
Instrument: nt8.i
Client Sample ID:

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt8.i/20100402A.b/ddt.b/df0402a.d ARI ID: DF0402A
Method: /chem3/nt8.i/20100402A.b/ddt.b/sw846ddt.m Misc:
Analysis Date: 02-APR-2010 13:38 Instrument: nt8.i

COMPOUND	RT	AREA
Pentachlorophenol	5.476	2030458
Benzidine	6.926	8089343
4,4'-DDE	7.154	29162
4,4'-DDD	7.476	203230
4,4'-DDT	7.776	4471795

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 29162 + 203230) * 100}{(\ 29162 + 203230 + 4471795)}$$

DDT Percent Breakdown = 4.9 %

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MB-033010
METHOD BLANK

Lab Sample ID: MB-033010
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 17:47
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	< 0.010 U
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	Phenanthrene	0.010	< 0.010 U
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	Fluoranthene	0.010	< 0.010 U
129-00-0	Pyrene	0.010	< 0.010 U
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
205-99-2	Benzo(b)fluoranthene	0.010	< 0.010 U
207-08-9	Benzo(k)fluoranthene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	Benzo(g,h,i)perylene	0.010	< 0.010 U
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	73.7%
d14-Dibenzo(a,h)anthracene	65.3%

YZ 4/3/10

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/qq20mb.d
Lab Smp Id: QQ20MBW1 Client Smp ID: QQ20MBW1
Inj Date : 02-APR-2010 17:47
Operator : VTS Inst ID: nt8.i
Smp Info : QQ20MBW1
Misc Info : 10-8030
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	5.377	5.377	(1.000)	199128	200.000	
	5 Naphthalene	128	Compound Not Detected.					
$	6 2-Methylnaphthalene-d10	152	6.085	6.095	(1.132)	137803	221.227	221
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	7.306	7.306	(1.000)	112885	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	182294	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
28	Benzo(a)anthracene	228	Compound Not Detected.					
* 29	Chrysene-d12	240	12.254	12.266	(1.000)	129872	200.000	
30	Chrysene	228	Compound Not Detected.					
32	Benzo(b)fluoranthene	252	Compound Not Detected.					
33	Benzo(k)fluoranthene	252	Compound Not Detected.					
34	Benzo(a)pyrene	252	Compound Not Detected.					
* 35	Perylene-d12	264	13.882	13.882	(1.000)	120744	200.000	
37	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 36	Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	120675	195.845	196
38	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
39	Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: qq20mb.d
Lab Smp Id: QQ20MBW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Client Smp ID: QQ20MBW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	199128	-8.99
11 Acenaphthene-d10	119440	59720	238880	112885	-5.49
18 Phenanthrene-d10	183479	91740	366958	182294	-0.65
29 Chrysene-d12	121669	60834	243338	129872	6.74
35 Perylene-d12	102197	51098	204394	120744	18.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.38	0.00
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.25	-0.10
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ20MBW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Client SDG: QQ20
Fraction: SV
Client Smp ID: QQ20MBW1
Operator: VTS
SampleType: BLANK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	0.00	*	41-101
7 2-Methylnaphthale	300	0.00	*	47-100
8 1-Methylnaphthale	300	0.00	*	30-160
10 Acenaphthylene	300	0.00	*	35-100
12 Acenaphthene	300	0.00	*	43-104
14 Dibenzofuran	300	0.00	*	37-100
15 Fluorene	300	0.00	*	51-103
19 Phenanthrene	300	0.00	*	55-109
20 Anthracene	300	0.00	*	30-101
24 Fluoranthene	300	0.00	*	49-123
25 Pyrene	300	0.00	*	48-120
28 Benzo(a)anthracene	300	0.00	*	43-113
30 Chrysene	300	0.00	*	59-112
32 Benzo(b)fluoranth	300	0.00	*	44-121
33 Benzo(k)fluoranth	300	0.00	*	50-117
34 Benzo(a)pyrene	300	0.00	*	10-100
37 Indeno(1,2,3-cd)p	300	0.00	*	43-112
38 Dibenzo(a,h)anthr	300	0.00	*	42-114
39 Benzo(g,h,i)peryl	300	0.00	*	31-118

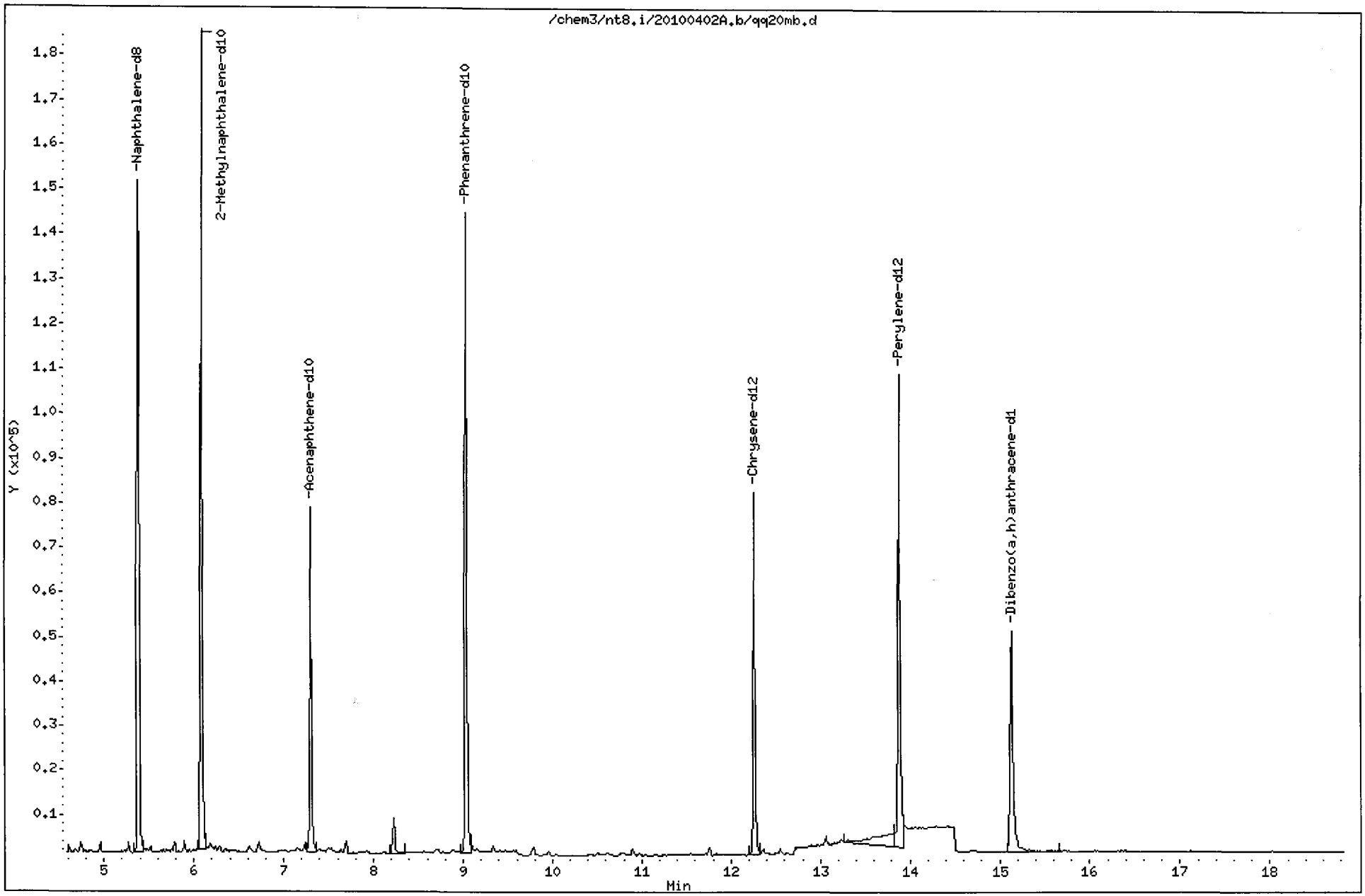
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	221	73.74	31-109
$ 36 Dibenzo(a,h)anthra	300	196	65.28	10-133

Data File: /chem3/nt8.i/20100402A.b/qq20mb.d
Date : 02-APR-2010 17:47
Client ID: QQ20MBW1
Sample Info: QQ20MBW1
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i

Operator: VTS
Column diameter: 0.25

QQ20:99355



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 18:58
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	---
91-57-6	2-Methylnaphthalene	0.010	---
90-12-0	1-Methylnaphthalene	0.010	---
208-96-8	Acenaphthylene	0.010	---
83-32-9	Acenaphthene	0.010	---
86-73-7	Fluorene	0.010	---
85-01-8	Phenanthrene	0.010	---
120-12-7	Anthracene	0.010	---
206-44-0	Fluoranthene	0.010	---
129-00-0	Pyrene	0.010	---
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
205-99-2	Benzo(b)fluoranthene	0.010	---
207-08-9	Benzo(k)fluoranthene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
191-24-2	Benzo(g,h,i)perylene	0.010	---
132-64-9	Dibenzofuran	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	67.7%
d14-Dibenzo(a,h)anthracene	28.6%

YZ 4/13/10

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/qq20ams.d
Lab Smp Id: QQ20AMS Client Smp ID: CB31A032510COMP MS
Inj Date : 02-APR-2010 18:58
Operator : VTS Inst ID: nt8.i
Smp Info : QQ20AMS
Misc Info : 10-8030
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 11 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	5.377	5.377	(1.000)	193478	200.000	
	5 Naphthalene	128	5.398	5.398	(1.004)	223461	204.264	204
$	6 2-Methylnaphthalene-d10	152	6.085	6.095	(1.132)	122779	202.863	203
	7 2-Methylnaphthalene	142	6.116	6.116	(1.137)	139966	211.093	211
	8 1-Methylnaphthalene	142	6.231	6.241	(1.159)	135835	199.748	200
	10 Acenaphthylene	152	7.125	7.125	(0.975)	213255	199.202	199
*	11 Acenaphthene-d10	164	7.306	7.306	(1.000)	111247	200.000	
	12 Acenaphthene	153	7.331	7.331	(1.003)	133862	198.503	199
	14 Dibenzofuran	168	7.524	7.524	(1.030)	194846	214.160	214
	15 Fluorene	166	7.923	7.923	(1.084)	160696	225.418	225
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	179471	200.000	
	19 Phenanthrene	178	9.059	9.059	(1.003)	275434	269.824	270
	20 Anthracene	178	9.108	9.108	(1.008)	214676	179.031	179
	24 Fluoranthene	202	10.499	10.499	(1.162)	307114	295.366	295
	25 Pyrene	202	10.777	10.777	(1.193)	312132	290.581	291

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	12.242	12.242	(0.998)	127923	194.370	194
*	29 Chrysene-d12	240	12.266	12.266	(1.000)	110311	200.000	
	30 Chrysene	228	12.290	12.290	(1.002)	163332	170.347	170(R)
	32 Benzo(b)fluoranthene	252	13.485	13.485	(0.971)	147556	182.690	183(M)
	33 Benzo(k)fluoranthene	252	13.506	13.506	(0.973)	124611	112.198	112(RM)
	34 Benzo(a)pyrene	252	13.819	13.819	(0.995)	91930	130.430	130
*	35 Perylene-d12	264	13.882	13.882	(1.000)	105289	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	15.161	15.161	(1.092)	90445	98.8722	98.9(R)
$	36 Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	46082	85.7647	85.8
	38 Dibenzo(a,h)anthracene	278	15.173	15.173	(1.093)	67393	92.7291	92.7(R)
	39 Benzo(g,h,i)perylene	276	15.524	15.524	(1.118)	100068	123.251	123

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: qq20ams.d
Lab Smp Id: QQ20AMS
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Client Smp ID: CB31A032510COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	193478	-11.58
11 Acenaphthene-d10	119440	59720	238880	111247	-6.86
18 Phenanthrene-d10	183479	91740	366958	179471	-2.18
29 Chrysene-d12	121669	60834	243338	110311	-9.34
35 Perylene-d12	102197	51098	204394	105289	3.03

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.38	0.00
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.27	0.00
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: FSI
Sample Matrix: LIQUID
Lab Smp Id: QQ20AMS
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Client SDG: QQ20
Fraction: SV
Client Smp ID: CB31A032510COMP MS
Operator: VTS
SampleType: MS
Quant Type: ISTD

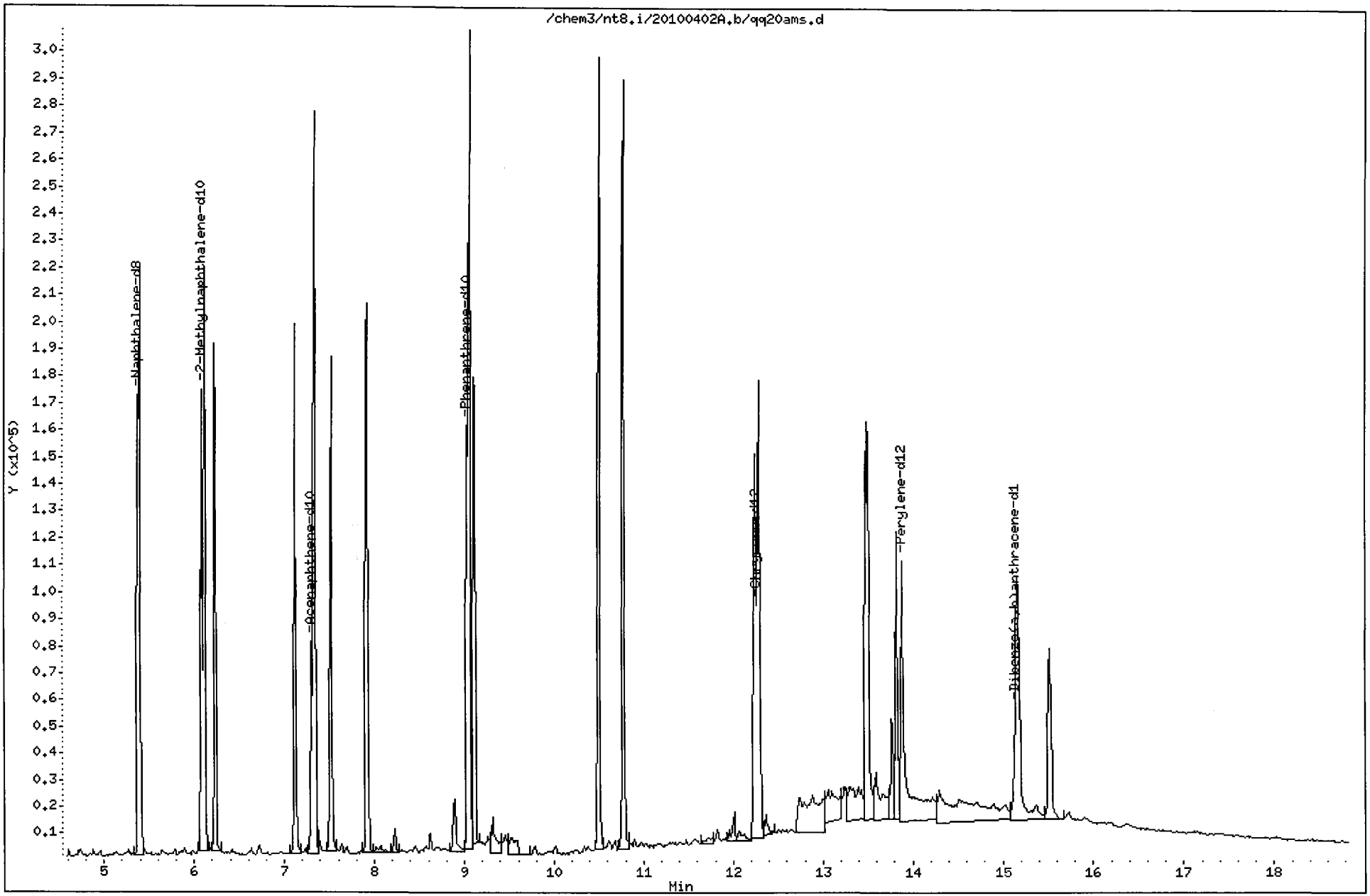
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	204	68.09	41-101
7 2-Methylnaphthalen	300	211	70.36	47-100
8 1-Methylnaphthalen	300	200	66.58	30-160
10 Acenaphthylene	300	199	66.40	35-100
12 Acenaphthene	300	199	66.17	43-104
14 Dibenzofuran	300	214	71.39	37-100
15 Fluorene	300	225	75.14	51-103
19 Phenanthrene	300	270	89.94	55-109
20 Anthracene	300	179	59.68	30-101
24 Fluoranthene	300	295	98.46	49-123
25 Pyrene	300	291	96.86	48-120
28 Benzo(a)anthracene	300	194	64.79	43-113
30 Chrysene	300	170	56.78*	59-112
32 Benzo(b)fluoranthe	300	183	60.90	44-121
33 Benzo(k)fluoranthe	300	112	37.40*	50-117
34 Benzo(a)pyrene	300	130	43.48	10-100
37 Indeno(1,2,3-cd)py	300	98.9	32.96*	43-112
38 Dibenzo(a,h)anthra	300	92.7	30.91*	42-114
39 Benzo(g,h,i)peryle	300	123	41.08	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	203	67.62	31-109
$ 36 Dibenzo(a,h)anthra	300	85.8	28.59	10-133

Data File: /chem3/nt8.i/20100402A.b/qq20ams.d
Date : 02-APR-2010 18:58
Client ID: CB31A032510COMP MS
Sample Info: QQ20AMS
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i

Operator: VTS
Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE DUPLICATE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/05/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 19:22
Instrument/Analyst: NT8/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	---
91-57-6	2-Methylnaphthalene	0.010	---
90-12-0	1-Methylnaphthalene	0.010	---
208-96-8	Acenaphthylene	0.010	---
83-32-9	Acenaphthene	0.010	---
86-73-7	Fluorene	0.010	---
85-01-8	Phenanthrene	0.010	---
120-12-7	Anthracene	0.010	---
206-44-0	Fluoranthene	0.010	---
129-00-0	Pyrene	0.010	---
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
205-99-2	Benzo(b)fluoranthene	0.010	---
207-08-9	Benzo(k)fluoranthene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
191-24-2	Benzo(g,h,i)perylene	0.010	---
132-64-9	Dibenzofuran	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	66.3%
d14-Dibenzo(a,h)anthracene	27.7%

YZ 4/3/10

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/qq20amsd.d
Lab Smp Id: QQ20AMSD Client Smp ID: CB31A032510COMP MSD
Inj Date : 02-APR-2010 19:22
Operator : VTS Inst ID: nt8.i
Smp Info : QQ20AMSD
Misc Info : 10-8030
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 12 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	5.388	5.377	(1.000)	205600	200.000	
	5 Naphthalene	128	5.398	5.398	(1.002)	226406	194.754	195
$	6 2-Methylnaphthalene-d10	152	6.096	6.095	(1.131)	127776	198.672	199
	7 2-Methylnaphthalene	142	6.127	6.116	(1.137)	149028	211.509	212
	8 1-Methylnaphthalene	142	6.241	6.241	(1.158)	145344	201.129	201
	10 Acenaphthylene	152	7.125	7.125	(0.975)	234432	198.535	199
*	11 Acenaphthene-d10	164	7.307	7.306	(1.000)	122705	200.000	
	12 Acenaphthene	153	7.331	7.331	(1.003)	140785	189.274	189
	14 Dibenzofuran	168	7.524	7.524	(1.030)	210570	209.831	210
	15 Fluorene	166	7.923	7.923	(1.084)	175189	222.800	223
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	201406	200.000	
	19 Phenanthrene	178	9.059	9.059	(1.003)	307901	268.779	269
	20 Anthracene	178	9.120	9.108	(1.009)	235131	174.733	175
	24 Fluoranthene	202	10.499	10.499	(1.162)	329518	282.398	282
	25 Pyrene	202	10.777	10.777	(1.193)	334118	277.173	277
	28 Benzo(a)anthracene	228	12.242	12.242	(0.999)	143946	197.388	197

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
* 29 Chrysene-d12	240	12.254	12.266	(1.000)	122230	200.000	
30 Chrysene	228	12.291	12.290	(1.003)	177865	167.415	167(R)
32 Benzo(b)fluoranthene	252	13.486	13.485	(0.971)	160372	178.220	178(M)
33 Benzo(k)fluoranthene	252	13.506	13.506	(0.973)	131606	106.359	106(RM)
34 Benzo(a)pyrene	252	13.819	13.819	(0.995)	98183	125.033	125
* 35 Perylene-d12	264	13.882	13.882	(1.000)	117304	200.000	
37 Indeno(1,2,3-cd)pyrene	276	15.161	15.161	(1.092)	92227	90.4936	90.5(R)
$ 36 Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	49725	83.0658	83.1
38 Dibenzo(a,h)anthracene	278	15.173	15.173	(1.093)	68083	84.0833	84.1(R)
39 Benzo(g,h,i)perylene	276	15.524	15.524	(1.118)	99470	109.966	110

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: qq20amsd.d
Lab Smp Id: QQ20AMSD
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Client Smp ID: CB31A032510COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	205600	-6.04
11 Acenaphthene-d10	119440	59720	238880	122705	2.73
18 Phenanthrene-d10	183479	91740	366958	201406	9.77
29 Chrysene-d12	121669	60834	243338	122230	0.46
35 Perylene-d12	102197	51098	204394	117304	14.78

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.39	0.20
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.25	-0.10
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: FSI
Sample Matrix: LIQUID
Lab Smp Id: QQ20AMSD
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Client SDG: QQ20
Fraction: SV
Client Smp ID: CB31A032510COMP MSD
Operator: VTS
SampleType: MS
Quant Type: ISTD

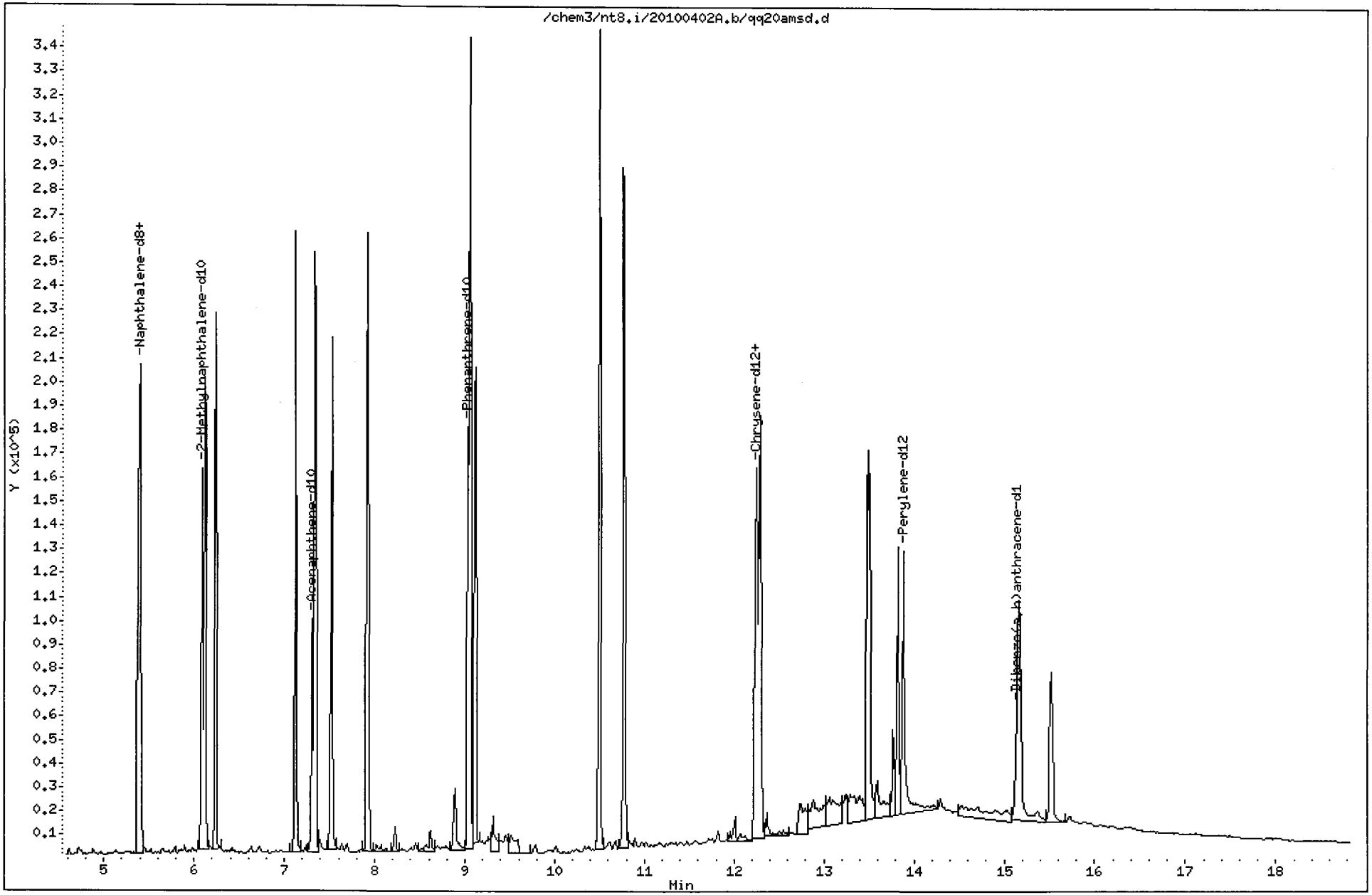
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	195	64.92	41-101
7 2-Methylnaphthalen	300	212	70.50	47-100
8 1-Methylnaphthalen	300	201	67.04	30-160
10 Acenaphthylene	300	199	66.18	35-100
12 Acenaphthene	300	189	63.09	43-104
14 Dibenzofuran	300	210	69.94	37-100
15 Fluorene	300	223	74.27	51-103
19 Phenanthrene	300	269	89.59	55-109
20 Anthracene	300	175	58.24	30-101
24 Fluoranthene	300	282	94.13	49-123
25 Pyrene	300	277	92.39	48-120
28 Benzo(a)anthracene	300	197	65.80	43-113
30 Chrysene	300	167	55.81*	59-112
32 Benzo(b)fluoranthe	300	178	59.41	44-121
33 Benzo(k)fluoranthe	300	106	35.45*	50-117
34 Benzo(a)pyrene	300	125	41.68	10-100
37 Indeno(1,2,3-cd)py	300	90.5	30.16*	43-112
38 Dibenzo(a,h)anthra	300	84.1	28.03*	42-114
39 Benzo(g,h,i)peryle	300	110	36.66	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	199	66.22	31-109
$ 36 Dibenzo(a,h)anthra	300	83.1	27.69	10-133

Data File: /chem3/nt8.i/20100402A.b/qq20amsd.d
Date : 02-APR-2010 19:22
Client ID: CB31A032510COMP MSD
Sample Info: QQ20AMSD
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i

Operator: VTS
Column diameter: 0.25



YZ 4/3/10

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt8.i/20100402A.b/qq20sb.d
Lab Smp Id: QQ20LCSW1 Client Smp ID: QQ20LCSW1
Inj Date : 02-APR-2010 18:11
Operator : VTS Inst ID: nt8.i
Smp Info : QQ20LCSW1
Misc Info : 10-8030
Comment :
Method : /chem3/nt8.i/20100402A.b/lowsim.m
Meth Date : 02-Apr-2010 14:32 yev Quant Type: ISTD
Cal Date : 22-MAR-2010 17:35 Cal File: ic0322f.d
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	5.377	5.377	(1.000)	218486	200.000	
	5 Naphthalene	128	5.398	5.398	(1.004)	229134	185.476	185
$	6 2-Methylnaphthalene-d10	152	6.085	6.095	(1.132)	143827	210.440	210
	7 2-Methylnaphthalene	142	6.116	6.116	(1.137)	150669	201.226	201
	8 1-Methylnaphthalene	142	6.241	6.241	(1.161)	150119	195.485	195
	10 Acenaphthylene	152	7.125	7.125	(0.975)	221854	182.966	183
*	11 Acenaphthene-d10	164	7.307	7.306	(1.000)	126002	200.000	
	12 Acenaphthene	153	7.331	7.331	(1.003)	146886	192.310	192
	14 Dibenzofuran	168	7.524	7.524	(1.030)	221136	214.594	215
	15 Fluorene	166	7.923	7.923	(1.084)	178653	221.261	221
*	18 Phenanthrene-d10	188	9.035	9.035	(1.000)	201515	200.000	
	19 Phenanthrene	178	9.059	9.059	(1.003)	261941	228.535	229
	20 Anthracene	178	9.120	9.108	(1.009)	238127	176.864	177
	24 Fluoranthene	202	10.499	10.499	(1.162)	289978	248.377	248
	25 Pyrene	202	10.777	10.777	(1.193)	287651	238.496	238

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	12.242	12.242	(0.999)	206166	236.152	236
*	29 Chrysene-d12	240	12.254	12.266	(1.000)	146327	200.000	
	30 Chrysene	228	12.290	12.290	(1.003)	223506	175.730	176(R)
	32 Benzo(b)fluoranthene	252	13.475	13.485	(0.971)	288320	282.236	282
	33 Benzo(k)fluoranthene	252	13.506	13.506	(0.973)	225457	160.499	160
	34 Benzo(a)pyrene	252	13.819	13.819	(0.995)	150696	169.045	169
*	35 Perylene-d12	264	13.882	13.882	(1.000)	133169	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	15.149	15.161	(1.091)	200937	173.672	174
$	36 Dibenzo(a,h)anthracene-d14	292	15.137	15.137	(1.090)	129099	189.968	190
	38 Dibenzo(a,h)anthracene	278	15.173	15.173	(1.093)	168799	183.633	184
	39 Benzo(g,h,i)perylene	276	15.512	15.524	(1.117)	173357	168.817	169

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: qq20sb.d
Lab Smp Id: QQ20LCSW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Calibration Date: 02-APR-2010
Calibration Time: 13:54
Client Smp ID: QQ20LCSW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	218805	109402	437610	218486	-0.15
11 Acenaphthene-d10	119440	59720	238880	126002	5.49
18 Phenanthrene-d10	183479	91740	366958	201515	9.83
29 Chrysene-d12	121669	60834	243338	146327	20.27
35 Perylene-d12	102197	51098	204394	133169	30.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	5.38	4.88	5.88	5.38	0.00
11 Acenaphthene-d10	7.31	6.81	7.81	7.31	0.00
18 Phenanthrene-d10	9.04	8.54	9.54	9.04	0.00
29 Chrysene-d12	12.27	11.77	12.77	12.25	-0.10
35 Perylene-d12	13.88	13.38	14.38	13.88	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QQ20LCSW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt8.i/20100402A.b/lowsim.m
Misc Info: 10-8030

Client SDG: QQ20
Fraction: SV
Client Smp ID: QQ20LCSW1
Operator: VTS
SampleType: LCS
Quant Type: ISTD

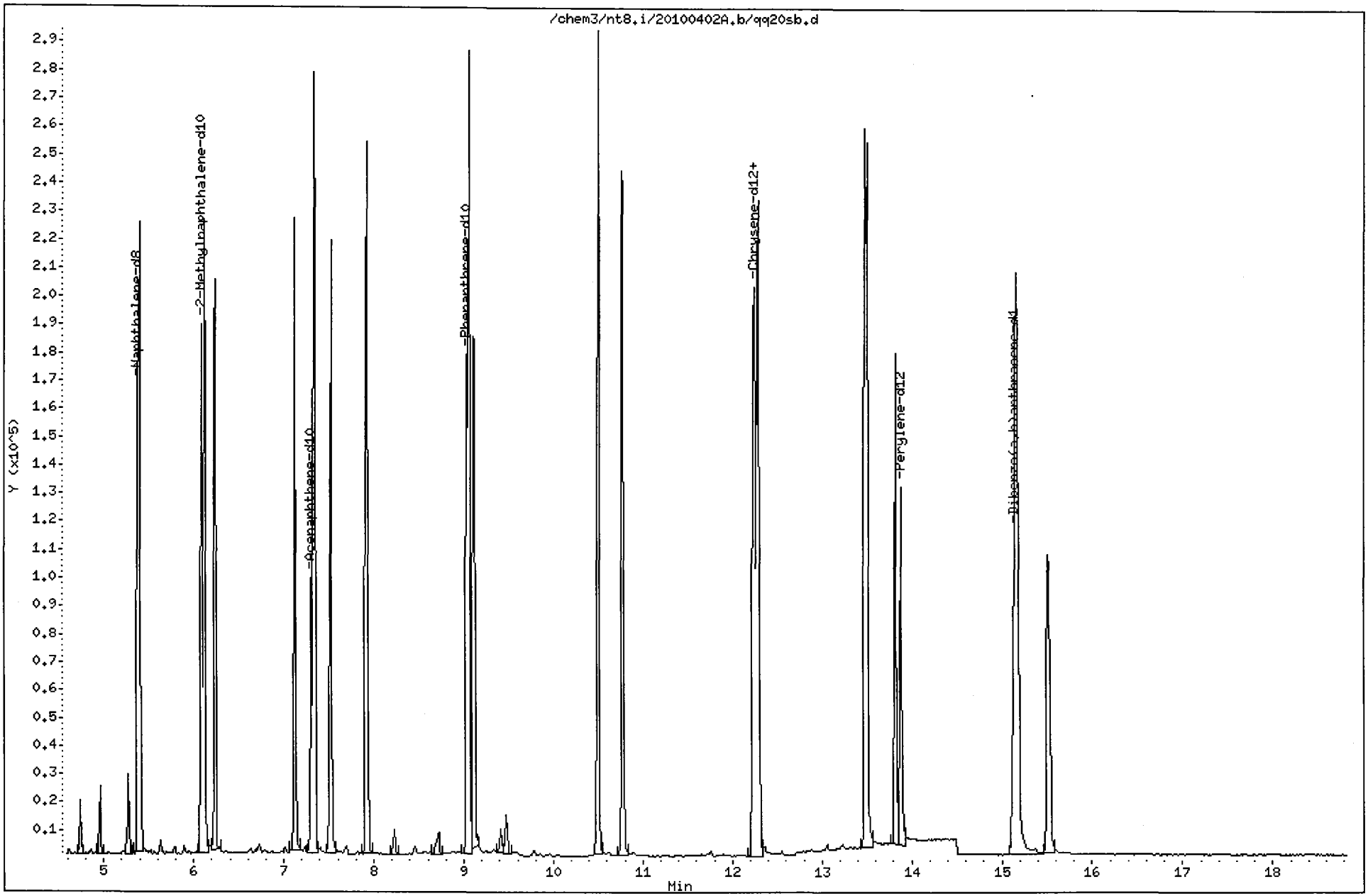
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	185	61.83	41-101
7 2-Methylnaphthalen	300	201	67.08	47-100
8 1-Methylnaphthalen	300	195	65.16	30-160
10 Acenaphthylene	300	183	60.99	35-100
12 Acenaphthene	300	192	64.10	43-104
14 Dibenzofuran	300	215	71.53	37-100
15 Fluorene	300	221	73.75	51-103
19 Phenanthrene	300	229	76.18	55-109
20 Anthracene	300	177	58.95	30-101
24 Fluoranthene	300	248	82.79	49-123
25 Pyrene	300	238	79.50	48-120
28 Benzo(a)anthracene	300	236	78.72	43-113
30 Chrysene	300	176	58.58*	59-112
32 Benzo(b)fluoranthe	300	282	94.08	44-121
33 Benzo(k)fluoranthe	300	160	53.50	50-117
34 Benzo(a)pyrene	300	169	56.35	10-100
37 Indeno(1,2,3-cd)py	300	174	57.89	43-112
38 Dibenzo(a,h)anthra	300	184	61.21	42-114
39 Benzo(g,h,i)peryle	300	169	56.27	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	210	70.15	31-109
$ 36 Dibenzo(a,h)anthra	300	190	63.32	10-133

Data File: /chem3/nt8.i/20100402A.b/qq20sb.d
Date : 02-APR-2010 18:11
Client ID: QQ20LCSW1
Sample Info: QQ20LCSW1
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt8.i

Operator: VTS
Column diameter: 0.25



SIM Semivolatile Analysis
Extraction Bench Sheets/Run Logs

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

SIM PNA-Water
Liquid/Liquid (3520C) (SOP # 3311S)

Preparation Test SIM PNA # 4
ARI Job No(s) QQ20

Low Level (0.01ppb)
Batch set up by: SP

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	Disassemble Liq/Liq	KD Hex X	TurboVap 1 2 3	(REQ) Silica Gel Clean (1:1)	TurboVap 1 2 3	Final Effective Volume	Volume to Lab	Comments
	QQ20 MBW	Date 3-34-10	500mL	↓	↓	↓	↓	↓	0.5mL	0.5mL	
	SBW	↓	↓	↓	↓	↓	↓	↓	↓	↓	
	~~SBW Dup.~~		↓	↓	↓	↓	↓	↓	↓	↓	
4,6,8	QQ20 A	Verified	500mL	↓	↓	↓	↓	↓	↓	↓	
↓	AMS	↓	↓	↓	↓	↓	↓	↓	↓	↓	
↓	AMSD	↓	↓	↓	↓	↓	↓	↓	↓	↓	
3	B	↓	↓	↓	↓	↓	↓	↓	↓	↓	
↓	C	↓	↓	↓	↓	↓	↓	↓	↓	↓	
↓	D	↓	↓	↓	↓	↓	↓	↓	↓	↓	

Analyst/Date: PD 3-34-10 | AR 03/31/10 | KP-TS 4.1.10 | CJZ 4/1/10

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	I	**100µL**	8/12/10	PD	WW
Spike	18B	**100µL**	8/28/10	PD	WW
Extraction Time: 15:20		**Liq/Liq Start:** 15:25		**Liq/Liq Stop:** 06:10	

SPECIAL INSTRUCTIONS: 1. Rinse all glassware with Low Level DCM. 2. Use 500mL Liq/Liq Body 3. Add 20-25mL Low Level Hexane. 4. Add ~200mL Low Level DCM to Liq/Liq. 5. Add surr/spike. 6. Extract minimum 8 hrs. 7. KD (no drying column) to ~8mL at 80°. 8. Exchange (2 X with 10mL) to Low Level Hexane at 100°. 9. TurboVap. 10. Silica Clean-up=REQUIRED. 11. TurboVap. 12. Vial in Low Level DCM. 13. Post Screen extracts with any color noted for Silica Gel Clean-up.

A. Archive Y / N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: QQ20 Client ID: Floyd- Snider

Parameter: low level SimpNA Client Project: Lora Lake Apartments

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☐ Wet sediment/sludge=	
☐ Standing Water Decanted=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☐ Rocks/Organics=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☑ Turbid/Color= A, B, C, D, amber.	MD 3-30-10
☑ Particulates= A, B, C, D.	MD 3-30-10
☐ Emulsions=	
☐ Other (Details)=	
☐ Other Notes/Comments=	

[redacted]

Analytical Resources Inc.: Organics Instrument Log

NT-8 Serial No.:GC=CN10540013, MS=US80138354

Date: 3/22/2010 Analysis: LL SIM PNA Analyst: YZ

GC Program: Low SIM Column No: 165242 Column Type: ZB5msi

Instrument Tune (.U or .CT.): 100219 EM Voltage: 1953

Calibration File: DF0322A Curve Date: ____

IS/SS	Ical/Ccal	LCS/ICV
1706-3	1665-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt8.i/20100322.b

	Time	Filename	LabID	ClientId	DF										
1	1521	df0322a.d	DF0322A		1	NO ISTDS FOUND									
2	1537	ic0322a.d	IC0322A		1	4.74	218805	6.56	119440	8.24	183479	11.42	121669	13.03	102197
3	1600	ic0322b.d	IC0322B		1	4.74	229256	6.56	115847	8.24	179911	11.41	128680	13.02	108765
4	1624	ic0322c.d	IC0322C		1	4.74	191625	6.56	103635	8.24	161026	11.42	100159	13.03	86610
5	1648	ic0322d.d	IC0322D		1	4.74	215378	6.56	114294	8.24	177085	11.42	123272	13.02	106029
6	1712	ic0322e.d	IC0322E		1	4.74	203071	6.56	109309	8.24	165597	11.42	103283	13.03	95294
7	1735	ic0322f.d	IC0322F		1	4.74	196247	6.56	105666	8.24	155775	11.42	103111	13.03	89821
8	1759	ic0322icv.d	IC0322ICV		1	4.74	200151	6.56	106361	8.24	169703	11.42	105931	13.02	8637[illegible]
9	1823	qn21mb.d	QN21MBW1	QN21MBW1	1	4.74	192963	6.56	104113	8.24	158821	11.42	106343	13.03	93285
10	1846	qn21sb.d	QN21LCSW1	QN21LCSW1	1	4.74	210277	6.56	114535	8.24	177509	11.42	118443	13.03	110104
11	1910	qn21sbd.d	QN21LCSDW1	QN21LCSDW1	1	4.74	207630	6.56	114275	8.24	173398	11.42	113265	13.02	106904
12	1934	qn21a.d	QN21A	CB31A031010C	1	4.74	212612	6.56	112428	8.24	171875	11.42	125933	13.02	115279
13	1957	qn21ams.d	QN21AMS	CB31A031010C	1	4.74	203961	6.56	114709	8.24	176895	11.42	117279	13.02	107459
14	2021	qn21amsd.d	QN21AMSD	CB31A031010C	1	4.74	212780	6.56	118339	8.24	180923	11.42	133122	13.02	120709
15	2045	qn21b.d	QN21B	CB4857031010	1	4.74	208367	6.56	113388	8.24	168281	11.42	116414	13.02	112899
16	2108	qn21c.d	QN21C	CB1031010COM	1	4.74	208147	6.56	113668	8.24	172296	11.42	124177	13.03	113065
17	2132	qn21d.d	QN21D	CB101031010C	1	4.74	214012	6.56	113375	8.24	169776	11.42	116373	13.02	115509

clipped ~5" of the column, new liner, new septom

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): IC0322A

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: LL SIM PNA curve Client ID: ARI

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): L.L SIM PNA

Instrument: NT-1 NT-2 NT-4 NT-6 NT-8

Curve Date: 03/22/10 Analysis Start Date: 03/22/10

DFTPP Tune Meets Criteria? YES / NO Internal Standard Meets Criteria? YES / NO

DDT Breakdown <20%? YES / NO / NA Method Blank In Control? YES / NO

Peak Tailing Factor ≤2? YES / NO / NA LCS / LCSD Recovery In Control? YES / NO

ICal acceptable YES / NO; Q flag applied YES / NO Surrogate Recovery In Control? YES / NO

CCal acceptable YES / NO; Q flag applied YES / NO Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

6 points curve, all RSD<20%

Additional Details on Reverse: Yes / No

Analyst Signature: YZ **Date:** 3/24/10

Reviewer's Signature: [illegible] **Date:** 4/5/10

Analytical Resources Inc.: Organics Instrument Log

NT-8 Serial No.:GC=CN10540013, MS=US80138354

Date: 04/02/10 Analysis: Low SIM DMA Analyst: XZ

GC Program: LOW SIM Column No: 165246 Column Type: ZB5ms

Instrument Tune (.U or .CT.): 100214 EM Voltage: 1976

Calibration File: DF0402A Curve Date: 03/22/10

IS/SS	Ical/Ccal	LCS/ICV
1706-3	1665-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt8.i/20100402A.b

	Time	Filename	LabID	ClientId	DF											
1	1338	df0402a.d	DF0402A		1	NO ISTDS FOUND										
2	1354	cc0402a.d	CC0402A		1	5.38	227349	7.31	136134	9.04	216975	12.27	128618	13.88	10843	
3	1502	qp57mb.d	QP57MBW1		1	5.38	216113	7.29	128392	9.04	209310	12.27	156103	13.89	13480	
4	1525	qp57sb.d	QP57LCSW1		1	5.39	217507	7.31	130530	9.04	211662	12.27	152958	13.88	125274	
5	1549	qp57sbd.d	QP57LCSDW1		1	5.39	210439	7.31	125361	9.04	206793	12.25	148733	13.88	124602	
6	1612	qp57d.d	QP57D		1	5.38	224020	7.31	126948	9.04	201095	12.25	141968	13.88	121042	
7	1636	qp57f.d	QP57F		1	5.38	211840	7.29	107925	9.04	166981	12.25	112740	13.88	95651	
8	1700	qp57g.d	QP57G		1	5.38	219886	7.31	124057	9.04	197363	12.25	135913	13.88	121601	
9	1723	qp57l.d	QP57L		1	5.38	283290	7.31	124154	9.04	195486	12.27	138903	13.88	129724	
10	1747	qq20mb.d	QQ20MBW1	QQ20MBW1	1	5.38	199128	7.31	112885	9.04	182294	12.25	129872	13.88	120744	
11	1811	qq20sb.d	QQ20LCSW1	QQ20LCSW1	1	5.38	218486	7.31	126002	9.04	201515	12.25	146327	13.88	133169	
12	1834	qq20a.d	QQ20A	CB31A032S10C	1	5.38	210012	7.31	120756	9.04	192568	12.25	115817	13.88	112398	
13	1858	qq20ams.d	QQ20AMS	CB31A032510C	1	5.38	193478	7.31	111247	9.04	179471	12.27	110311	13.88	105289	
14	1922	qq20amsd.d	QQ20AMSD	CB31A032S10C	1	5.39	205600	7.31	122705	9.04	201406	12.25	122230	13.88	117304	
15	1945	qq20b.d	QQ20B	CB4857032510	1	5.38	196206	7.31	115775	9.04	187706	12.27	111652	13.88	106602	
16	2009	qq20c.d	QQ20C	CB1032510COM	1	5.39	210555	7.31	125046	9.04	200461	12.25	125127	13.88	114146	
17	2033	qq20d.d	QQ20D	CB101032510C	1	5.39	205919	7.31	117008	9.04	189751	12.25	116784	13.88	111146	
18	2056	qq37mb.d	QQ37MBW1		1	5.39	204543	7.31	117275	9.04	193954	12.25	133147	13.88	110045	
19	2120	qq37sb.d	QQ37LCSW1		1	5.38	204051	7.31	117590	9.04	188213	12.25	137925	13.88	121925	
20	2144	qq37sbd.d	QQ37LCSDW1		1	5.38	219152	7.31	125126	9.04	200715	12.25	147981	13.88	132426	
21	2207	qq37a.d	QQ37A		1	5.39	203919	7.31	114942	9.04	188411	12.25	112776	13.88	106445	
22	2231	qq37b.d	QQ37B		1	5.39	218771	7.31	122896	9.03	202821	12.25	127401	13.88	125157	

new times, new septum

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): CC0402A

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: QQ20 Client ID: Floyd-Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): LL SIM PNA

Instrument: NT-1 NT-2 NT-4 NT-6 (NT-8)

Curve Date: 3/22/10 Analysis Start Date: 4/2/10

DFTPP Tune Meets Criteria? (YES) / NO

Internal Standard Meets Criteria? (YES) / NO

DDT Breakdown <20%? (YES) / NO / NA

Method Blank In Control? (YES) / NO

Peak Tailing Factor ≤2? (YES) / NO / NA

LCS / LCSD Recovery In Control? (YES) / NO

ICal acceptable (YES) / NO; Q flag applied YES / (NO)

Surrogate Recovery In Control? (YES) / NO

CCal acceptable (YES) / NO; Q flag applied (YES) / NO

Special Analysis Criteria Met? (YES) / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / (No)

Analyst Signature: YZ **Date:** 4/3/10

Reviewer's Signature: [signature] **Date:** 4/5/10

PCP/Chlorophenols ANALYSIS
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	TBP	TOT OUT
MB-033010	78.4%	0
LCS-033010	83.8%	0
CB31A032510COMP	74.4%	0
CB31A032510COMP MS	76.8%	0
CB31A032510COMP MSD	79.0%	0
CB4857032510COMP	63.6%	0
CB1032510COMP	68.4%	0
CB101032510COMP	62.4%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 10-8030 to 10-8033

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB31A032510COMP
MS/MSD

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted MS/MSD: 03/30/10

Sample Amount MS: 500 mL
MSD: 500 mL

Date Analyzed MS: 04/02/10 22:10
MSD: 04/02/10 22:30

Final Extract Volume MS: 50 mL
MSD: 50 mL

Instrument/Analyst MS: ECD1/JGR
MSD: ECD1/JGR

Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	0.84	3.03	2.50	87.6%	3.14	2.50	92.0%	3.6%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: LCS-033010
LAB CONTROL

Lab Sample ID: LCS-033010
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 21:30
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	2.51	2.50	100%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	83.8%

Results reported in µg/L

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

QQ20MBW1

Lab Name: ANALYTICAL RESOURCES, INC — Client: FLOYD SNIDER

ARI Job No.: QQ20 — Project: LORA LAKE APTS

Lab Sample ID: QQ20MBW1 — Lab File ID: 0402A024

Matrix (soil/water) LIQUID — Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y — Date Extracted: 03/30/10

Date Analyzed (1): 04/02/10 — Date Analyzed (2): 04/02/10

Time Analyzed (1): 2111 — Time Analyzed (2): 2111

Instrument ID (1): ECD1 — Instrument ID (2): ECD1

GC Column (1): ZB5 ID: 0.53(mm) — GC Column (2): ZB35 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QQ20LCSW1	QQ20LCSW1	04/02/10	04/02/10
02	CB31A032510C	QQ20A	04/02/10	04/02/10
03	CB31A032510C	QQ20AMS	04/02/10	04/02/10
04	CB31A032510C	QQ20AMSD	04/02/10	04/02/10
05	CB4857032510	QQ20B	04/02/10	04/02/10
06	CB1032510COM	QQ20C	04/03/10	04/03/10
07	CB101032510C	QQ20D	04/03/10	04/03/10

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 02/18/10 02/18/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 9.90

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	02/18/10	2017	9.90
02		PCPA	02/18/10	2037	9.91
03		PCPB	02/18/10	2057	9.91
04		PCPC	02/18/10	2117	9.90
05		PCPE	02/18/10	2137	9.90
06		PCPF	02/18/10	2156	9.90
07	ZZZZZ	ZZZZZ	02/18/10	2216	9.90
08	QQ20MBW1	QQ20MBW1	04/02/10	2111	9.94
09	QQ20LCSW1	QQ20LCSW1	04/02/10	2130	9.92
10	CB31A032510C	QQ20A	04/02/10	2150	9.91
11	CB31A032510C	QQ20AMS	04/02/10	2210	9.91
12	CB31A032510C	QQ20AMSD	04/02/10	2230	9.91
13	CB4857032510	QQ20B	04/02/10	2250	9.91
14	CB1032510COM	QQ20C	04/03/10	2310	9.92
15	CB101032510C	QQ20D	04/03/10	2330	9.91

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 02/18/10 02/18/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.55

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	02/18/10	2017	10.54
02		PCPA	02/18/10	2037	10.55
03		PCPB	02/18/10	2057	10.55
04		PCPC	02/18/10	2117	10.54
05		PCPE	02/18/10	2137	10.54
06		PCPF	02/18/10	2156	10.54
07	ZZZZZ	ZZZZZ	02/18/10	2216	10.54
08	QQ20MBW1	QQ20MBW1	04/02/10	2111	10.57
09	QQ20LCSW1	QQ20LCSW1	04/02/10	2130	10.56
10	CB31A032510C	QQ20A	04/02/10	2150	10.55
11	CB31A032510C	QQ20AMS	04/02/10	2210	10.55
12	CB31A032510C	QQ20AMSD	04/02/10	2230	10.55
13	CB4857032510	QQ20B	04/02/10	2250	10.55
14	CB1032510COM	QQ20C	04/03/10	2310	10.55
15	CB101032510C	QQ20D	04/03/10	2330	10.55

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

PCP/Chlorophenols ANALYSIS
Sample Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A032510COMP
SAMPLE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 21:50
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**0.25**	**0.84**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	74.4%

FORM I

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

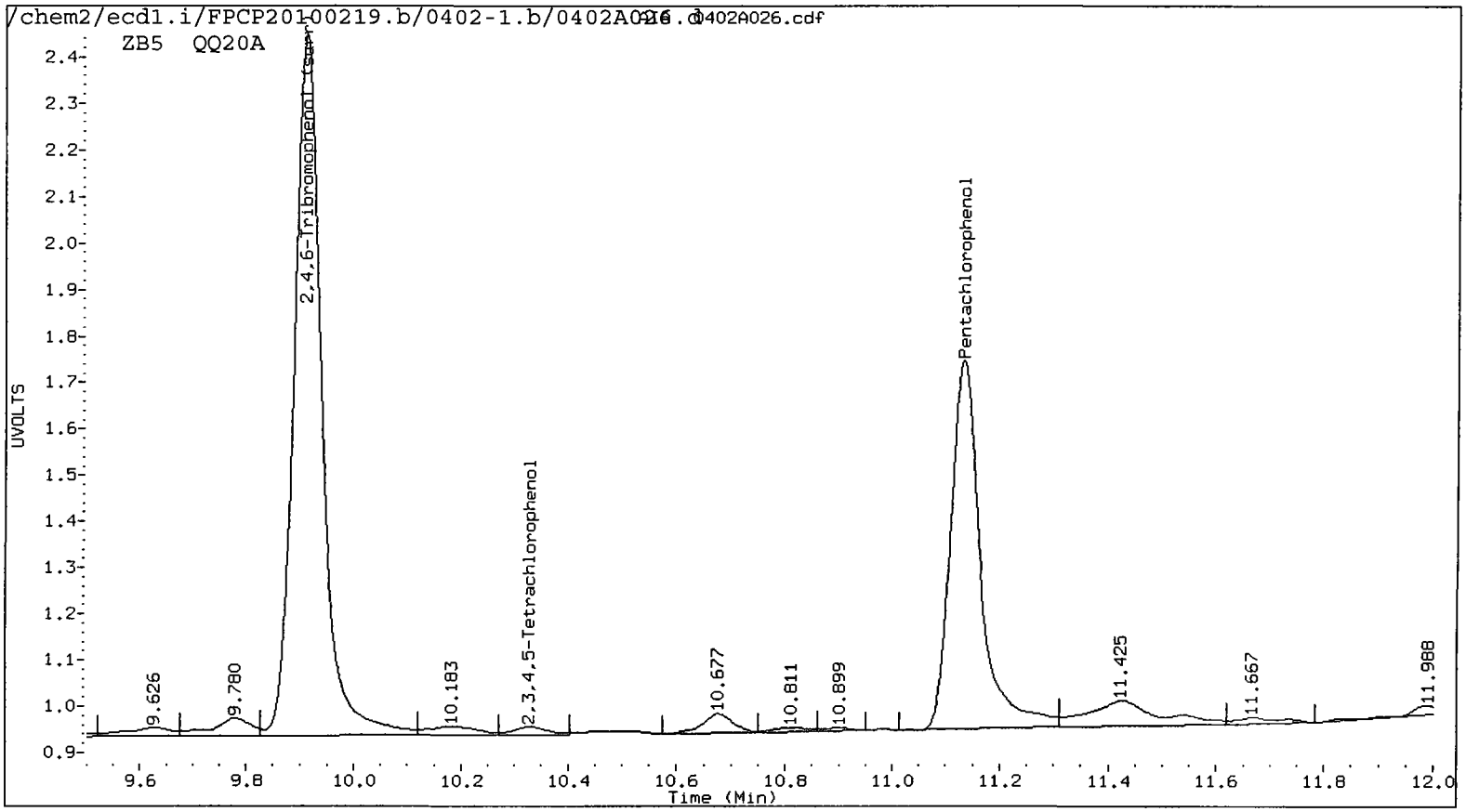
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A026.d ARI ID: QQ20A
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A026.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 02-APR-2010 21:50
Compound Sublist: all Report Date: 04/06/2010 08:27
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.133	0.009	153936	11.577	0.001	152909	8.4071	7.4391	12.2	Pentachlorophenol
7.141	-0.049	25247	7.298	0.036	2759	2.4985	0.2426	164.6*	2,4,6-Trichlorophenol
7.555	0.015	9015	7.779	-0.008	2153	0.8997	0.1909	130.0*	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
8.658	-0.023	6186	----			0.8746	0.0000	---	2,3,4-Trichlorophenol
8.982	0.070	17046	9.206	0.022	4158	1.1105	0.2448	127.8*	2,3,5,6-Tetrachlorophenol
10.328	0.026	3902	11.002	-0.022	3836	0.3323	0.2932	12.5	2,3,4,5-Tetrachlorophenol
6.844	0.027	4524	7.085	-0.006	2029	9.1889	3.5964	87.5*	2,4-Dichlorophenol
9.910	0.011	272188	10.549	0.002	308869	18.6	18.5	0.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	74.6	74.0

04/06/10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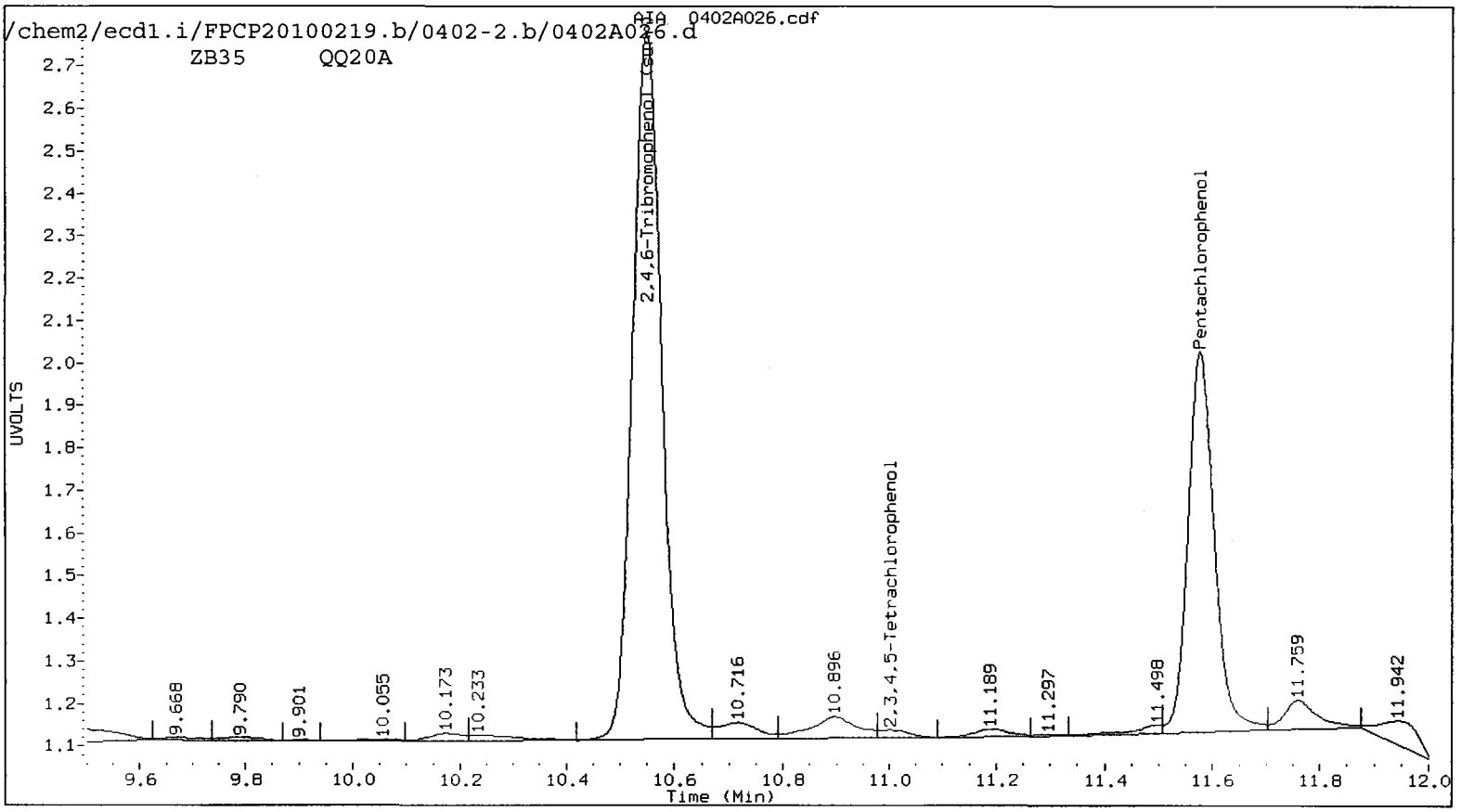
0402A026.cdf
ZB5 QQ20A
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.626
9.780
10.183
10.677
10.811
10.899
11.425
11.667
11.988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0402A026.cdf
ZB35 QQ20A
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.668
9.790
9.901
10.055
10.173
10.233
10.716
10.896
11.189
11.297
11.498
11.759
11.942

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB4857032510COMP
SAMPLE

Lab Sample ID: QQ20B
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 22:50
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	0.60

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	63.6%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

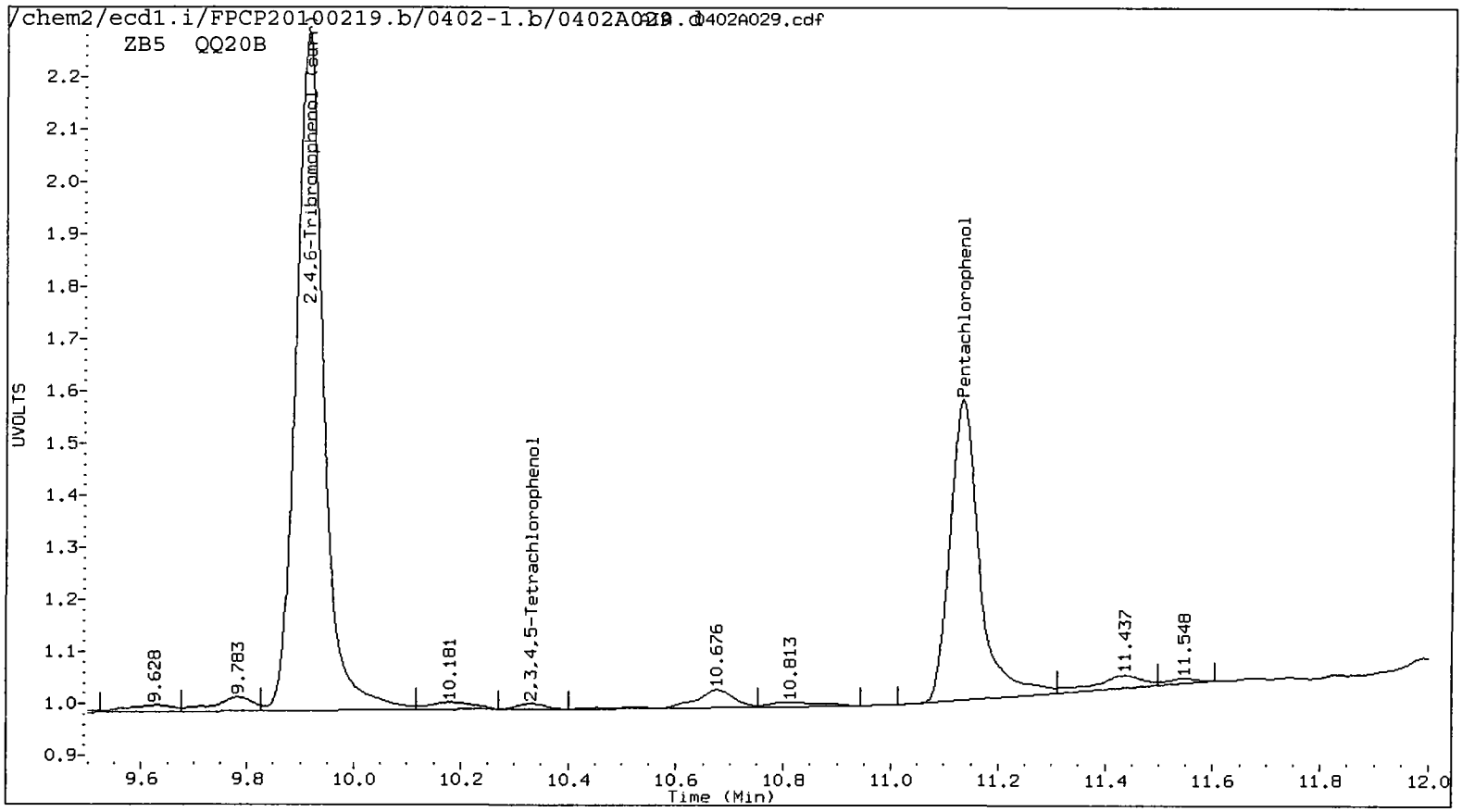
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A029.d ARI ID: QQ20B
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A029.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 02-APR-2010 22:50
Compound Sublist: all Report Date: 04/06/2010 08:27
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.133	0.010	109403	11.578	0.002	113038	5.9750	5.4993	8.3	Pentachlorophenol
7.147	-0.043	23234	7.292	0.030	1950	2.2993	0.1714	172.2*	2,4,6-Trichlorophenol
7.558	0.018	6245	7.779	-0.008	1451	0.6232	0.1286	131.6*	2,3,6-Trichlorophenol
----			8.467	-0.053	2423	0.0000	0.4106	---	2,4,5-Trichlorophenol
8.647	-0.033	53420	----			7.5530	0.0000	---	2,3,4-Trichlorophenol
----			9.206	0.023	2678	0.0000	0.1576	---	2,3,5,6-Tetrachlorophenol
10.331	0.029	1920	11.004	-0.019	1788	0.1635	0.1367	17.9	2,3,4,5-Tetrachlorophenol
6.845	0.028	5888	7.086	-0.005	1985	11.9593	3.5184	109.1*	2,4-Dichlorophenol
9.912	0.013	232259	10.550	0.004	261935	15.9	15.7	1.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	63.6	62.7

04/06/10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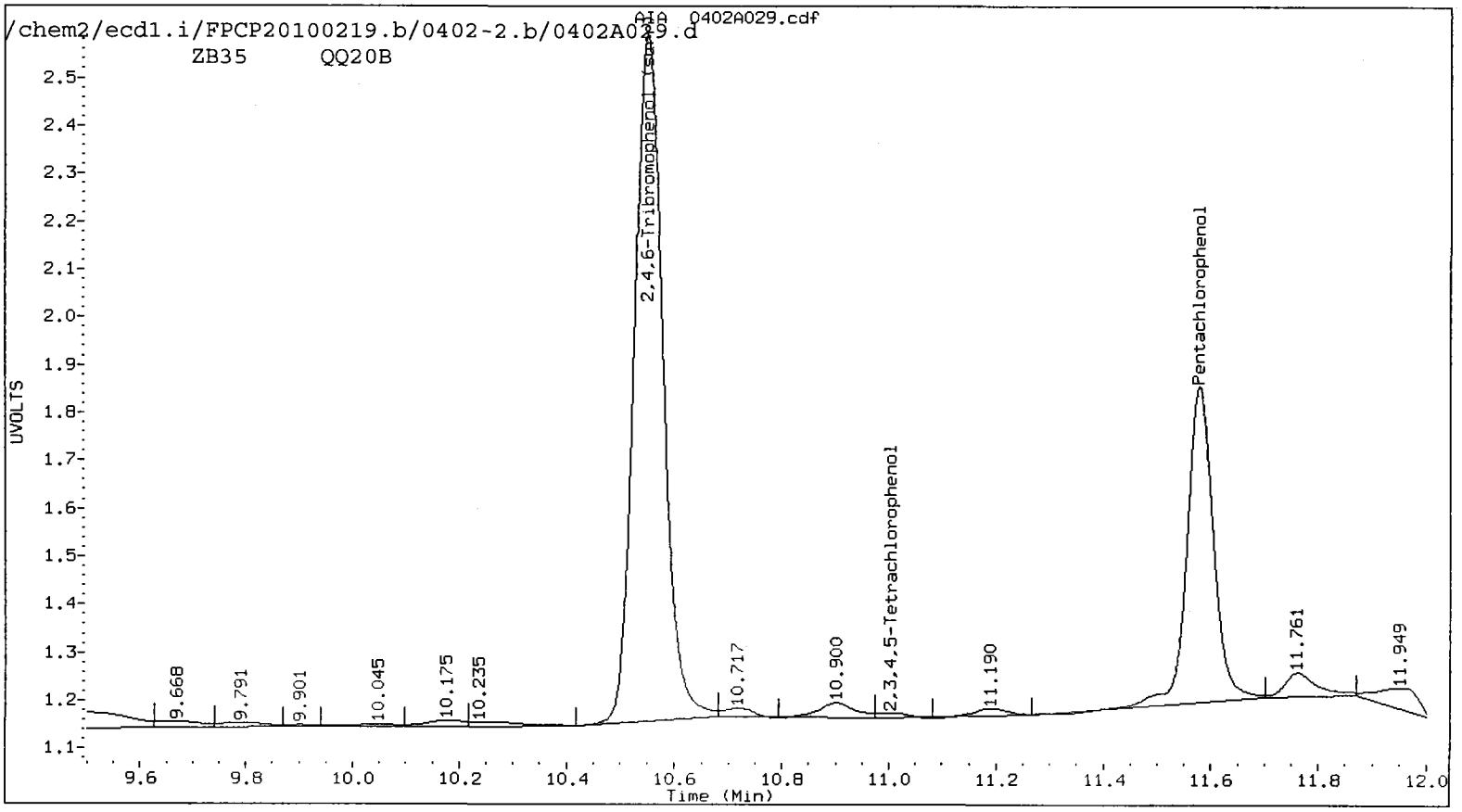
0402A029.cdf
ZB5 QQ20B
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.628
9.783
10.181
10.676
10.813
11.437
11.548
UVOLTS
Time (Min)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0402A029.cdf
ZB35 QQ20B
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.668
9.791
9.901
10.045
10.175
10.235
10.717
10.900
11.190
11.761
11.949
UVOLTS
Time (Min)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB1032510COMP
SAMPLE

Lab Sample ID: QQ20C
LIMS ID: 10-8032
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/03/10 23:10
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	68.4%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

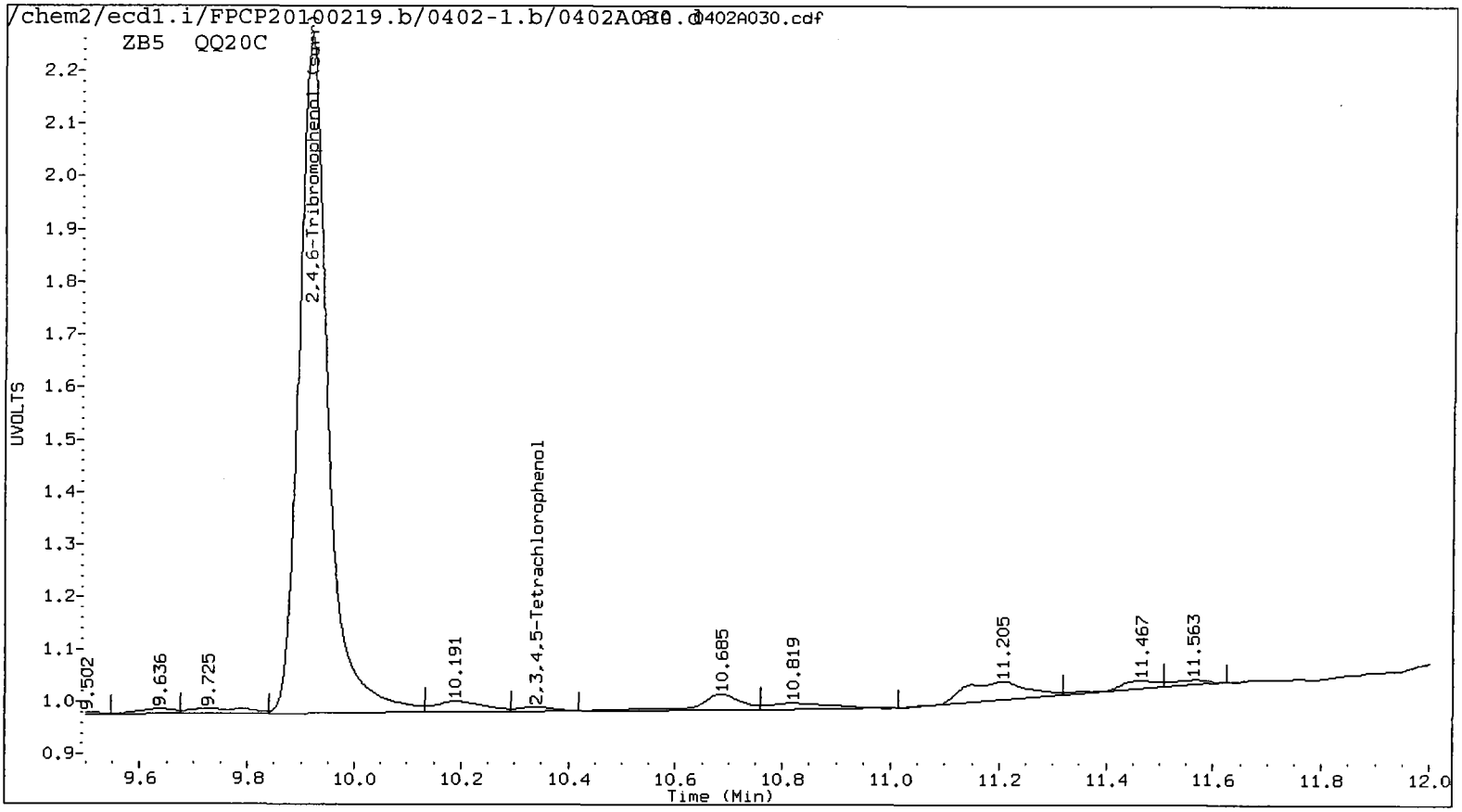
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A030.d ARI ID: QQ20C
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A030.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 03-APR-2010 23:10
Compound Sublist: all Report Date: 04/06/2010 08:27
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
----			11.581	0.004	17055	0.0000	0.8297	---	Pentachlorophenol
7.167	-0.023	17338	7.282	0.020	2344	1.7158	0.2061	157.1*	2,4,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,6-Trichlorophenol
----			8.470	-0.049	3840	0.0000	0.6508	---	2,4,5-Trichlorophenol
8.658	-0.023	33446	9.346	0.066	4955	4.7289	0.6347	152.7*	2,3,4-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,5,6-Tetrachlorophenol
10.339	0.037	1727	10.989	-0.034	2380	0.1471	0.1819	21.2	2,3,4,5-Tetrachlorophenol
6.845	0.028	7507	7.086	-0.005	2049	15.2477	3.6318	123.1*	2,4-Dichlorophenol
9.917	0.018	243741	10.554	0.008	285361	16.7	17.1	2.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	66.8	68.3

JC 04/06/10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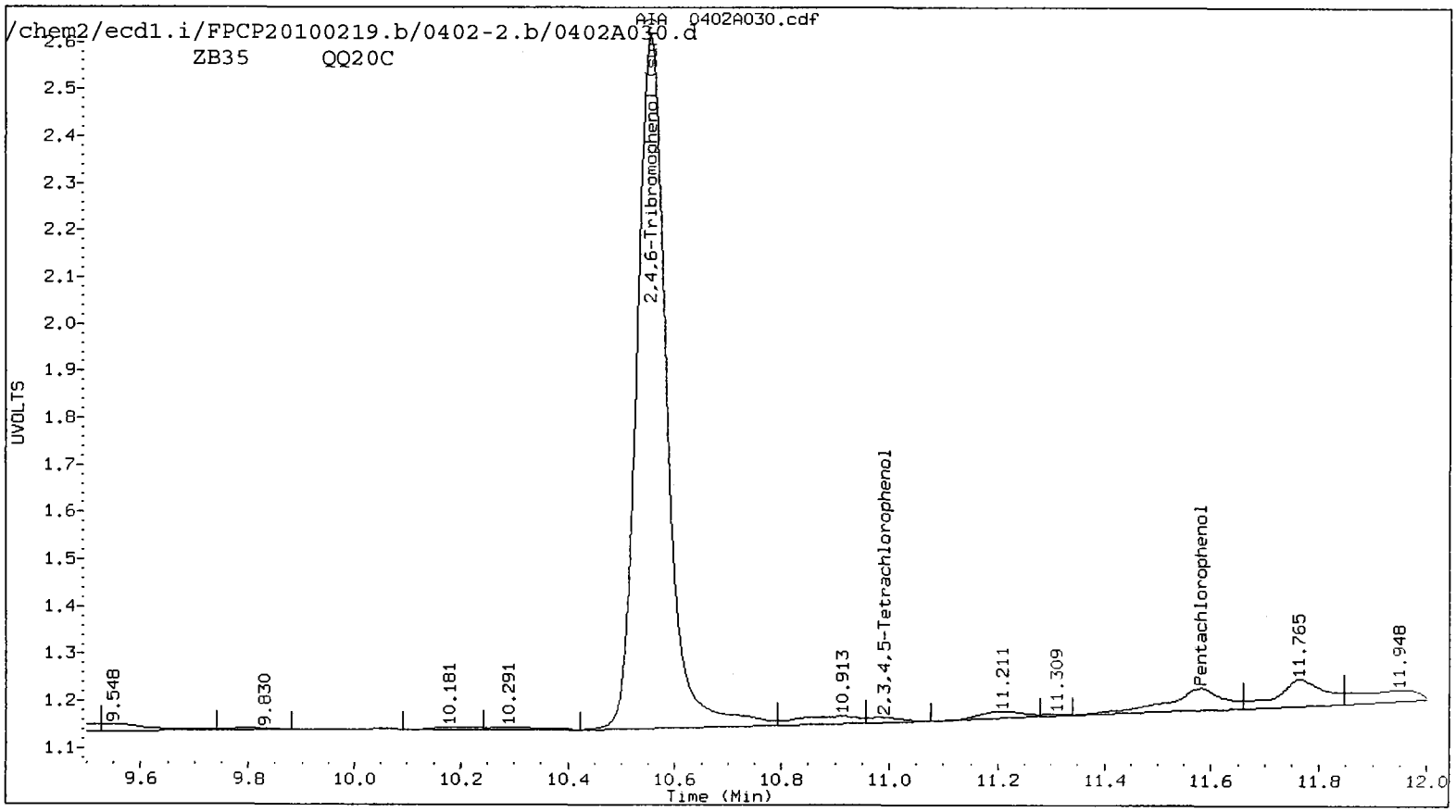
AIA 0402A030.cdf
ZB5 QQ20C
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
UVOLTS
Time (Min)
9.502
9.636
9.725
10.191
10.685
10.819
11.205
11.467
11.563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AIA 0402A030.cdf
ZB35 QQ20C
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)
9.548
9.830
10.181
10.291
10.913
11.211
11.309
11.765
11.948

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB101032510COMP
SAMPLE

Lab Sample ID: QQ20D
LIMS ID: 10-8033
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/03/10 23:30
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	0.25	0.59

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	62.4%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

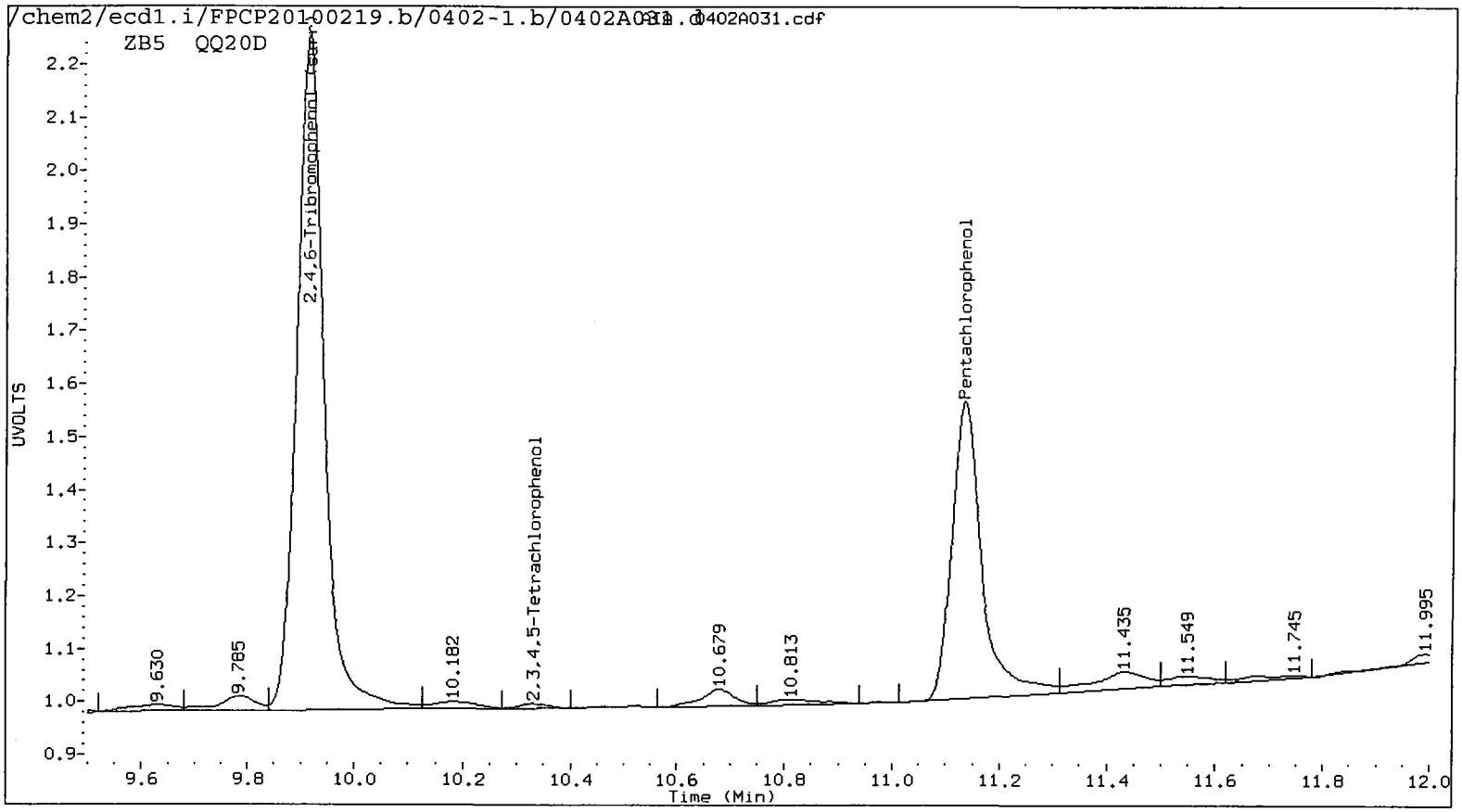
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A031.d ARI ID: QQ20D
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A031.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 03-APR-2010 23:30
Compound Sublist: all Report Date: 04/06/2010 08:28
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.135	0.012	108805	11.579	0.003	104772	5.9423	5.0972	15.3	Pentachlorophenol
7.147	-0.043	22396	7.269	0.007	2400	2.2163	0.2110	165.2*	2,4,6-Trichlorophenol
----			7.777	-0.010	500	0.0000	0.0443	---	2,3,6-Trichlorophenol
----			8.463	-0.056	1491	0.0000	0.2527	---	2,4,5-Trichlorophenol
8.652	-0.029	19055	----			2.6942	0.0000	---	2,3,4-Trichlorophenol
----			9.207	0.023	3217	0.0000	0.1894	---	2,3,5,6-Tetrachlorophenol
10.332	0.029	1642	----			0.1398	0.0000	---	2,3,4,5-Tetrachlorophenol
6.845	0.028	4888	7.084	-0.007	2586	9.9282	4.5837	73.7*	2,4-Dichlorophenol
9.914	0.015	227367	10.550	0.004	257303	15.6	15.4	1.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	62.3	61.6

04/06/10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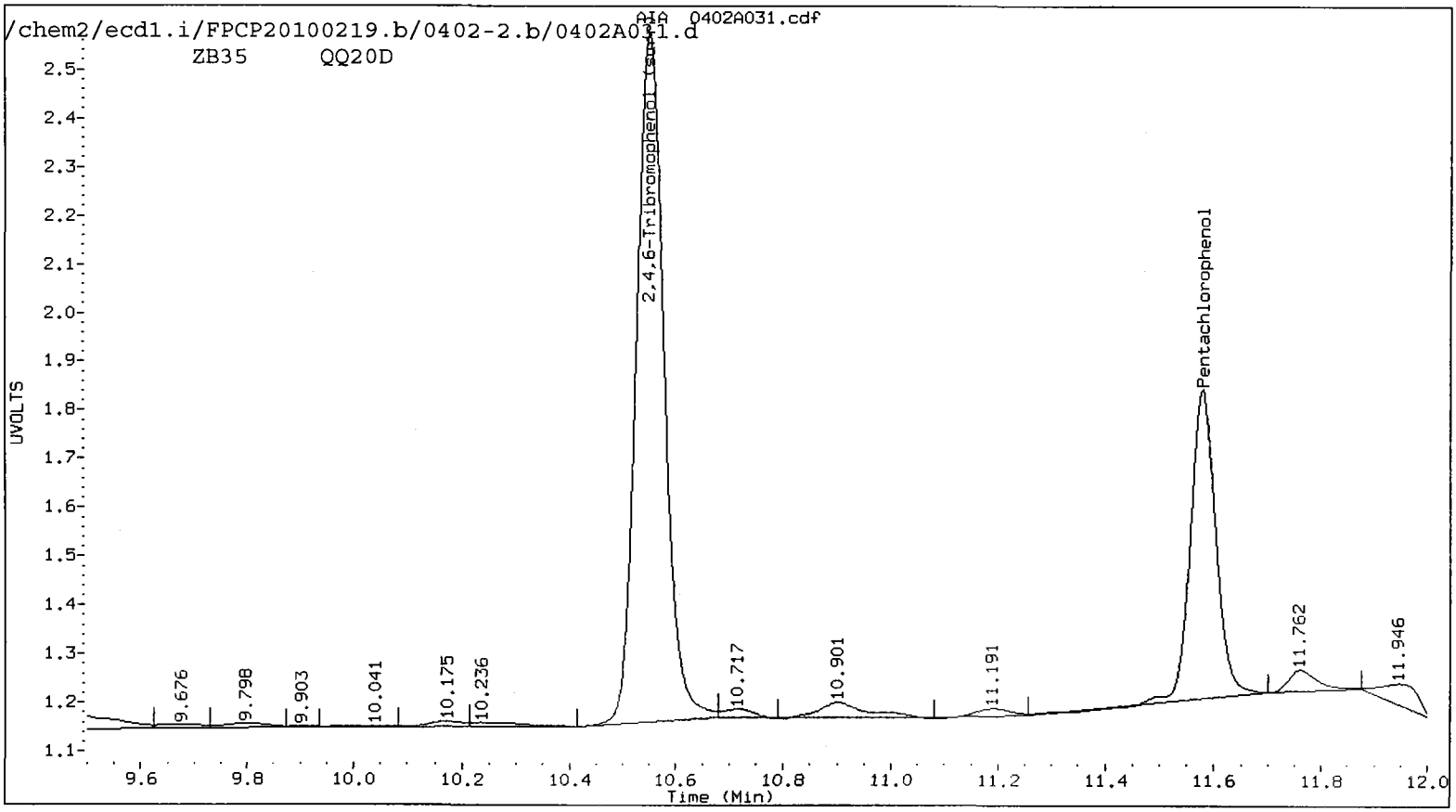
0402A031.cdf
ZB5 QQ20D
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.630
9.785
10.182
10.679
10.813
11.435
11.549
11.745
11.995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0402A031.cdf
ZB35 QQ20D
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.676
9.798
9.903
10.041
10.175
10.236
10.717
10.901
11.191
11.762
11.946

PCP/Chlorophenols ANALYSIS
Standard Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 02/18/10

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol___	11.13	11.13	11.13	11.12	11.12	11.13	11.05	11.19
2,4,6-Trichloropheno	7.19	7.19	7.19	7.19	7.19	7.19	7.12	7.26
2,3,6-Trichloropheno	7.55	7.55	7.54	7.54	7.54	7.54	7.47	7.61
2,4,5-Trichloropheno	8.16	8.15	8.14	8.14	8.14	8.15	8.07	8.21
2,3,4-Trichloropheno	8.70	8.70	8.69	8.69	8.68	8.69	8.61	8.75
2,3,5,6-Tetrachlorop	8.92	8.92	8.92	8.91	8.91	8.92	8.84	8.98
2,3,4,5-Tetrachlorop	10.32	10.32	10.31	10.31	10.30	10.31	10.23	10.37
2,4-Dichlorophenol__	6.82	6.82	6.82	6.82	6.82	6.82	6.75	6.89
2,4,6-Tribromophenol	9.91	9.91	9.90	9.90	9.90	9.90	9.83	9.97

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 02/18/10

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol___	11.58	11.58	11.57	11.57	11.57	11.57	11.51	11.65
2,4,6-Trichloropheno	7.26	7.26	7.26	7.26	7.26	7.26	7.19	7.33
2,3,6-Trichloropheno	7.79	7.79	7.79	7.79	7.78	7.79	7.72	7.86
2,4,5-Trichloropheno	8.52	8.52	8.52	8.51	8.51	8.52	8.45	8.59
2,3,4-Trichloropheno	9.28	9.28	9.28	9.27	9.27	9.28	9.21	9.35
2,3,5,6-Tetrachlorop	9.19	9.18	9.18	9.18	9.18	9.18	9.11	9.25
2,3,4,5-Tetrachlorop	11.03	11.02	11.02	11.02	11.02	11.02	10.95	11.09
2,4-Dichlorophenol__	7.09	7.09	7.09	7.09	7.09	7.09	7.02	7.16
2,4,6-Tribromophenol	10.55	10.55	10.54	10.54	10.54	10.54	10.48	10.62

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 02/18/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol____	19260	20286	19708	18632	16832	15143	10.7	A
2,4,6-Trichlorophenol	12690	11388	9439	10360	8705	8048	17.2	A
2,3,6-Trichlorophenol	11610	10956	10515	10092	8822	8128	13.1	A
2,4,5-Trichlorophenol	5557	5419	5418	5382	4505	4088	12.0	A
2,3,4-Trichlorophenol	8452	8484	7742	6654	5844	5260	19.3	A
2,3,5,6-Tetrachloroph	16891	16608	16259	15694	13938	12707	10.8	A
2,3,4,5-Tetrachloroph	14069	13078	12346	11471	10474	9024	15.5	A
2,4-Dichlorophenol___	539	574	536	478	449	376	14.8	A
2,4,6-Tribromophenol	16092	15471	15178	14700	13698	12467	9.0	A
						AVE RSD	13.6	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A012.d
LVL 2: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A013.d
LVL 3: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A014.d
LVL 4: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A011.d
LVL 5: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A015.d
LVL 6: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A016.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 02/18/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol____	21892	22397	21863	20727	19095	17355	9.6	A
2,4,6-Trichlorophenol	12480	12200	12371	11514	10380	9304	11.2	A
2,3,6-Trichlorophenol	12934	12277	11772	11120	10187	9386	11.7	A
2,4,5-Trichlorophenol	6873	6583	6297	5844	5218	4589	14.7	A
2,3,4-Trichlorophenol	8997	8826	8328	7674	6874	6144	14.5	A
2,3,5,6-Tetrachloroph	18467	18264	17819	17161	15802	14414	9.3	A
2,3,4,5-Tetrachloroph	13447	14149	13746	14433	11943	10771	10.9	A
2,4-Dichlorophenol___	664	633	639	562	478	409	18.0	A
2,4,6-Tribromophenol	17723	17320	17250	16916	16059	14968	6.1	A
						AVE RSD	11.8	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A012.d/0218A012.cdf
LVL 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A013.d/0218A013.cdf
LVL 3: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A014.d/0218A014.cdf
LVL 4: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A011.d/0218A011.cdf
LVL 5: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A015.d/0218A015.cdf
LVL 6: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A016.d/0218A016.cdf

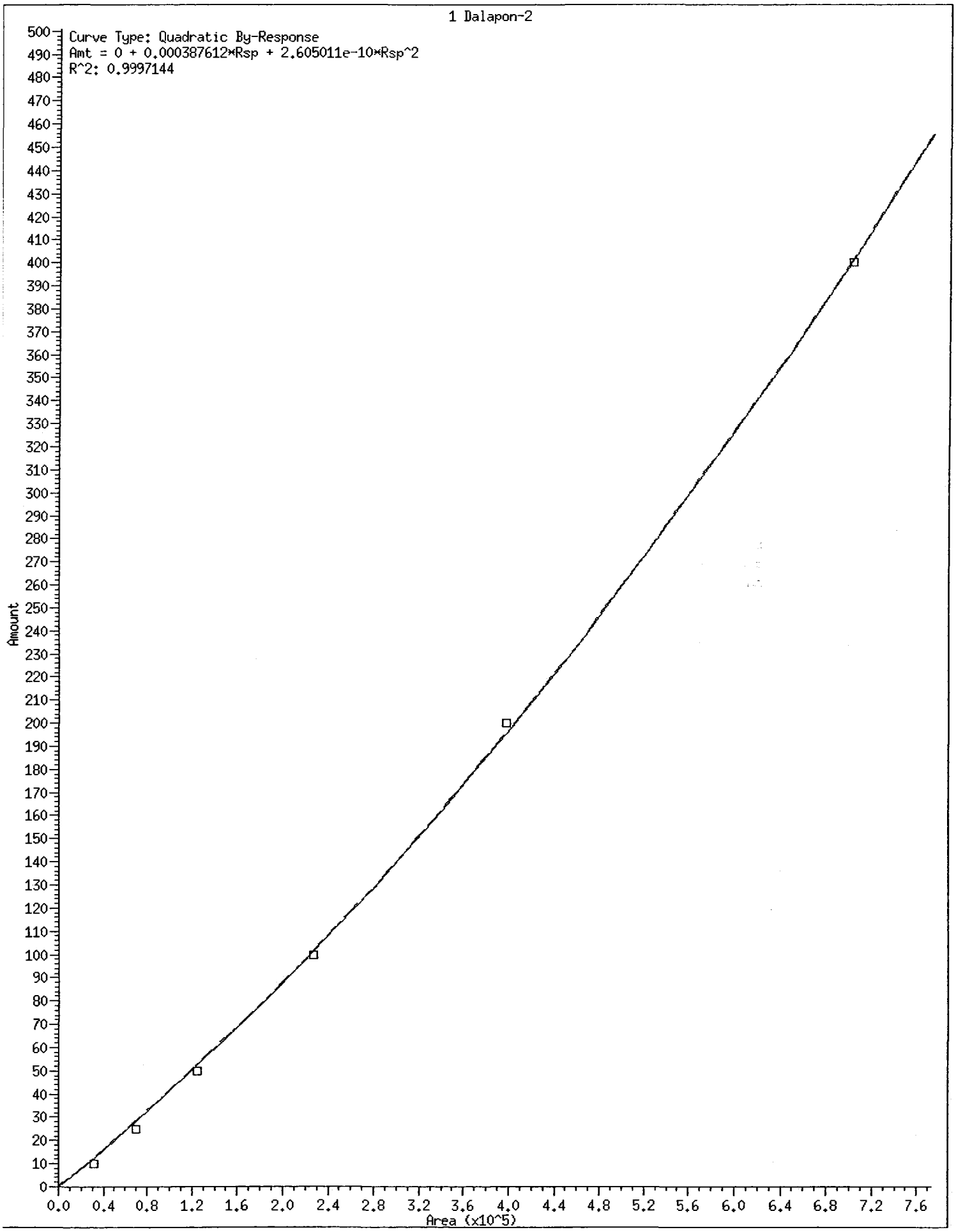
Analytical Resources, Inc.

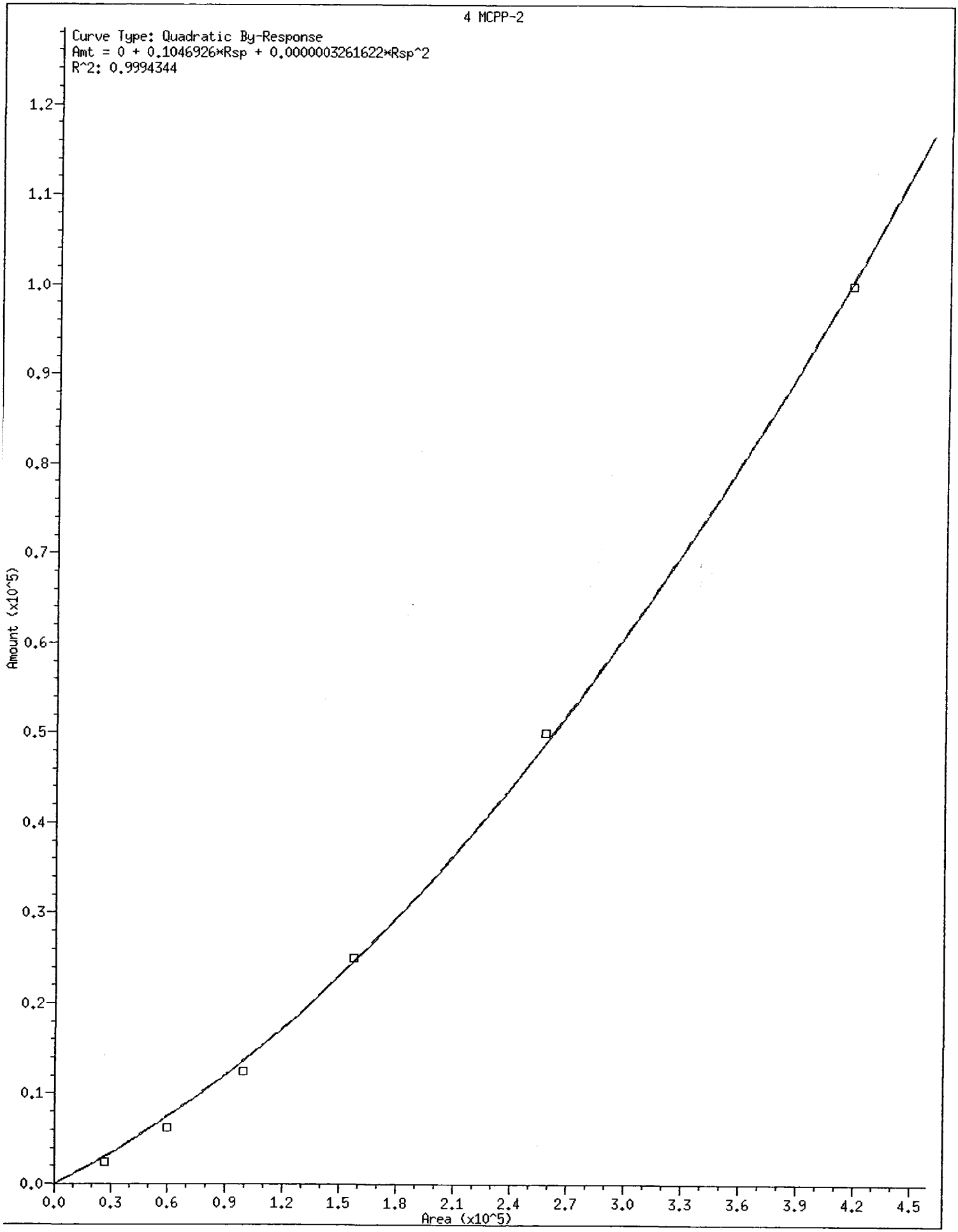
INITIAL CALIBRATION DATA

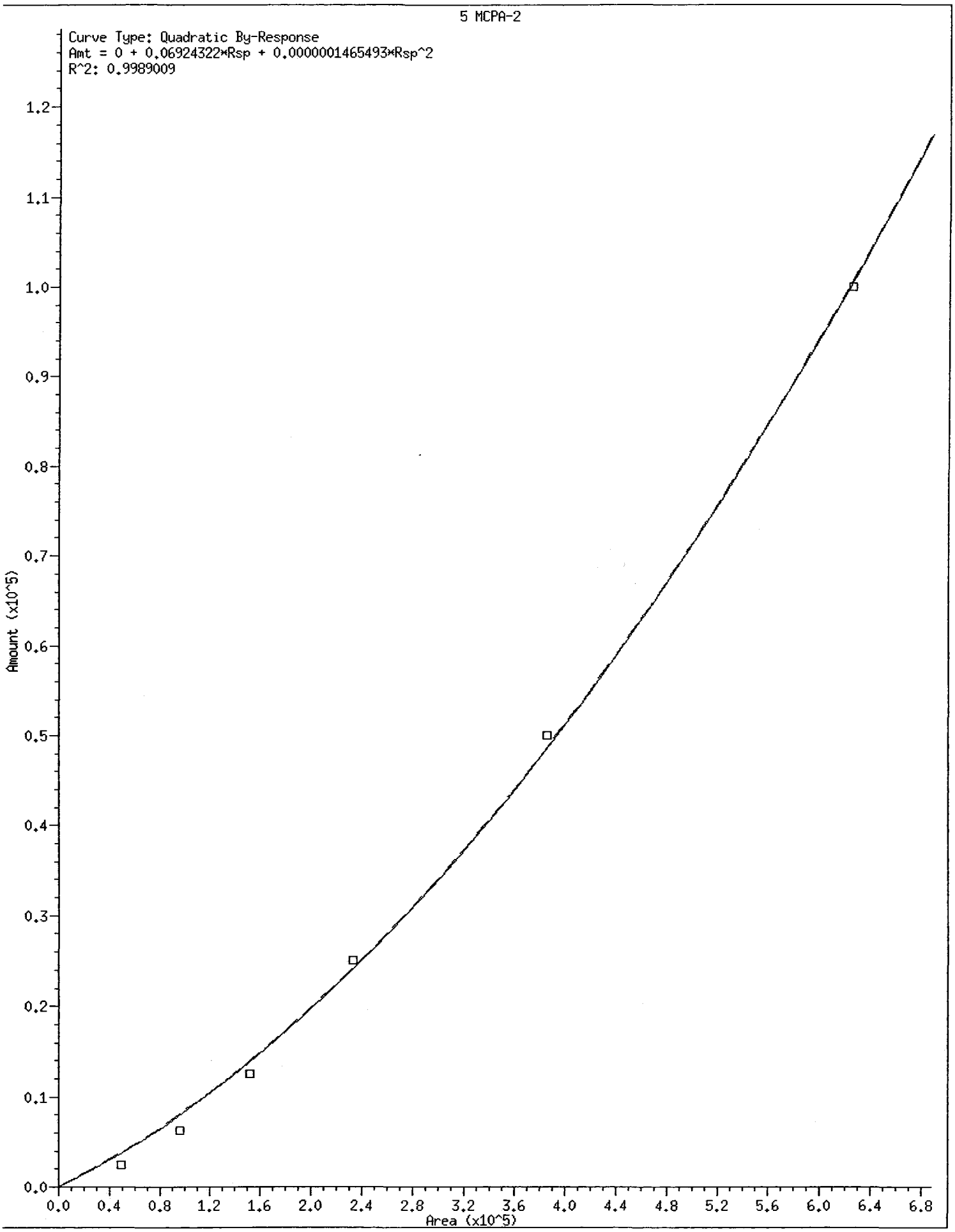
Start Cal Date : 19-FEB-2010 20:56
End Cal Date : 19-FEB-2010 23:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/HERB20100218.b/HERBB.m
Cal Date : 20-Feb-2010 07:30 aron
Curve Type : Average

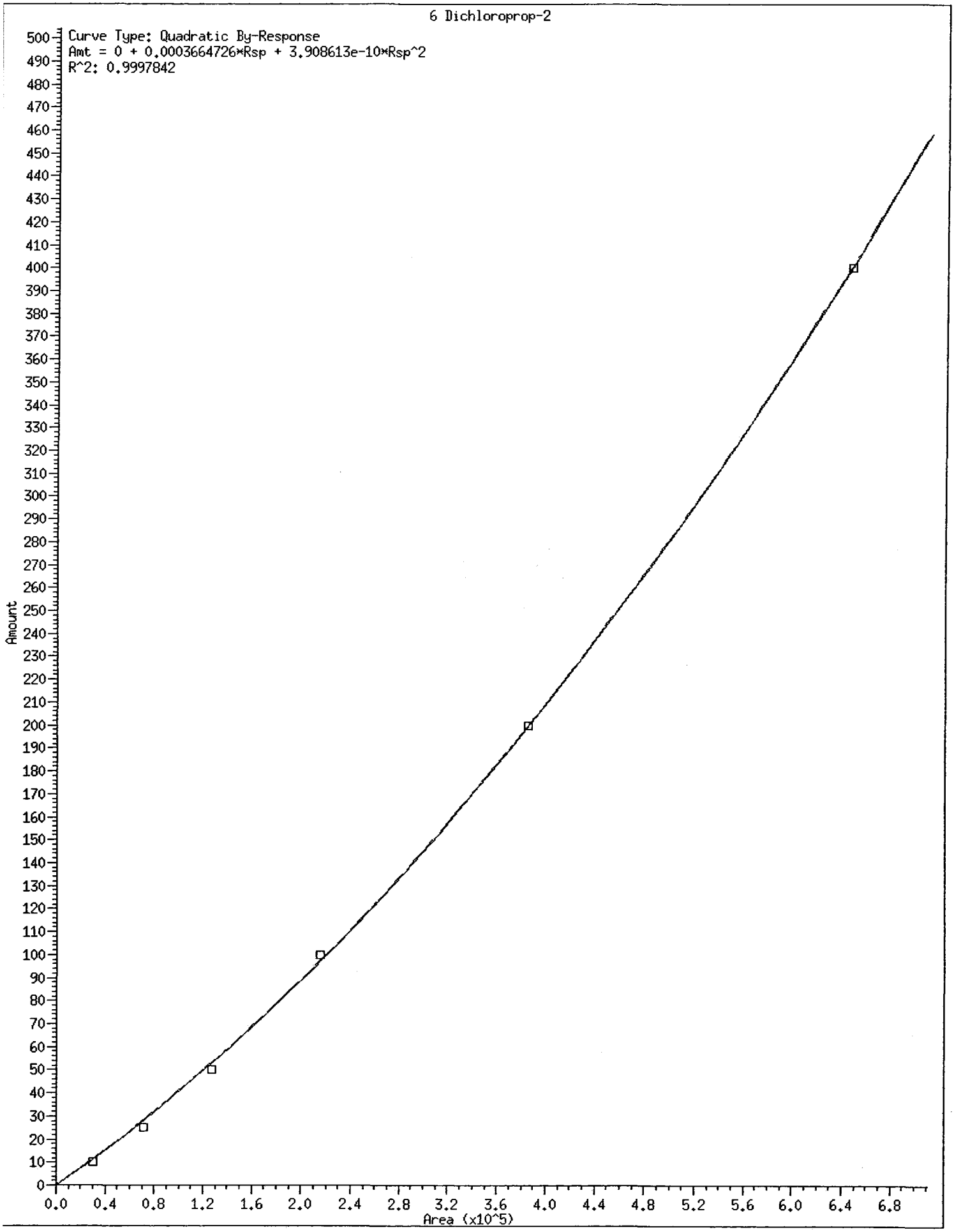
Calibration File Names:
Level 1: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A084.d
Level 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A085.d
Level 3: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A086.d
Level 4: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A083.d
Level 5: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A087.d
Level 6: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A088.d

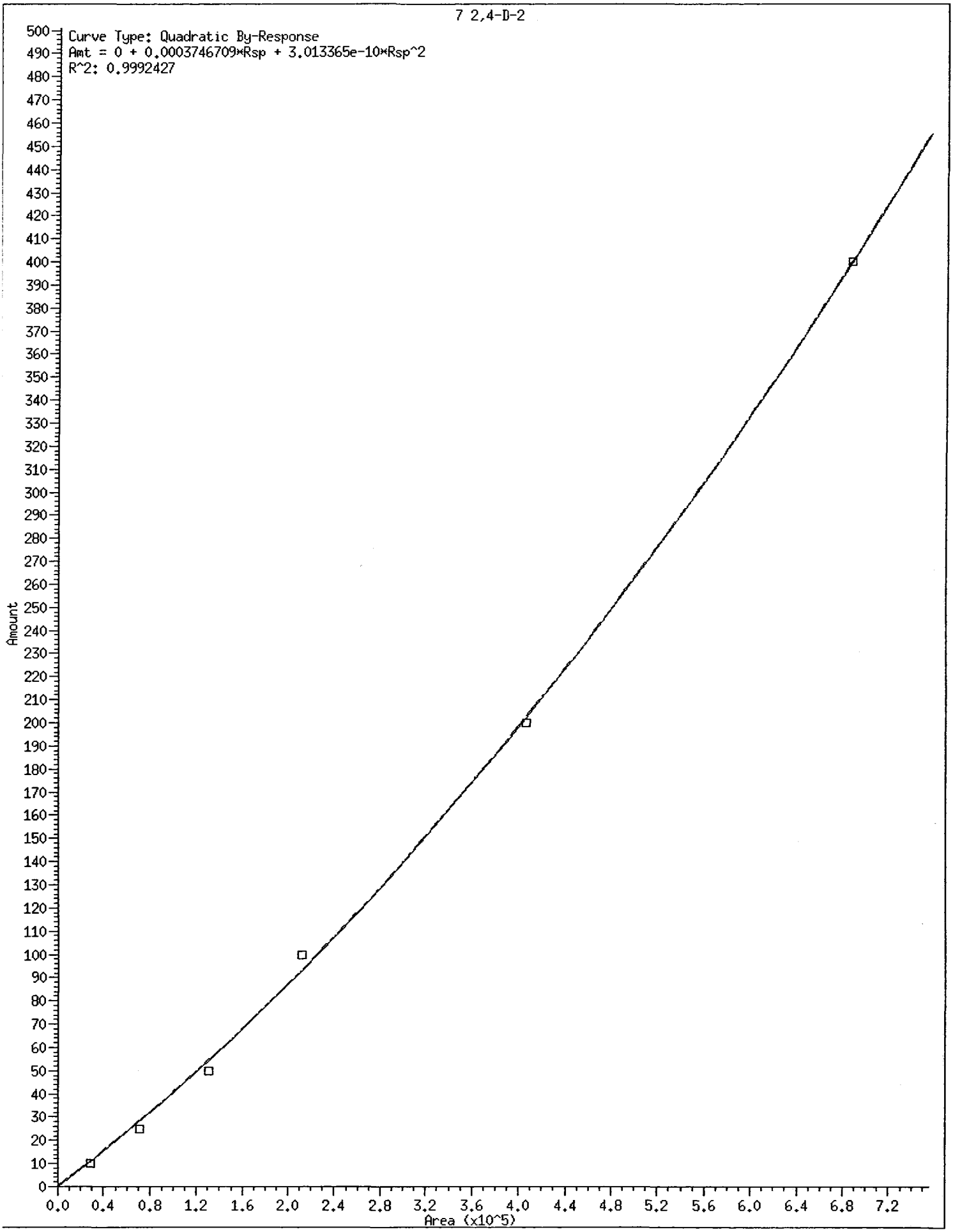
	Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	400.000 Level 6	___ RRF	% RSD	
1	Dalapon-2	3120	2808	2500	2266	1992	1757	2407	21.123	<-
3	Dicamba-2	7323	6630	6077	5460	4960	4353	5801	18.886	
4	MCPP-2	10.78080	9.60720	7.95248	6.28692	5.16860	4.17134	7.32789	35.174	<-
5	MCPA-2	19.64400	15.28256	12.12832	9.31536	7.71728	6.25138	11.72315	43.051	<-
6	Dichloroprop-2	2986	2848	2549	2155	1926	1617	2347	22.928	<-
7	2,4-D-2	2878	2840	2620	2116	2034	1718	2368	20.204	<-
8	Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9	Silvex-2	20024	15064	12695	10517	10444	9225	12995	30.904	<-
10	2,4,5-T-2	10704	10255	9883	9031	8438	7538	9308	12.842	
11	2,4-DB-2	1401	1345	1218	1054	939	812	1128	20.611	<-
12	Dinoseb-2	9293	8432	8003	7212	6698	5978	7603	15.913	
$ 2	Surrogate-2	2655	2327	2069	1789	1554	1299	1949	25.759	<-

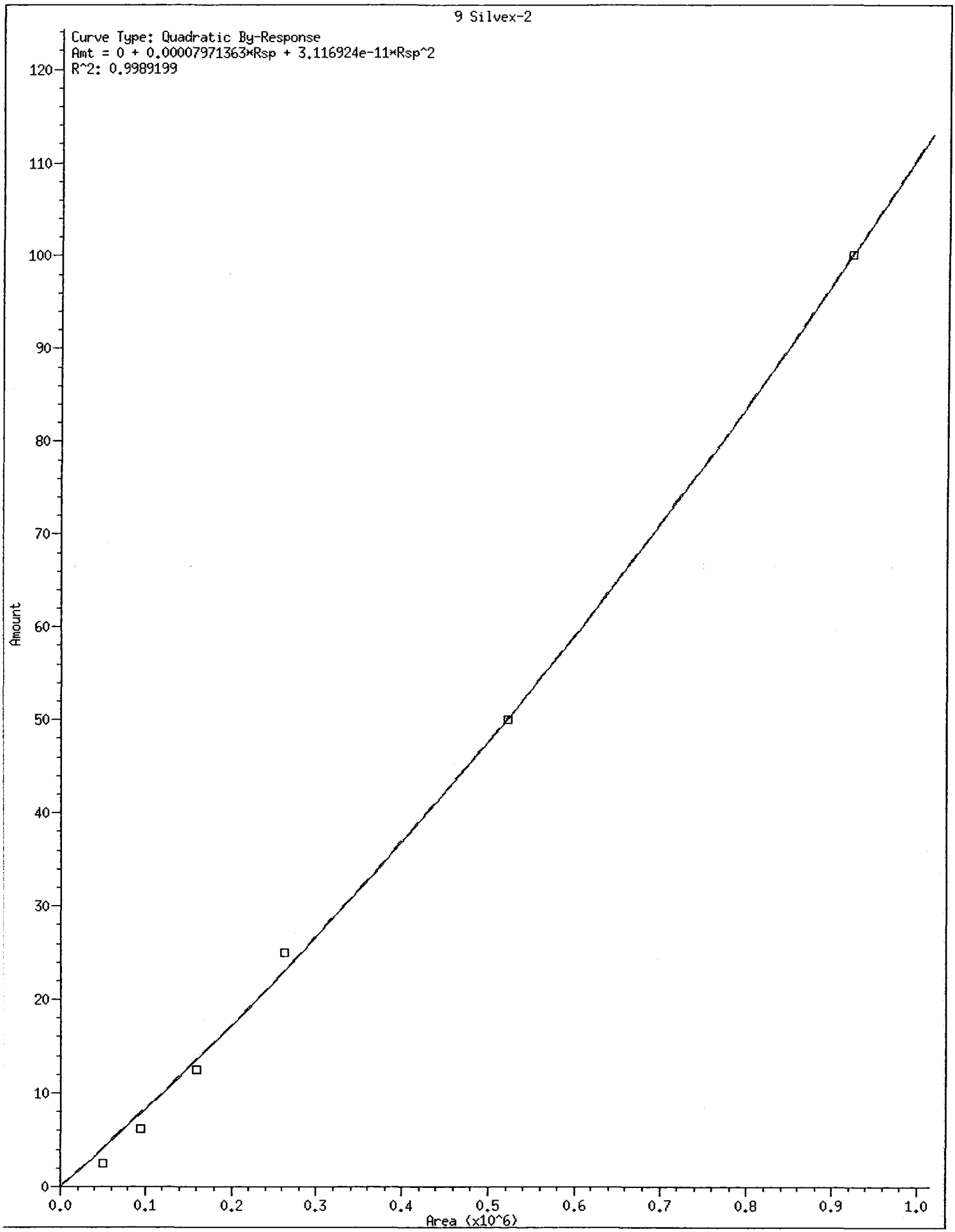

1 Dalapon-2
Curve Type: Quadratic By-Response
Amt = 0 + 0.000387612*Rsp + 2.605011e-10*Rsp^2
R^2: 0.9997144
Amount
Area (x10^5)

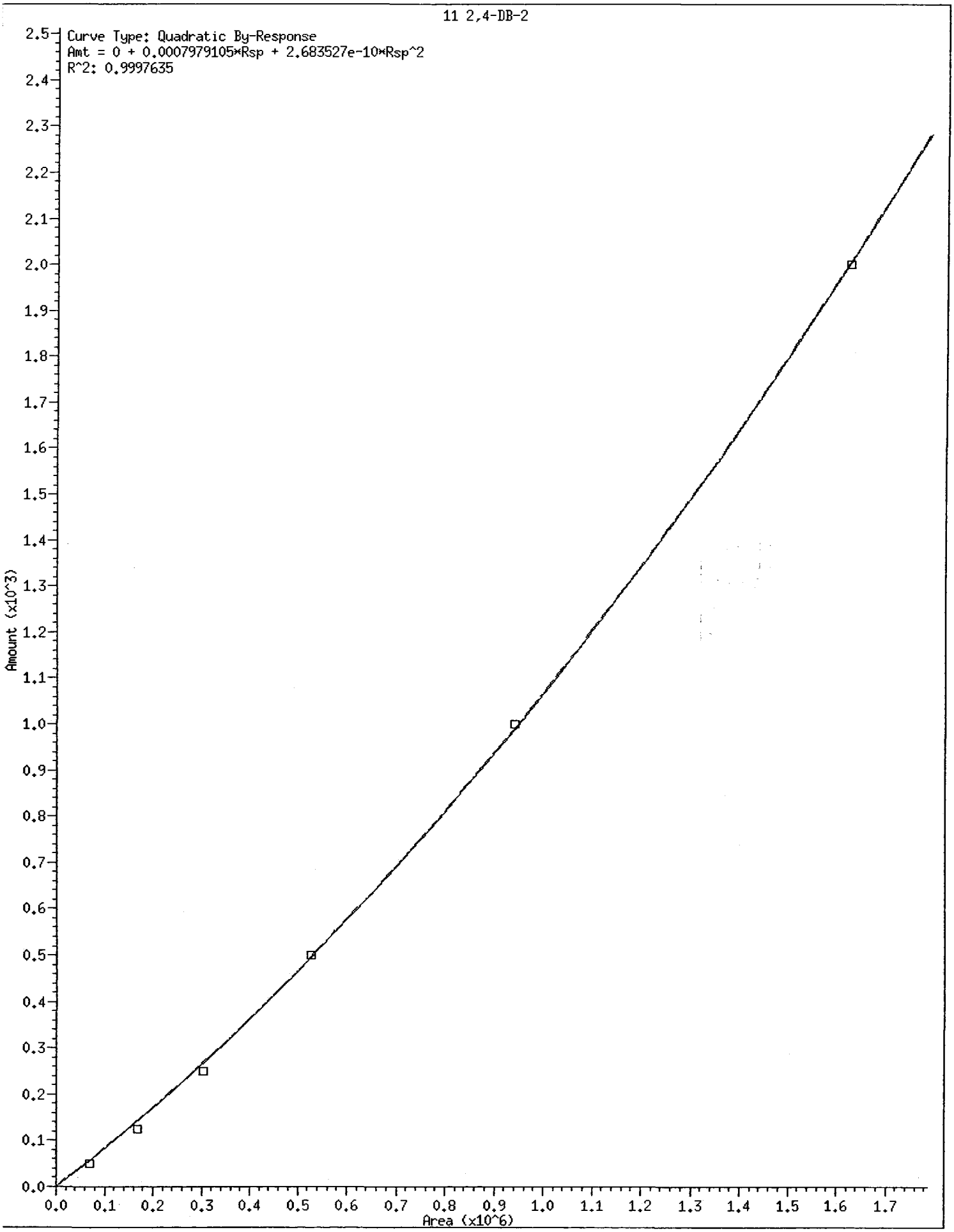

4 MCPP-2
Curve Type: Quadratic By-Response
Amt = 0 + 0.1046926*Rsp + 0.0000003261622*Rsp^2
R^2: 0.9994344
Amount (x10^5)
Area (x10^5)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5

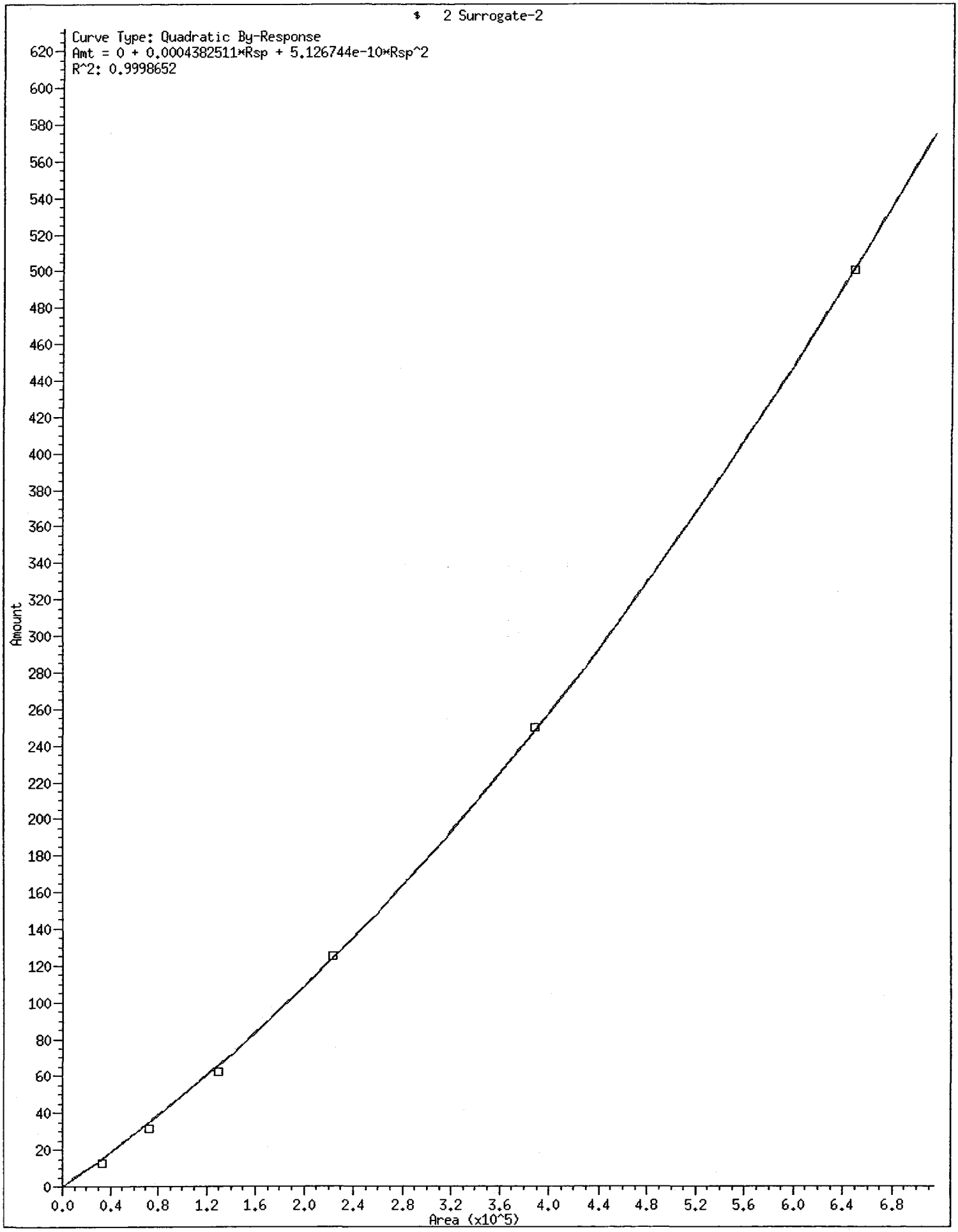

5 MCPA-2
Curve Type: Quadratic By-Response
Amt = 0 + 0.06924322*Rsp + 0.0000001465493*Rsp^2
R^2: 0.9989009
Amount (x10^5)
Area (x10^5)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8


6 Dichloroprop-2
Curve Type: Quadratic By-Response
Amt = 0 + 0.0003664726*Rsp + 3.908613e-10*Rsp^2
R^2: 0.9997842
Amount
Area (x10^5)
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500
0.0 0.4 0.8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6 6.0 6.4 6.8


7 2,4-D-2
Curve Type: Quadratic By-Response
Amt = 0 + 0.0003746709*Rsp + 3.013365e-10*Rsp^2
R^2: 0.9992427
Amount
Area (x10^5)
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500
0.0 0.4 0.8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6 6.0 6.4 6.8 7.2


9 Silvex-2
Curve Type: Quadratic By-Response
Amt = 0 + 0.00007971363*Rsp + 3.116924e-11*Rsp^2
R^2: 0.9989199
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0


11 2,4-DB-2
Curve Type: Quadratic By-Response
Amt = 0 + 0.0007979105*Rsp + 2.683527e-10*Rsp^2
R^2: 0.9997635
Amount (x10^3)
Area (x10^6)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5


$ 2 Surrogate-2
Curve Type: Quadratic By-Response
Amt = 0 + 0.0004382511*Rsp + 5.126744e-10*Rsp^2
R^2: 0.9998652
Amount
Area (x10^5)
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
420
440
460
480
500
520
540
560
580
600
620
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 18-FEB-2010 14:52
End Cal Date : 19-FEB-2010 23:56
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/HERB20100218.b/HERBB.m
Cal Date : 20-Feb-2010 07:37 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A084.d
Level 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A085.d
Level 3: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A086.d
Level 4: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A083.d
Level 5: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A087.d
Level 6: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A088.d

	Compound	10 Level 1	25 Level 2	50 Level 3	100 Level 4	200 Level 5	400 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1	Dalapon-2	31200	70211	124988	226628	398324	702858	QUAD	0.000e+00	0.00039	2.605e-10	0.99971
3	Dicamba-2	7323	6630	6077	5460	4960	4353	AVRG		5801		18.88556
4	MCPP-2	26952	60045	99406	157173	258430	417134	QUAD	0.000e+00	0.10469	3.262e-07	0.99943
5	MCPA-2	49110	95516	151604	232884	385864	625138	QUAD	0.000e+00	0.06924	1.465e-07	0.99890
6	Dichloroprop-2	29863	71196	127434	215538	385174	646698	QUAD	0.000e+00	0.00037	3.909e-10	0.99978
7	2,4-D-2	28775	71006	130993	211552	406849	687084	QUAD	0.000e+00	0.00037	3.013e-10	0.99924
8	Pentachlorophenol	23076	23160	22956	21051	20452	18752	AVRG		21575		8.33757
9	Silvex-2	50060	94152	158693	262924	522181	922531	QUAD	0.000e+00	0.00008	3.117e-11	0.99892
10	2,4,5-T-2	10704	10255	9883	9031	8438	7538	AVRG		9308		12.84178
11	2,4-DB-2	70038	168078	304415	526840	939089	1624516	QUAD	0.000e+00	0.00080	2.684e-10	0.99976
12	Dinoseb-2	9293	8432	8003	7212	6698	5978	AVRG		7603		15.91262
$ 2	Surrogate-2	33182	72728	129313	223599	388412	649464	QUAD	0.000e+00	0.00044	5.127e-10	0.99987

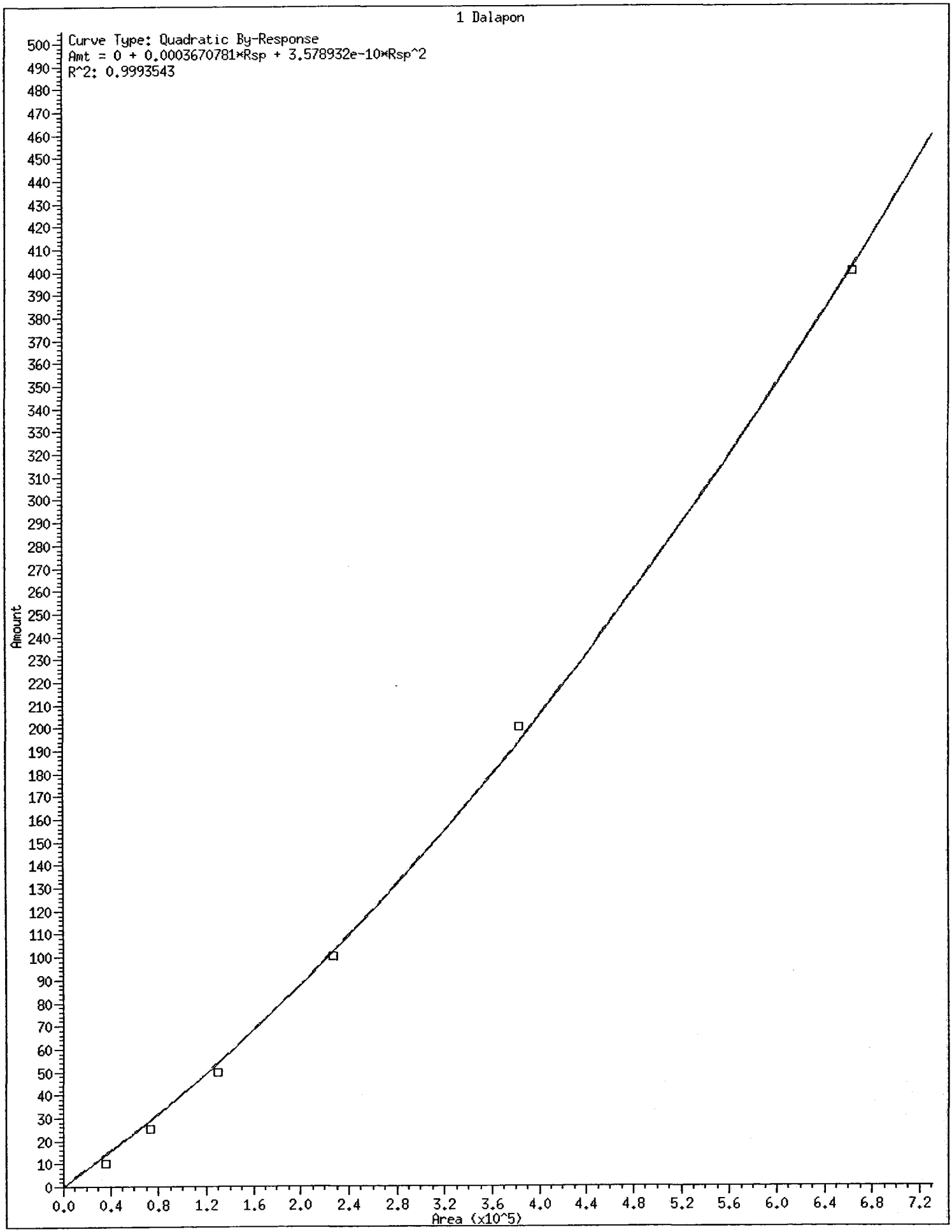
Analytical Resources, Inc.

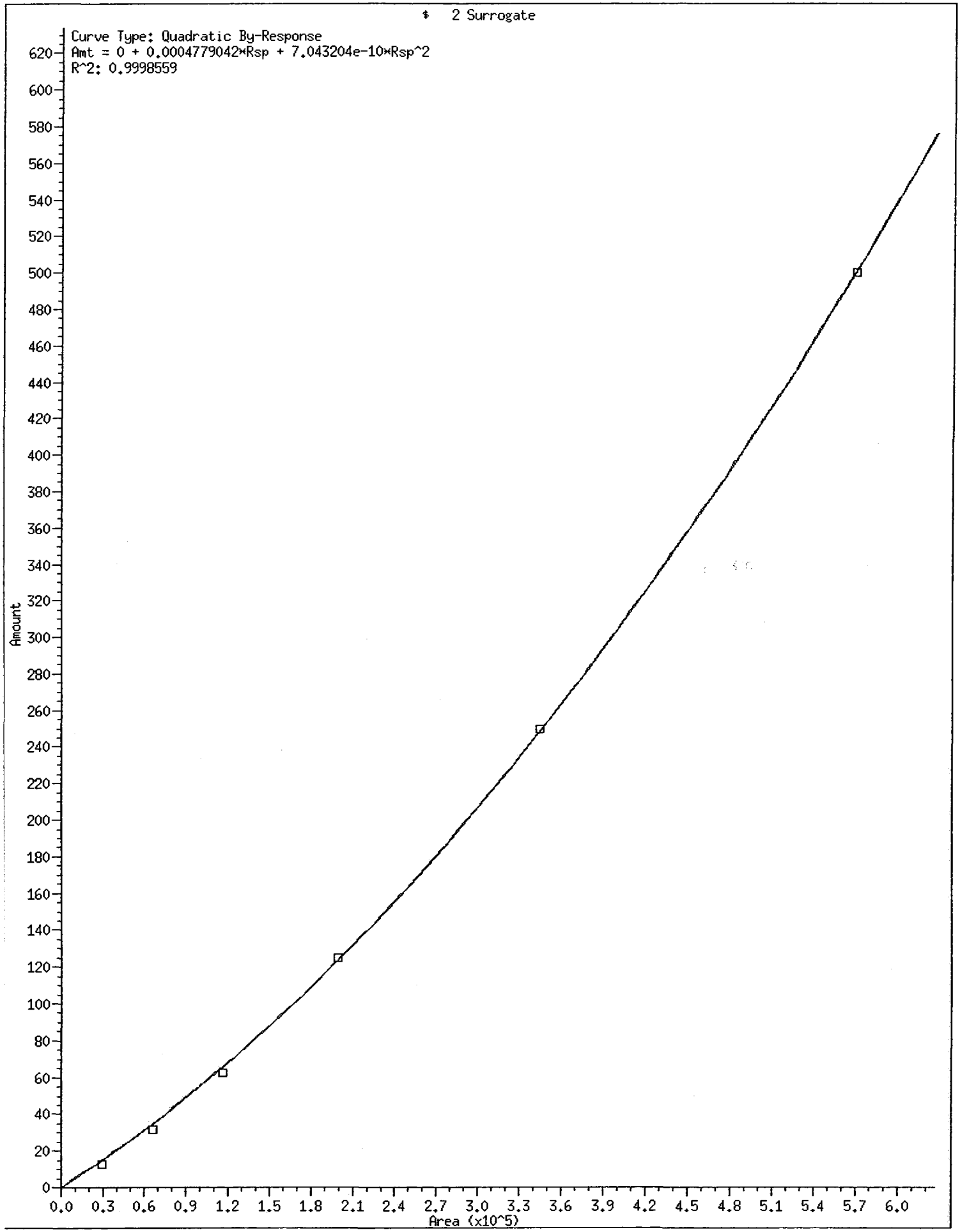
INITIAL CALIBRATION DATA

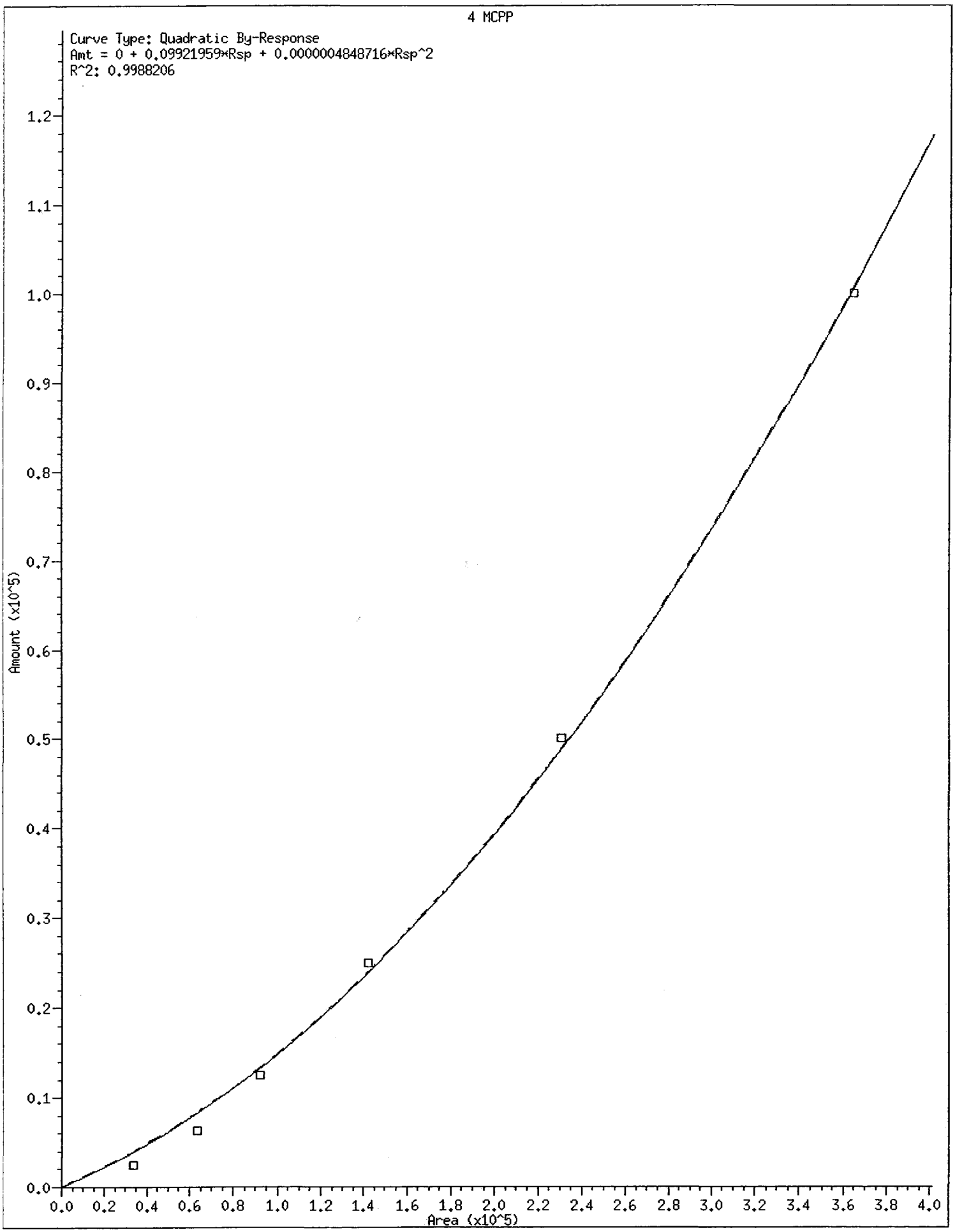
Start Cal Date : 18-FEB-2010 14:52
End Cal Date : 19-FEB-2010 23:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/HERB20100218.b/HERB.m
Cal Date : 22-Feb-2010 10:31 aron
Curve Type : Average

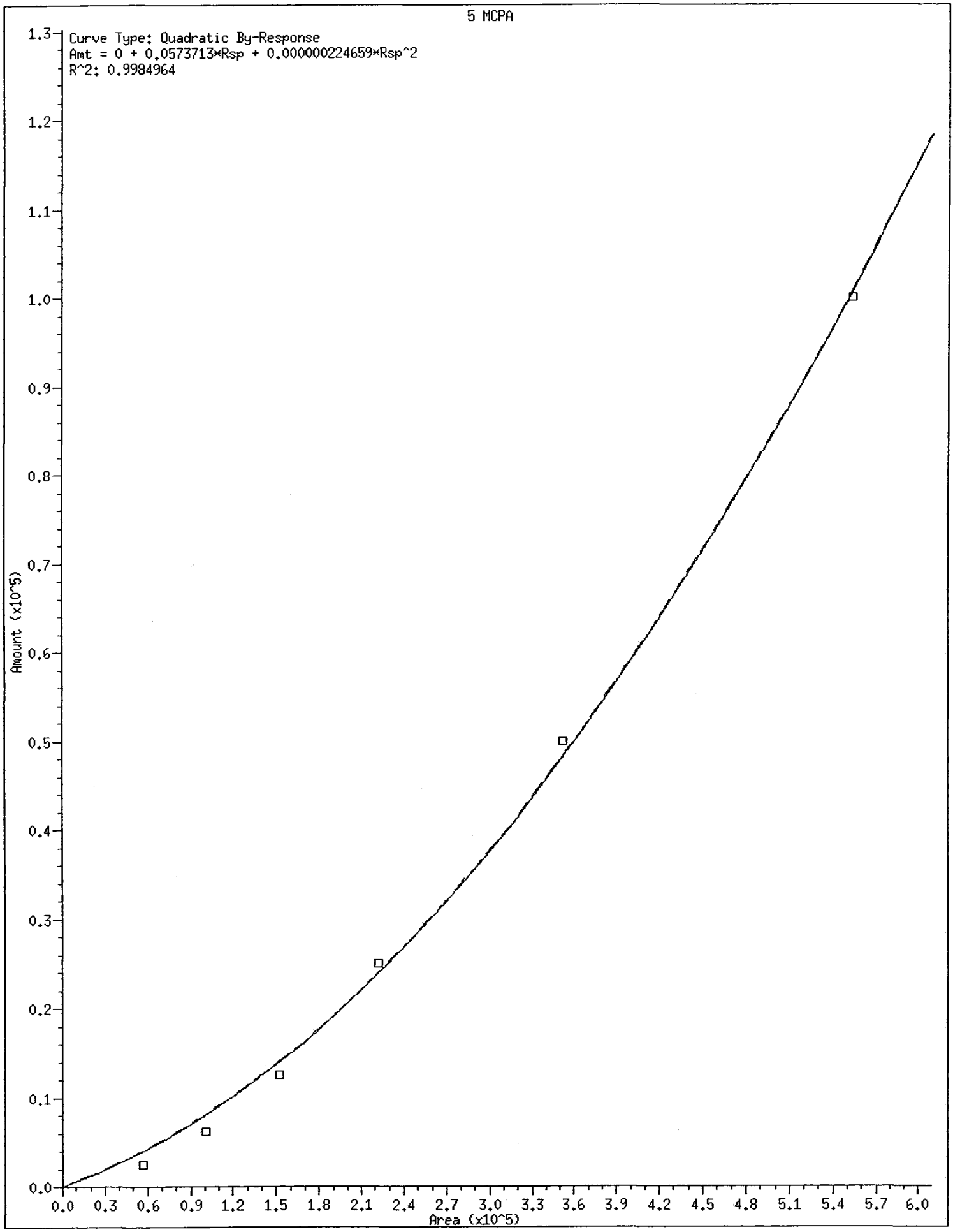
Calibration File Names:
Level 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A084.d
Level 2: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A085.d
Level 3: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A086.d
Level 4: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A083.d
Level 5: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A087.d/0218A087.cdf
Level 6: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A088.d

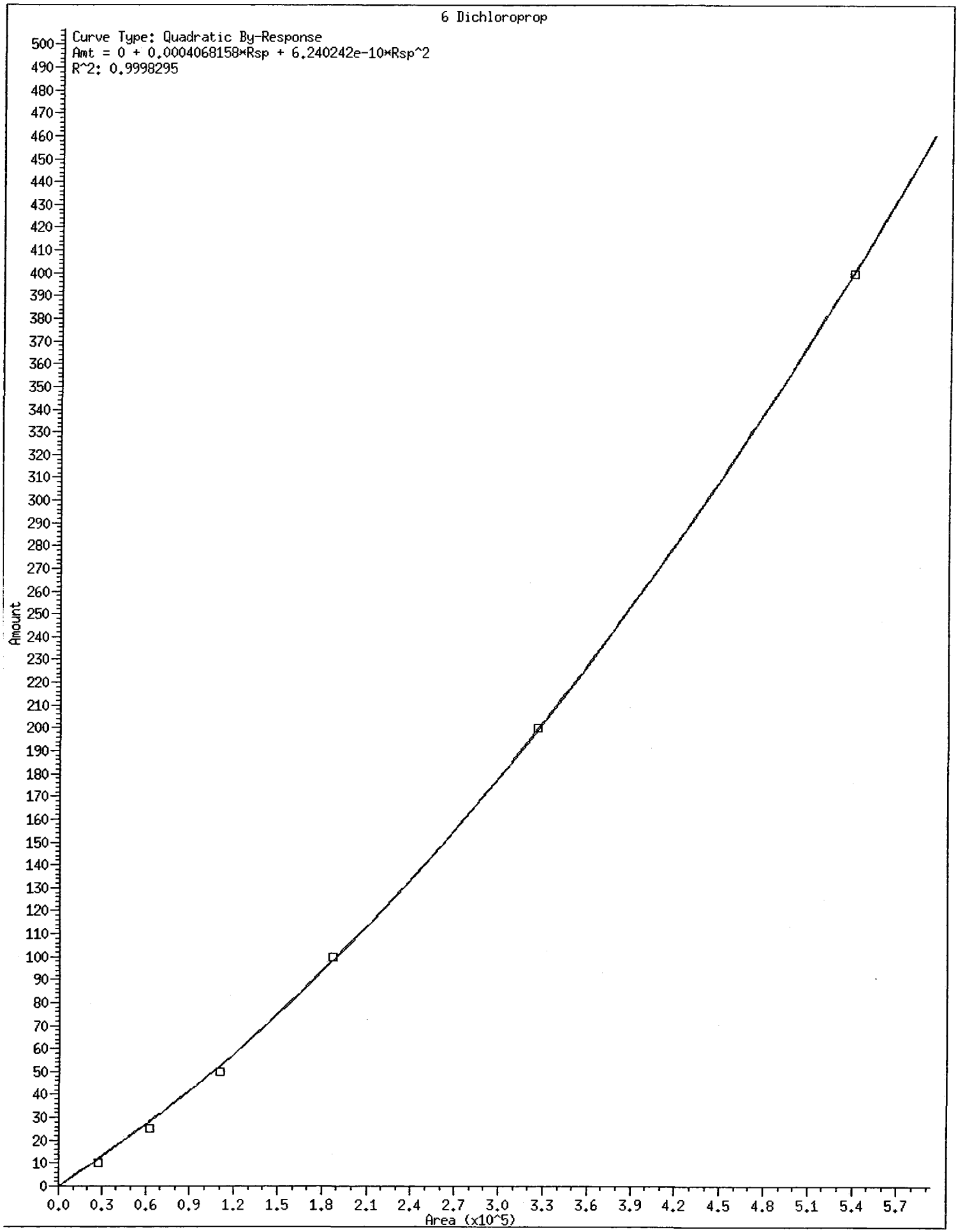
	Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	400.000 Level 6	RRF	% RSD	
1	Dalapon	3653	2914	2599	2278	1917	1661	2504	28.835	<-
3	Dicamba	6853	6256	5758	5108	4594	3972	5423	19.759	
4	MCPP	13.63360	10.18512	7.38720	5.68480	4.61400	3.64454	7.52488	50.193	<-
5	MCPA	22.73080	16.11728	12.15472	8.89692	7.05630	5.53976	12.08263	53.367	<-
6	Dichloroprop	2772	2527	2202	1871	1628	1348	2058	26.394	<-
7	2,4-D	2756	2582	2318	2216	1781	1482	2190	21.997	<-
8	Pentachlorophenol	22306	24243	19428	17678	16909	15372	19323	17.513	
9	Silvex	11043	10114	9361	8420	7892	6948	8963	16.781	
10	2,4,5-T	10566	9602	9108	8065	7486	6541	8561	17.235	
11	2,4-DB	955	885	841	757	693	606	789	16.357	
12	Dinoseb	16697	13753	11699	9332	8063	6474	11003	34.587	<-
$ 2	Surrogate	2332	2115	1871	1594	1376	1139	1738	26.032	<-

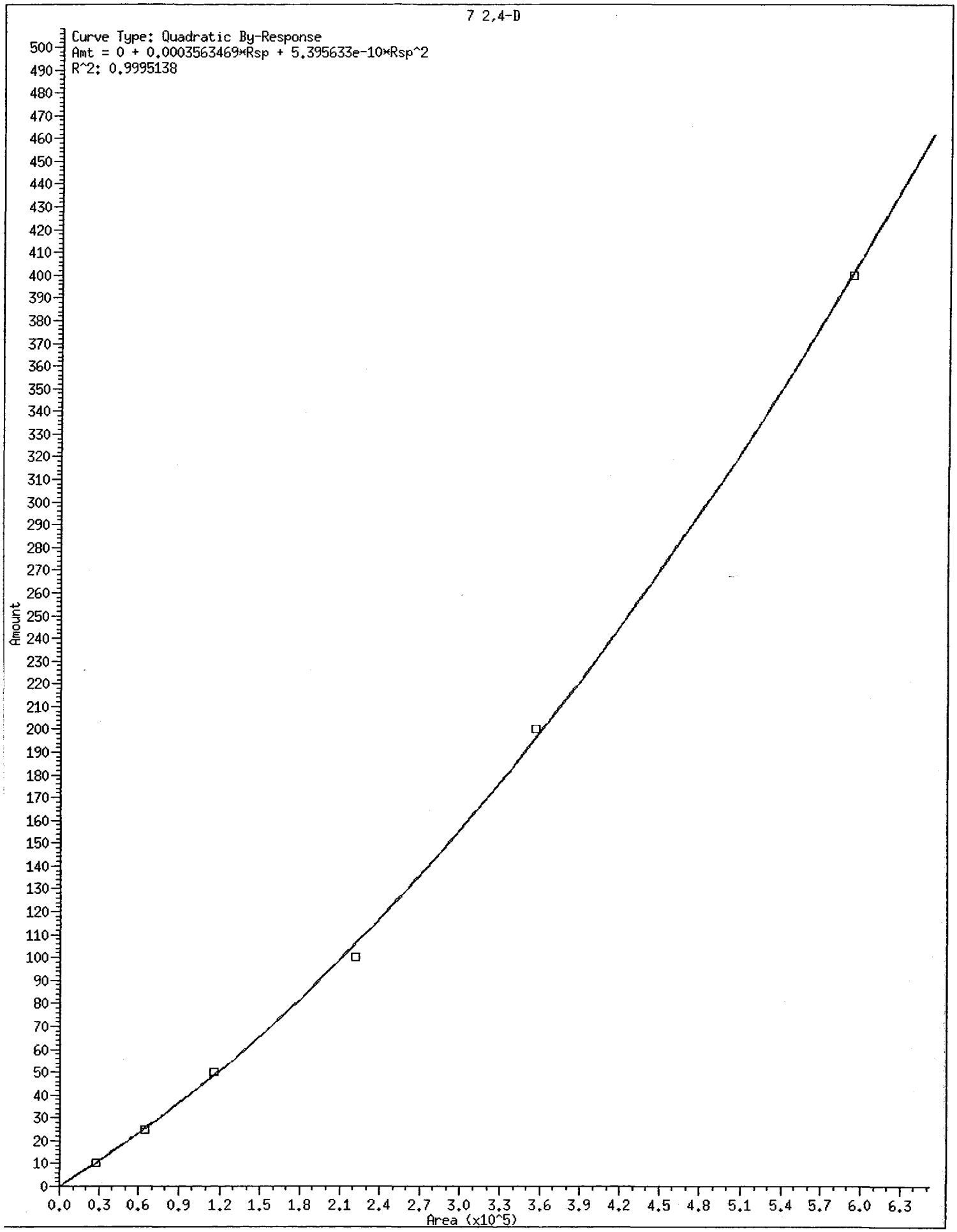

1 Dalapon
Curve Type: Quadratic By-Response
Amt = 0 + 0.0003670781*Rsp + 3.578932e-10*Rsp^2
R^2: 0.9993543
Amount
Area (x10^5)

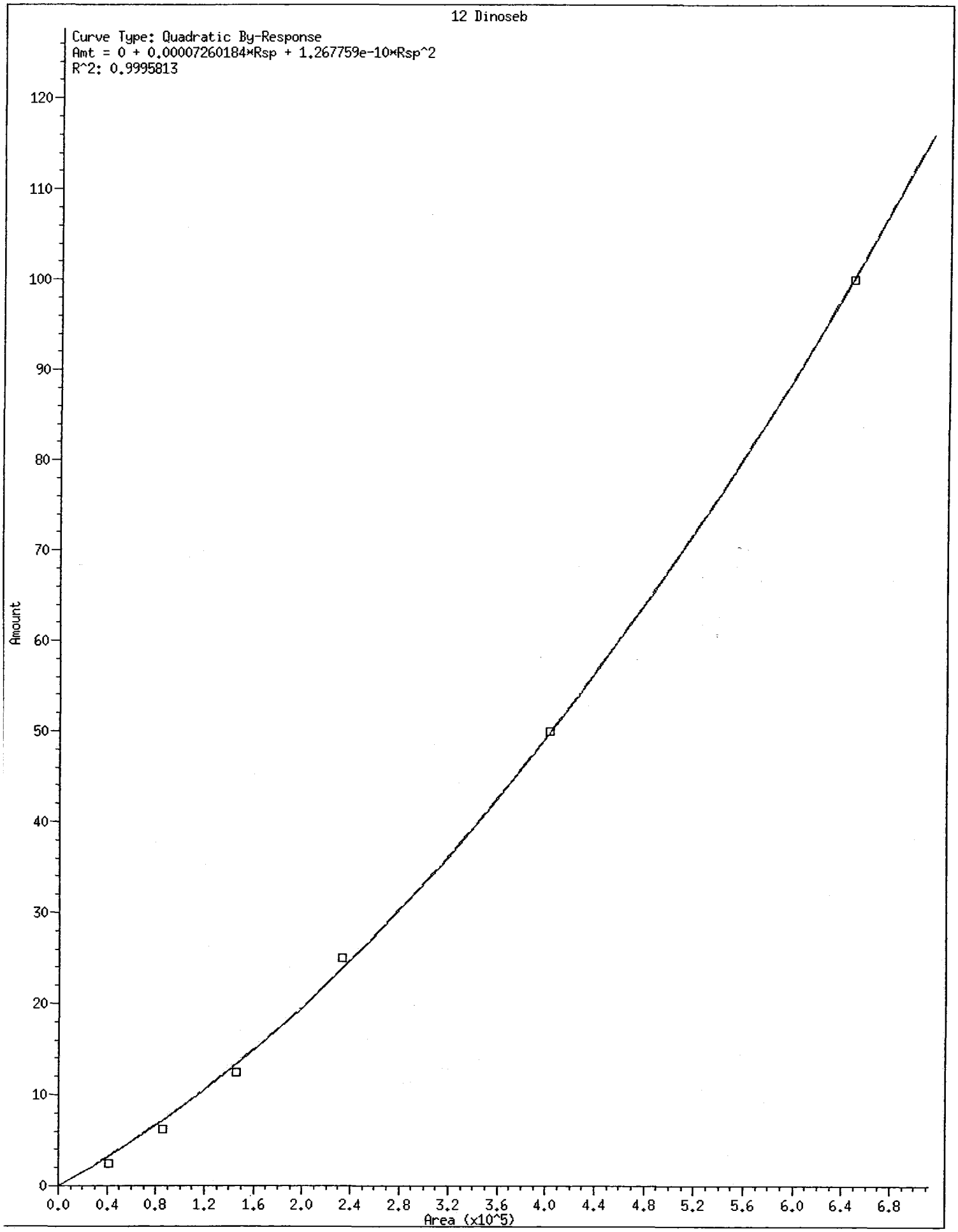

2 Surrogate
Curve Type: Quadratic By-Response
Amt = 0 + 0.0004779042*Rsp + 7.043204e-10*Rsp^2
R^2: 0.9998559
Amount
Area (x10^5)
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620
0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5 4.8 5.1 5.4 5.7 6.0


4 MCPP
Curve Type: Quadratic By-Response
Amt = 0 + 0.09921959*Rsp + 0.0000004848716*Rsp^2
R^2: 0.9988206
Amount (x10^5)
Area (x10^5)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0


5 MCPA
Curve Type: Quadratic By-Response
Amt = 0 + 0.0573713*Rsp + 0.000000224659*Rsp^2
R^2: 0.9984964
Amount (x10^5)
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5 4.8 5.1 5.4 5.7 6.0
Area (x10^5)


6 Dichloroprop
Curve Type: Quadratic By-Response
Amt = 0 + 0.0004068158*Rsp + 6.240242e-10*Rsp^2
R^2: 0.9998295
Amount
Area (x10^5)


7 2,4-D
Curve Type: Quadratic By-Response
Amt = 0 + 0.0003563469*Rsp + 5.395633e-10*Rsp^2
R^2: 0.9995138
Amount
Area (x10^5)


12 Dinoseb
Curve Type: Quadratic By-Response
Amt = 0 + 0.00007260184*Rsp + 1.267759e-10*Rsp^2
R^2: 0.9995813
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 18-FEB-2010 14:52
End Cal Date : 19-FEB-2010 23:56
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/HERB20100218.b/HERB.m
Cal Date : 22-Feb-2010 10:31 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A084.d
Level 2: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A085.d
Level 3: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A086.d
Level 4: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A083.d
Level 5: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A087.d/0218A087.cdf
Level 6: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A088.d

Compound	10 Level 1	25 Level 2	50 Level 3	100 Level 4	200 Level 5	400 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1 Dalapon	36533	72861	129936	227763	383323	664290	QUAD	0.000e+00	0.00037	3.579e-10	0.99935
3 Dicamba	6853	6256	5758	5108	4594	3972	AVRG		5423		19.75908
4 MCPP	34084	63657	92340	142120	230700	364454	QUAD	0.000e+00	0.09922	4.849e-07	0.99882
5 MCPA	56827	100733	151934	222423	352815	553976	QUAD	0.000e+00	0.05737	2.247e-07	0.99850
6 Dichloroprop	27721	63169	110095	187071	325599	539038	QUAD	0.000e+00	0.00041	6.240e-10	0.99983
7 2,4-D	27563	64562	115911	221648	356271	592879	QUAD	0.000e+00	0.00036	5.396e-10	0.99951
8 Pentachlorophenol	22306	24243	19428	17678	16909	15372	AVRG		19323		17.51310
9 Silvex	11043	10114	9361	8420	7892	6948	AVRG		8963		16.78107
10 2,4,5-T	10566	9602	9108	8065	7486	6541	AVRG		8561		17.23487
11 2,4-DB	955	885	841	757	693	606	AVRG		789		16.35650
12 Dinoseb	41742	85956	146238	233303	403157	647399	QUAD	0.000e+00	0.00007	1.268e-10	0.99958
2 Surrogate	29156	66108	116967	199273	344015	569702	QUAD	0.000e+00	0.00048	7.043e-10	0.99986

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 18-FEB-2010 14:52
End Cal Date : 19-FEB-2010 23:56
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/HERB20100218.b/HERB.m
Cal Date : 22-Feb-2010 10:31 aron

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

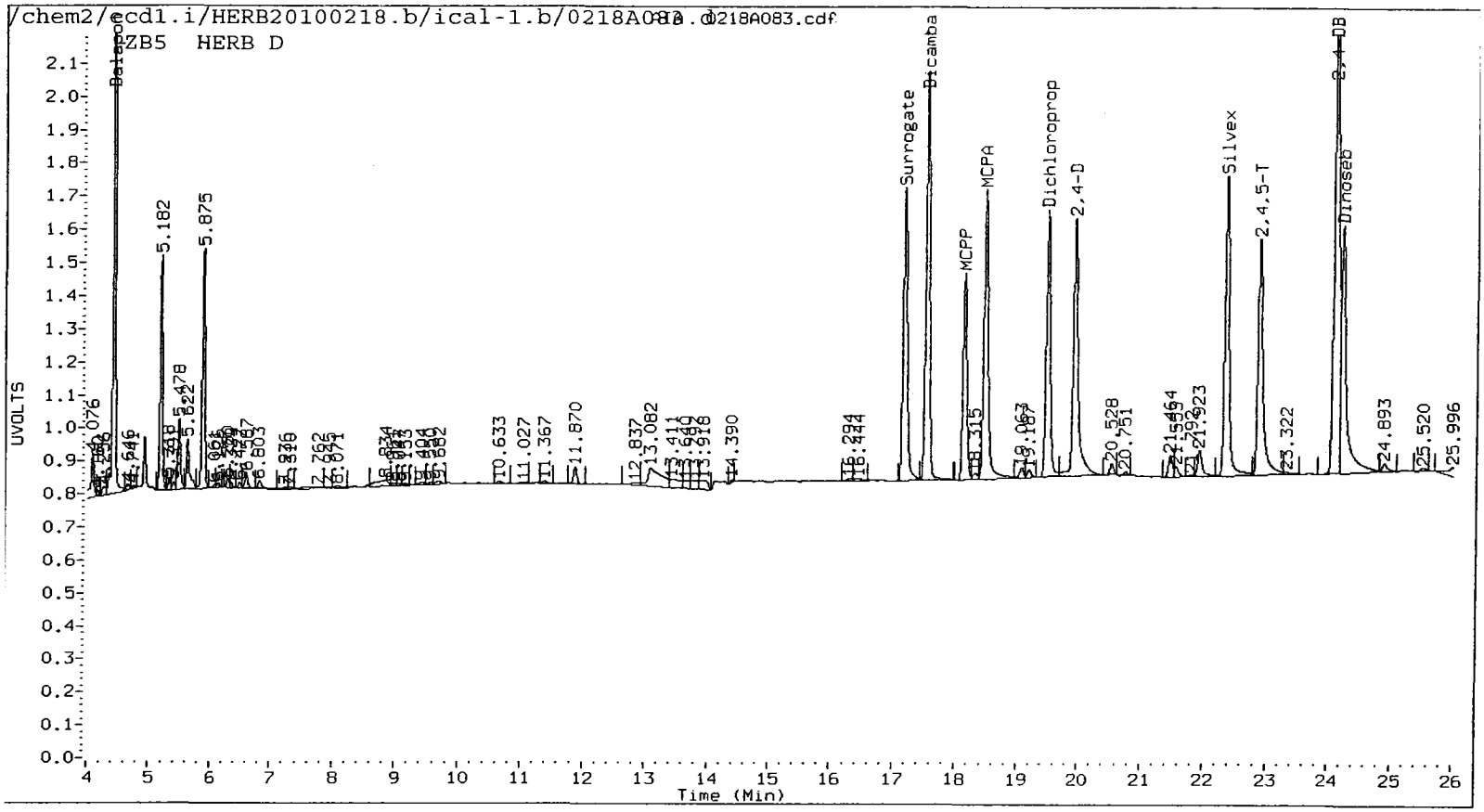
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

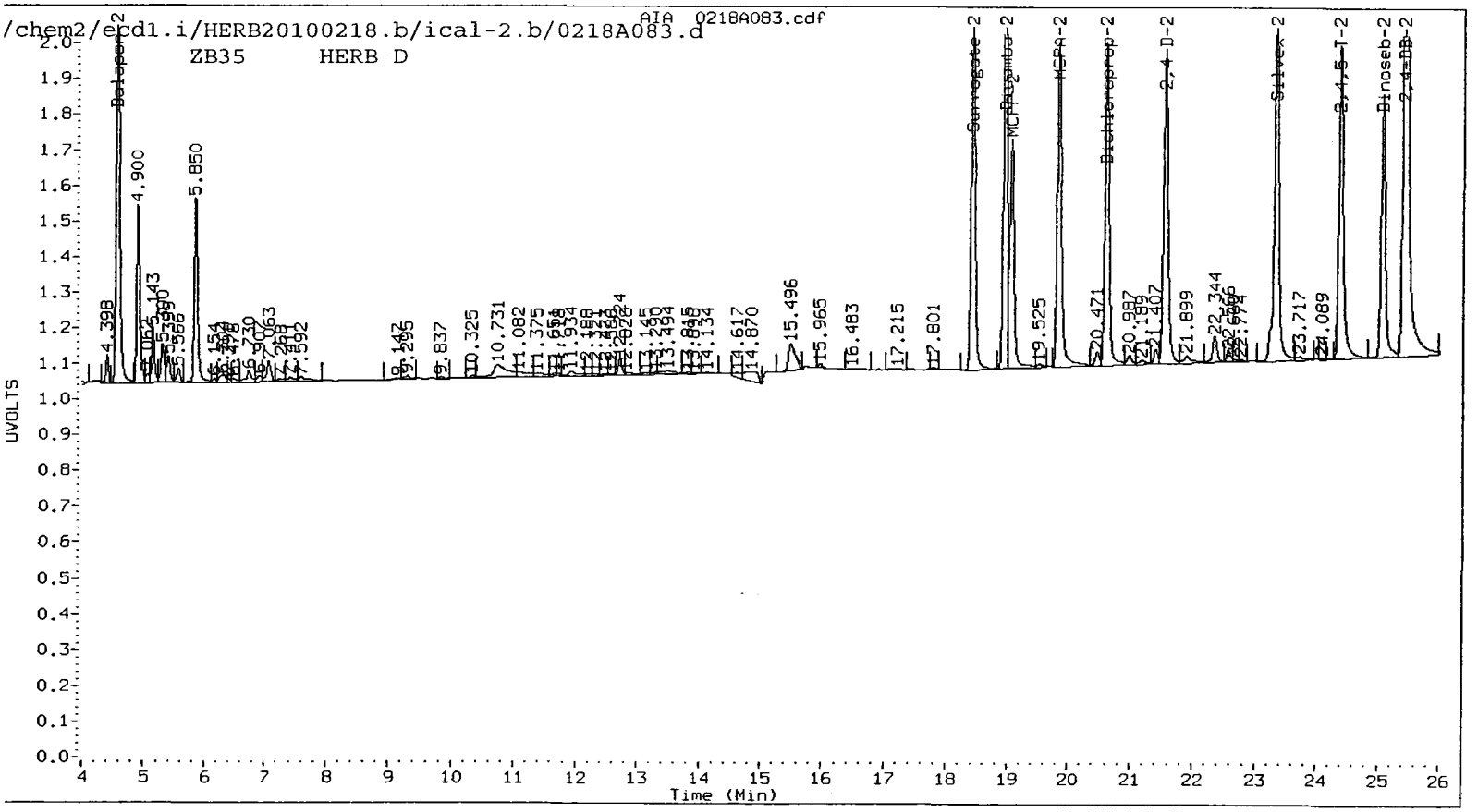
Data file 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A083.d ARI ID: HERB D
Data file 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A083.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 19-FEB-2010 20:56
Compound Sublist: herb Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
4.412	0.004	227763	4.562	0.000	226628	102.173	101.223	0.9	Dalapon
17.529	-0.001	255388	18.955	0.000	273024	47.090	47.069	0.0	Dicamba
18.470	-0.005	222423	19.837	0.000	232884	23875.027	24073.731	0.8	MCPA
18.130	-0.004	142120	19.062	0.000	157173	23894.570	24512.153	2.6	MCPP
19.482	0.004	187071	20.617	0.000	215538	97.942	97.147	0.8	Dichloroprop
19.927	0.008	221648	21.553	0.000	211552	105.491	92.748	12.9	2,4-D
22.342	0.002	210500	23.338	0.000	262924	23.485	23.113	1.6	Silvex
22.879	0.007	201633	24.384	0.000	225771	23.551	24.255	2.9	2,4,5-T
24.097	0.007	378347	25.430	0.000	526840	479.246	494.855	3.2	2,4-DB
24.210	-0.001	233303	25.071	0.000	180307	23.839	23.716	0.5	Dinoseb
17.175	-0.001	199273	18.430	0.000	223599	123.2	123.6	0.3	Surrogate

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4-DCPA (Surr)	98.6	98.9


/chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A083.d
0218A083.cdf
ZB5 HERB D
Betapon
5.182
5.875
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2.4-D
Silvex
2,4,5-T
2,4-DB
Dinoseb
UVOLTS
Time (Min)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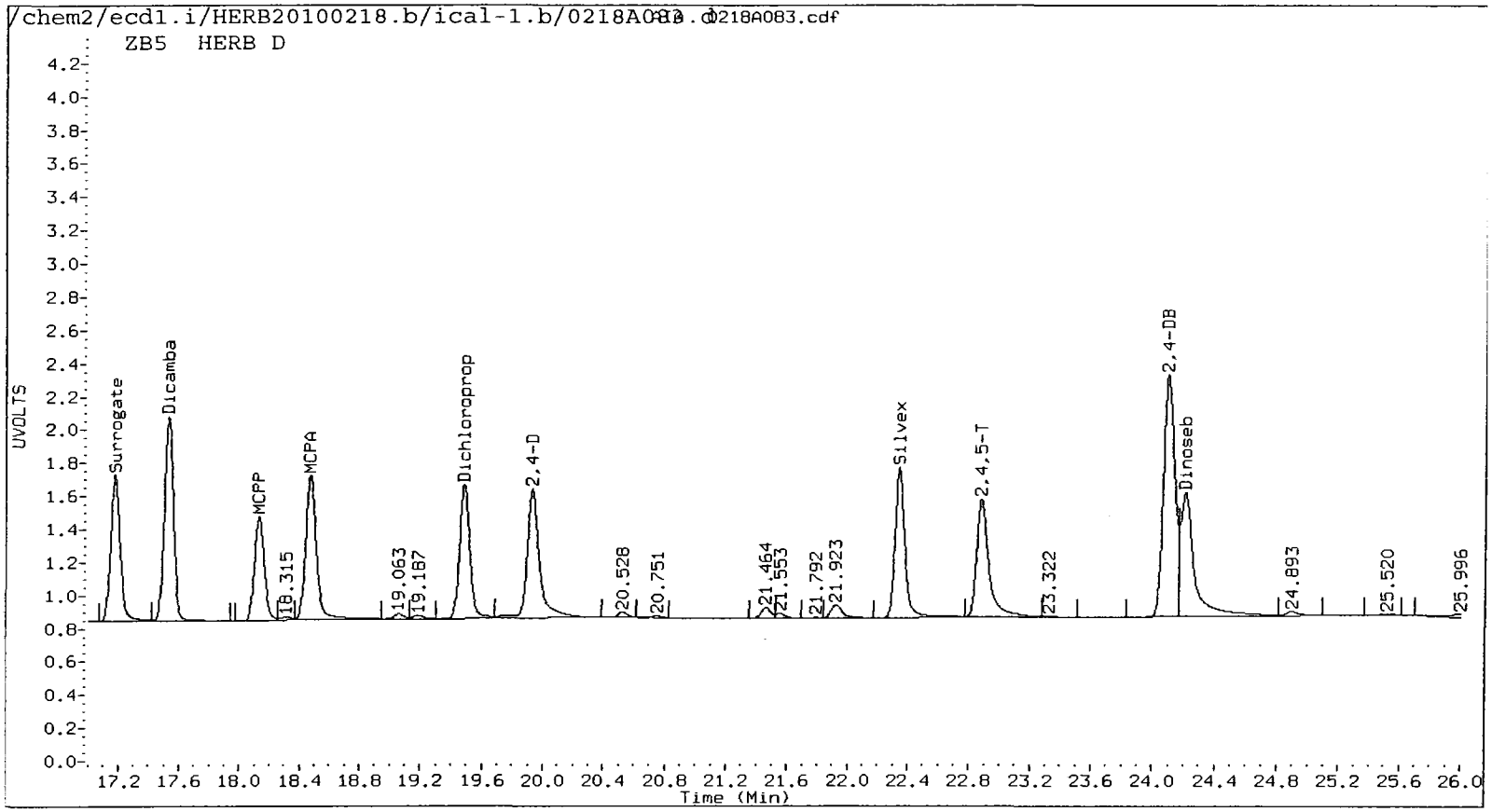
0218A083.cdf
ZB35 HERB D
Betapon-2
4.900
5.850
Surrogate-2
MCPA-2
Dichloroprop-2
2,4-D-2
Silvex-2
2,4,5-T-2
Dinoseb-2
2,4-DB-2
UVOLTS
Time (Min)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0218A083.cdf
ZB5 HERB D
UVOLTS
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
Silvex
2,4,5-T
2,4-DB
Dinoseb
18.315
19.063
19.187
20.528
20.751
21.464
21.553
21.792
21.923
23.322
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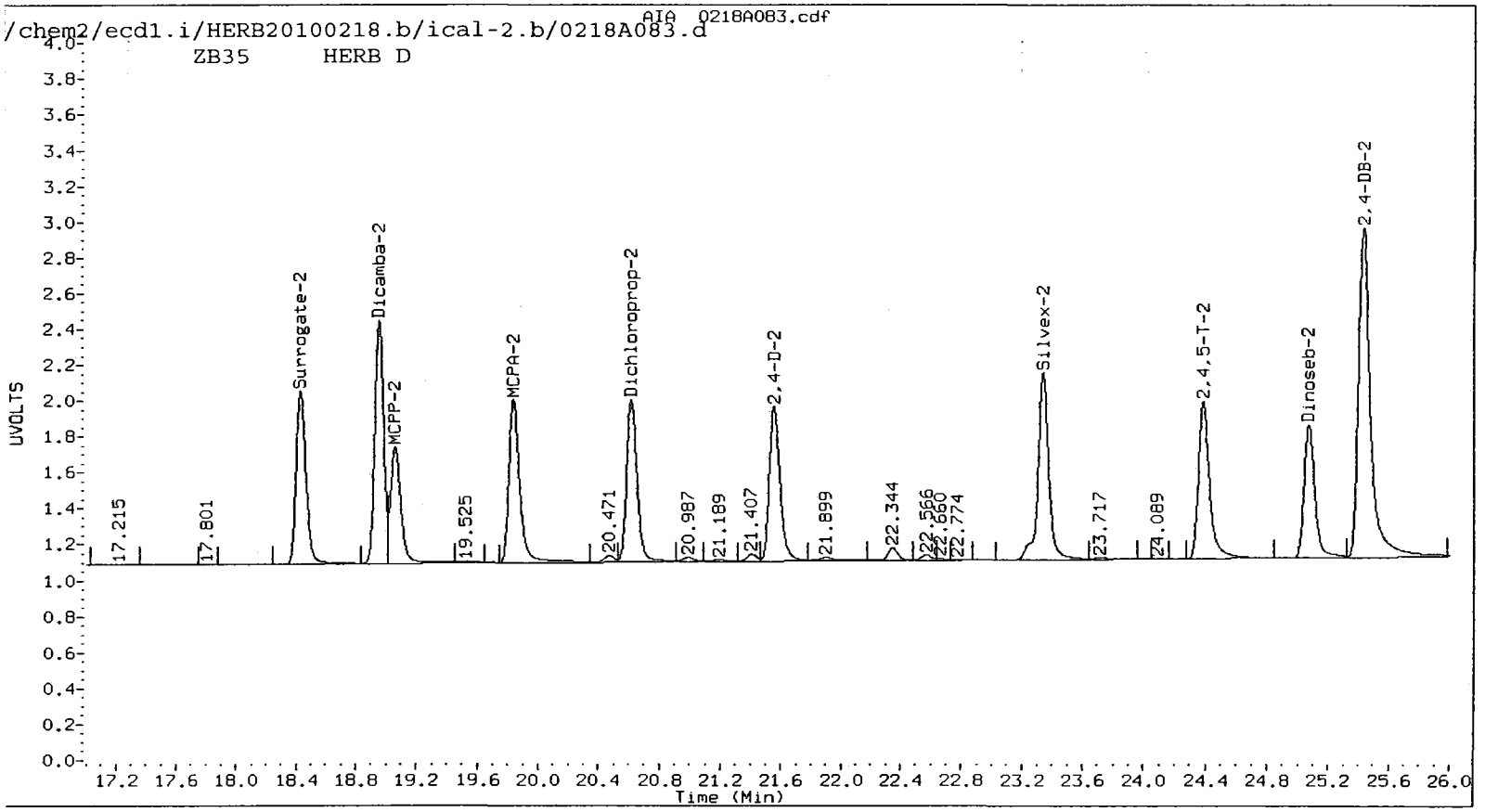
25.520
25.996
Time (Min)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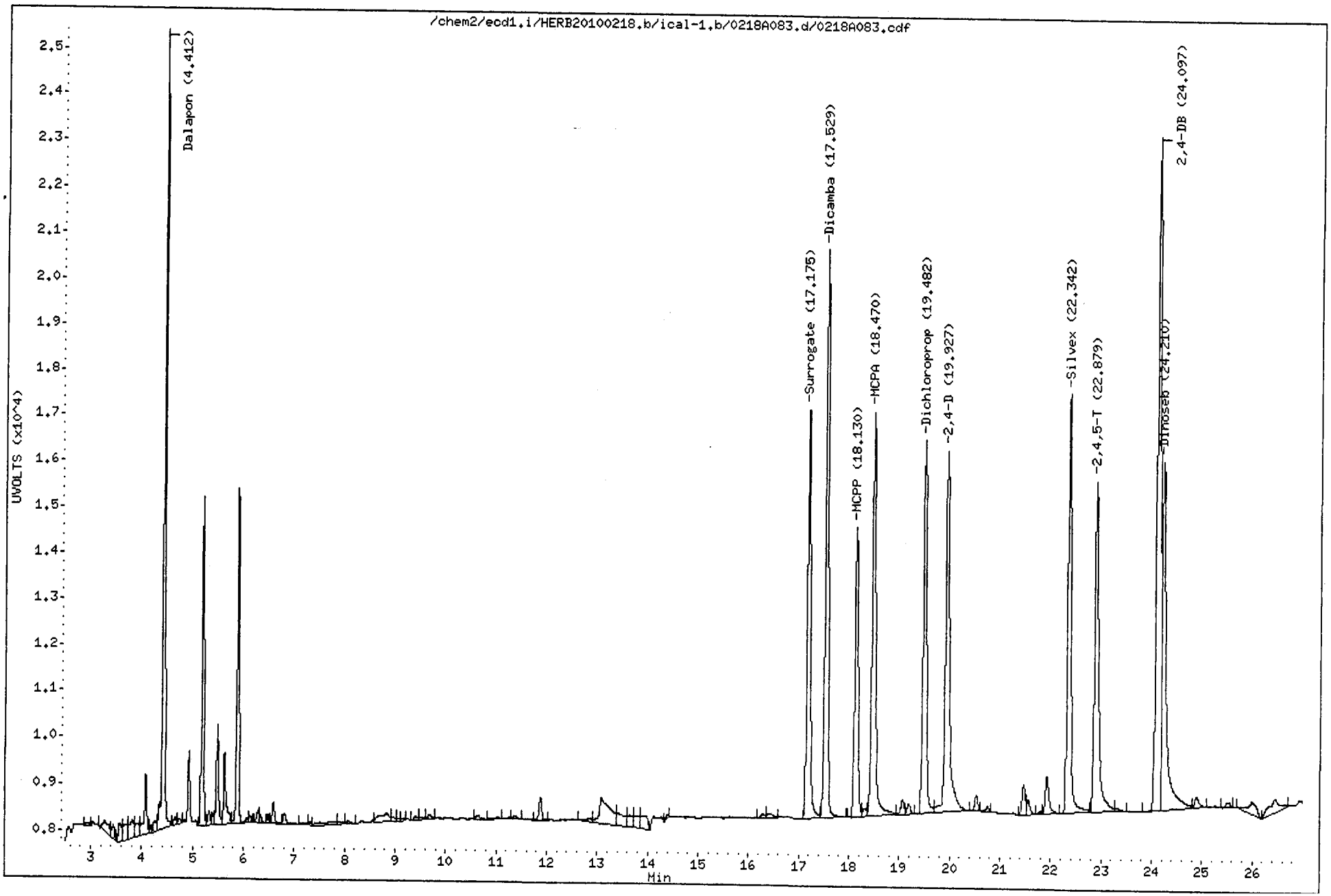
AIA 0218A083.cdf
ZB35 HERB D
UVOLTS
Surrogate-2
Dicamba-2
MCPP-2
MCPA-2
Dichloroprop-2
2,4-D-2
Silvex-2
2,4,5-T-2
Dinoseb-2
2,4-DB-2
17.215
17.801
19.525
20.471
20.987
21.189
21.407
21.899
22.344
22.566
22.660
22.774
23.717
24.089
Time (Min)

Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A083.d
Date : 19-FEB-2010 20:56
Client ID:
Sample Info: HERB D

Column phase: DB5

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

Data file 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A084.d ARI ID: HERB A
Data file 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A084.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 19-FEB-2010 21:32
Compound Sublist: herb Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
4.414	0.006	36533	4.564	0.002	31200	13.888	12.347	11.7	Dalapon
17.534	0.004	34263	18.958	0.003	36616	6.318	6.312	0.1	Dicamba
18.477	0.002	56827	19.844	0.007	49110	3985.732	3753.981	6.0	MCPA
18.132	-0.002	34084	19.066	0.004	26952	3945.085	3058.603	25.3	MCPP
19.499	0.021	27721	20.629	0.012	29863	11.757	11.293	4.0	Dichloroprop
19.972	0.053	27563	21.575	0.022	28775	10.232	11.031	7.5	2,4-D
22.367	0.027	27608	23.350	0.012	50060	3.080	4.069	27.7	Silvex
22.925	0.053	26415	24.408	0.024	26761	3.085	2.875	7.1	2,4,5-T
24.150	0.060	47774	25.457	0.027	70038	60.514	57.200	5.6	2,4-DB
24.203	-0.008	41742	25.081	0.010	23233	3.251	3.056	6.2	Dinoseb
17.183	0.007	29156	18.437	0.007	33182	14.5	15.1	3.9	Surrogate

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4-DCPA (Surr)	11.6	12.1

Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A084.d

Date : 19-FEB-2010 21:32

Client ID:

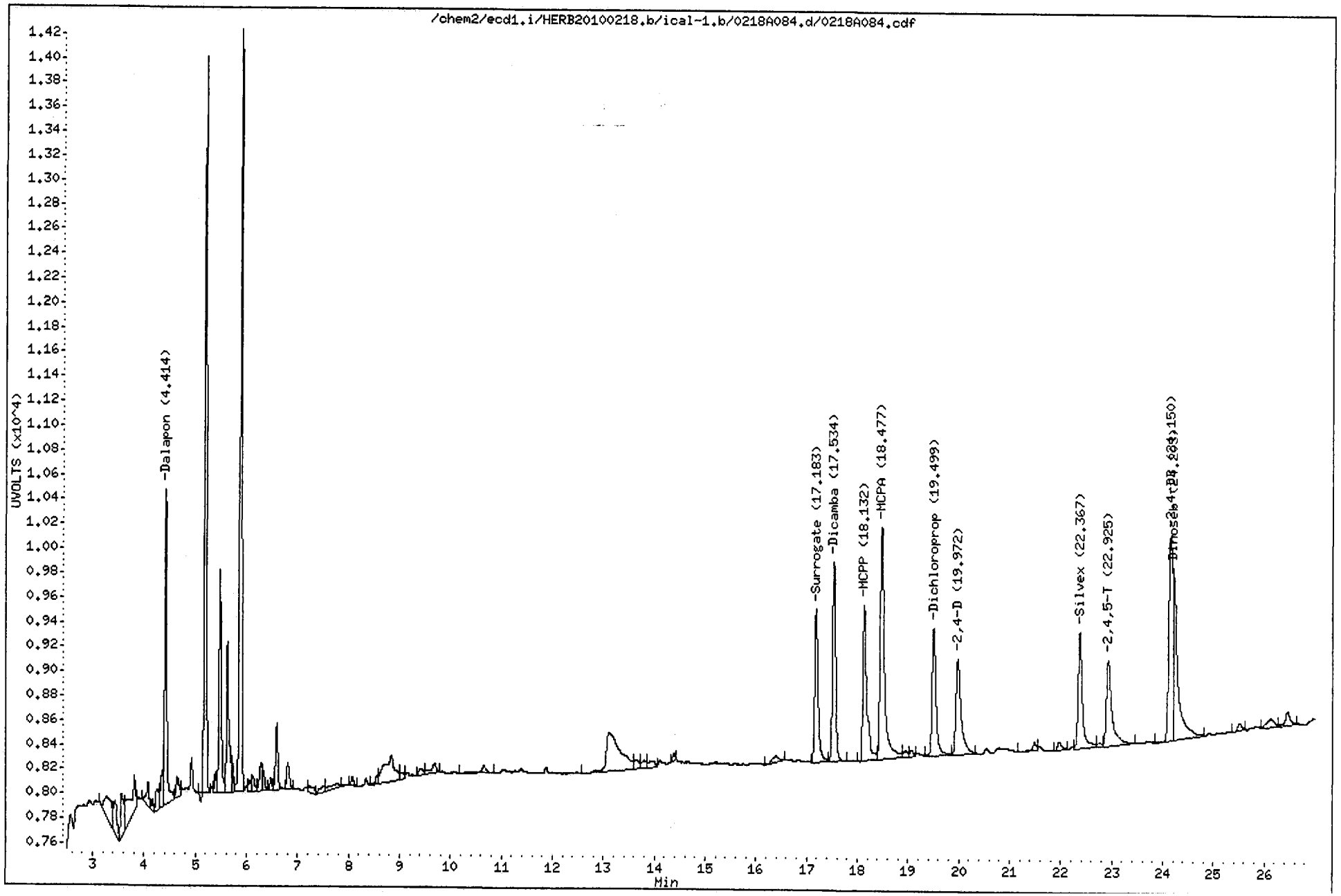
Sample Info: HERB A

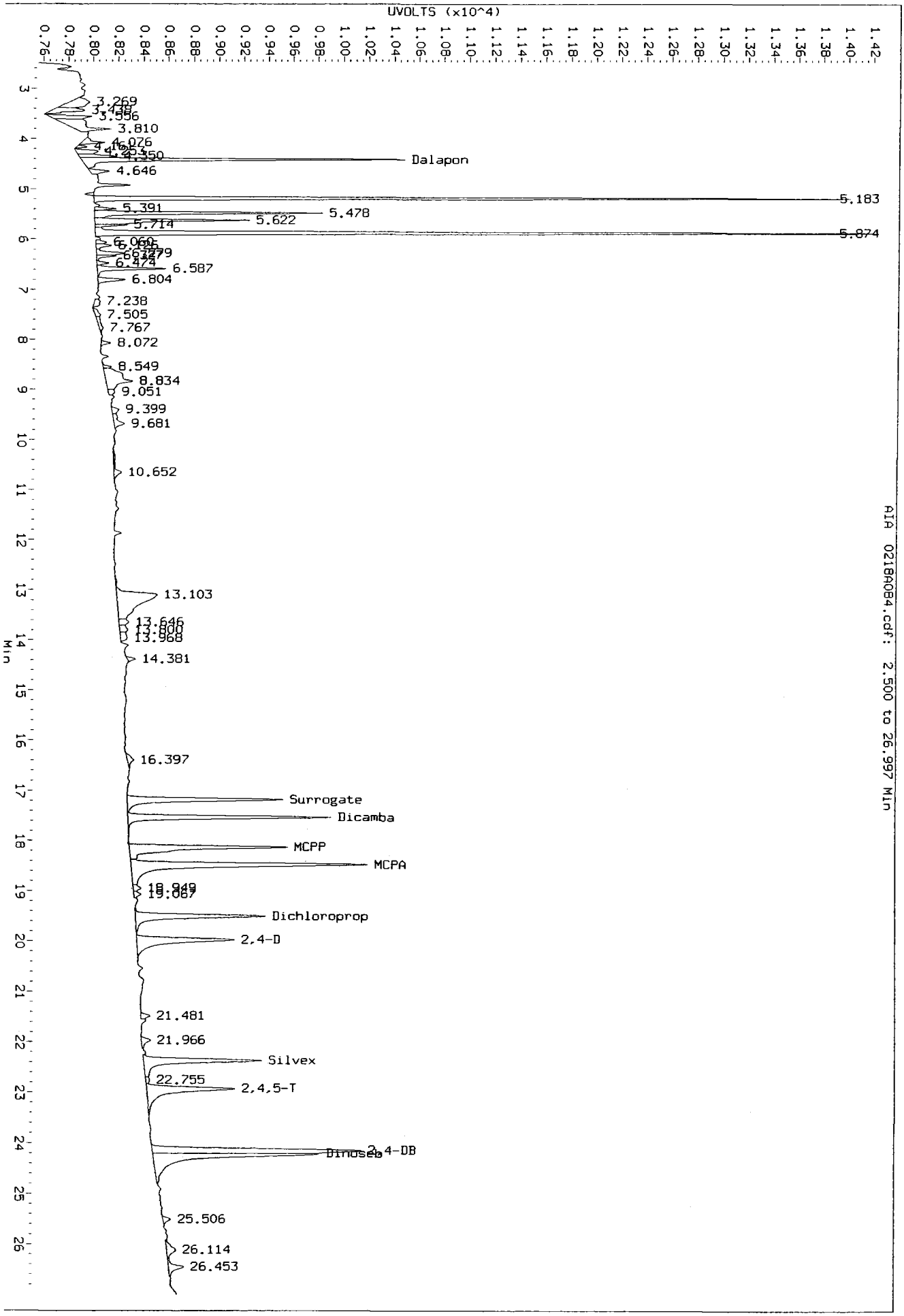
Column phase: DB5

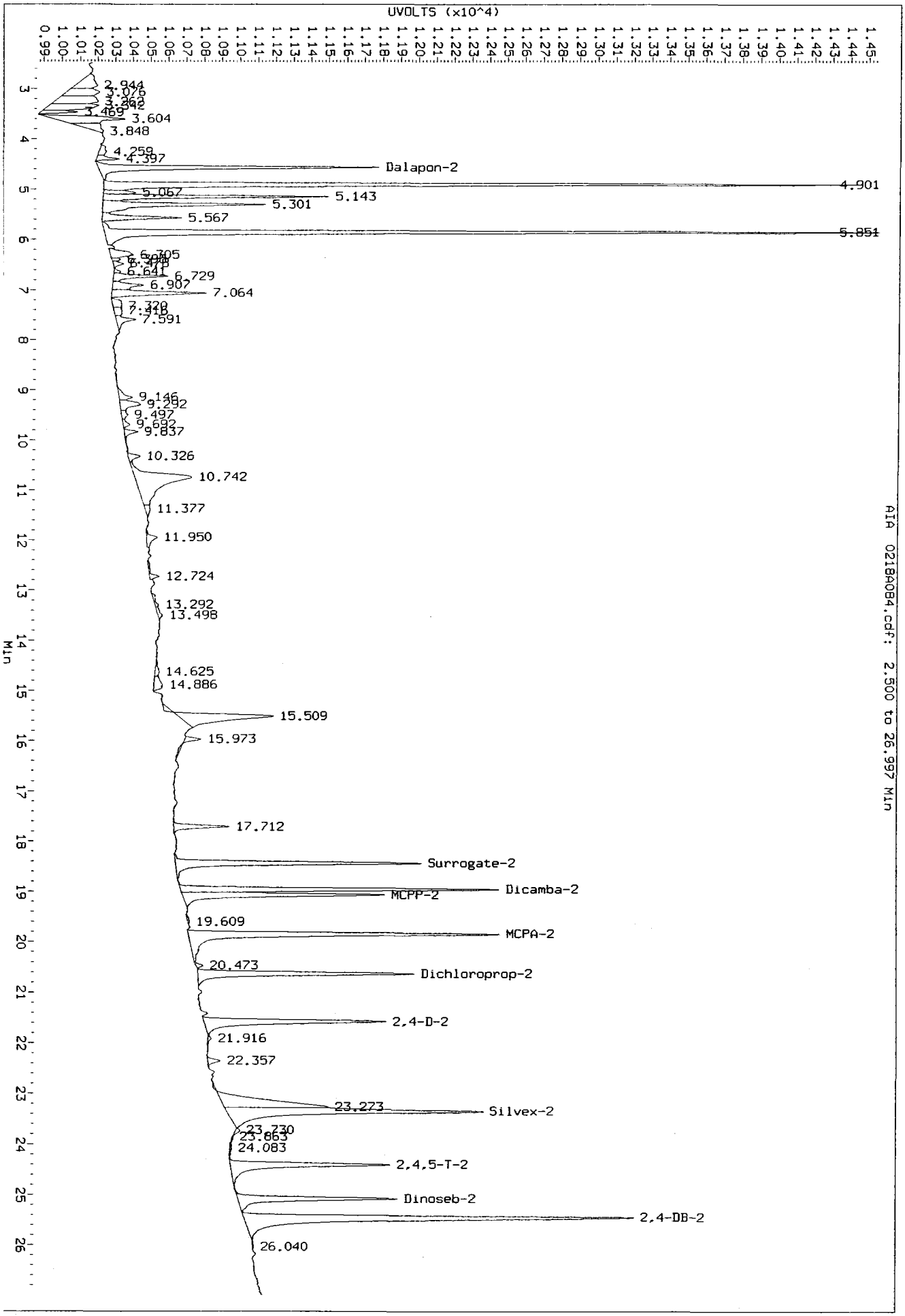
Instrument: ecd1.i

Operator: ar

Column diameter: 0.53




Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A084.d/0218A084.cdf
Injection Date: 19-FEB-2010 21:32
Instrument: ecd1.i
Client Sample ID:
UVOLTS (x10^4)
AIA 0218A084.cdf: 2.500 to 26.997 Min
Min
3.269
3.596
3.810
4.076
4.350
Dalapon
4.646
5.183
5.391
5.478
5.622
5.714
5.874
6.587
6.804
7.238
7.505
7.767
8.072
8.549
8.834
9.051
9.399
9.681
10.652
13.103
13.646
13.968
14.381
16.397
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
21.481
21.966
Silvex
22.755
2,4,5-T
2,4-DB
25.506
26.114
26.453



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Injection Date: 19-FEB-2010 21:32
Instrument: ecd1.i
Client Sample ID:

AIA 0218A084.cdf: 2.500 to 26.997 Min

Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

Data file 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A085.d ARI ID: HERB B
Data file 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A085.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 19-FEB-2010 22:08
Compound Sublist: herb Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
4.414	0.006	72861	4.563	0.001	70211	28.646	28.499	0.5	Dalapon
17.531	0.001	78195	18.956	0.001	82875	14.418	14.287	0.9	Dicamba
18.472	-0.003	100733	19.840	0.003	95516	8058.829	7950.849	1.3	MCPA
18.129	-0.005	63657	19.063	0.001	60045	8280.825	7462.214	10.4	MCPP
19.493	0.015	63169	20.624	0.007	71196	28.188	28.073	0.4	Dichloroprop
19.956	0.037	64562	21.568	0.015	71006	25.256	28.123	10.7	2,4-D
22.359	0.019	63212	23.347	0.009	94152	7.052	7.782	9.8	Silvex
22.907	0.035	60013	24.398	0.014	64093	7.010	6.886	1.8	2,4,5-T
24.128	0.038	110582	25.446	0.016	168078	140.072	141.692	1.1	2,4-DB
24.214	0.003	85956	25.077	0.006	52701	7.177	6.932	3.5	Dinoseb
17.179	0.003	66108	18.434	0.004	72728	34.7	34.6	0.2	Surrogate

PERCENT RECOVERY

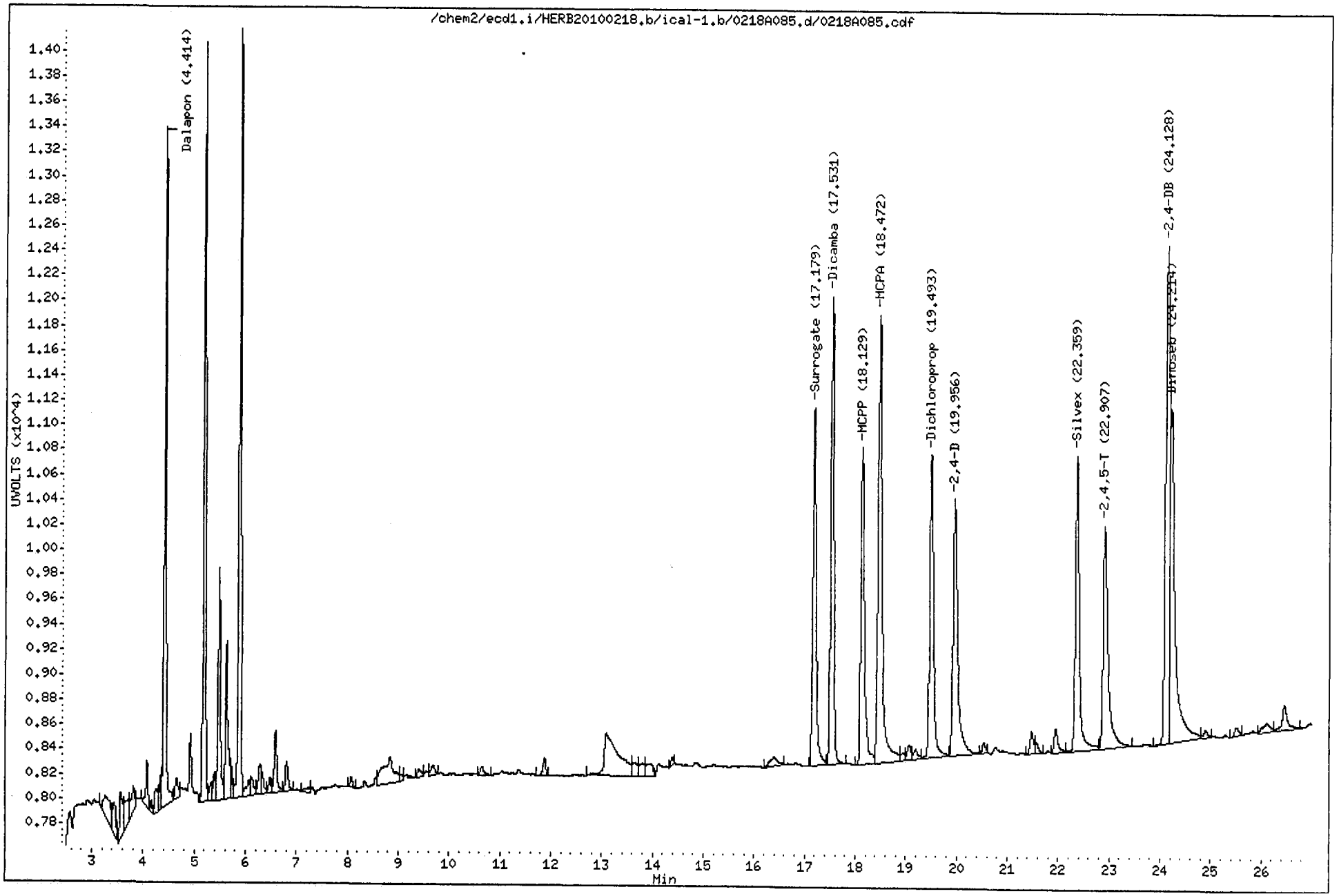
COMPOUND	Col1	Col2
2,4-DCPA (Surr)	27.7	27.7

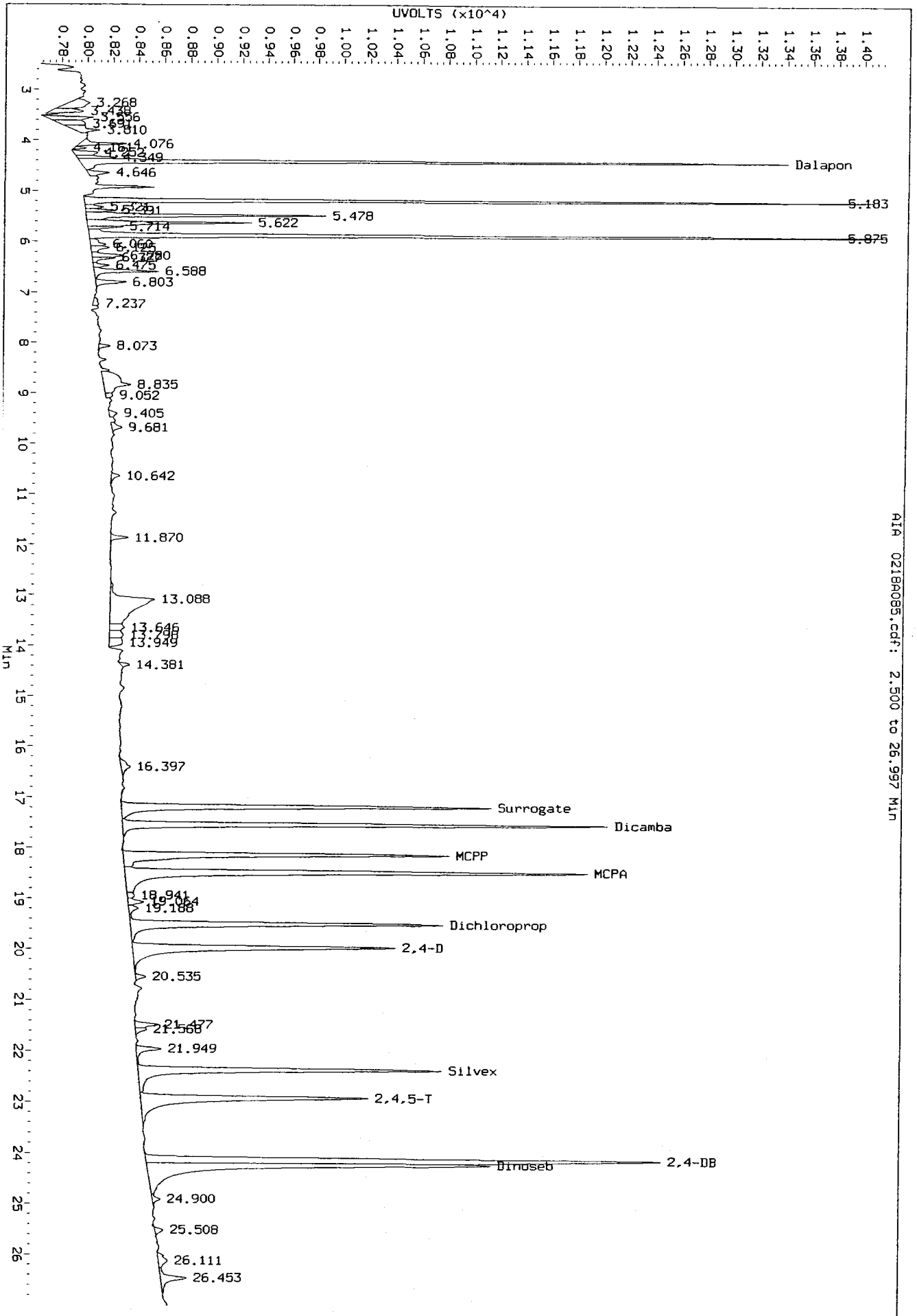
Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A085.d
Date : 19-FEB-2010 22:08
Client ID:
Sample Info: HERB B

Column phase: DB5

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53

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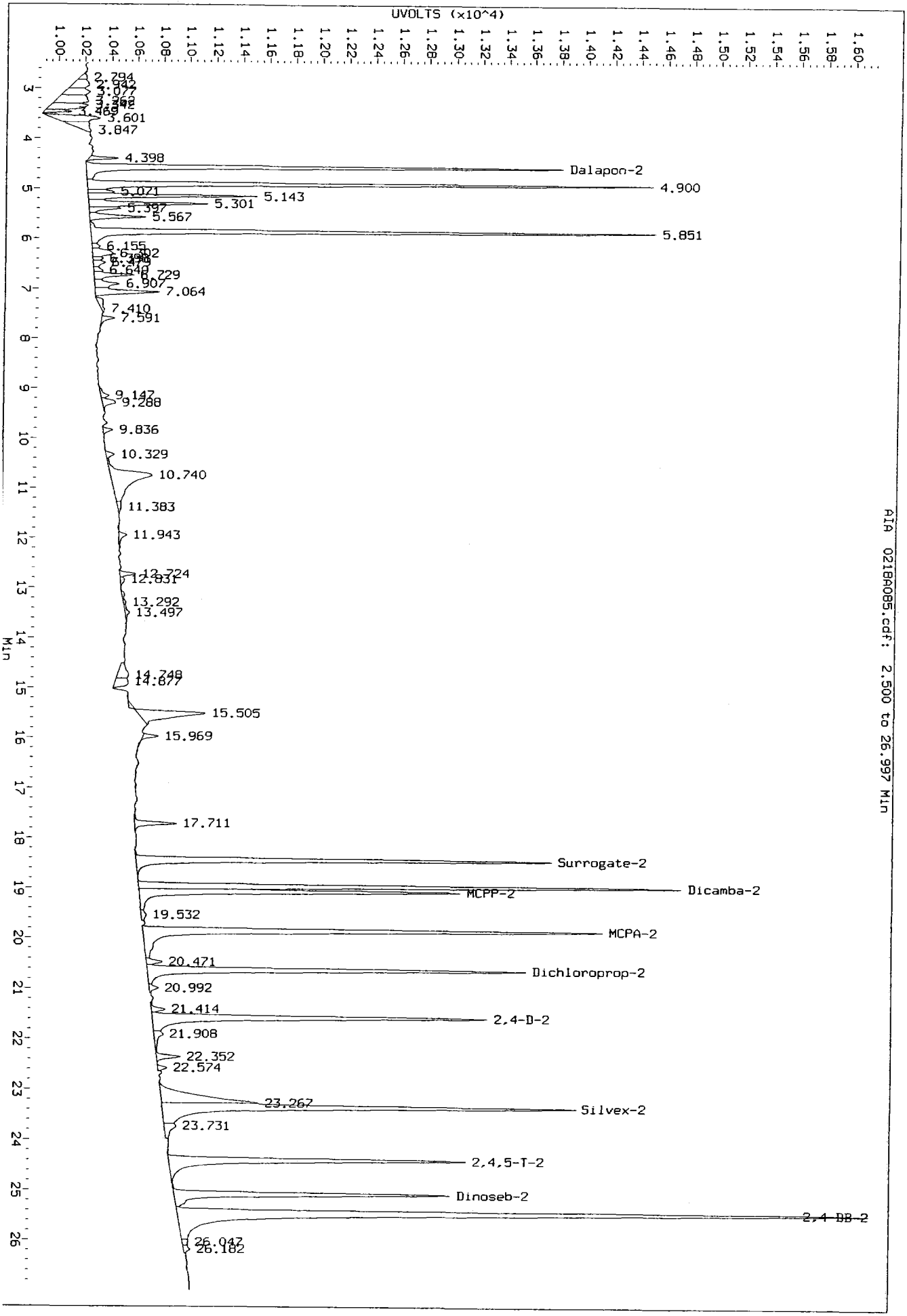
Injection Date: 19-FEB-2010 22:08
Instrument: ecd1.i
Client Sample ID:
UVOLTS (x10^4)
AIA 0218A085.caf: 2.500 to 26.997 Min
Min
3.268
4.076
4.349
Dalapon
4.646
5.183
5.478
5.622
5.714
5.875
6.588
6.803
7.237
8.073
8.835
9.052
9.405
9.681
10.642
11.870
13.088
13.646
13.949
14.381
16.397
Surrogate
Dicamba
MCPP
MCPA
18.941
19.188
Dichloroprop
2,4-D
20.535
21.949
Silvex
2,4,5-T
2,4-DB
Dinoseb
24.900
25.508
26.111
26.453


UVOLTS (x10^4)
Min
Data File: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A085.d/0218A085.cdf
Injection Date: 19-FEB-2010 22:08
Instrument: ecd1.i
Client Sample ID:
AIA 0218A085.cdf: 2.500 to 26.997 Min
Dalapon-2
4.900
5.851
Surrogate-2
Dicamba-2
MCPP-2
MCPA-2
Dichloroprop-2
2,4-D-2
Silvex-2
2,4,5-T-2
Dinoseb-2
2,4-DB-2

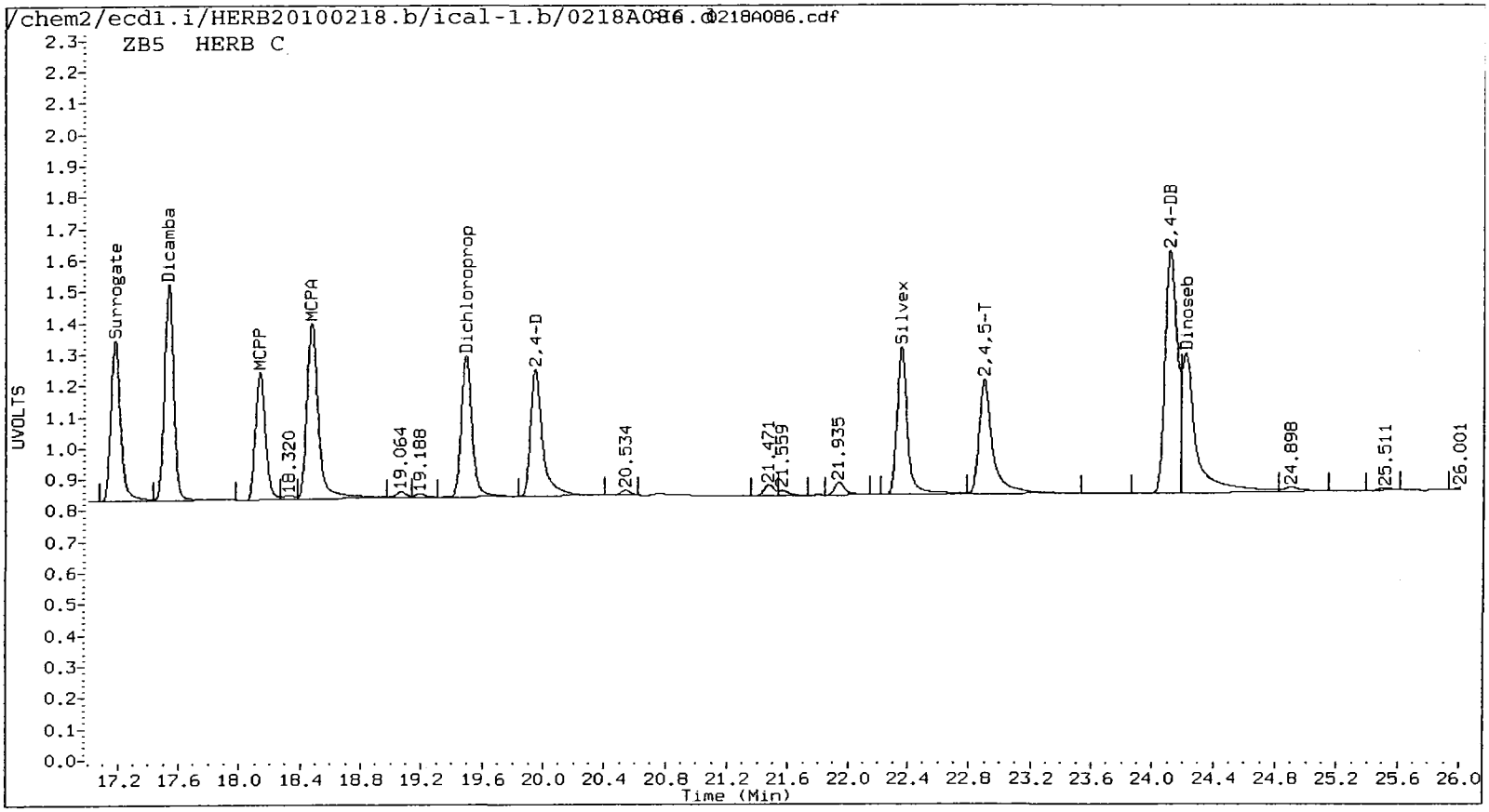
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

Data file 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A086.d ARI ID: HERB C
Data file 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A086.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 19-FEB-2010 22:44
Compound Sublist: herb Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
4.413	0.005	129936	4.563	0.001	124988	53.739	52.516	2.3	Dalapon
17.531	0.001	143957	18.956	0.001	151914	26.544	26.190	1.3	Dicamba
18.471	-0.004	151934	19.839	0.002	151604	13902.667	13865.804	0.3	MCPA
18.129	-0.005	92340	19.063	0.001	99406	13296.279	13630.064	2.5	MCPP
19.488	0.010	110095	20.621	0.004	127434	52.352	53.048	1.3	Dichloroprop
19.941	0.022	115911	21.560	0.007	130993	48.554	54.250	11.1	2,4-D
22.351	0.011	117015	23.343	0.005	158693	13.055	13.435	2.9	Silvex
22.893	0.021	113855	24.391	0.007	123532	13.299	13.271	0.2	2,4,5-T
24.112	0.022	210256	25.438	0.008	304415	266.328	267.764	0.5	2,4-DB
24.213	0.002	146238	25.075	0.004	100038	13.328	13.158	1.3	Dinoseb
17.177	0.001	116967	18.431	0.001	129313	65.5	65.2	0.4	Surrogate

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4-DCPA (Surr)	52.4	52.2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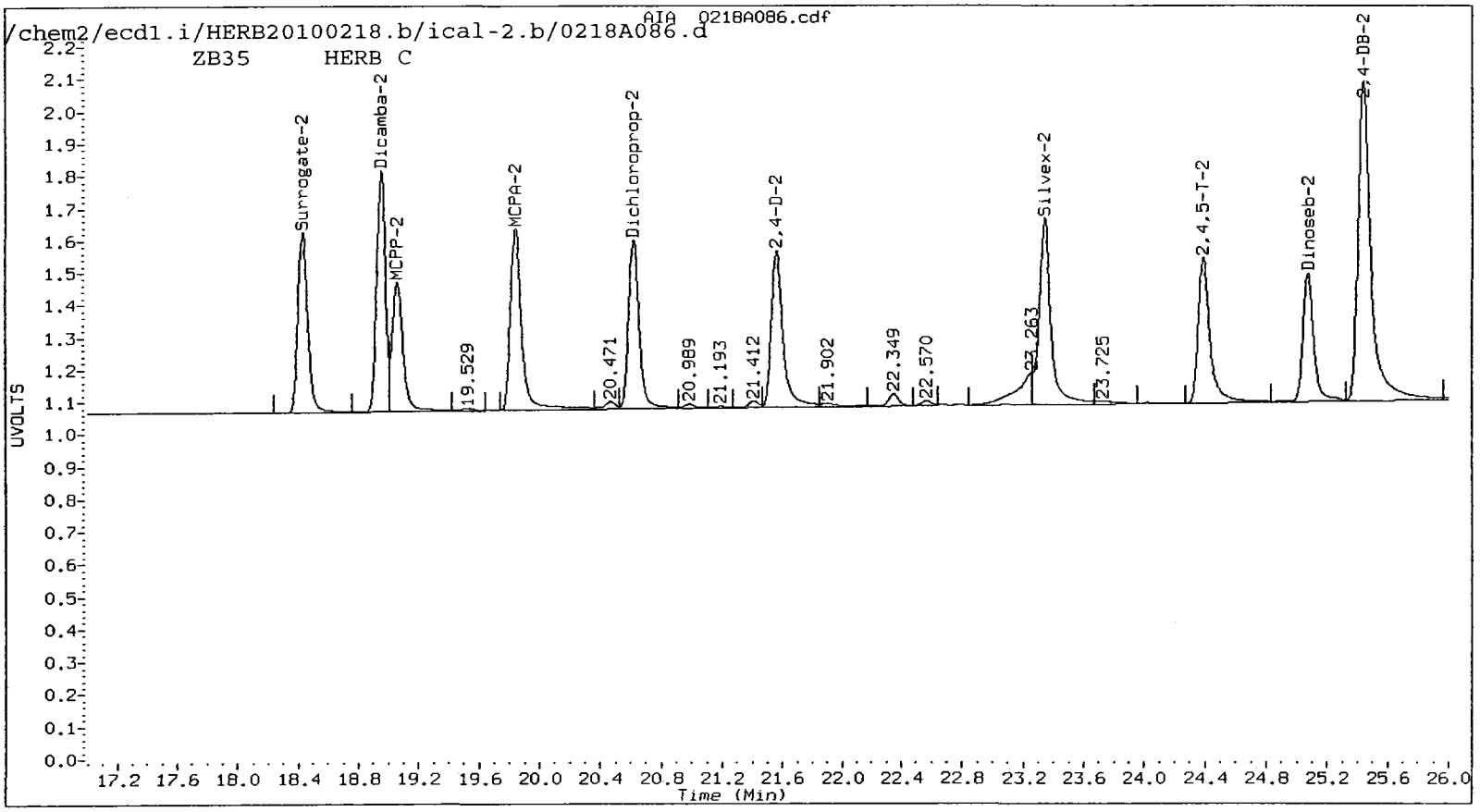
0218A086.cdf
ZB5 HERB C
UVOLTS
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
Silvex
2,4,5-T
2,4-DB
Dinoseb
18.320
19.064
19.188
20.534
21.471
21.559
21.935
24.898
25.511
26.001
Time (Min)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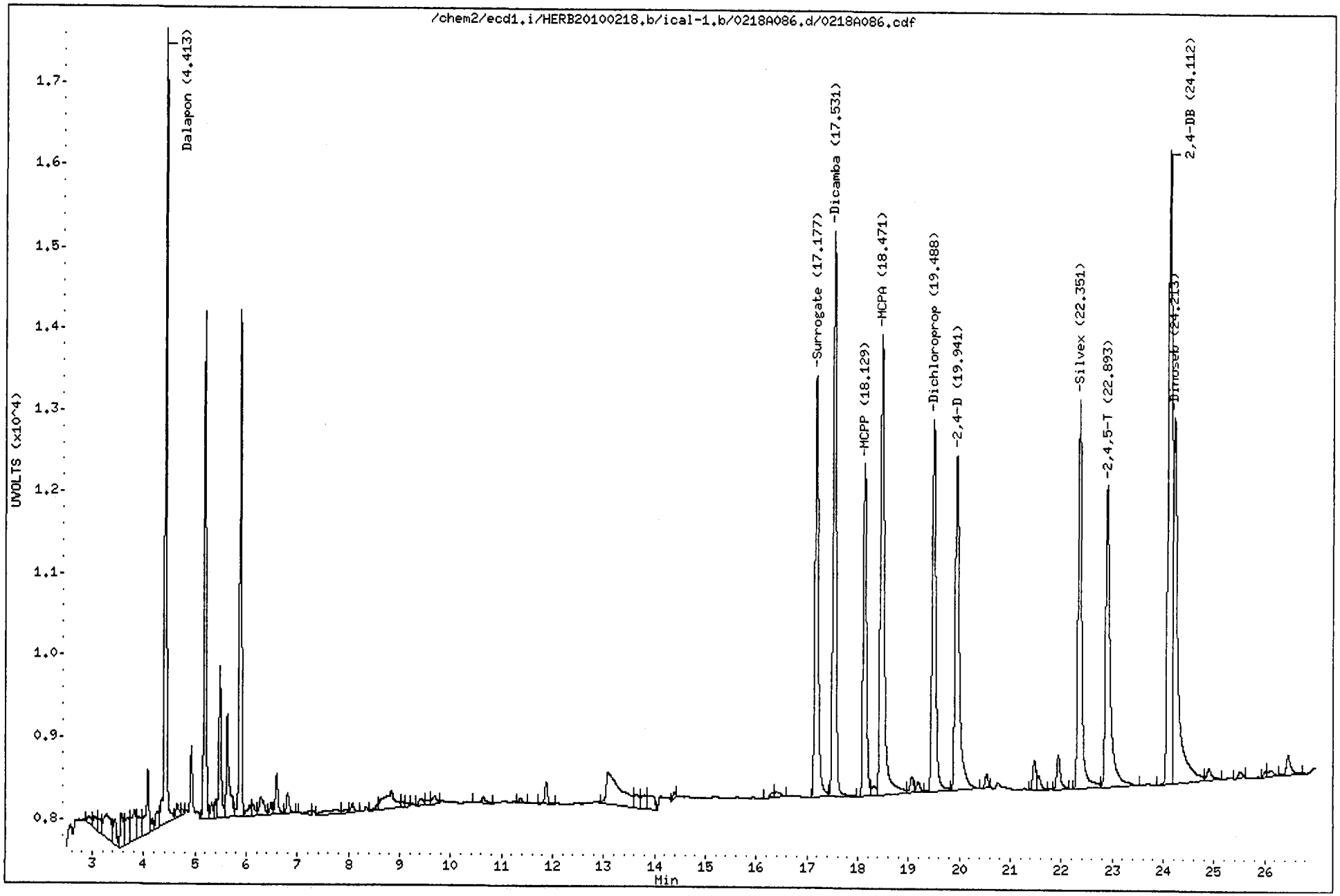
AIA 0218A086.cdf
ZB35 HERB C
UVOLTS
Surrogate-2
Dicamba-2
MCPP-2
MCPA-2
Dichloroprop-2
2,4-D-2
Silvex-2
2,4,5-T-2
Dinoseb-2
2,4-DB-2
19.529
20.471
20.989
21.193
21.412
21.902
22.349
22.570
23.263
23.725
Time (Min)

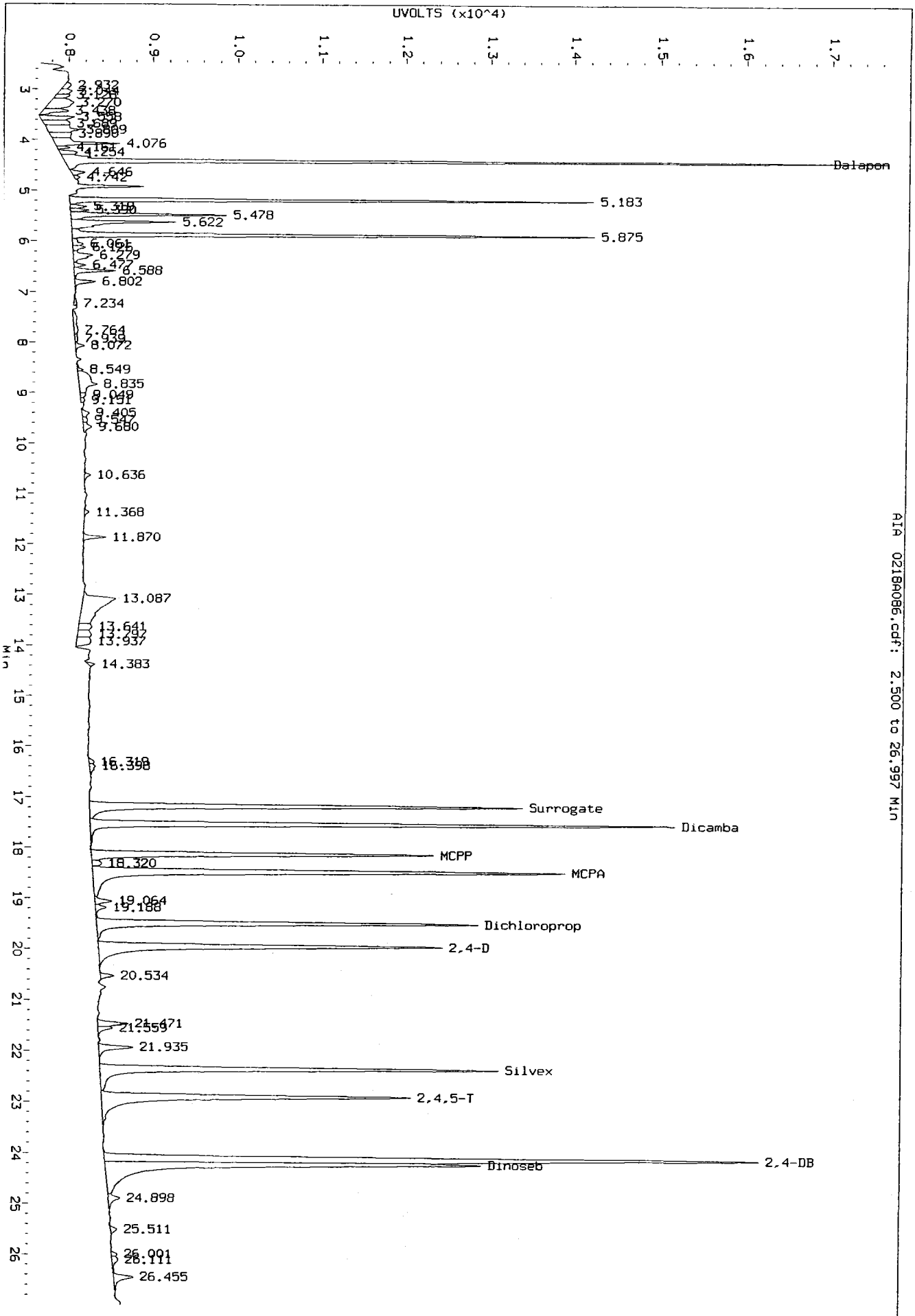
Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A086.d
Date : 19-FEB-2010 22:44
Client ID:
Sample Info: HERB C

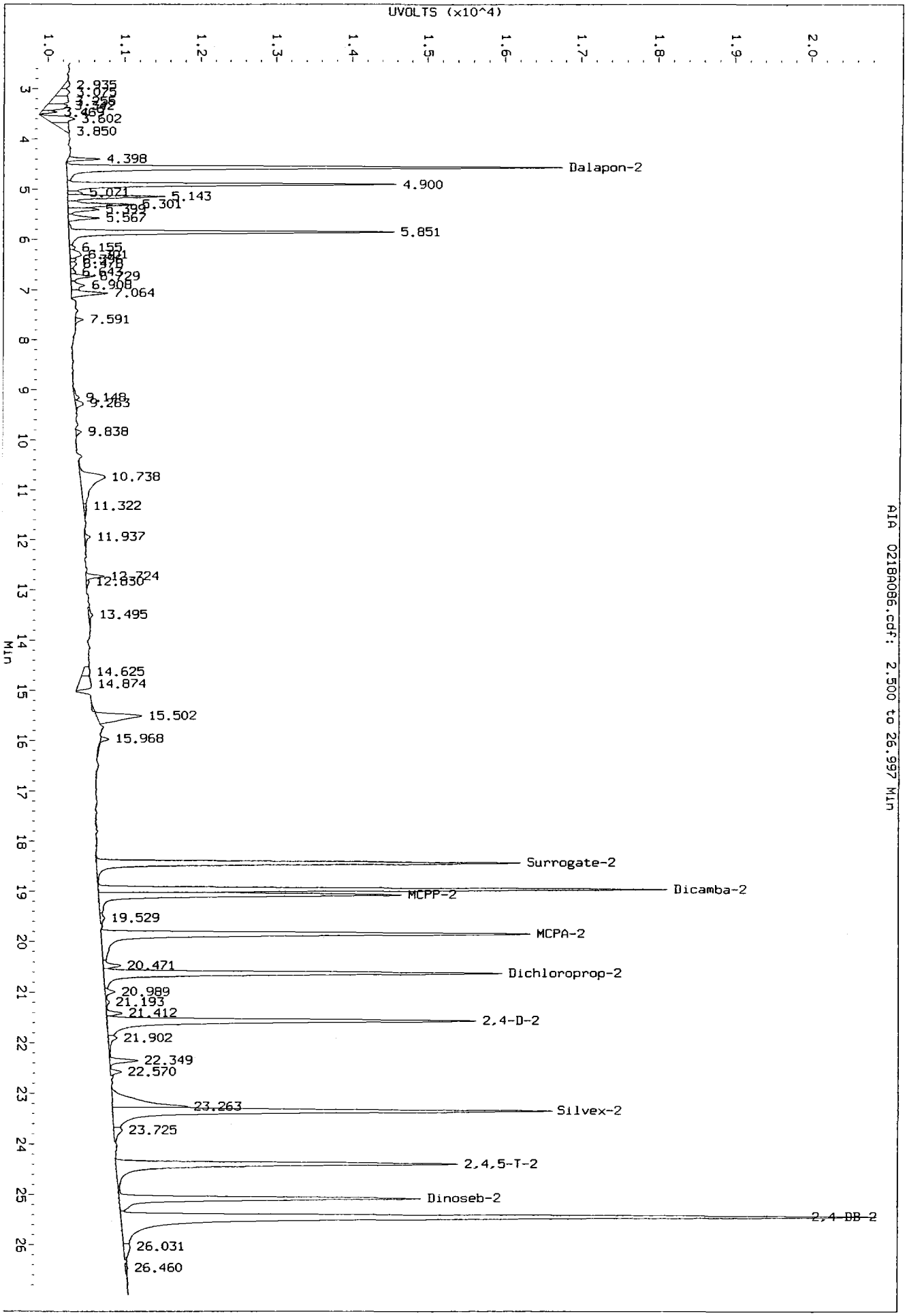
Column phase: DB5

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53




UVOLTS (x10^4)
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Min
2.932
4.076
Dalapon
4.742
5.183
5.478
5.622
5.875
6.279
6.588
6.802
7.234
7.764
8.072
8.549
8.835
9.405
9.680
10.636
11.368
11.870
13.087
13.641
13.937
14.383
Surrogate
Dicamba
MCPP
18.320
MCPA
19.064
Dichloroprop
2,4-D
20.534
21.935
Silvex
2,4,5-T
2,4-DB
Dinoseb
24.898
25.511
26.455
Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A086.d/0218A086.cdf
Injection Date: 19-FEB-2010 22:44
Instrument: ecd1.i
Client Sample ID:
AIA 0218A086.cdf: 2.500 to 26.997 Min


UVOLTS (x10^4)
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
Min
2.935
3.602
3.850
4.398
Dalapon-2
4.900
5.071
5.143
5.301
5.567
5.851
6.155
6.908
7.064
7.591
9.148
9.283
9.838
10.738
11.322
11.937
12.724
12.830
13.495
14.625
14.874
15.502
15.968
Surrogate-2
Dicamba-2
MCPP-2
19.529
MCPA-2
20.471
Dichloroprop-2
20.989
21.193
21.412
2,4-D-2
21.902
22.349
22.570
23.263
Silvex-2
23.725
2,4,5-T-2
Dinoseb-2
2,4-DB-2
26.031
26.460
Data File: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A086.d/0218A086.cdf
Injection Date: 19-FEB-2010 22:44
Instrument: ecd1.i
Client Sample ID:
AIA 0218A086.cdf: 2.500 to 26.997 Min

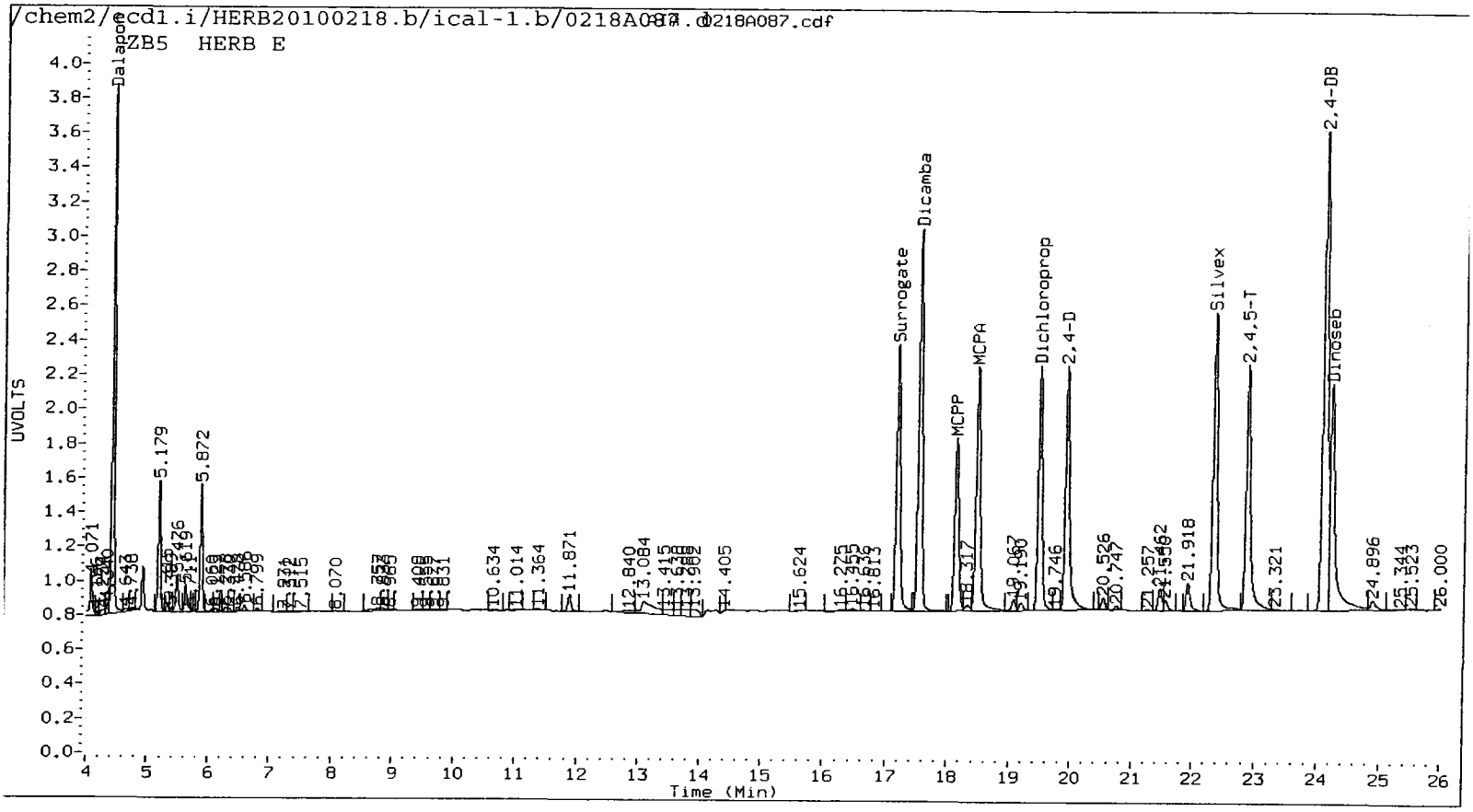
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

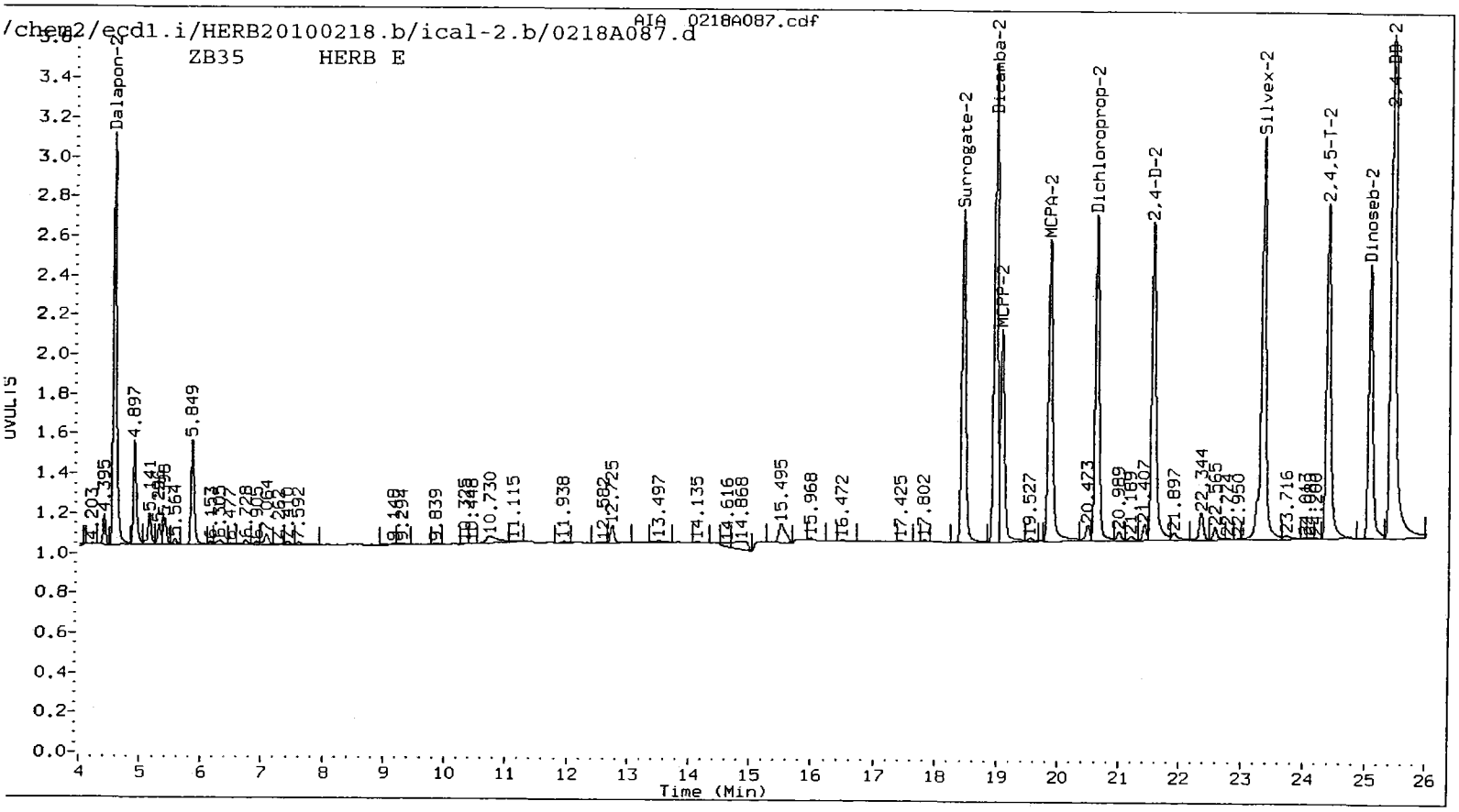
Data file 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A087.d ARI ID: HERB E
Data file 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A087.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 19-FEB-2010 23:20
Compound Sublist: herb Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
4.408	0.000	383323	4.559	-0.003	398324	193.297	195.727	1.2	Dalapon
17.530	0.000	459434	18.957	0.002	496042	84.714	85.516	0.9	Dicamba
18.475	0.000	352815	19.842	0.005	385864	48206.659	48538.337	0.7	MCPA
18.134	0.000	230700	19.066	0.004	258430	48696.031	48838.805	0.3	MCPP
19.478	0.000	325599	20.617	0.000	385174	198.615	199.143	0.3	Dichloroprop
19.919	0.000	356271	21.550	-0.003	406849	195.442	202.314	3.5	2,4-D
22.340	0.000	394601	23.338	0.000	522181	44.025	50.124	13.0	Silvex
22.872	0.000	374293	24.382	-0.002	421923	43.719	45.329	3.6	2,4,5-T
24.090	0.000	693145	25.428	-0.002	939089	877.995	985.966	11.6	2,4-DB
24.211	0.000	403157	25.072	0.001	334878	49.876	44.047	12.4	Dinoseb
17.176	0.000	344015	18.431	0.001	388412	247.8	247.6	0.1	Surrogate

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4-DCPA (Surr)	198.2	198.1


/chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A087.d
0218A087.cdf
ZB5 HERB E
UVOLTS
Time (Min)
Dalapon
5.179
5.872
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
Silvex
2,4,5-T
Dinoseb
2,4-DB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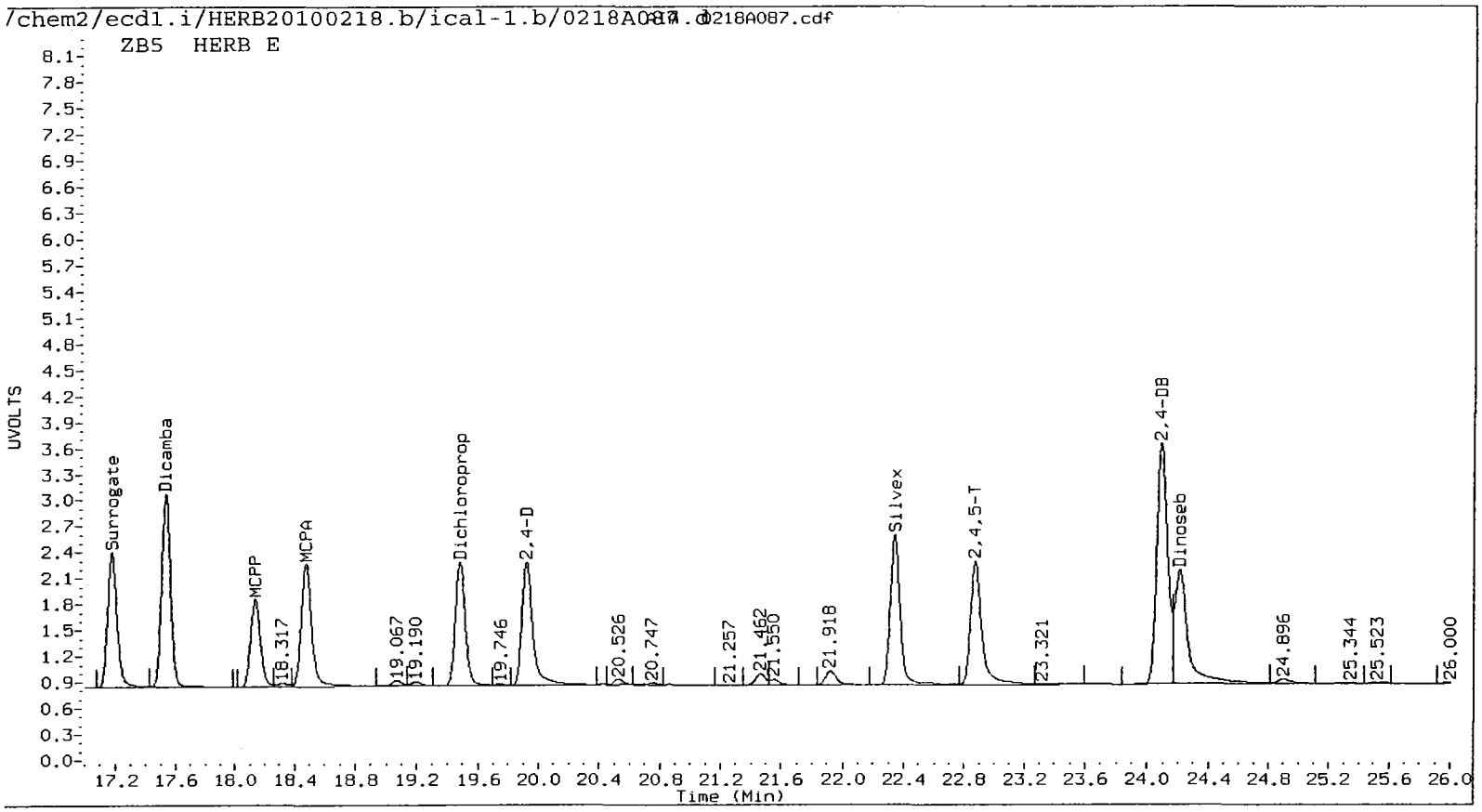
AIA 0218A087.cdf
ZB35 HERB E
UVOLTS
Time (Min)
Dalapon-2
4.897
5.849
Surrogate-2
Dicamba-2
MCPP-2
MCPA-2
Dichloroprop-2
2.4-D-2
Silvex-2
2,4,5-T-2
Dinoseb-2
2,4-DB-2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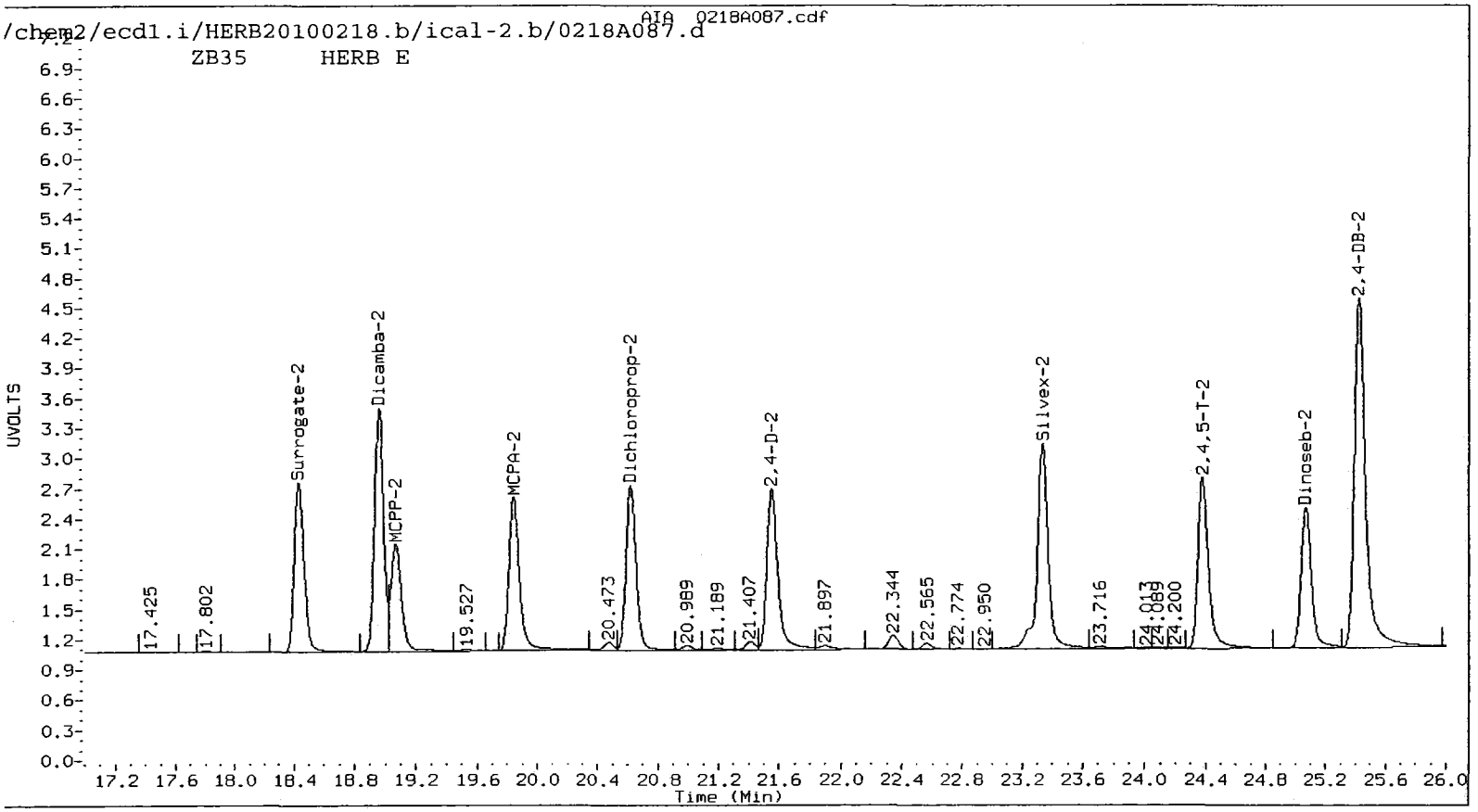
AIA 0218A087.cdf
ZB5 HERB E
UVOLTS
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
Silvex
2,4,5-T
2,4-DB
Dinoseb
17.317
19.067
19.190
19.746
20.526
20.747
21.257
21.462
21.550
21.918
23.321
24.896
25.344
25.523
26.000
Time (Min)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AIA 0218A087.cdf
ZB35 HERB E
UVOLTS
17.425
17.802
Surrogate-2
Dicamba-2
MCPP-2
19.527
MCPA-2
20.473
Dichloroprop-2
20.989
21.189
21.407
2,4-D-2
21.897
22.344
22.565
22.774
22.950
Silvex-2
23.716
24.013
24.089
24.200
2,4,5-T-2
Dinoseb-2
2,4-DB-2
Time (Min)

Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A087.d

Date : 19-FEB-2010 23:20

Client ID:

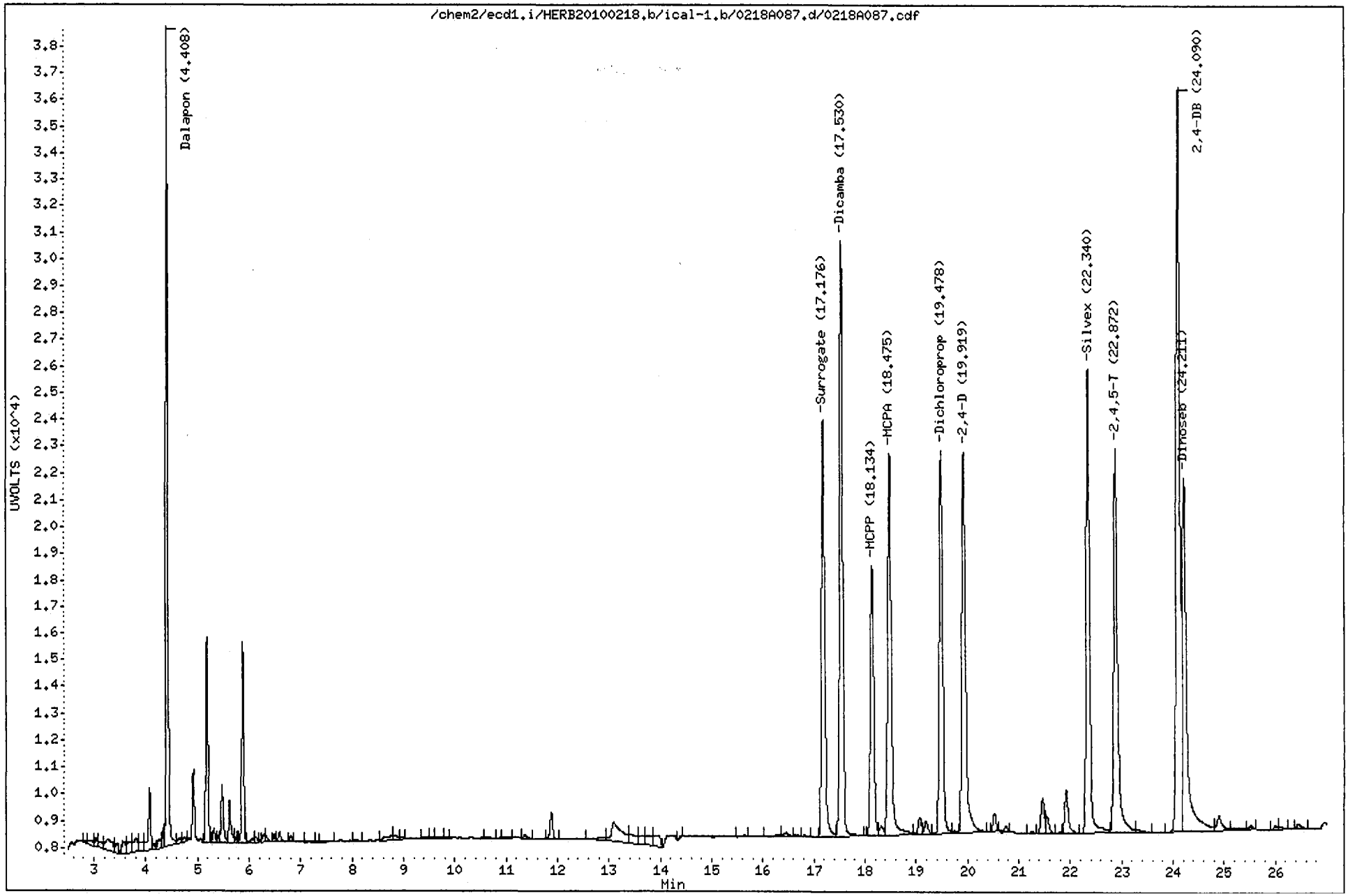
Instrument: ecd1.i

Sample Info: HERB E

Operator: ar

Column phase: DB5

Column diameter: 0.53



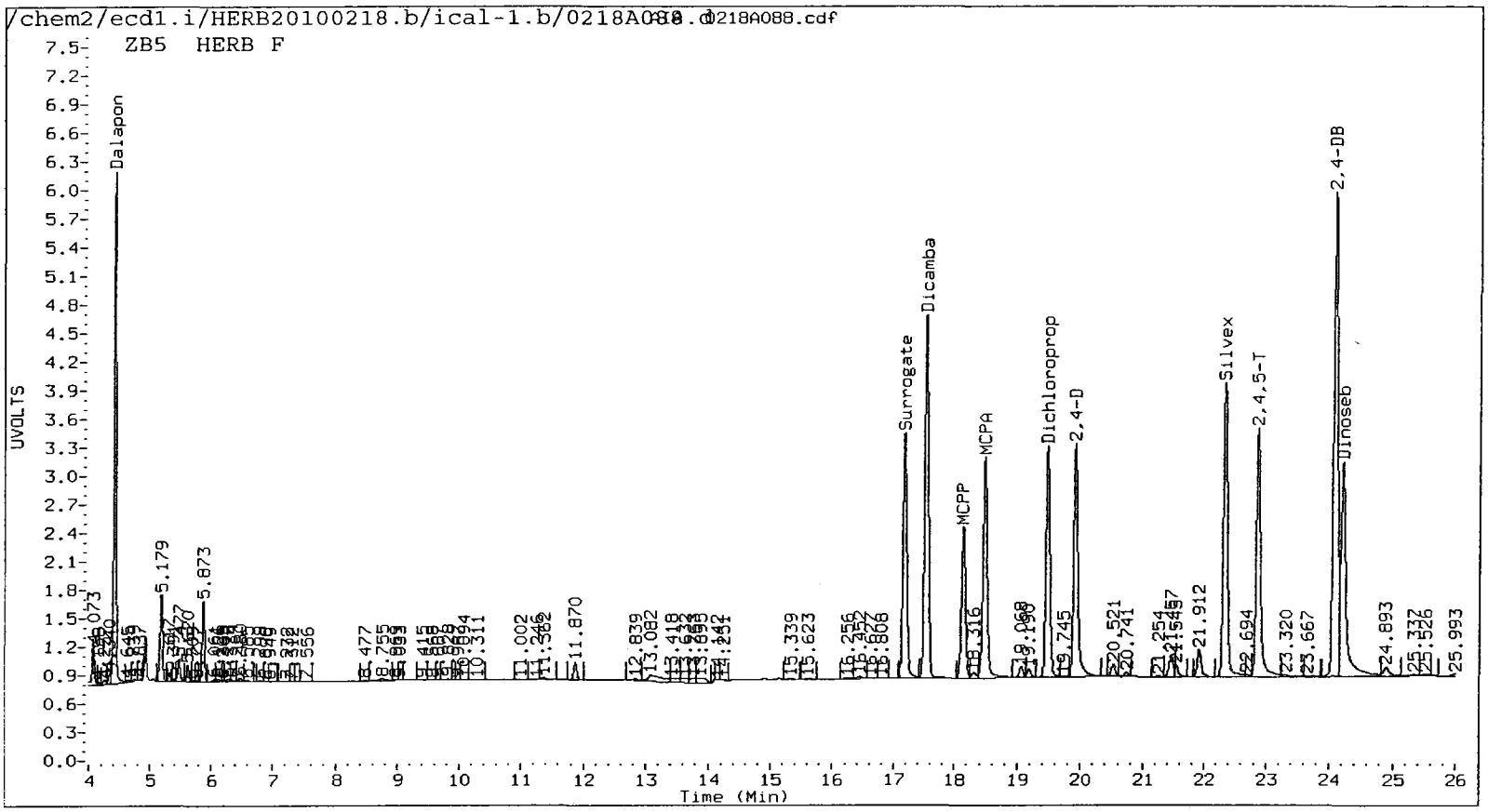
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

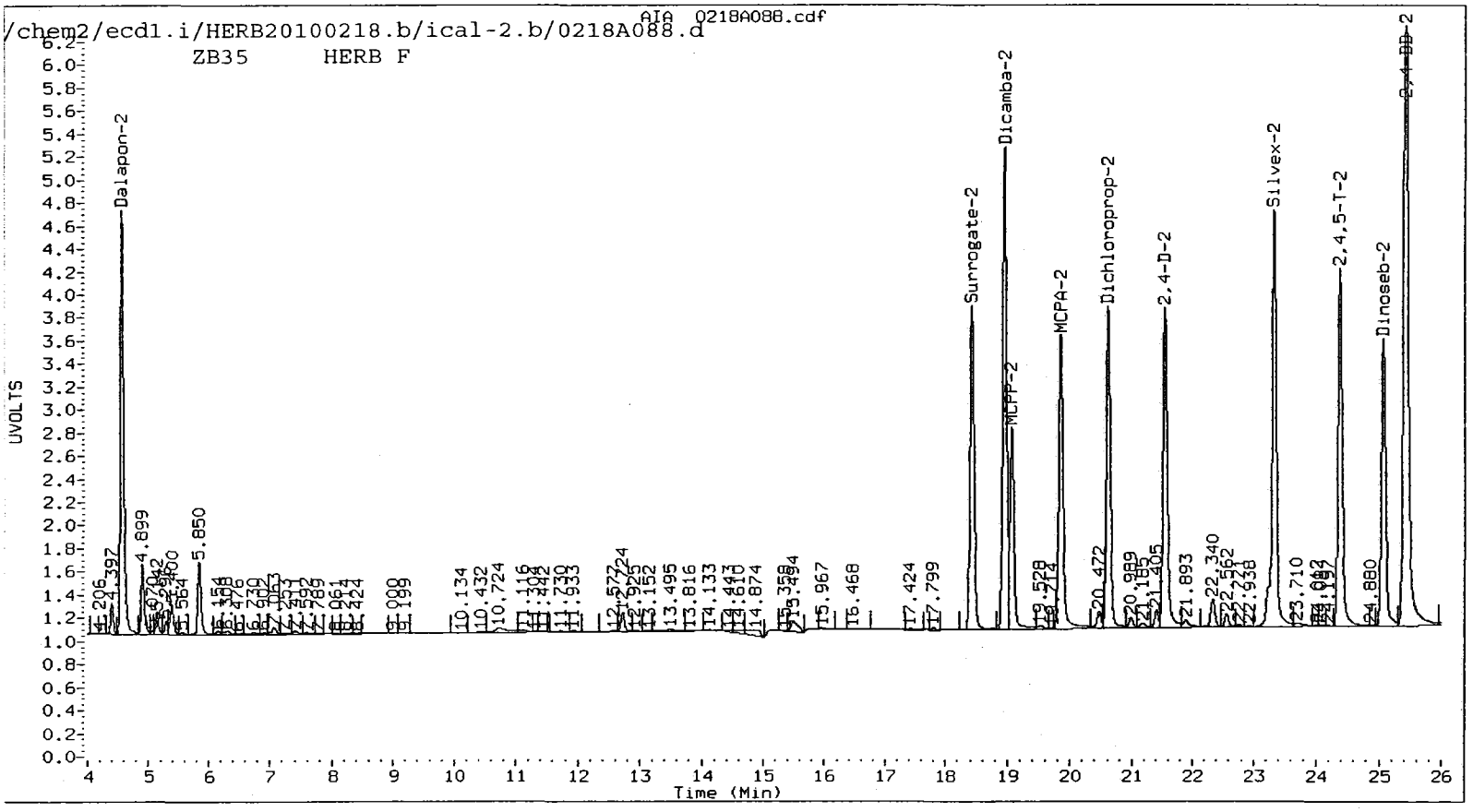
Data file 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A088.d ARI ID: HERB F
Data file 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A088.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 19-FEB-2010 23:56
Compound Sublist: herb Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
4.409	0.001	664290	4.560	-0.002	702858	401.778	401.126	0.2	Dalapon
17.530	0.000	794338	18.956	0.001	870547	146.466	150.080	2.4	Dicamba
18.484	0.009	553976	19.845	0.008	625138	100727.805	100557.659	0.2	MCPA
18.139	0.005	364454	19.069	0.007	417134	100564.874	100423.331	0.1	MCPP
19.475	-0.003	539038	20.614	-0.003	646698	400.607	400.462	0.0	Dichloroprop
19.911	-0.008	592879	21.544	-0.009	687084	400.930	399.687	0.3	2,4-D
22.335	-0.005	694821	23.334	-0.004	922531	77.520	100.065	25.4	Silvex
22.865	-0.007	654083	24.377	-0.007	753755	76.399	80.978	5.8	2,4,5-T
24.084	-0.006	1211566	25.422	-0.008	1624516	1534.670	2004.415	26.5	2,4-DB
24.209	-0.002	647399	25.068	-0.003	597785	100.137	78.628	24.1	Dinoseb
17.174	-0.002	569702	18.429	-0.001	649464	500.9	500.9	0.0	Surrogate

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4-DCPA (Surr)	400.7	400.7


/chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A088.d
0218A088.cdf
ZB5 HERB F
UVOLTS
Time (Min)
Dalapon
5.179
5.873
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
Silvex
2,4,5-T
2,4-DB
Dinoseb
11.870
21.912
23.320
23.667
24.893
25.993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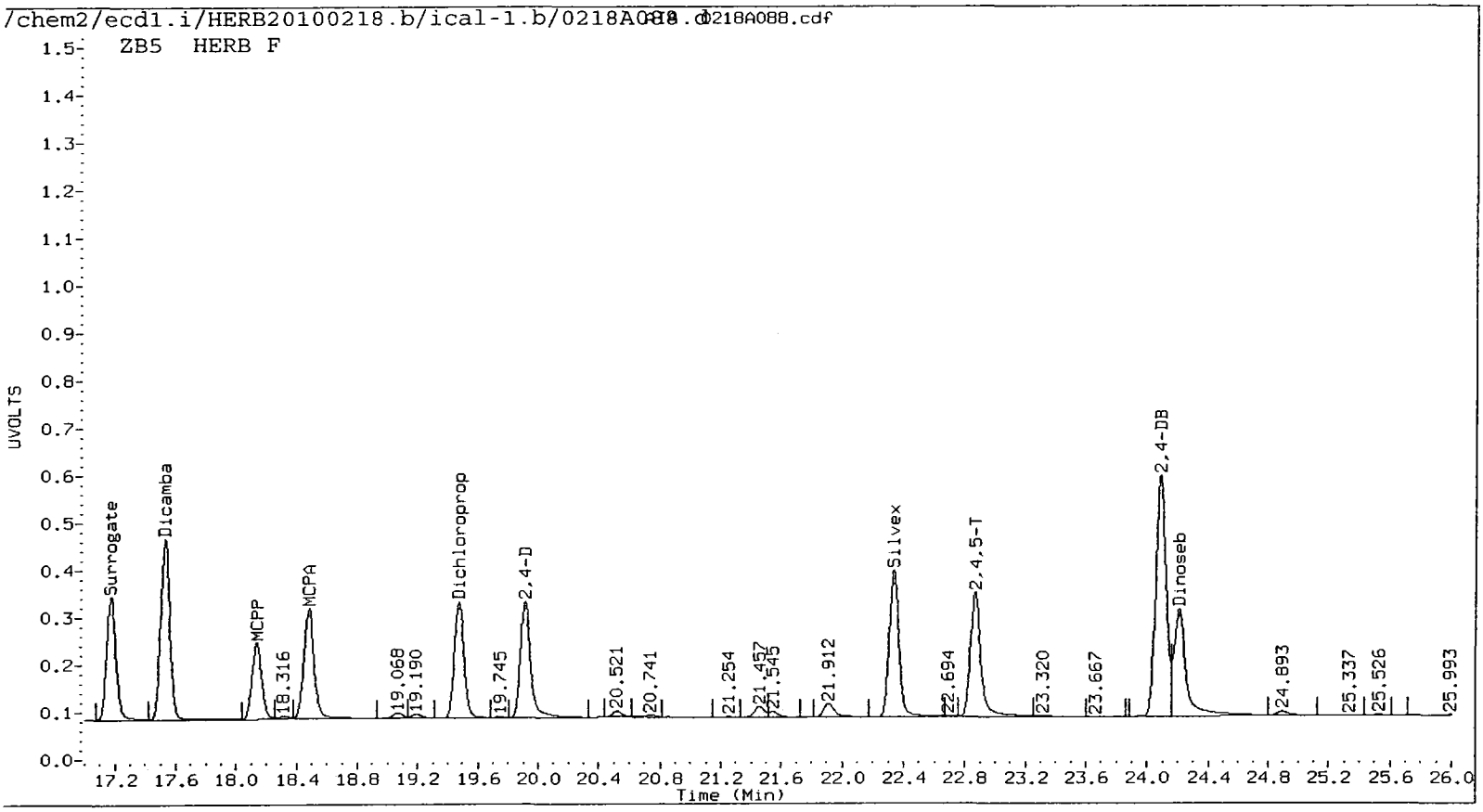
0218A088.cdf
ZB35 HERB F
UVOLTS
Time (Min)
Dalapon-2
4.899
5.850
Surrogate-2
Dicamba-2
MCPP-2
MCPA-2
Dichloroprop-2
2,4-D-2
Silvex-2
2,4,5-T-2
Dinoseb-2
2,4-DB-2
7.424
7.799
15.967
16.468
20.422
21.893
22.340
23.710
24.880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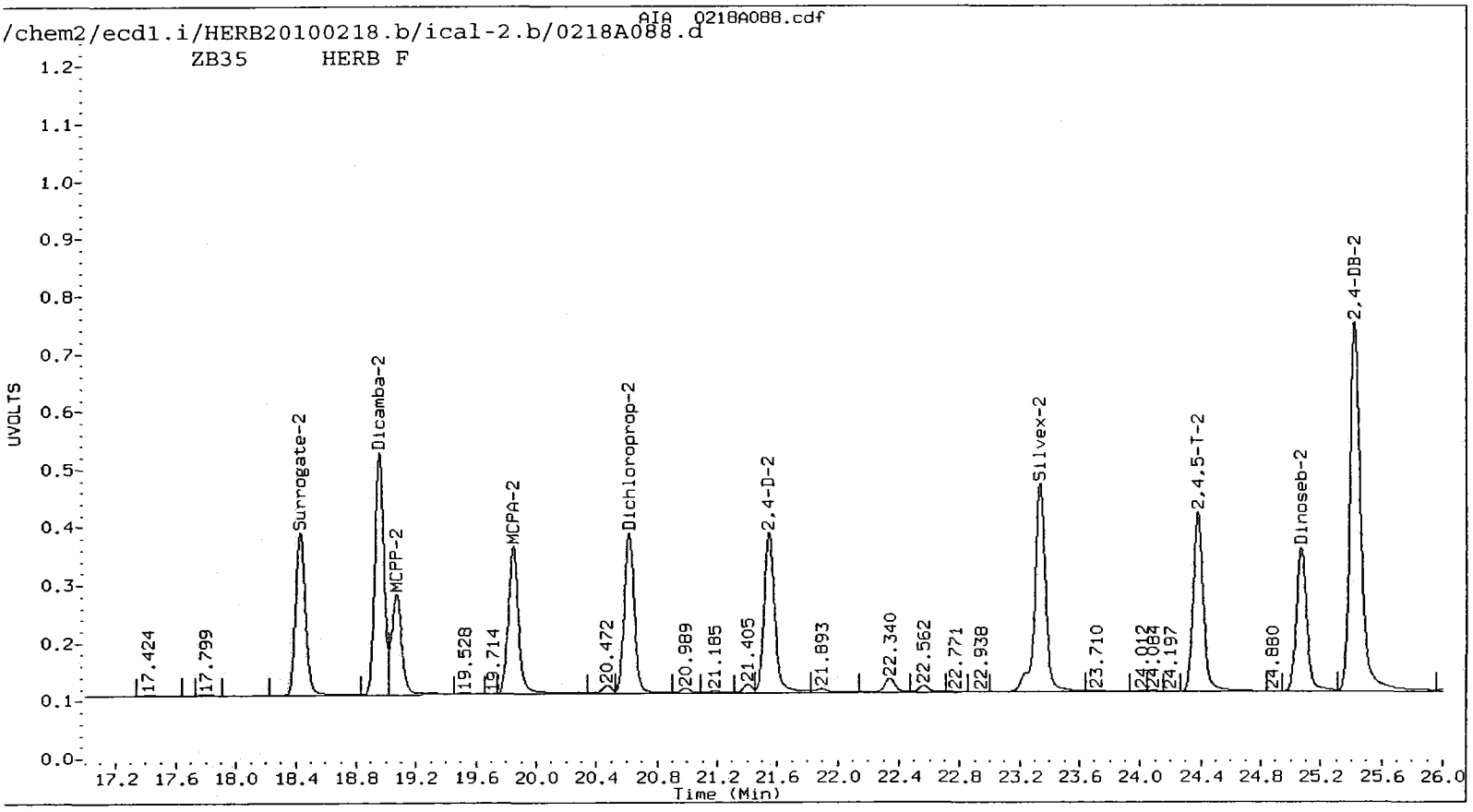
AIA 0218A088.cdf
ZB5 HERB F
UVOLTS
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
Silvex
2,4,5-T
2,4-DB
Dinoseb
17.424
18.316
19.068
19.190
19.745
20.521
20.741
21.254
21.457
21.545
21.912
22.694
23.320
23.667
24.893
25.337
25.526
25.993
Time (Min)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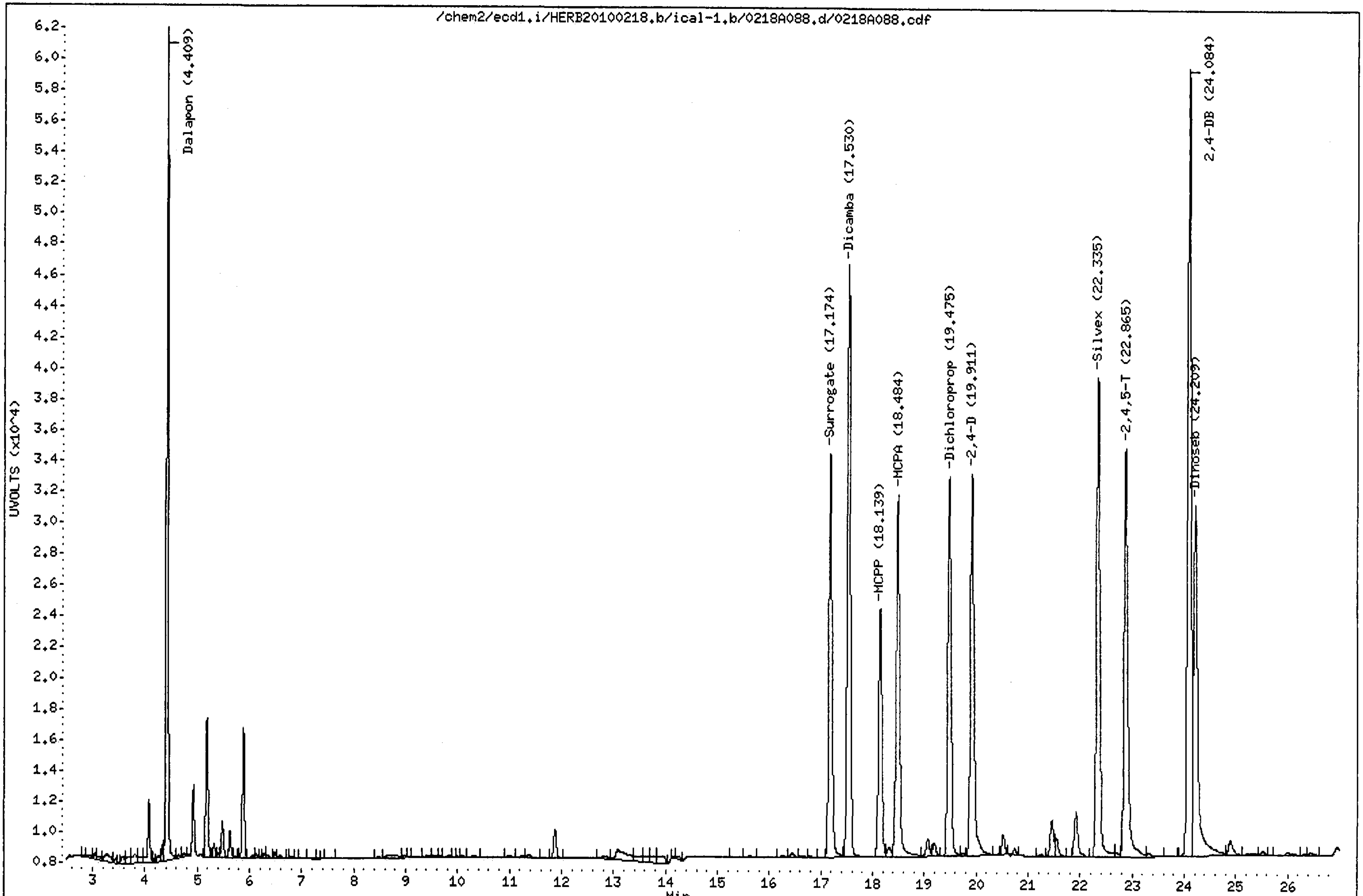
AIA 0218A088.cdf
ZB35 HERB F
UVOLTS
Surrogate-2
Dicamba-2
MCPP-2
MCPA-2
Dichloroprop-2
2,4-D-2
Silvex-2
2,4,5-T-2
Dinoseb-2
2,4-DB-2
17.424
17.799
19.528
19.714
20.472
20.989
21.185
21.405
21.893
22.340
22.562
22.771
22.938
23.710
24.012
24.083
24.197
24.880
Time (Min)

Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A088.d
Date : 19-FEB-2010 23:56
Client ID:
Sample Info: HERB F

Column phase: DB5

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



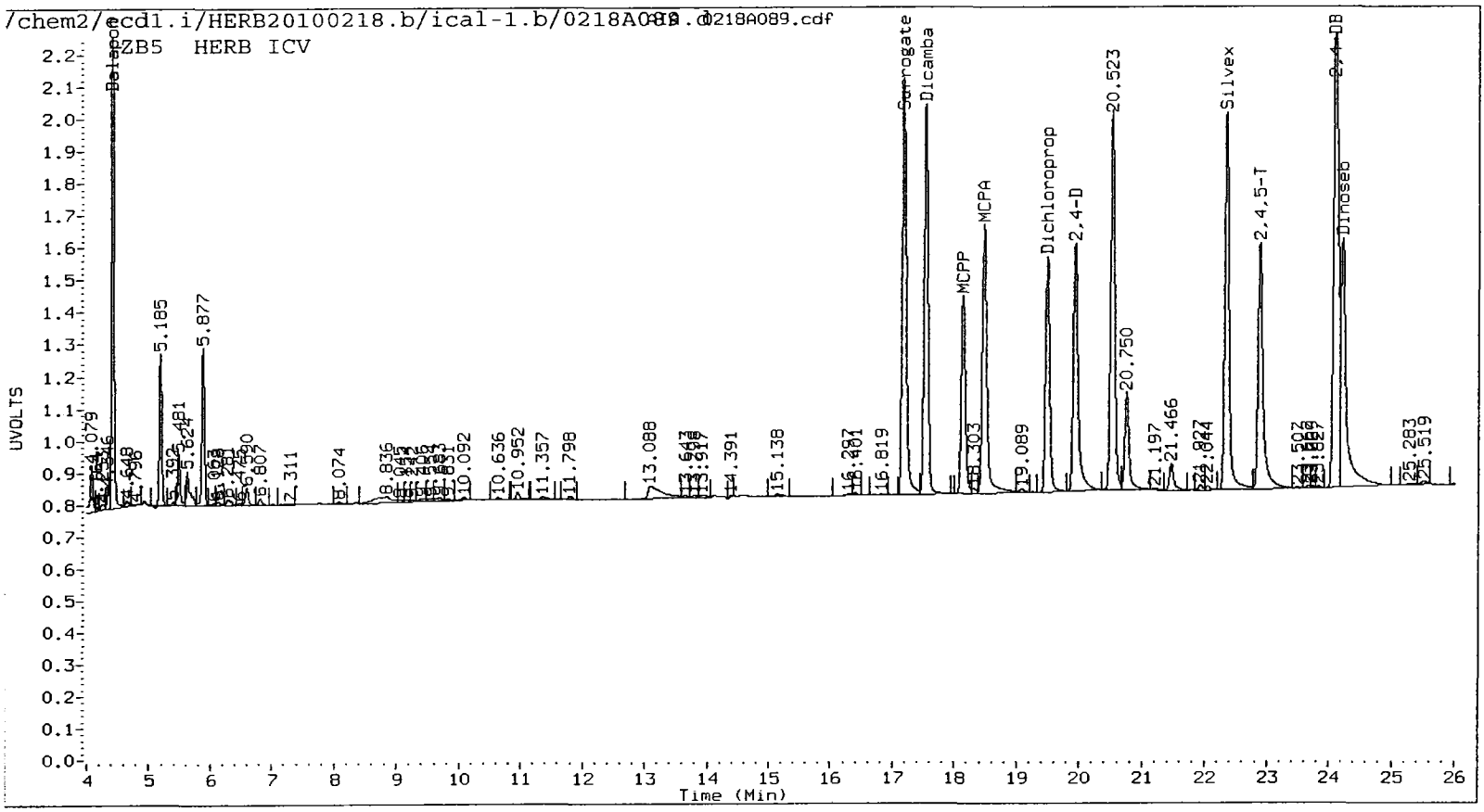
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

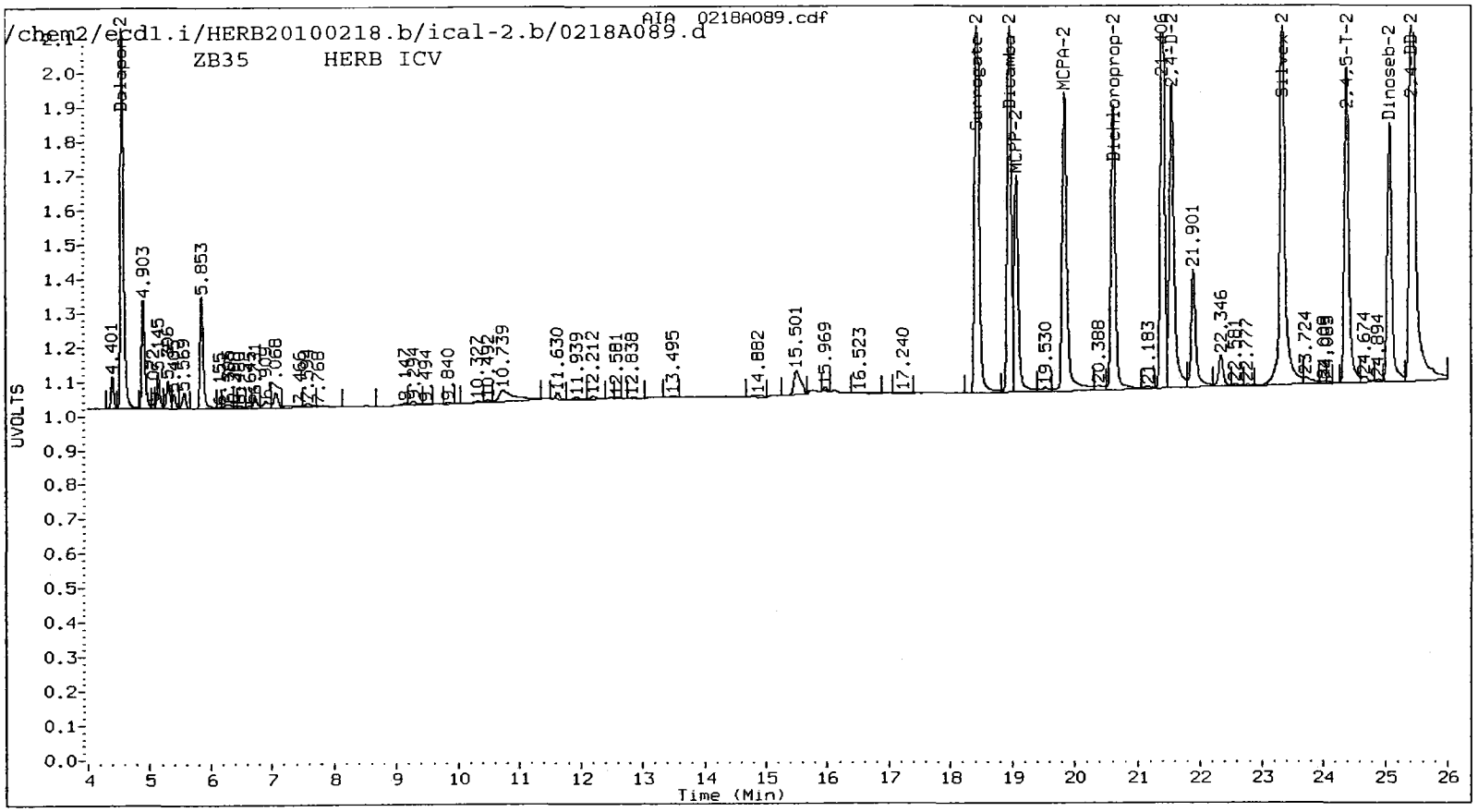
Data file 1: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A089.d ARI ID: HERB ICV
Data file 2: /chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A089.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 20-FEB-2010 00:32
Compound Sublist: herb Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

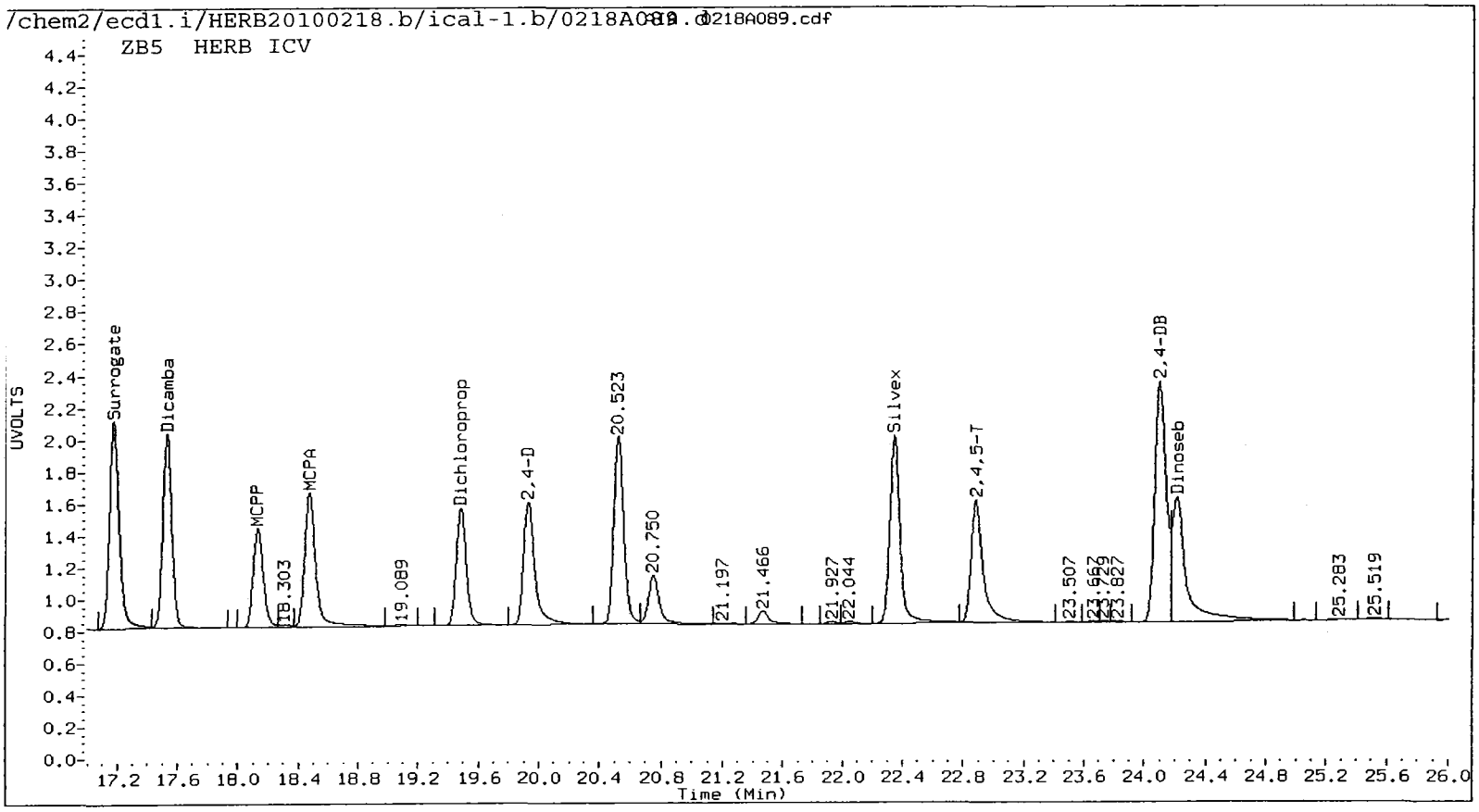
ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound
4.415	0.007	208984	4.564	0.002	207771	92.344	91.780	0.6	Dalapon
17.532	0.002	254598	18.958	0.003	268759	46.945	46.333	1.3	Dicamba
18.472	-0.003	220303	19.840	0.003	230839	23542.539	23793.154	1.1	MCPA
18.131	-0.003	143161	19.065	0.003	156045	24141.853	24278.824	0.6	MCPP
19.484	0.006	169549	20.620	0.003	201593	86.914	89.763	3.2	Dichloroprop
19.929	0.010	202900	21.555	0.002	238655	94.516	106.580	12.0	2,4-D
22.346	0.006	278753	23.341	0.003	376467	31.100	34.427	10.2	Silvex
22.882	0.010	219529	24.387	0.003	236486	25.642	25.406	0.9	2,4,5-T
24.099	0.009	388071	25.433	0.003	545821	491.563	515.464	4.7	2,4-DB
24.213	0.002	251672	25.074	0.003	190191	26.302	25.016	5.0	Dinoseb
17.177	0.001	295572	18.432	0.002	328666	202.8	199.4	1.7	Surrogate

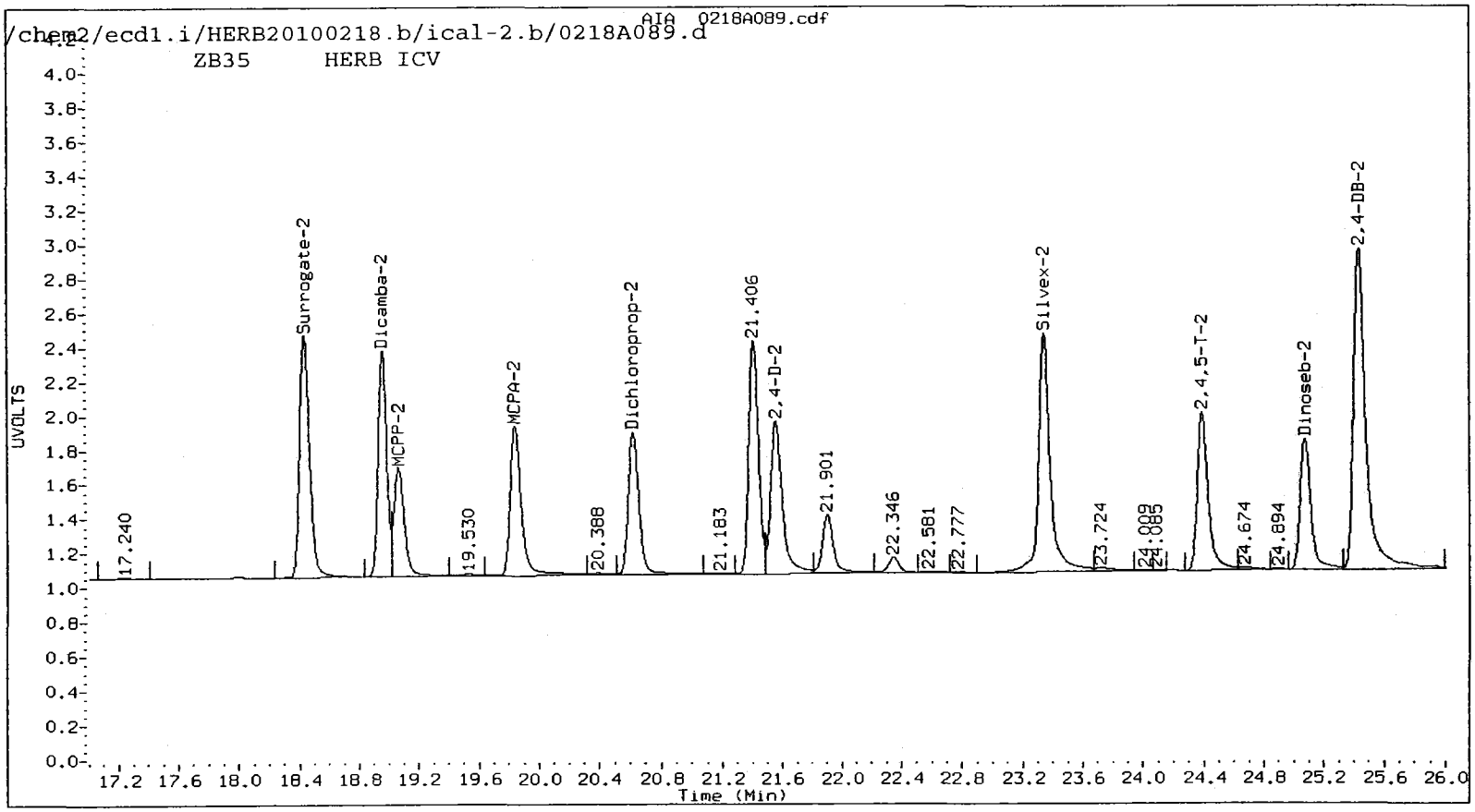
PERCENT RECOVERY

COMPOUND	Col1	Col2
Dalapon	92.3	91.8
Dicamba	93.9	92.7
MCPA	94.2	95.2
MCPP	96.6	97.1
Dichloroprop	86.9	89.8
2,4-D	94.5	106.6
Silvex (2,4,5-TP)	62.2	68.9
2,4,5-T	102.6	101.6
2,4-DB	98.3	103.1
Dinoseb	52.6	50.0
2,4-DCPA (Surr)	162.2	159.5


/chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A089.d
AID 0218A089.cdf
ZB5 HERB ICV
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
20.523
Silvex
2,4,5-T
Dinoseb
20.750
5.185
5.877
UVOLTS
Time (Min)


/chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A089.d
AID 0218A089.cdf
ZB35 HERB ICV
Surrogate-2
Dicamba-2
MCPP-2
MCPA-2
Dichloroprop-2
2,4-D-2
Silvex-2
2,4,5-T-2
Dinoseb-2
21.901
4.903
5.853
UVOLTS
Time (Min)


/chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A089.d
AIA 0218A089.cdf
ZB5 HERB ICV
UVOLTS
Surrogate
Dicamba
MCPP
MCPA
Dichloroprop
2,4-D
20.523
20.750
Silvex
2,4,5-T
2,4-DB
Dinoseb
19.089
21.197
21.466
21.927
22.044
25.283
25.519
Time (Min)


/chem2/ecd1.i/HERB20100218.b/ical-2.b/0218A089.d
AIA 0218A089.cdf
ZB35 HERB ICV
UVOLTS
17.240
Surrogate-2
Dicamba-2
MCPP-2
19.530
MCPA-2
20.388
Dichloroprop-2
21.183
21.406
2,4-D-2
21.901
22.346
22.581
22.777
Silvex-2
23.724
24.089
24.285
2,4,5-T-2
24.674
24.894
Dinoseb-2
2,4-DB-2
Time (Min)

Data File: /chem2/ecd1.i/HERB20100218.b/ical-1.b/0218A089.d

Date : 20-FEB-2010 00:32

Client ID:

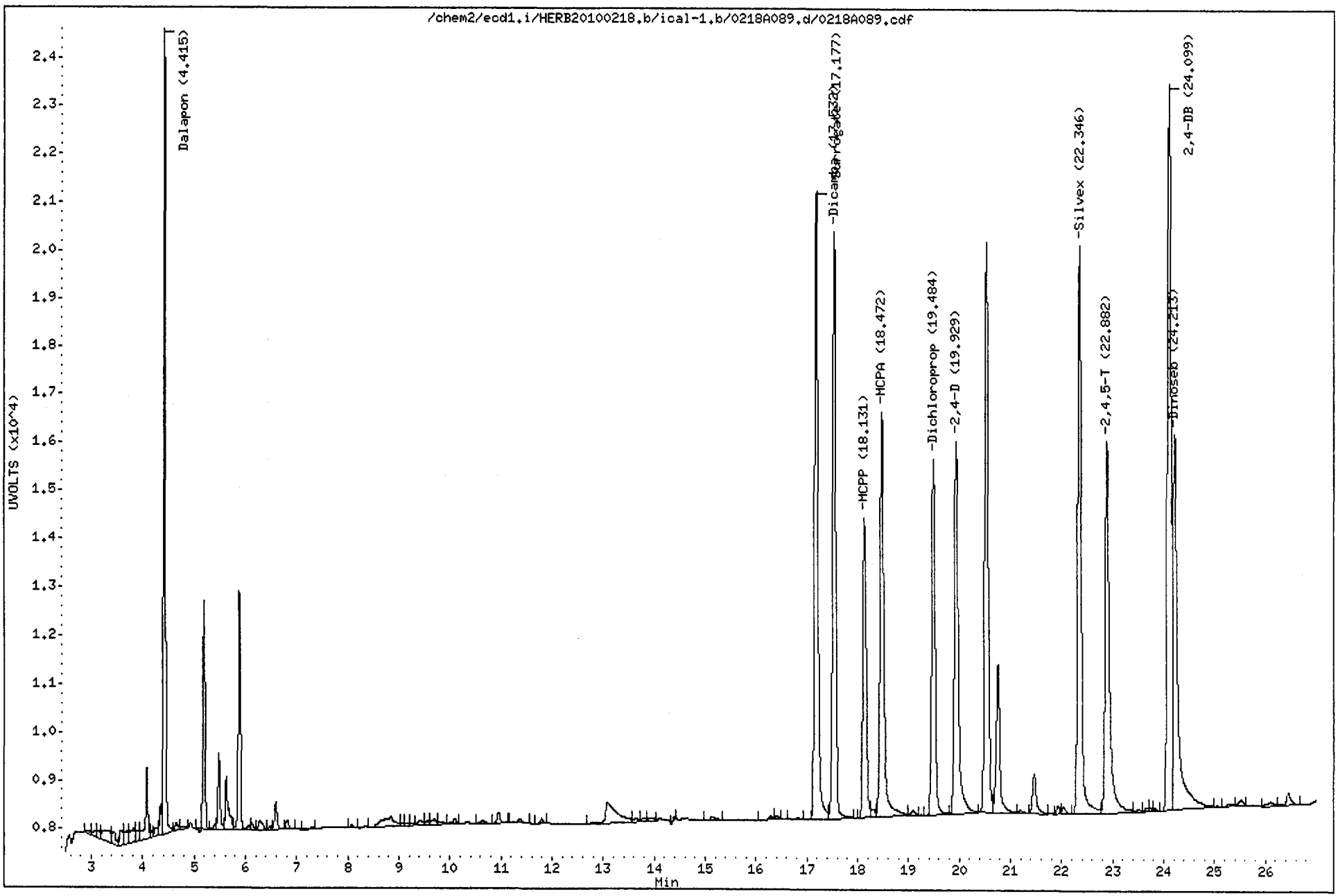
Sample Info: HERB ICV

Column phase: DB5

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



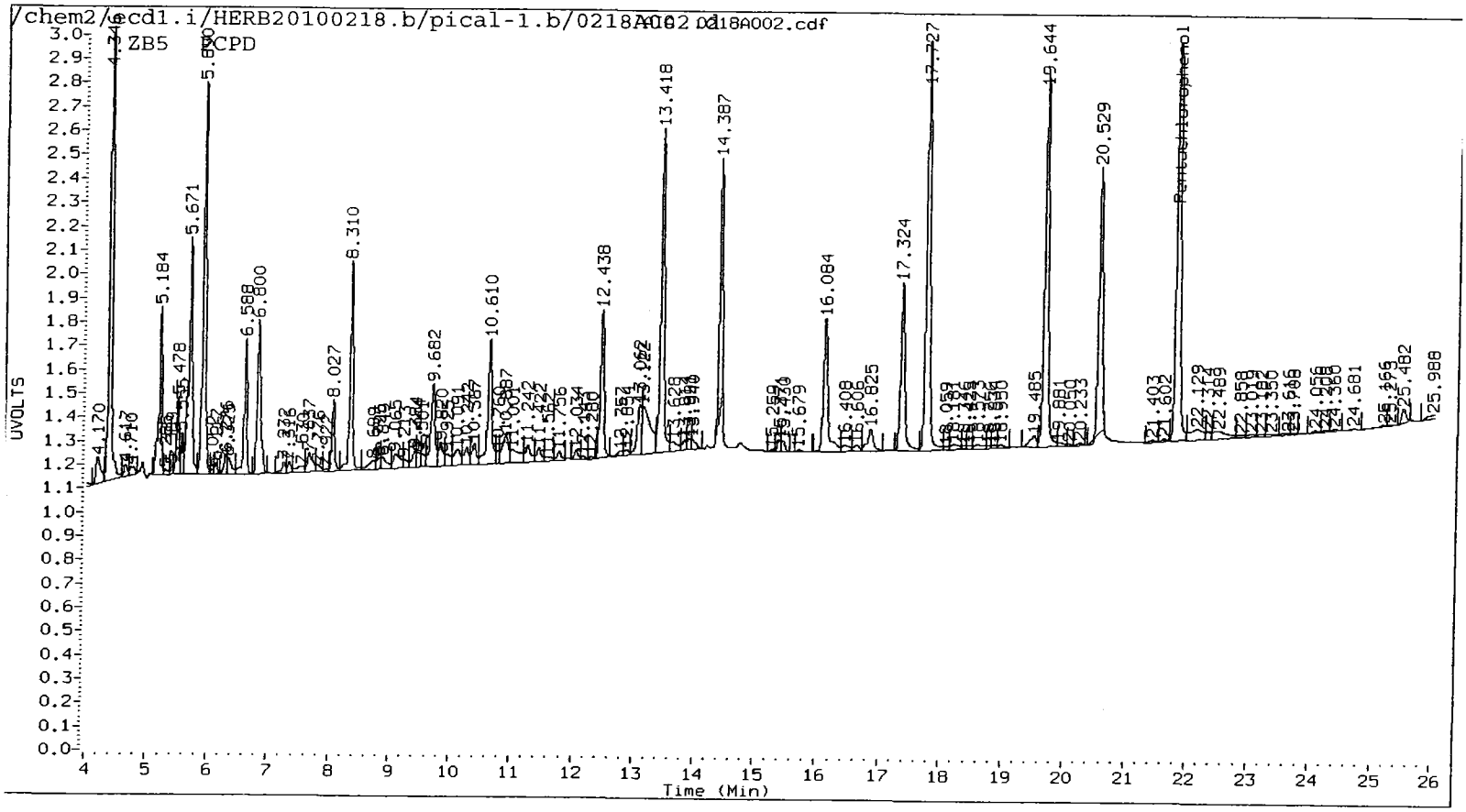
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

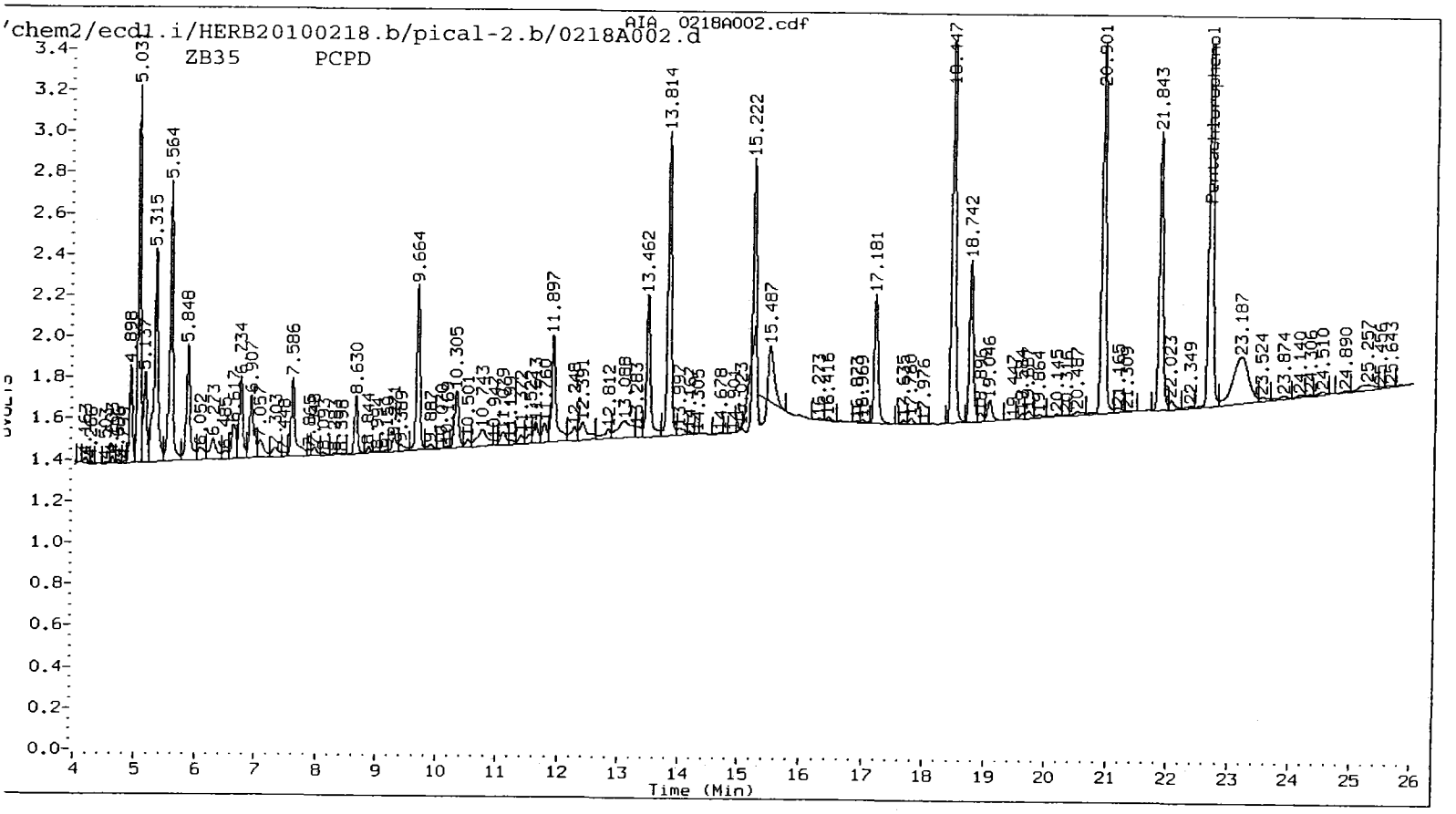
Data file 1: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A002.d ARI ID: PCPD
Data file 2: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A002.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 18-FEB-2010 14:52
Compound Sublist: pcp Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

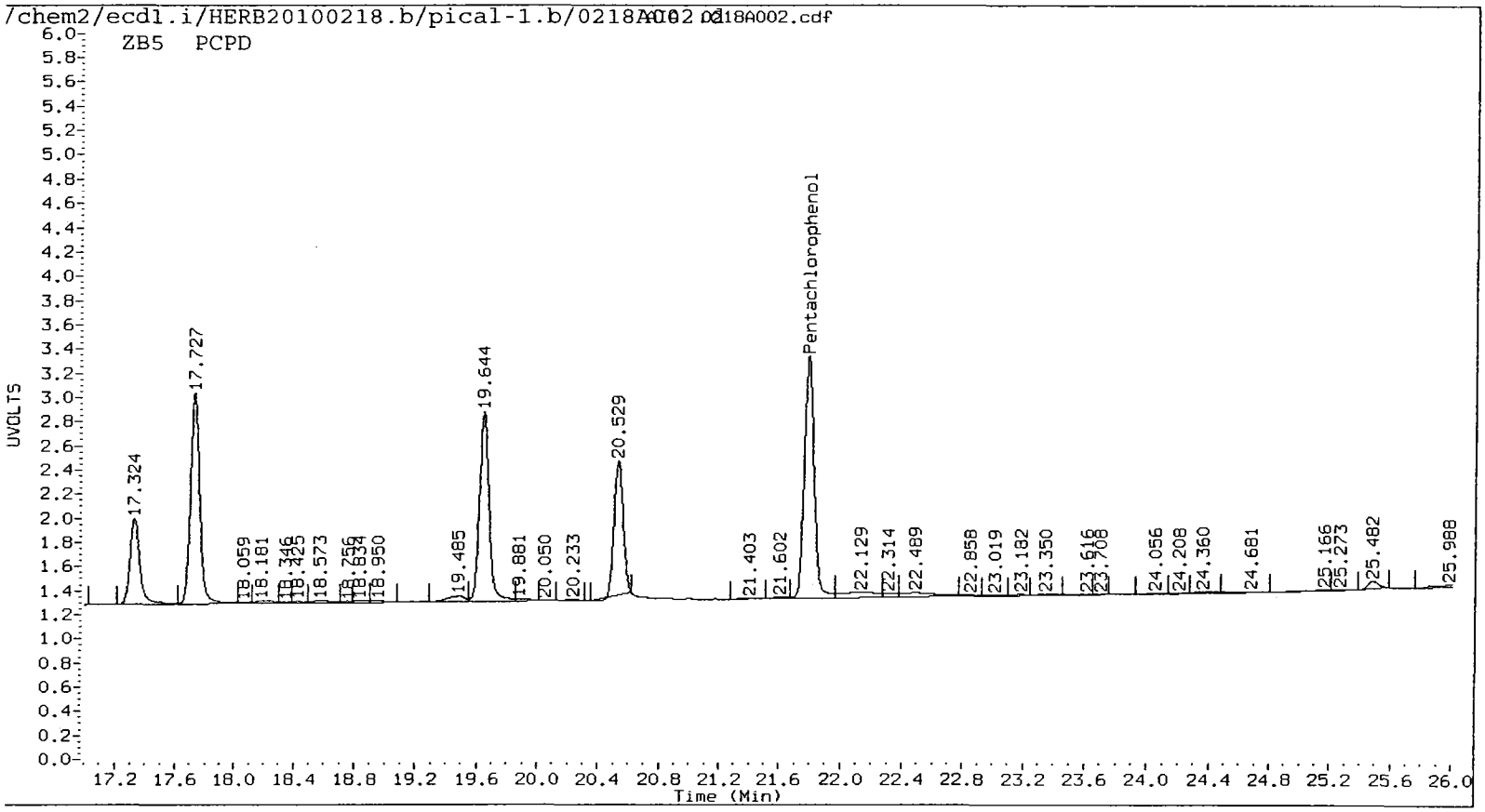
ZB5 Col RT	ZB5 Col Shift Response	ZB35 Col RT	ZB35 Col Shift Response	ZB5 on col	ZB35 on col	RPD	Compound
21.790	0.004 441949	22.664	0.000 526265	22.872	24.393	6.4	Pentachlorophenol

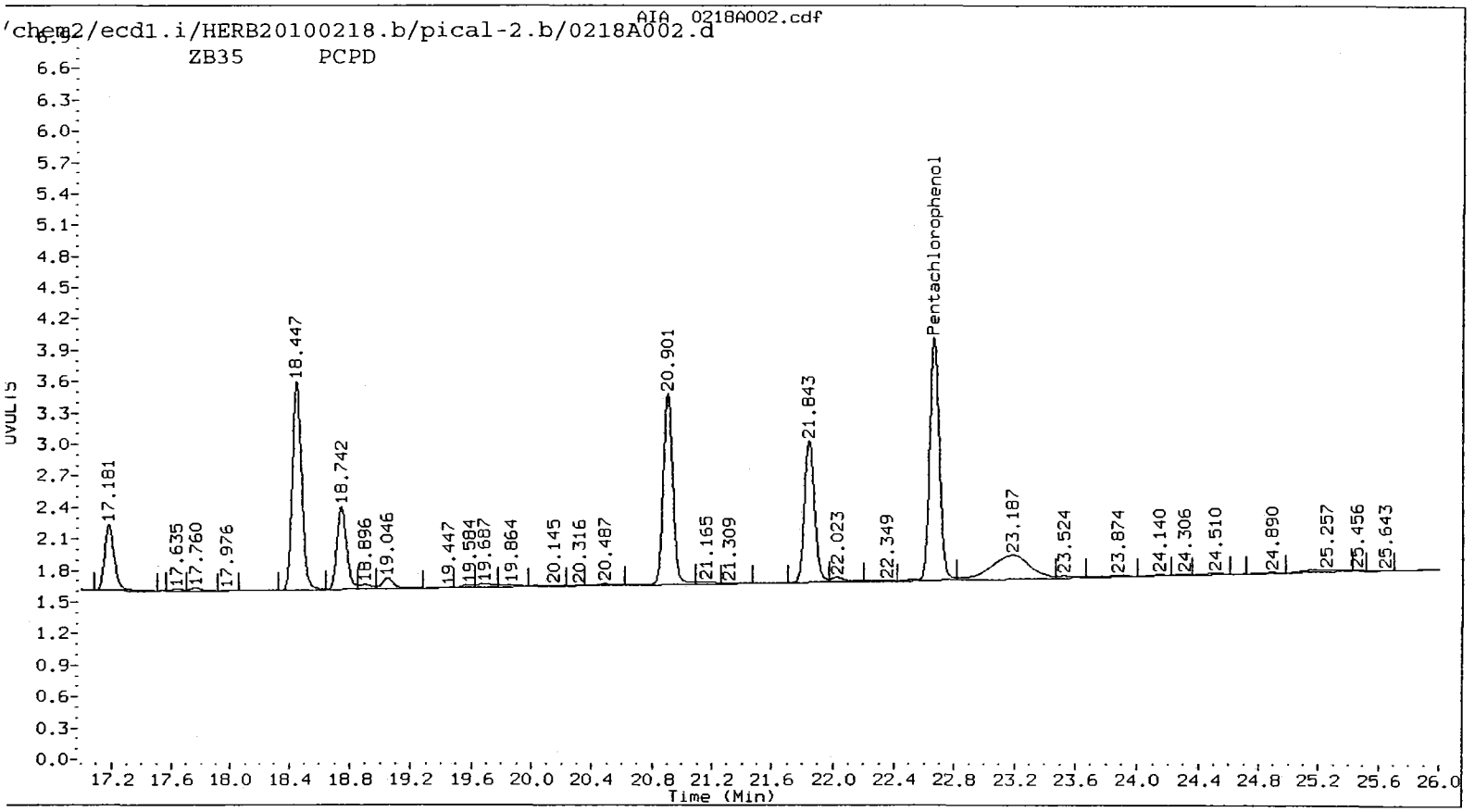
PERCENT RECOVERY

COMPOUND	Col1	Col2


/chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A002.d
AIA 0218A002.cdf
ZB5 PCPD
UVOLTS
Time (Min)
Pentachlorophenol


/chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A002.d
AIA 0218A002.cdf
ZB35 PCPD
UVOLTS
Time (Min)
Pentachlorophenol


/chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A002.d
AIA 0218A002.cdf
ZB5 PCPD
UVOLTS
17.324
17.727
19.644
20.529
Pentachlorophenol
Time (Min)


/chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A002.d
AIA 0218A002.cdf
ZB35 PCPD
UVOLTS
17.181
18.447
18.742
20.901
21.843
Pentachlorophenol
23.187
Time (Min)

Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A002.d

Date : 18-FEB-2010 14:52

Client ID:

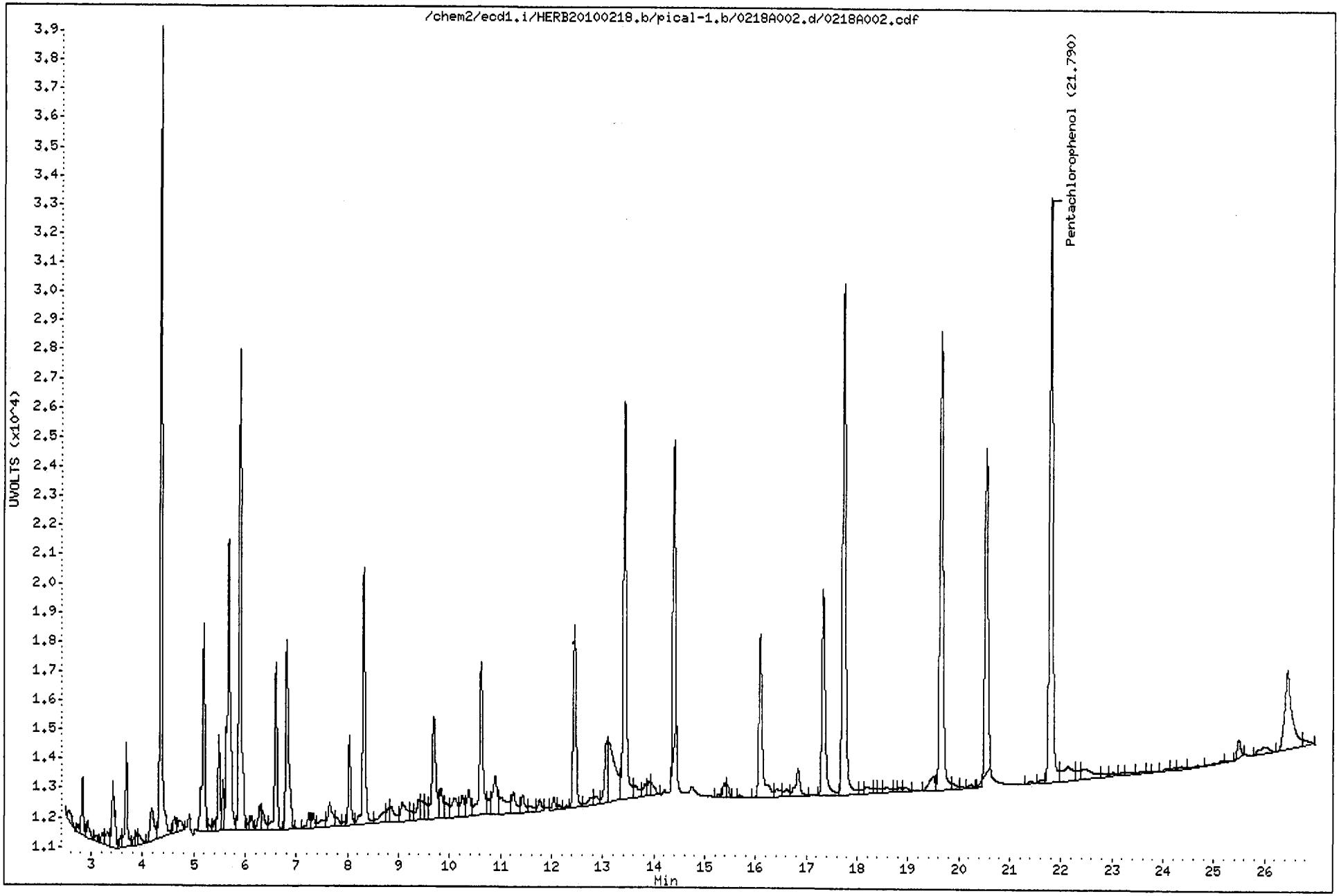
Sample Info: PCPD

Column phase: DB5

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

Data file 1: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A003.d ARI ID: PCPA
Data file 2: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A003.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 18-FEB-2010 15:28
Compound Sublist: pcp Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.793	0.007	55765	22.666	0.003	57690	2.886	2.674	7.6	Pentachlorophenol

PERCENT RECOVERY

COMPOUND	Col1	Col2

Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A003.d

Date : 18-FEB-2010 15:28

Client ID:

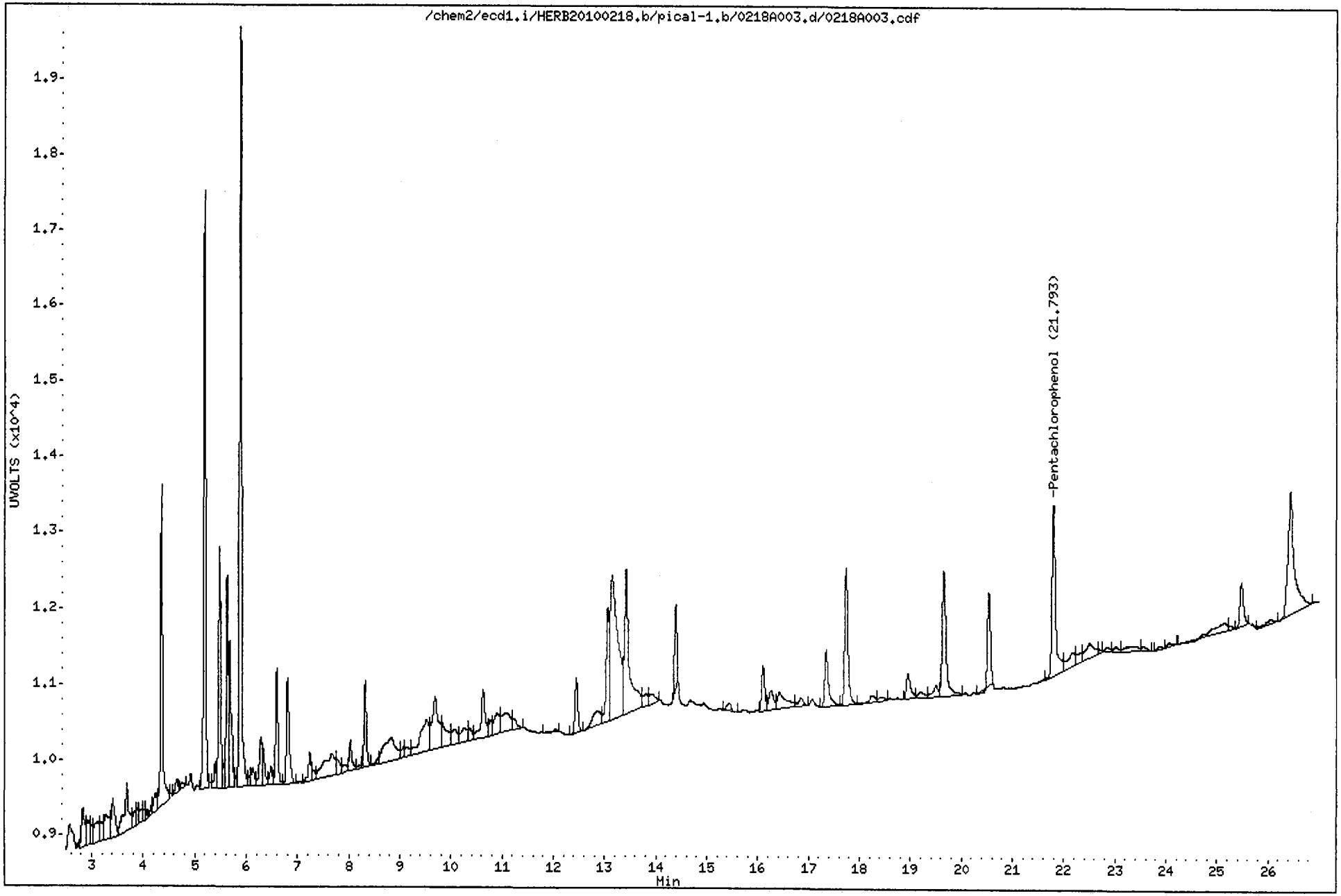
Sample Info: PCPA

Column phase: DB5

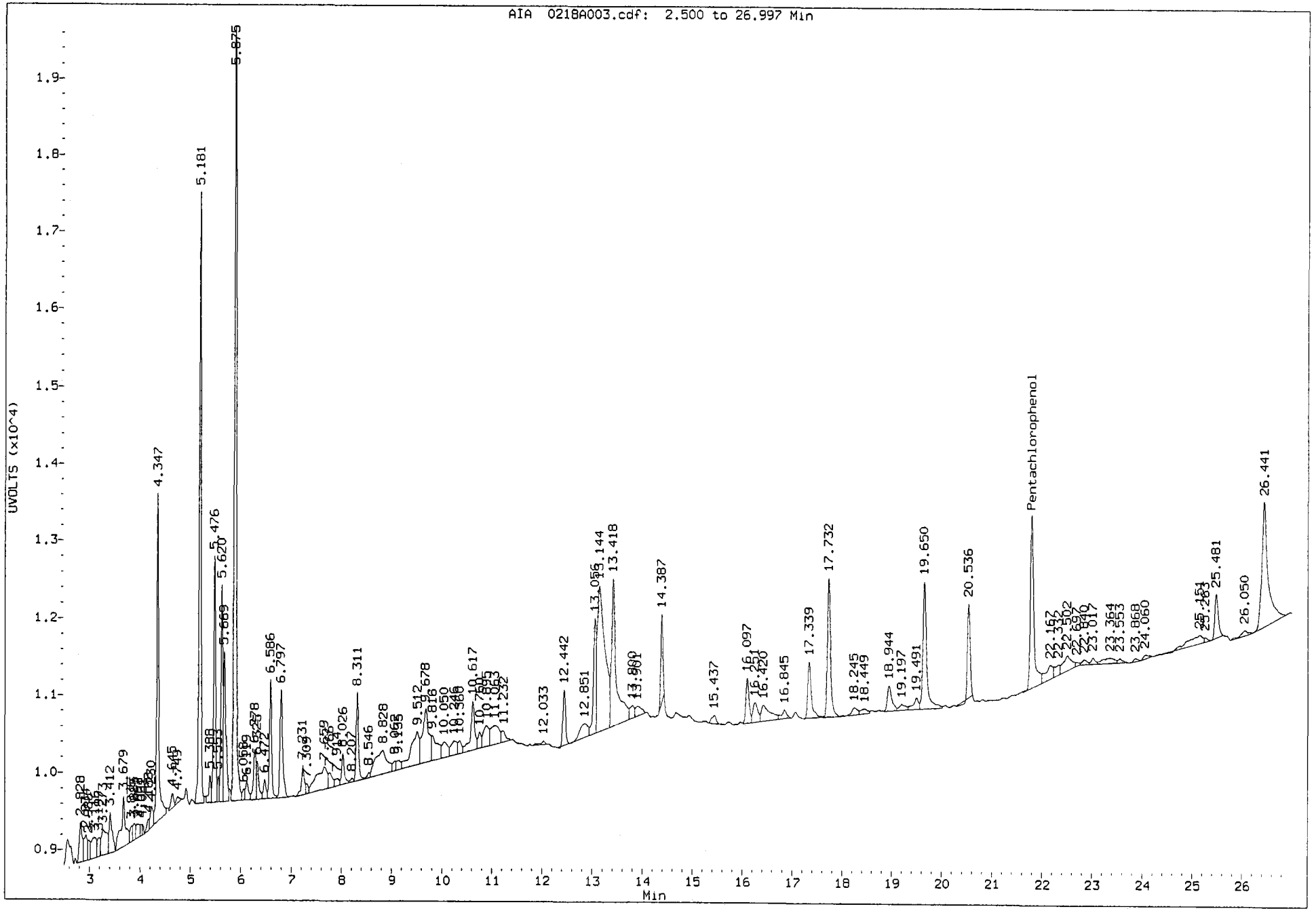
Instrument: ecd1.i

Operator: ar

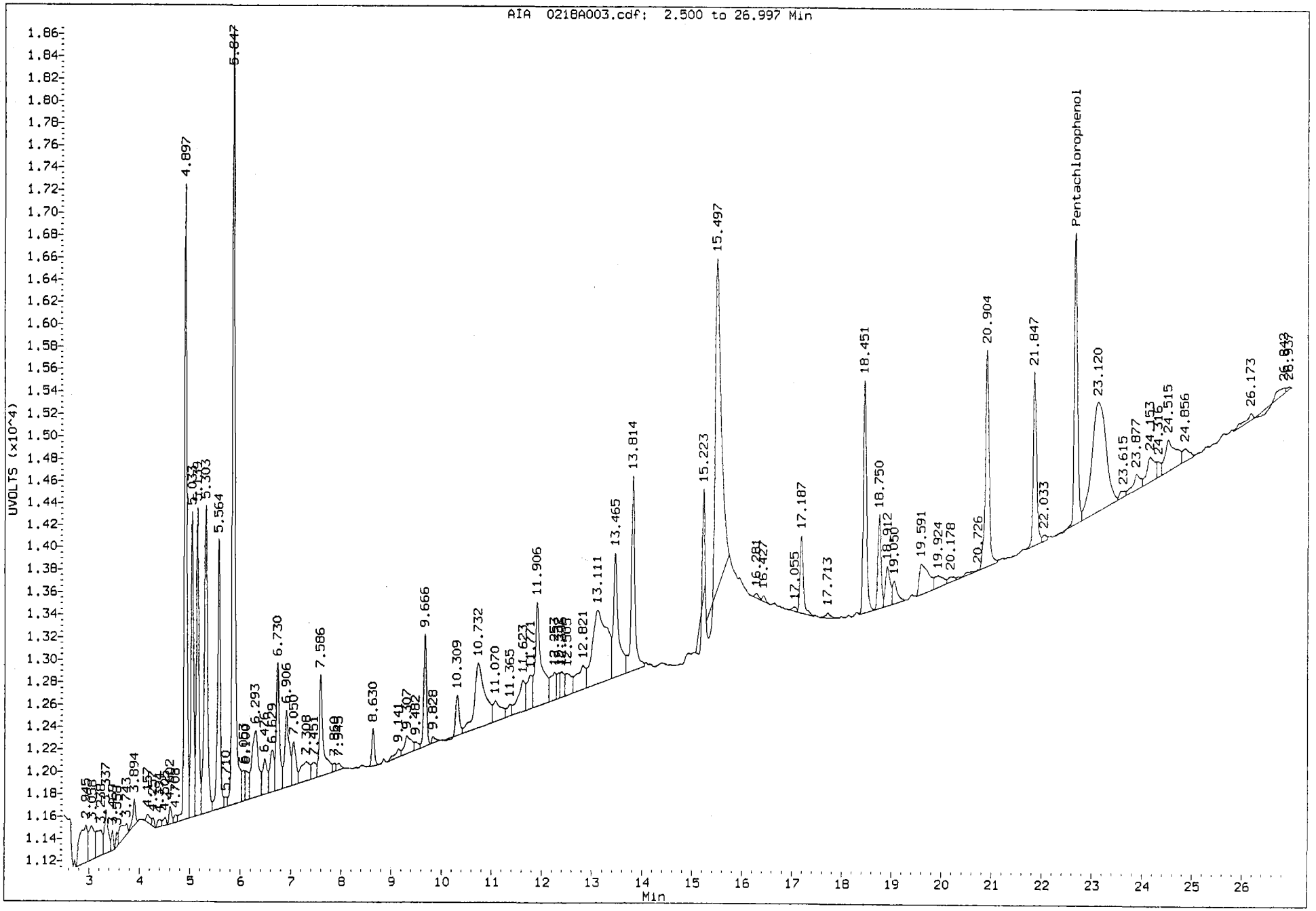
Column diameter: 0.53



Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A003.d/0218A003.cdf
Injection Date: 18-FEB-2010 15:28
Instrument: ecd1.i
Client Sample ID:



Data File: /chem2/ecd1.i/HERB20100218.b/pica1-2.b/0218A003.d/0218A003.cdf
Injection Date: 18-FEB-2010 15:28
Instrument: ecd1.i
Client Sample ID:



Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

Data file 1: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A004.d ARI ID: PCPB
Data file 2: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A004.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 18-FEB-2010 16:04
Compound Sublist: pcp Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound
21.792	0.006	127276	22.666	0.002	144753	6.587	6.709	1.8	Pentachlorophenol

PERCENT RECOVERY

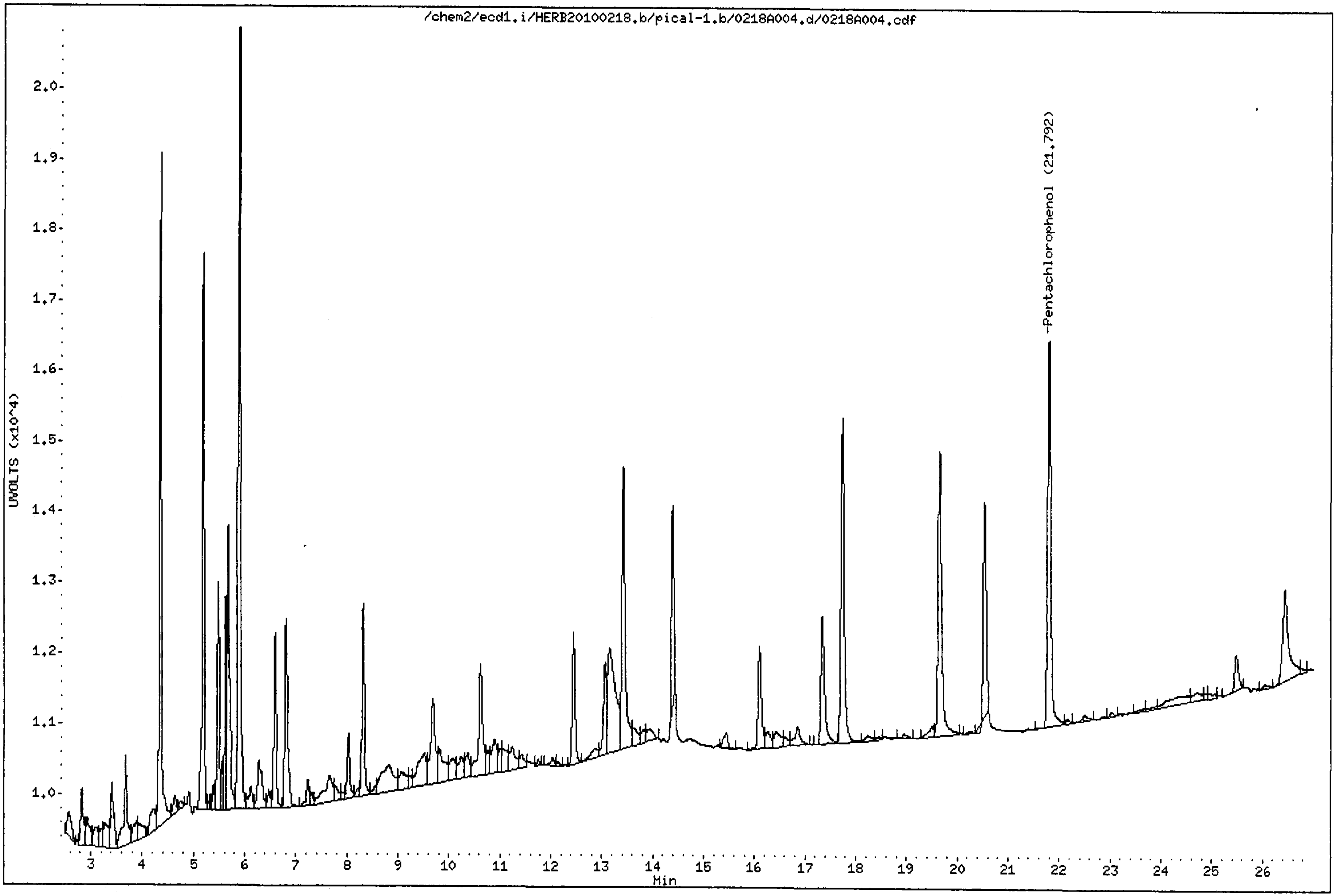
COMPOUND	Col1	Col2

Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A004.d
Date : 18-FEB-2010 16:04
Client ID:
Sample Info: PCPB

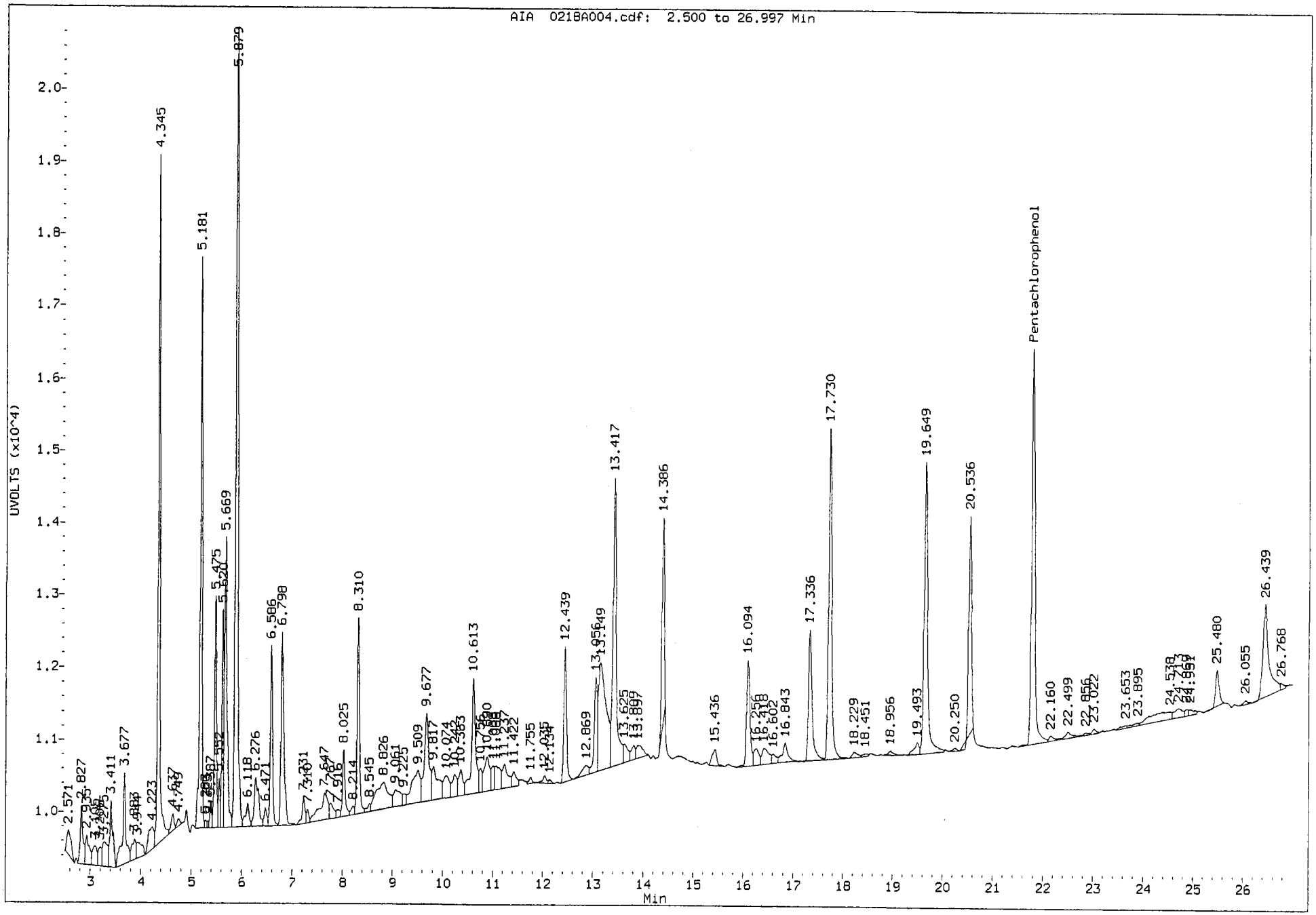
Column phase: DB5

Instrument: ecd1.i

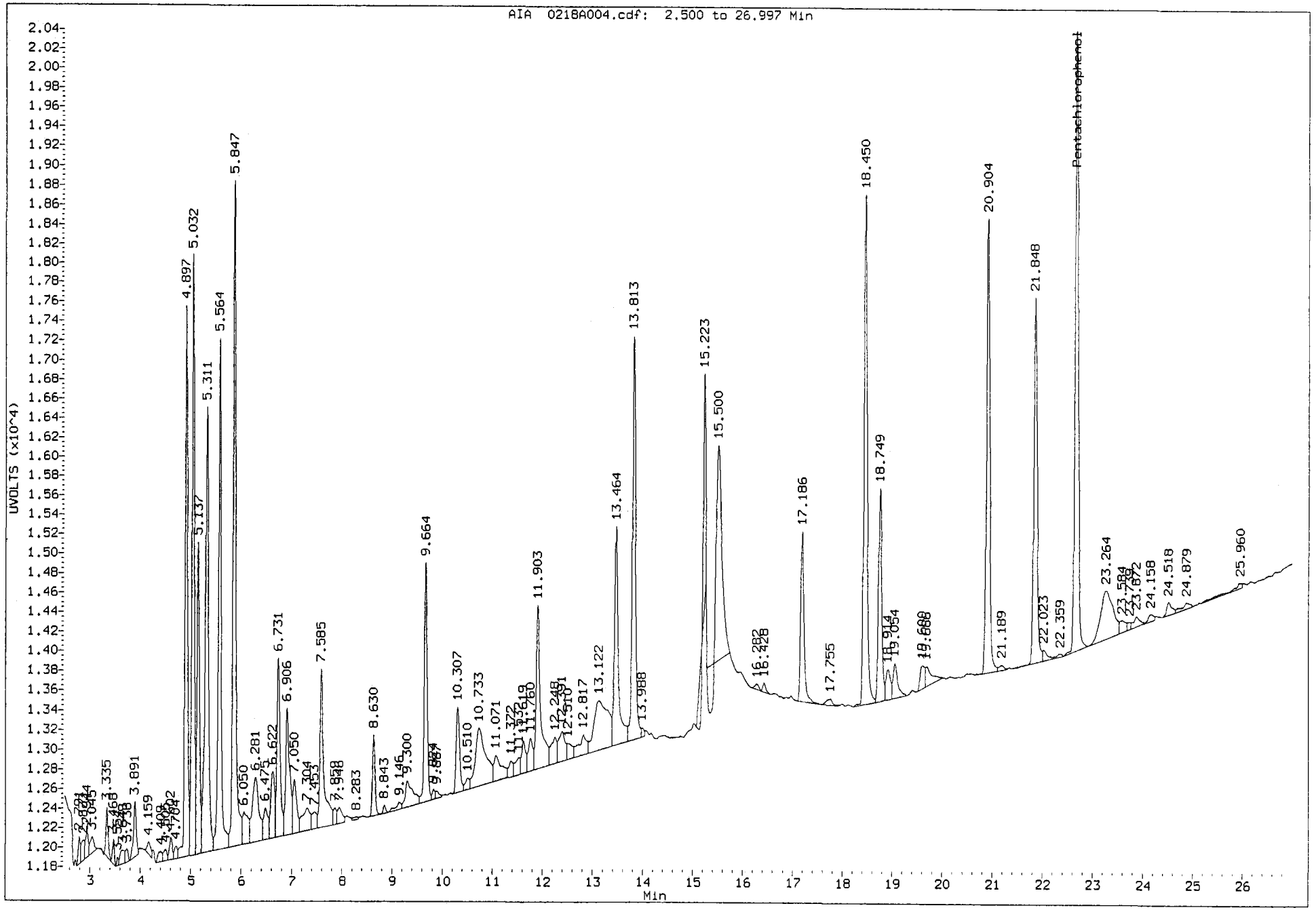
Operator: ar
Column diameter: 0.53



Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A004.d/0218A004.cdf
Injection Date: 18-FEB-2010 16:04
Instrument: ecd1.i
Client Sample ID:



Data File: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A004.d/0218A004.cdf
Injection Date: 18-FEB-2010 16:04
Instrument: ecd1.i
Client Sample ID:



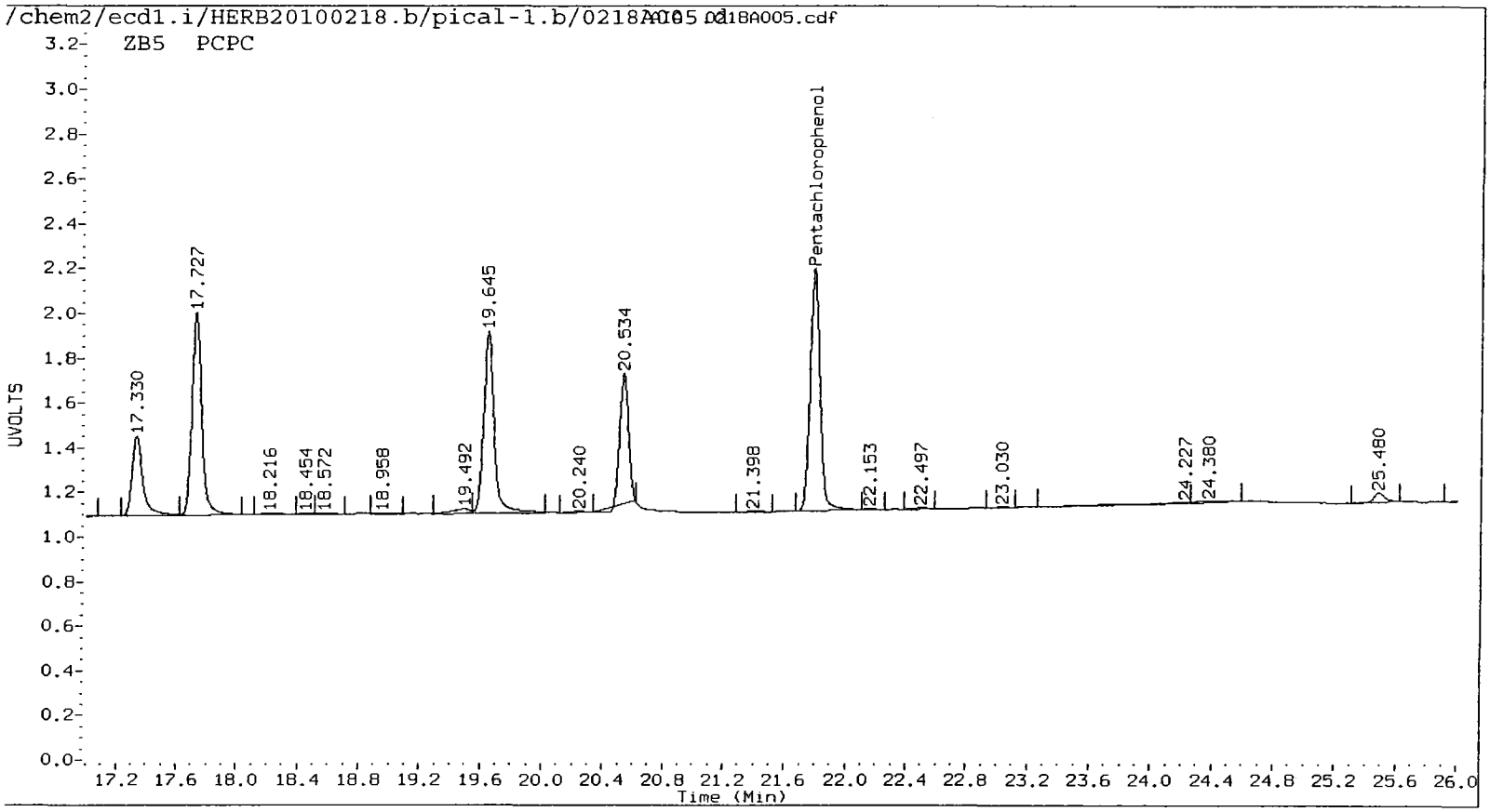
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

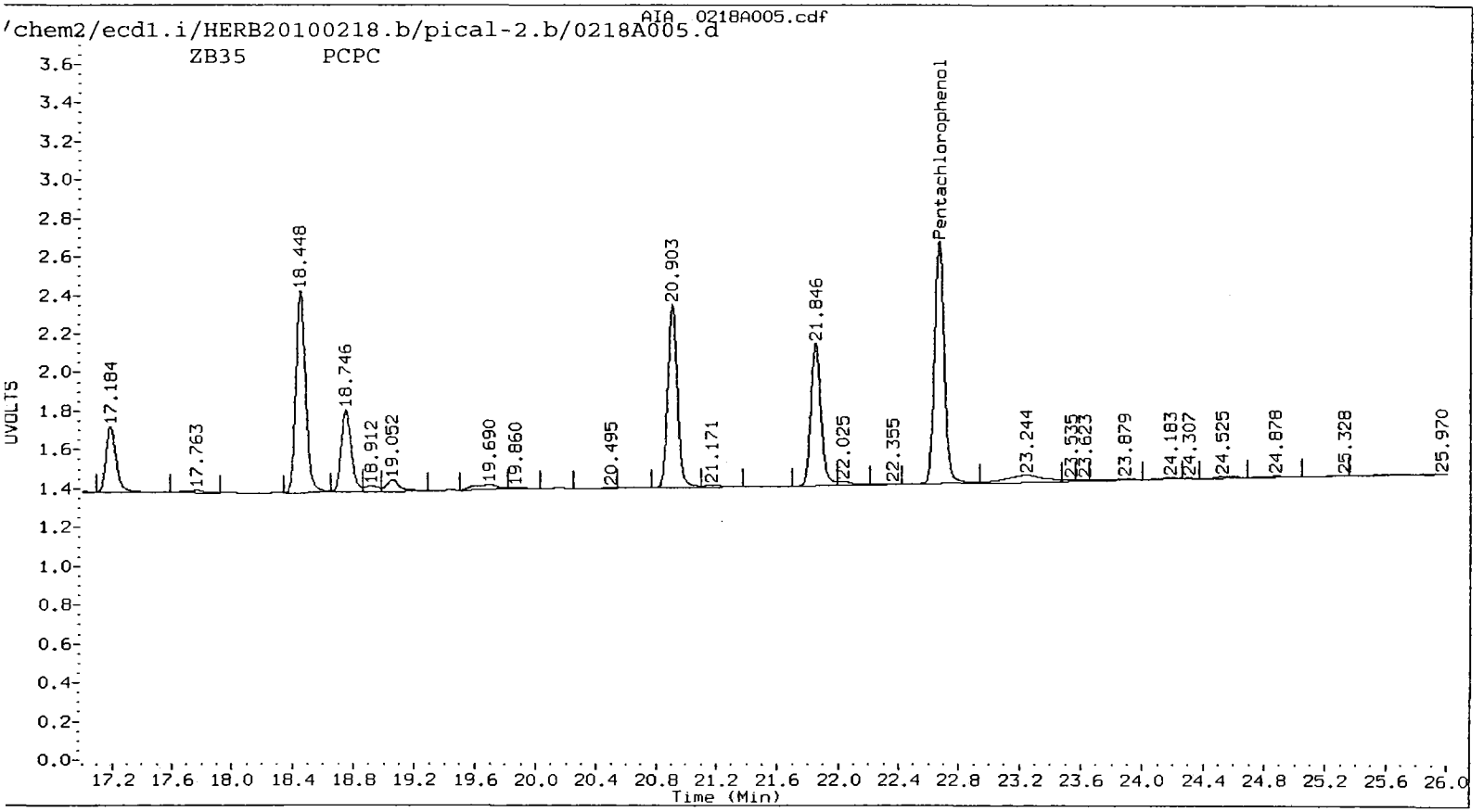
Data file 1: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A005.d ARI ID: PCPC
Data file 2: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A005.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 18-FEB-2010 16:40
Compound Sublist: pcp Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift Response	ZB35 Col RT	ZB35 Col Shift Response	ZB5 on col	ZB35 on col	RPD	Compound
21.790	0.004 242844	22.665	0.002 286949	12.568	13.300	5.7	Pentachlorophenol

PERCENT RECOVERY

COMPOUND	Col1	Col2


/chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A005.d
AIA 0218A005.cdf
ZB5 PCPC
UVOLTS
Time (Min)
17.330
17.727
18.216
18.454
18.572
18.958
19.492
19.645
20.240
20.534
21.398
Pentachlorophenol
22.153
22.497
23.030
24.227
24.380
25.480


/chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A005.d
AIA 0218A005.cdf
ZB35 PCPC
UVOLTS
Time (Min)
17.184
17.763
18.448
18.746
18.912
19.052
19.690
19.860
20.495
20.903
21.171
21.846
22.025
22.355
Pentachlorophenol
23.244
23.535
23.623
23.879
24.183
24.307
24.525
24.878
25.328
25.970

Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A005.d

Date : 18-FEB-2010 16:40

Client ID:

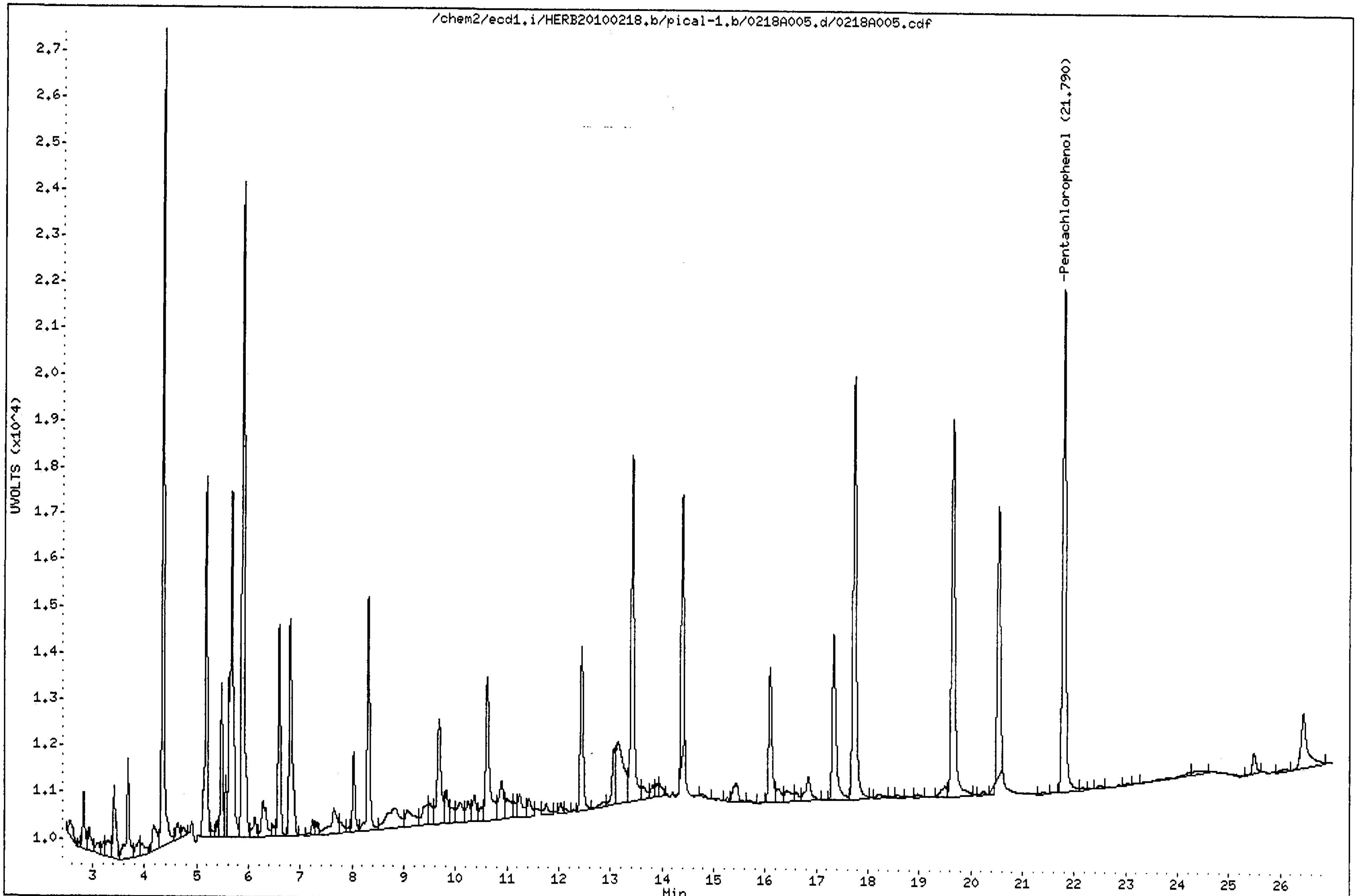
Sample Info: PCPC

Column phase: DB5

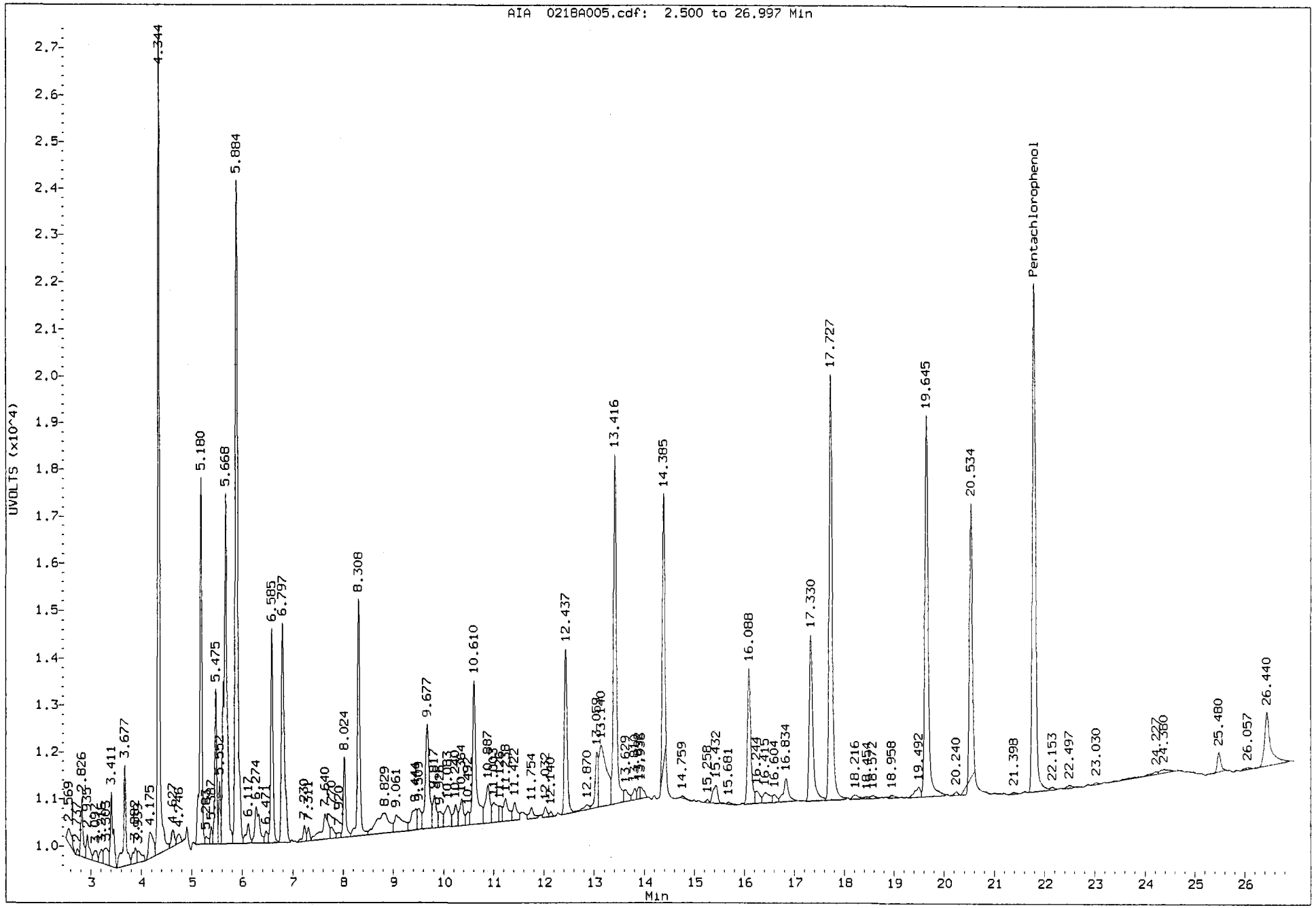
Instrument: ecd1.i

Operator: ar

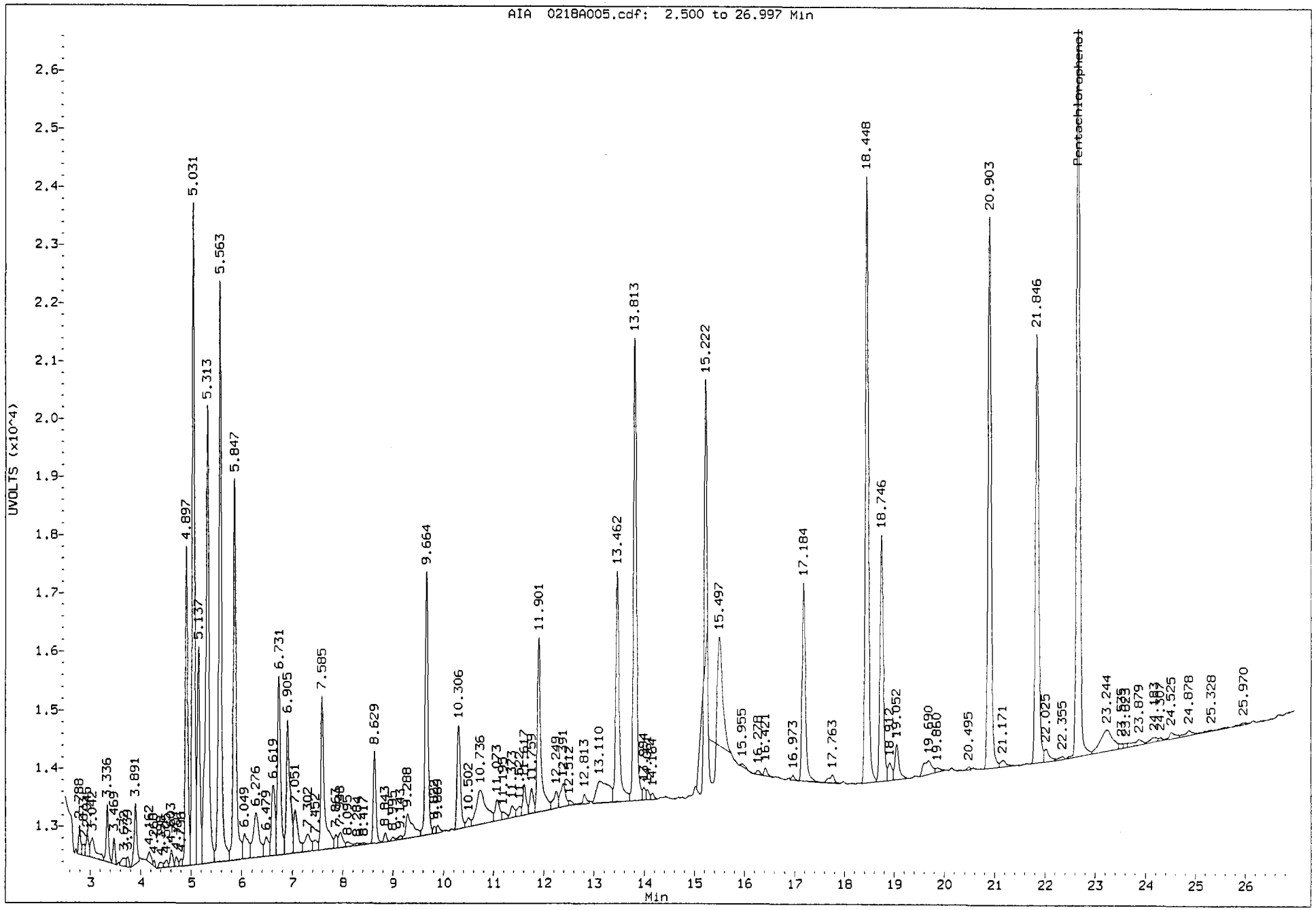
Column diameter: 0.53



Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A005.d/0218A005.cdf
Injection Date: 18-FEB-2010 16:40
Instrument: ecd1.i
Client Sample ID:



Data File: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A005.d/0218A005.cdf
Injection Date: 18-FEB-2010 16:40
Instrument: ecd1.i
Client Sample ID:



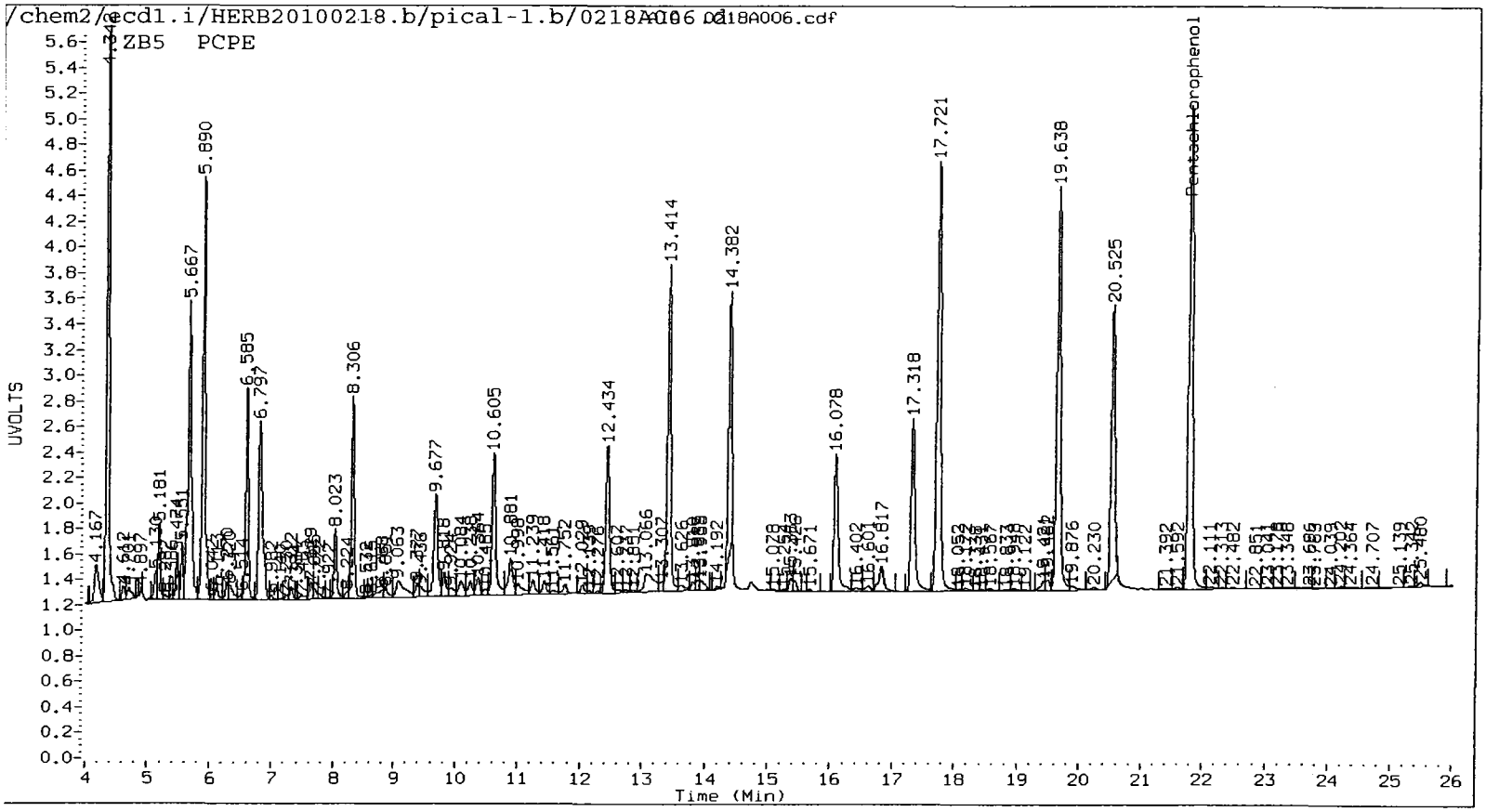
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

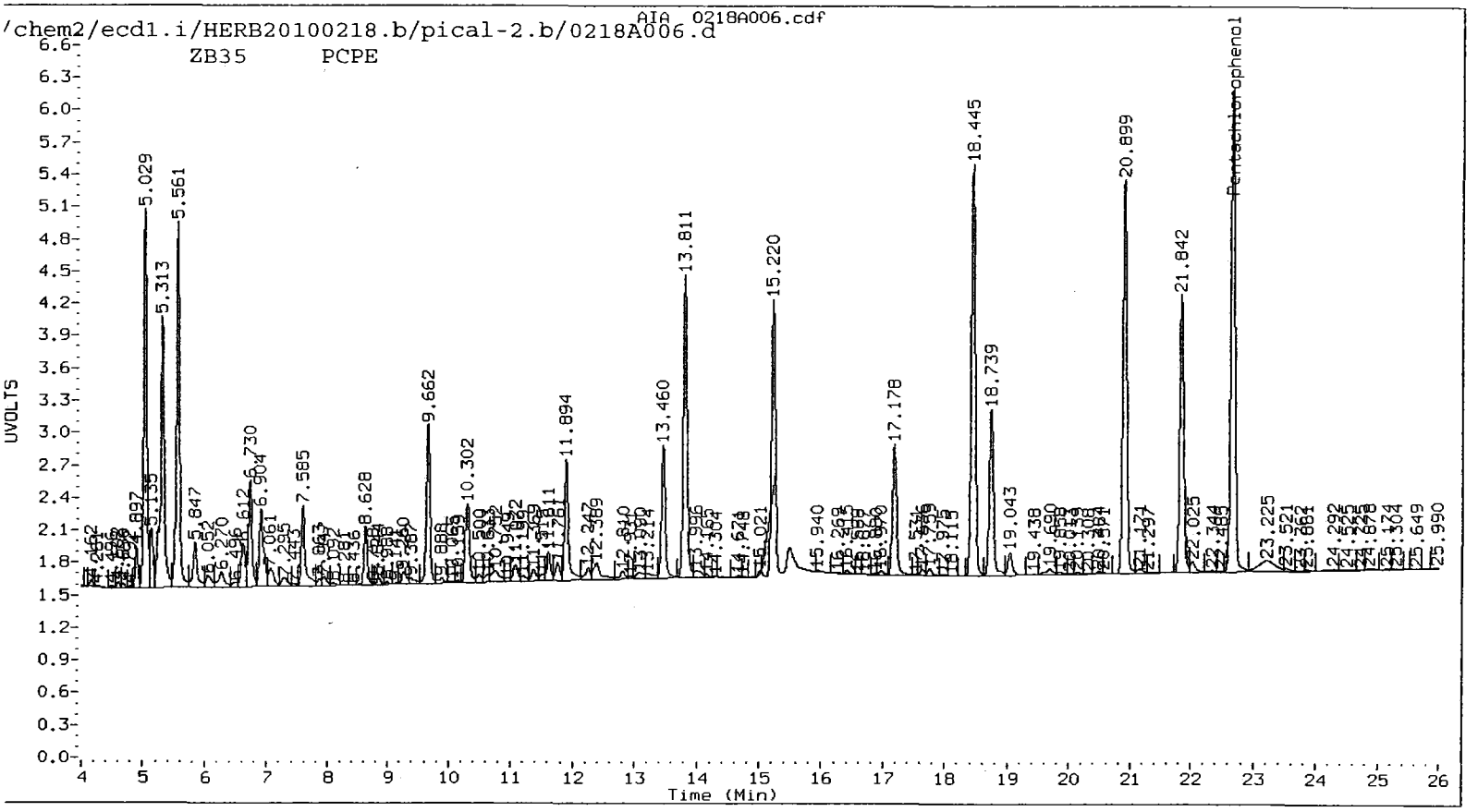
Data file 1: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A006.d ARI ID: PCPE
Data file 2: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A006.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 18-FEB-2010 17:17
Compound Sublist: pcp Report Date: 02/22/2010 10:33
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

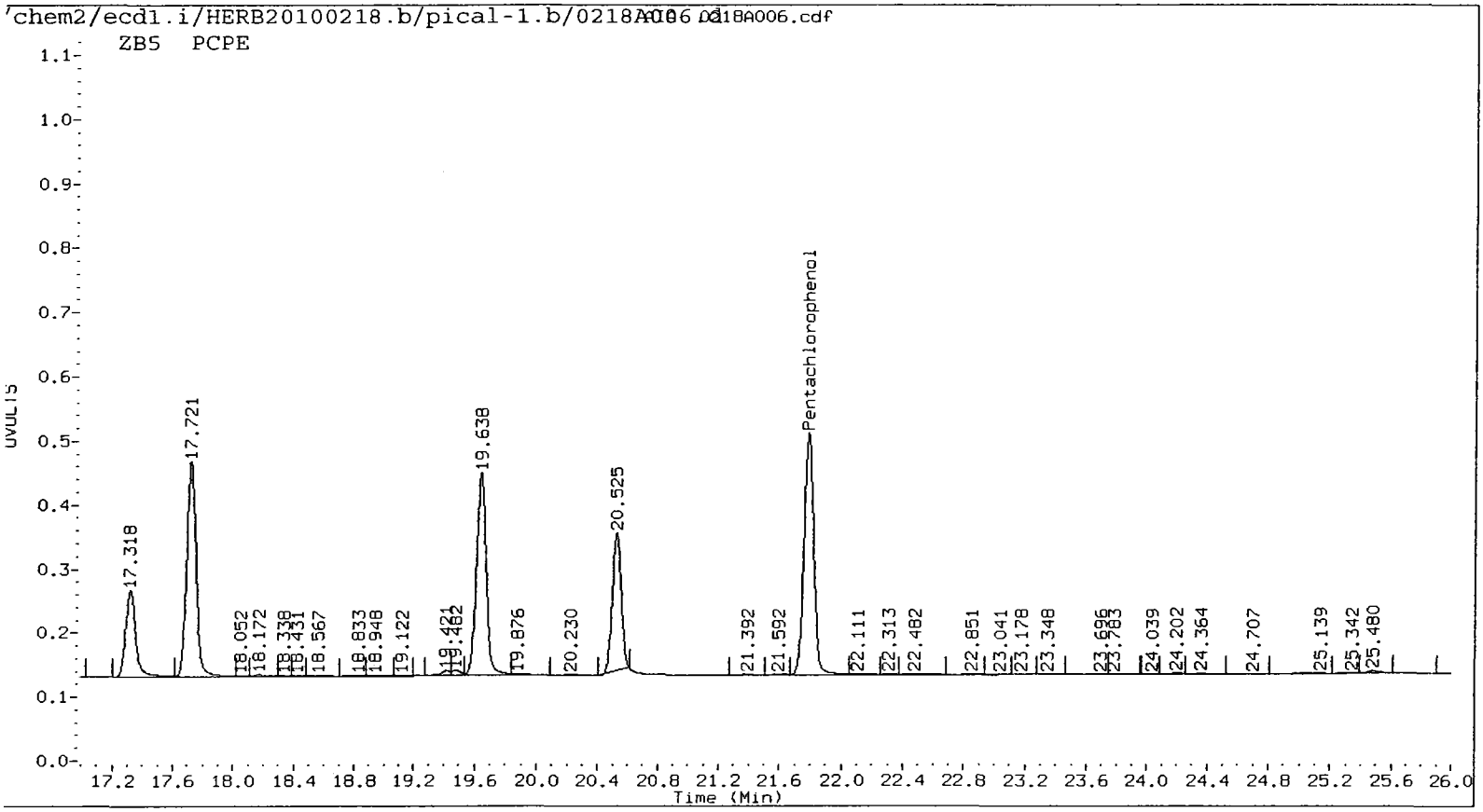
RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound
21.786	0.000	845450	22.663	-0.001	1022587	43.754	47.398	8.0	Pentachlorophenol

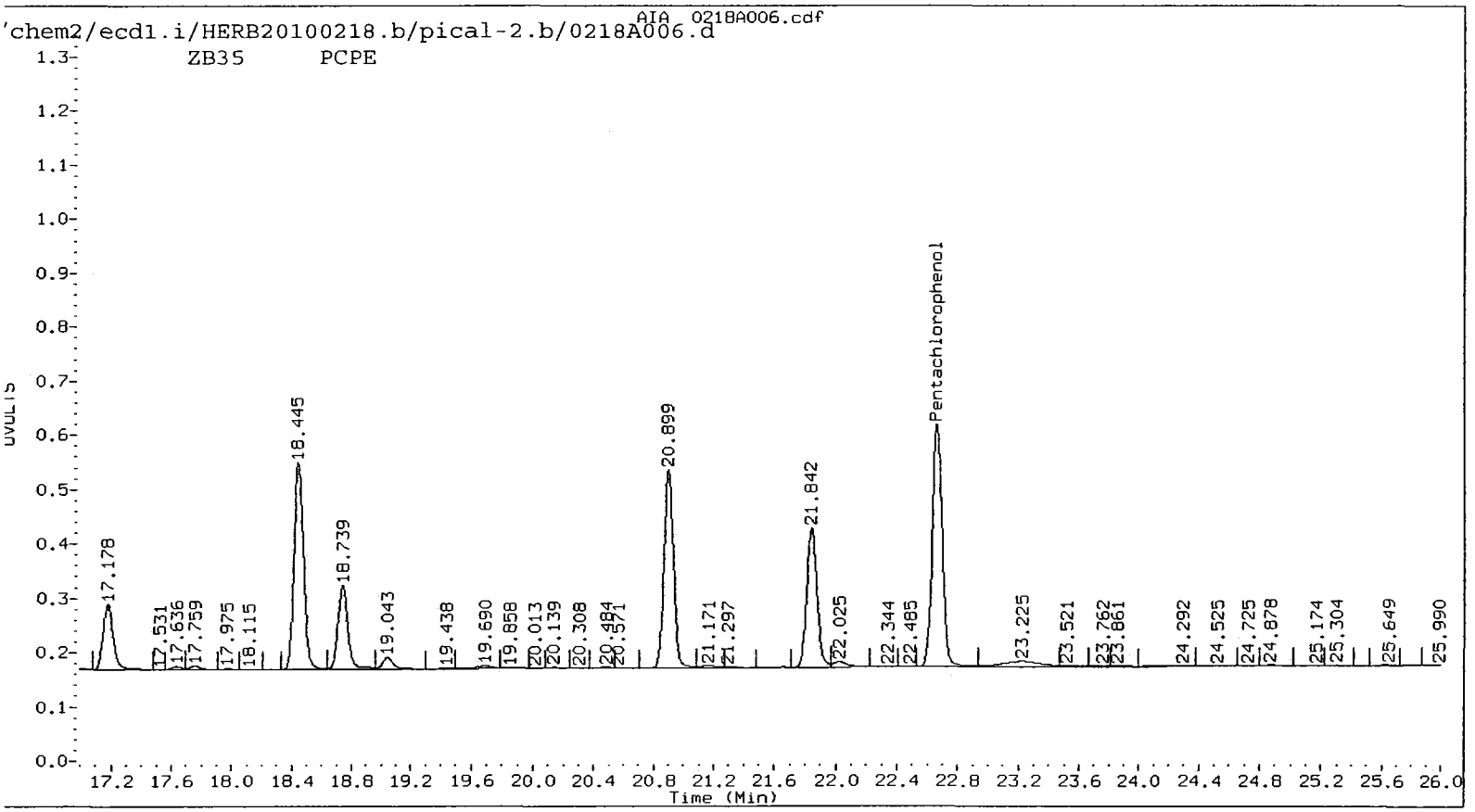
PERCENT RECOVERY

COMPOUND	Col1	Col2


/chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A006.d
AIA 0218A006.cdf
ZB5 PCPE
UVOLTS
Time (Min)
Pentachlorophenol


/chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A006.d
AIA 0218A006.cdf
ZB35 PCPE
UVOLTS
Time (Min)
Pentachlorophenol


'chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A006.d
AIA 0218A006.cdf
ZB5 PCPE
UVVOLTS
17.318
17.721
19.638
20.525
Pentachlorophenol
Time (Min)


'chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A006.d
AIA 0218A006.cdf
ZB35 PCPE
UVVOLTS
17.178
18.445
18.739
20.899
21.842
Pentachlorophenol
Time (Min)

Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A006.d

Date : 18-FEB-2010 17:17

Client ID:

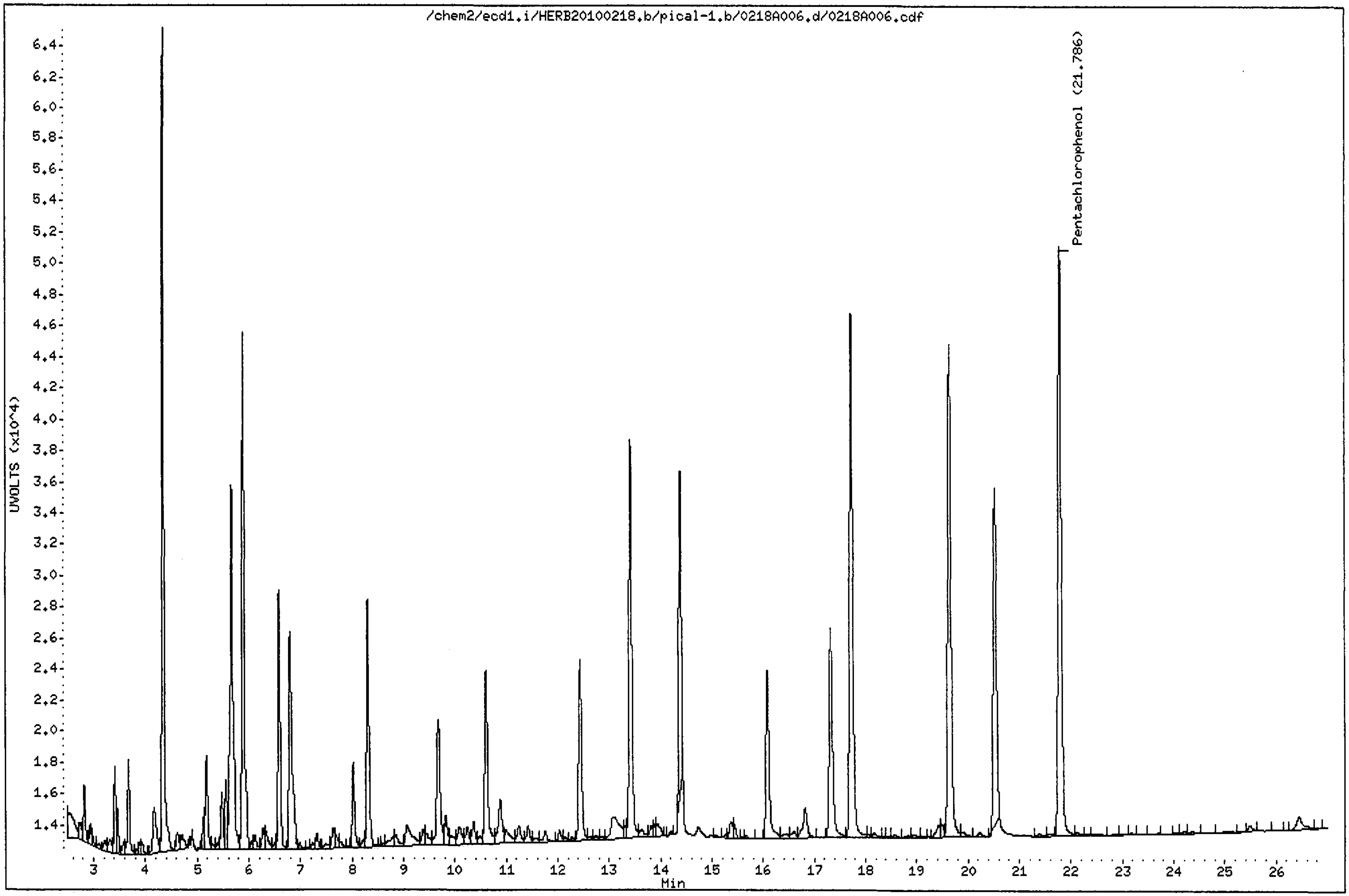
Sample Info: PCPE

Column phase: DB5

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



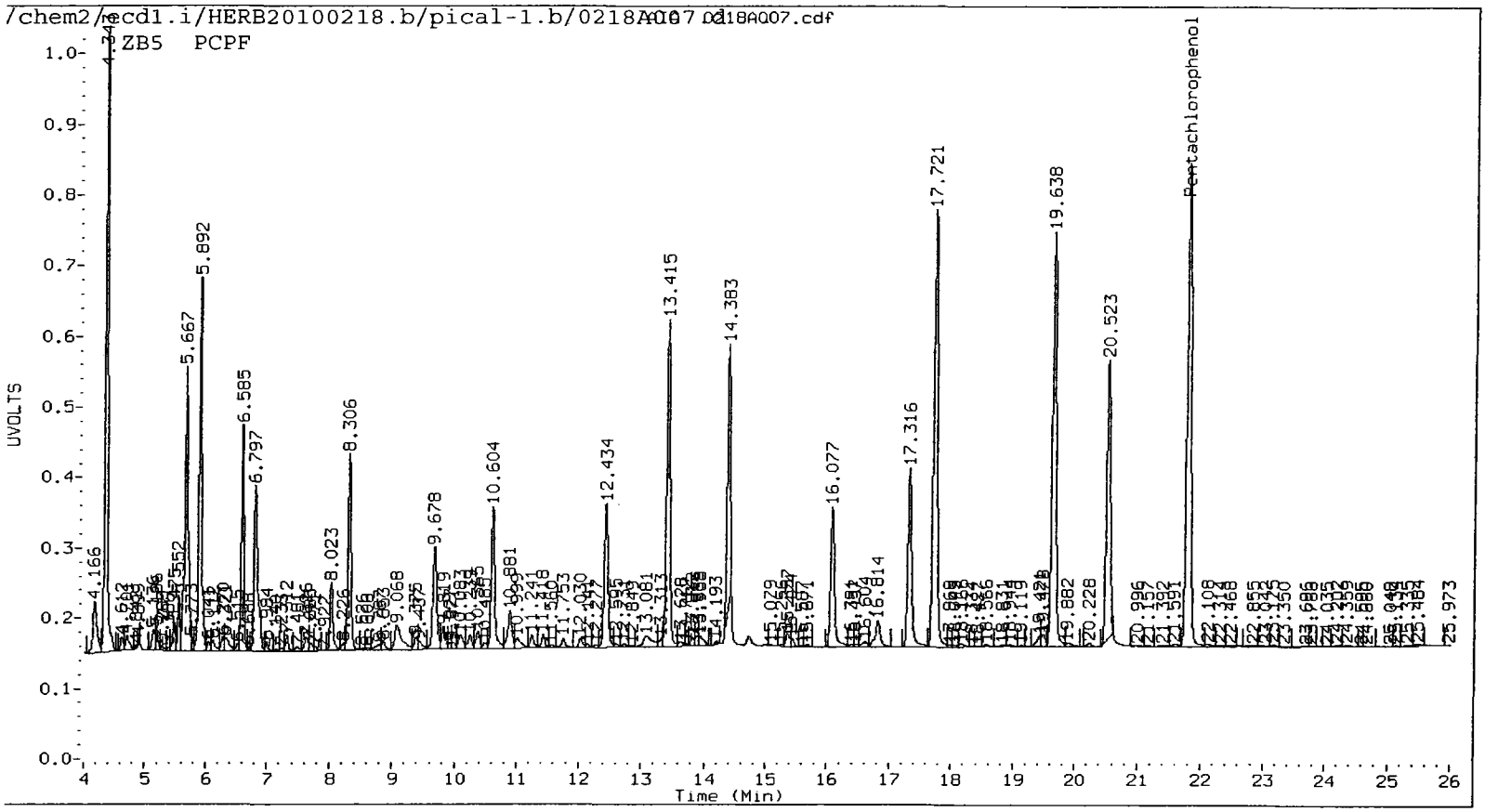
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

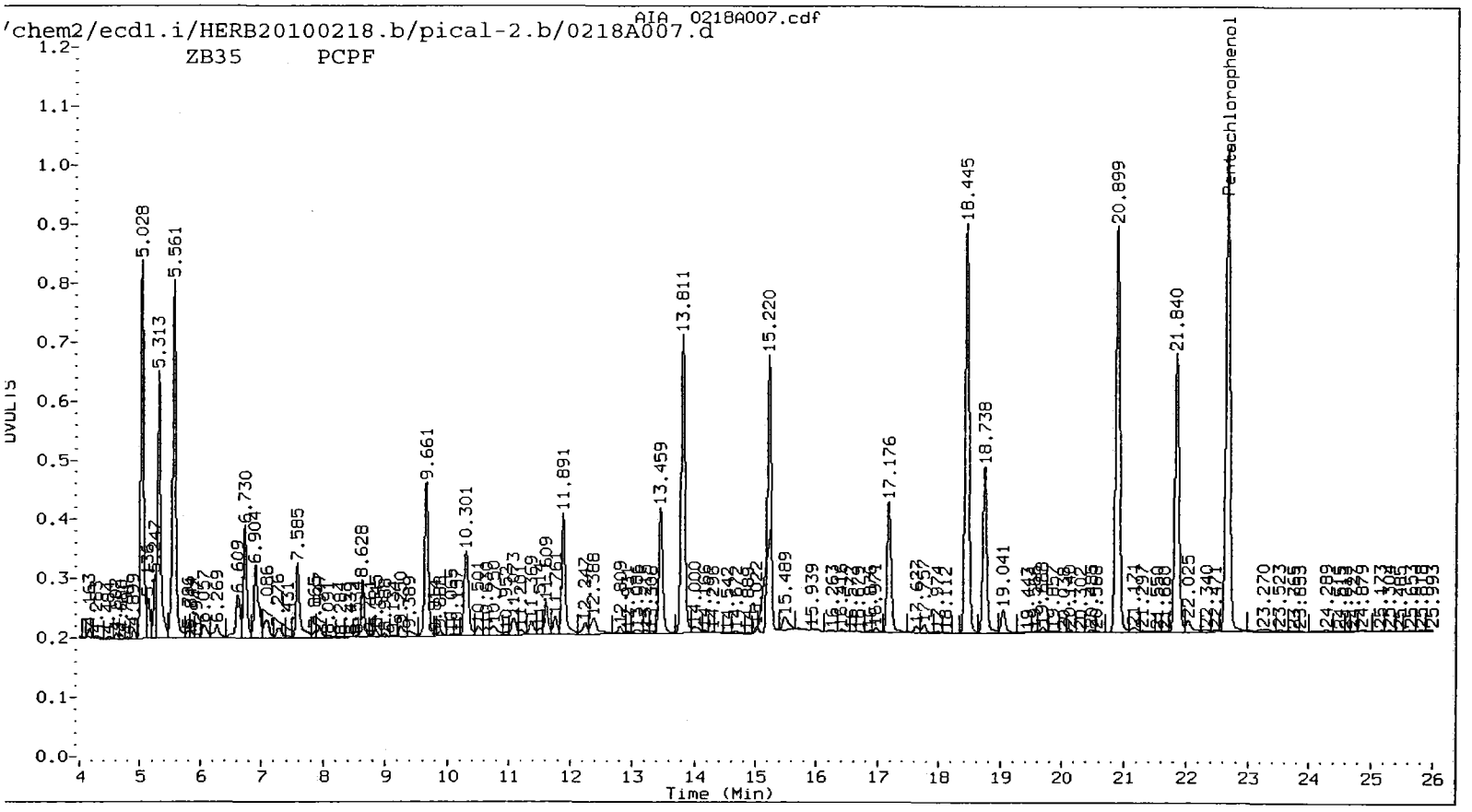
Data file 1: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A007.d ARI ID: PCPF
Data file 2: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A007.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 18-FEB-2010 17:53
Compound Sublist: pcp Report Date: 02/22/2010 10:34
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

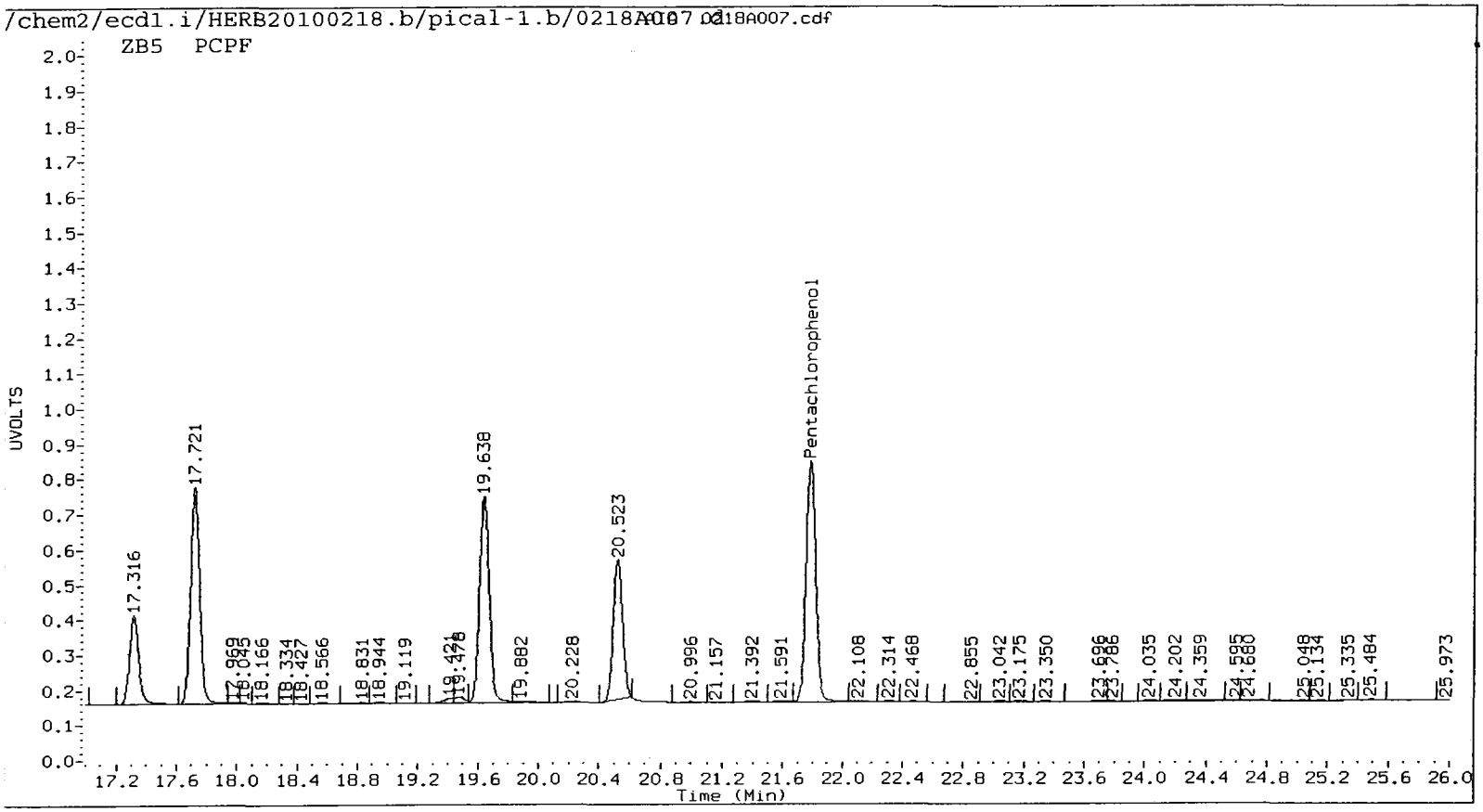
ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound
21.786	0.000	1537237	22.663	-0.001	1875227	79.556	86.919	8.8	Pentachlorophenol

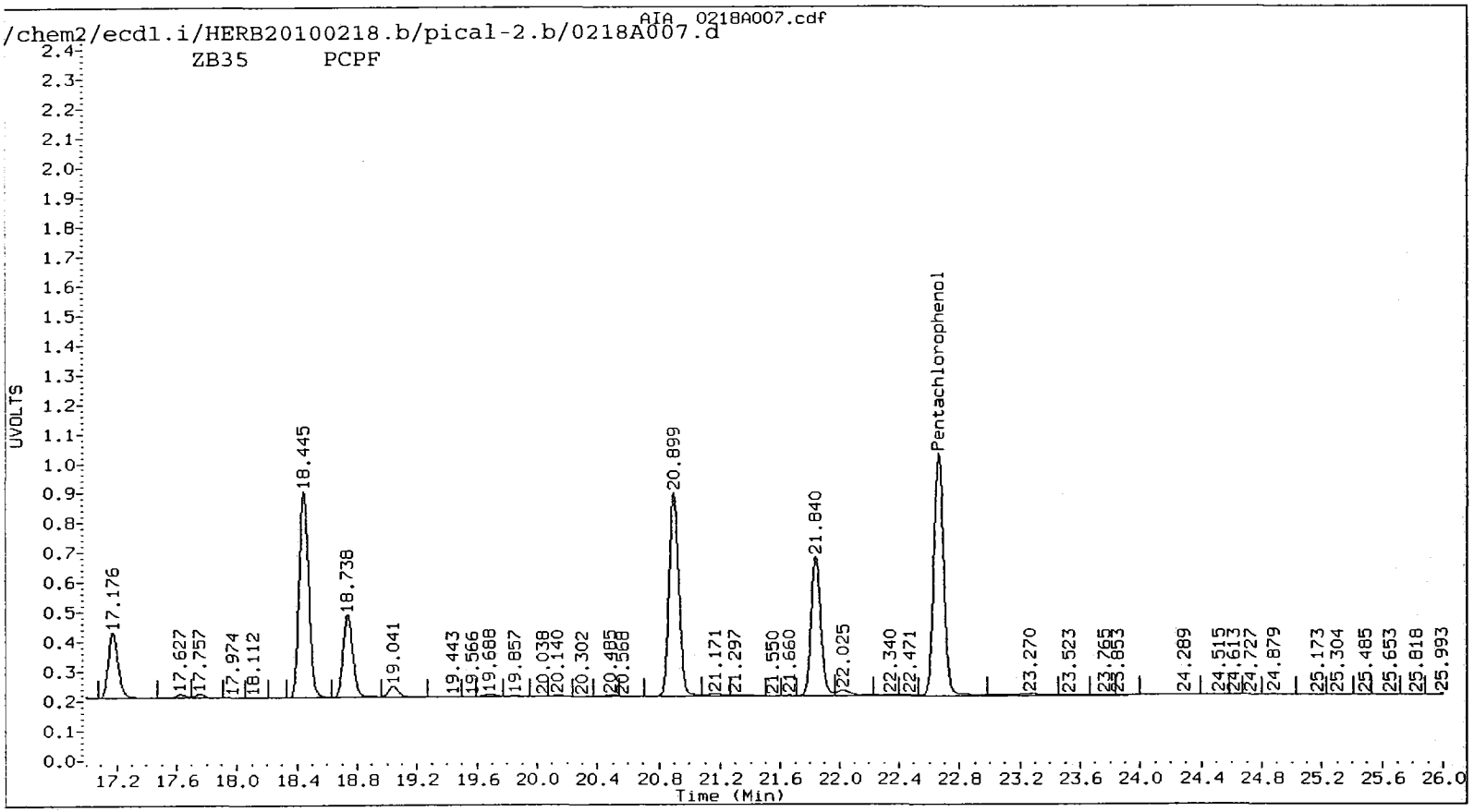
PERCENT RECOVERY

COMPOUND	Col1	Col2


/chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A007.d
AIA 0218A007.cdf
ZB5 PCPF
UVOLTS
Time (Min)
Pentachlorophenol
4.166
4.347
5.667
5.892
6.585
6.797
8.023
8.306
9.678
10.604
12.434
13.415
14.383
16.077
17.316
17.721
19.638
20.523
25.973


/chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A007.d
AIA 0218A007.cdf
ZB35 PCPF
UVOLTS
Time (Min)
Pentachlorophenol
5.028
5.313
5.561
6.730
7.585
9.661
10.301
11.891
13.459
13.811
15.220
17.176
18.445
18.738
20.899
21.840


/chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A007.d
AIA 0218A007.cdf
ZB5 PCPF
UVOLTS
Time (Min)
17.316
17.721
19.638
20.523
Pentachlorophenol


/chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A007.d
AIA 0218A007.cdf
ZB35 PCPF
UVOLTS
Time (Min)
17.176
18.445
18.738
20.899
21.840
Pentachlorophenol

Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A007.d

Date : 18-FEB-2010 17:53

Client ID:

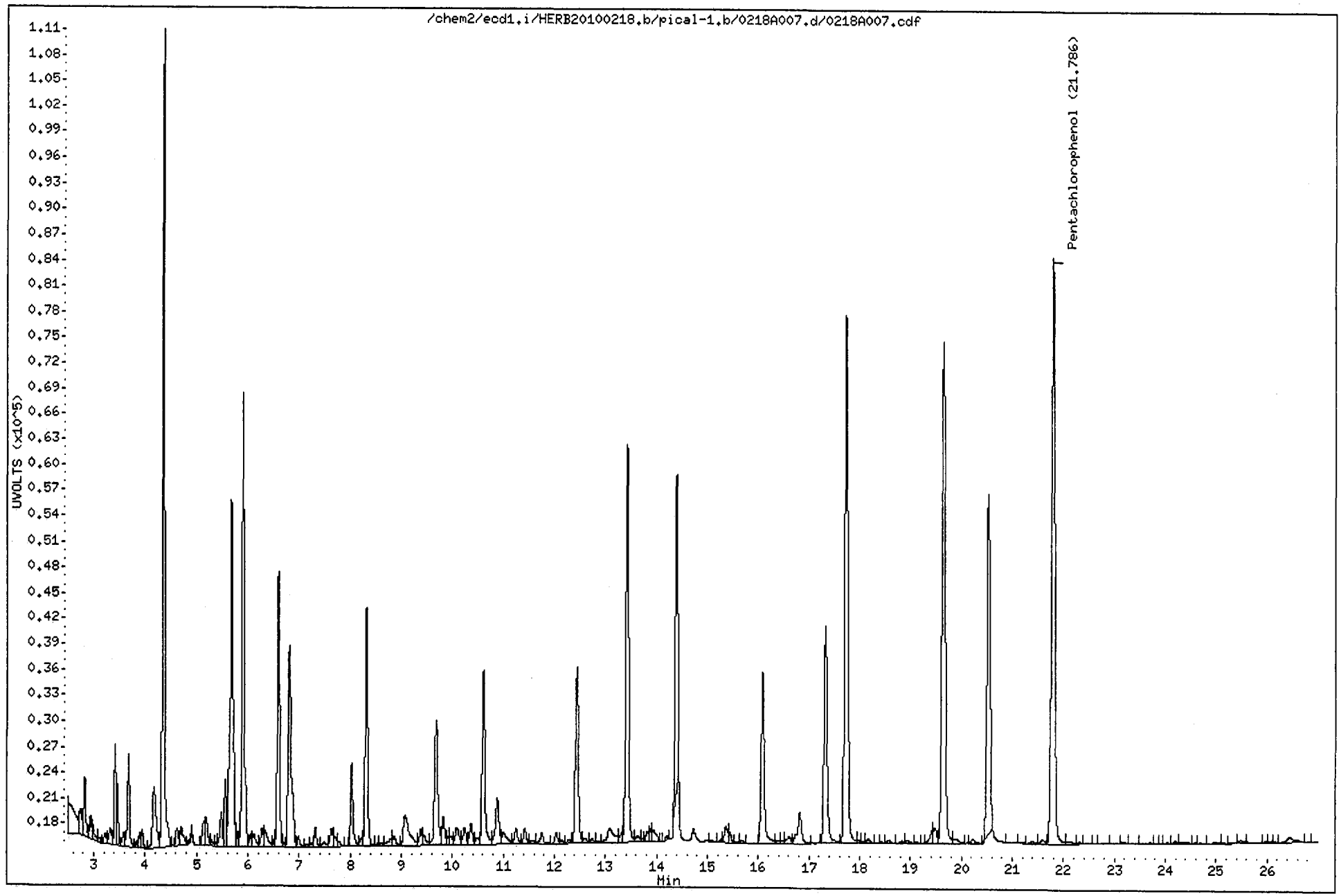
Sample Info: PCPF

Column phase: DB5

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



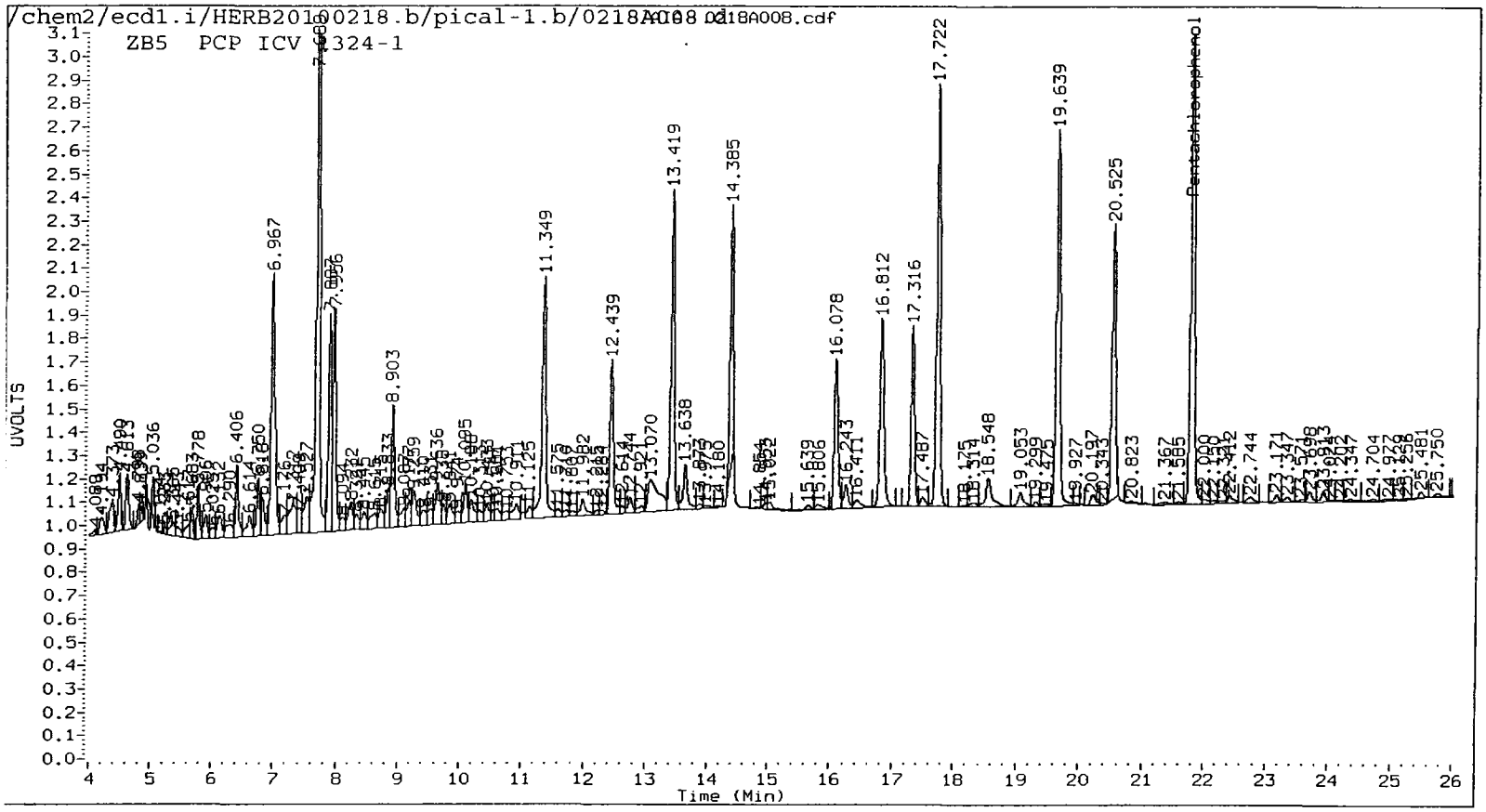
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

Data file 1: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A008.d ARI ID: PCP ICV 1324-1
Data file 2: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A008.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 18-FEB-2010 18:29
Compound Sublist: pcp Report Date: 02/22/2010 10:34
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound
21.786	0.000	451624	22.663	-0.001	531547	23.373	24.638	5.3	Pentachlorophenol

PERCENT RECOVERY

COMPOUND	Col1	Col2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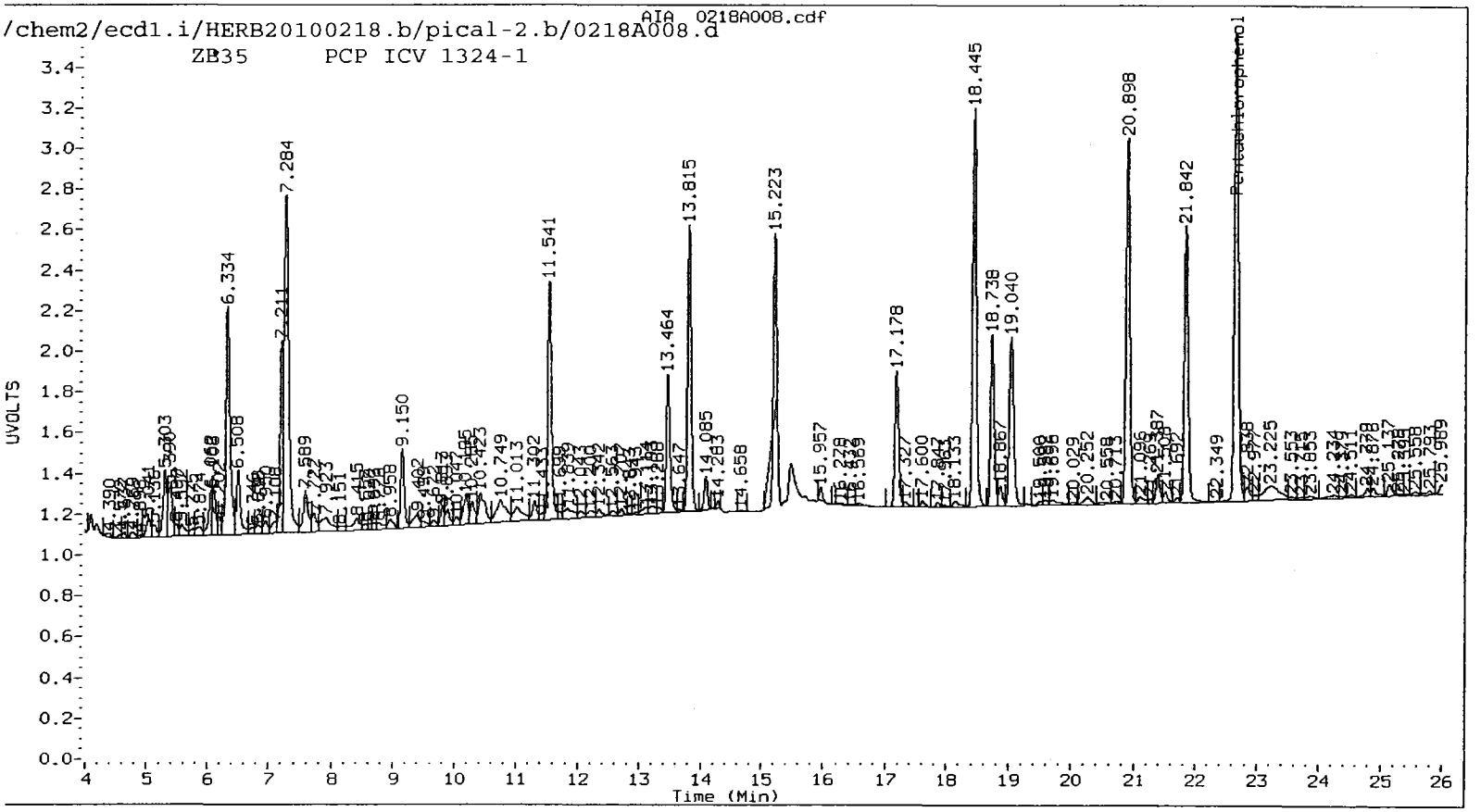
AIA 0218A008.cdf
ZB5 PCP ICV 1324-1
UVOLTS
Time (Min)
6.967
7.600
8.903
11.349
12.439
13.419
14.385
16.078
16.812
17.316
17.722
19.639
20.525
Pentachlorophenol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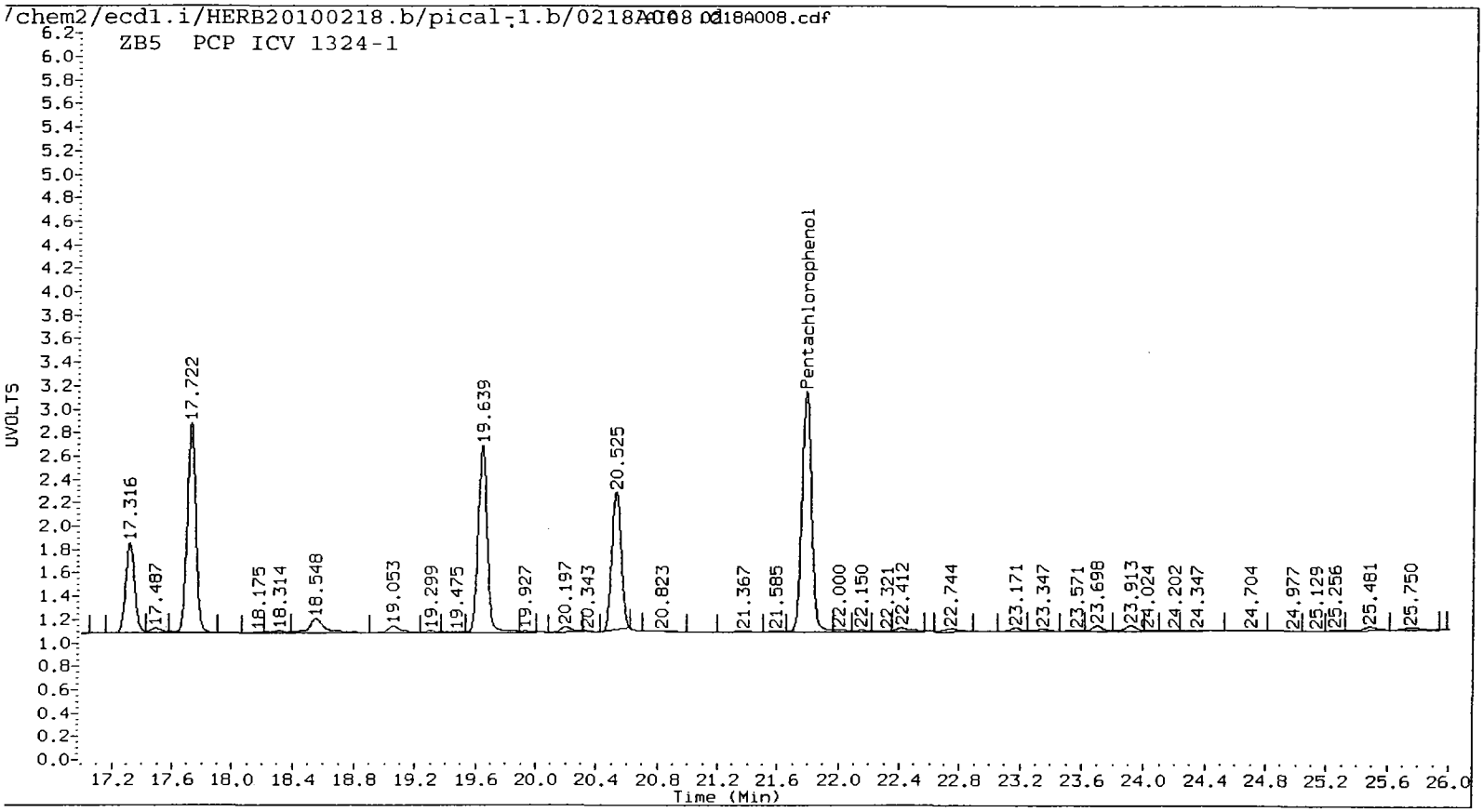
AIA 0218A008.cdf
ZB35 PCP ICV 1324-1
UVOLTS
Time (Min)
6.334
7.284
9.150
11.541
13.464
13.815
15.223
17.178
18.445
18.738
19.040
20.898
21.842
Pentachlorophenol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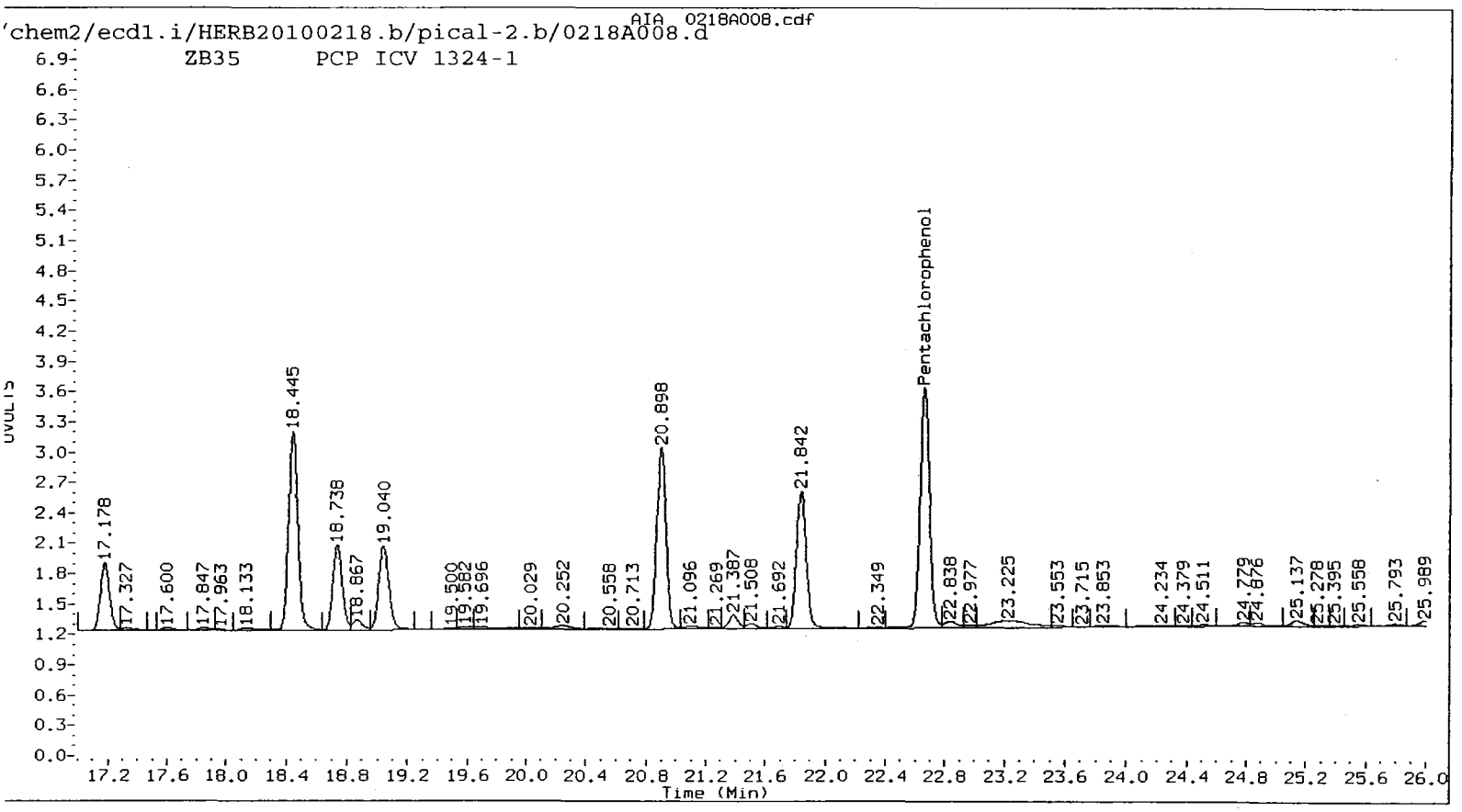
AIA 0218A008.cdf
ZB5 PCP ICV 1324-1
UVOLTS
Time (Min)
17.316
17.487
17.722
18.175
18.314
18.548
19.053
19.299
19.475
19.639
19.927
20.197
20.343
20.525
20.823
21.367
21.585
Pentachlorophenol
22.000
22.150
22.321
22.412
22.744
23.171
23.347
23.571
23.698
23.913
24.024
24.202
24.347
24.704
24.977
25.129
25.256
25.481
25.750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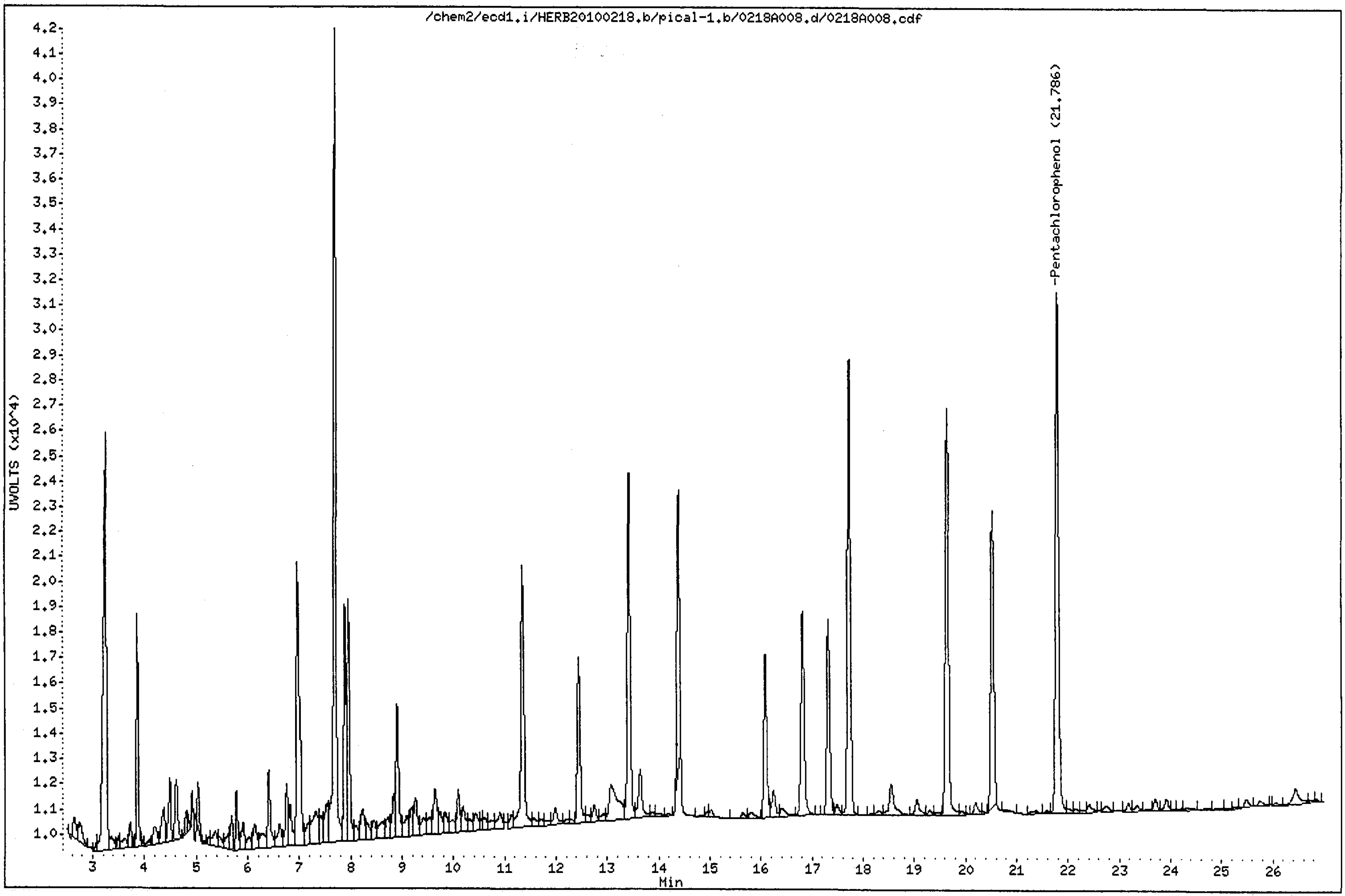
AIA 0218A008.cdf
ZB35 PCP ICV 1324-1
UVOLTS
Time (Min)
17.178
17.327
17.600
17.847
17.963
18.133
18.445
18.738
18.867
19.040
19.500
19.582
19.696
20.029
20.252
20.558
20.713
20.898
21.096
21.269
21.387
21.508
21.692
21.842
22.349
Pentachlorophenol
22.838
22.977
23.225
23.553
23.715
23.853
24.234
24.379
24.511
24.779
24.876
25.137
25.278
25.395
25.558
25.793
25.989

Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A008.d
Date : 18-FEB-2010 18:29
Client ID:
Sample Info: PCP ICV 1324-1

Column phase: DB5

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



QO20 : 00483

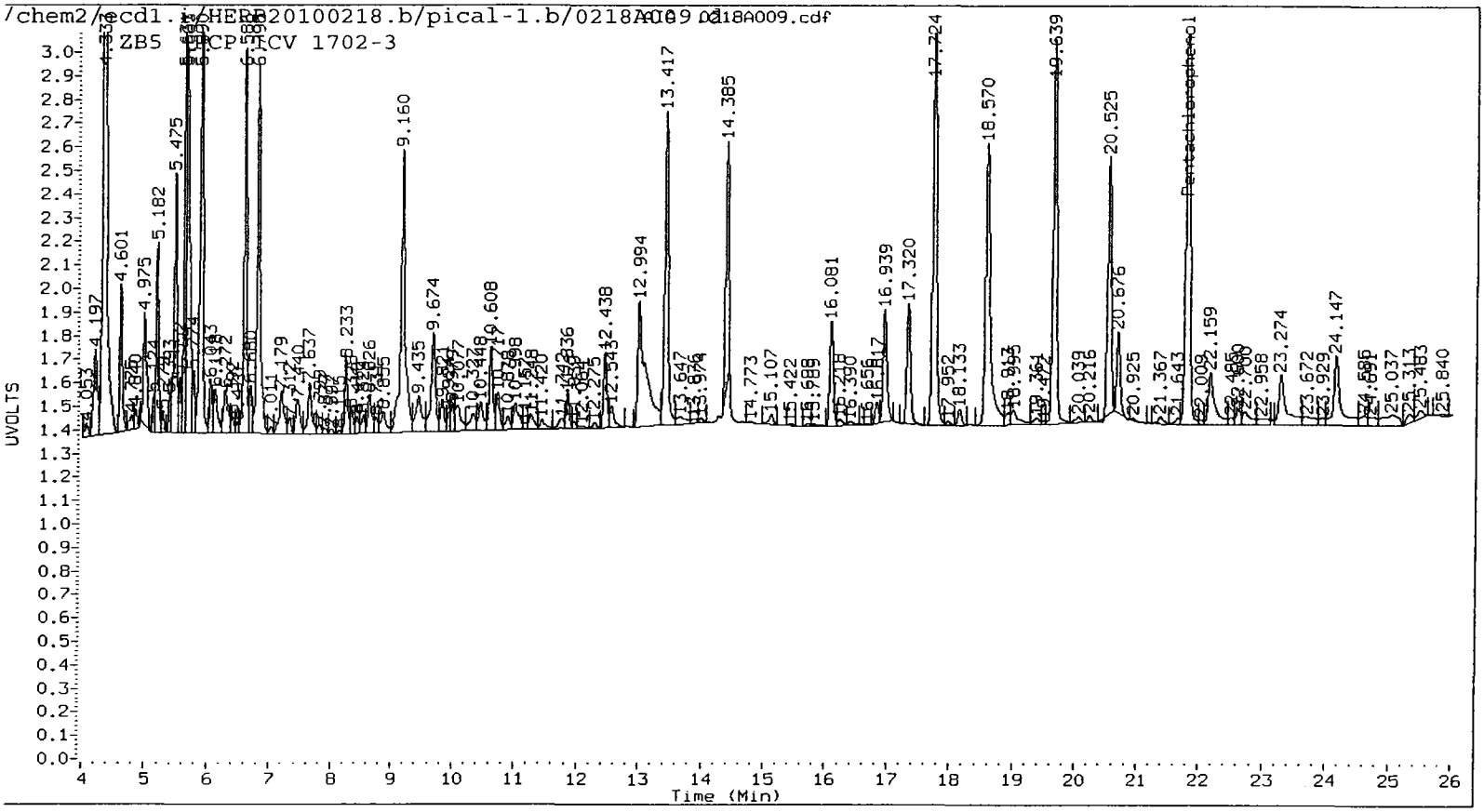
Analytical Resources Inc.
Dual Column 8151 Herbicide Quantitation Report

Data file 1: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A009.d ARI ID: PCP ICV 1702-3
Data file 2: /chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A009.d Client ID:
Method: /chem2/ecd1.i/HERB20100218.b/HERB.m Injection Date: 18-FEB-2010 19:05
Compound Sublist: pcp Report Date: 02/22/2010 10:34
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 1.000

RT	ZB5 Col Shift Response	RT	ZB35 Col Shift Response	ZB5 on col	ZB35 on col	RPD	Compound
21.787	0.001 446678	22.663	-0.001 534746	23.117	24.786	7.0	Pentachlorophenol

PERCENT RECOVERY

COMPOUND	Col1	Col2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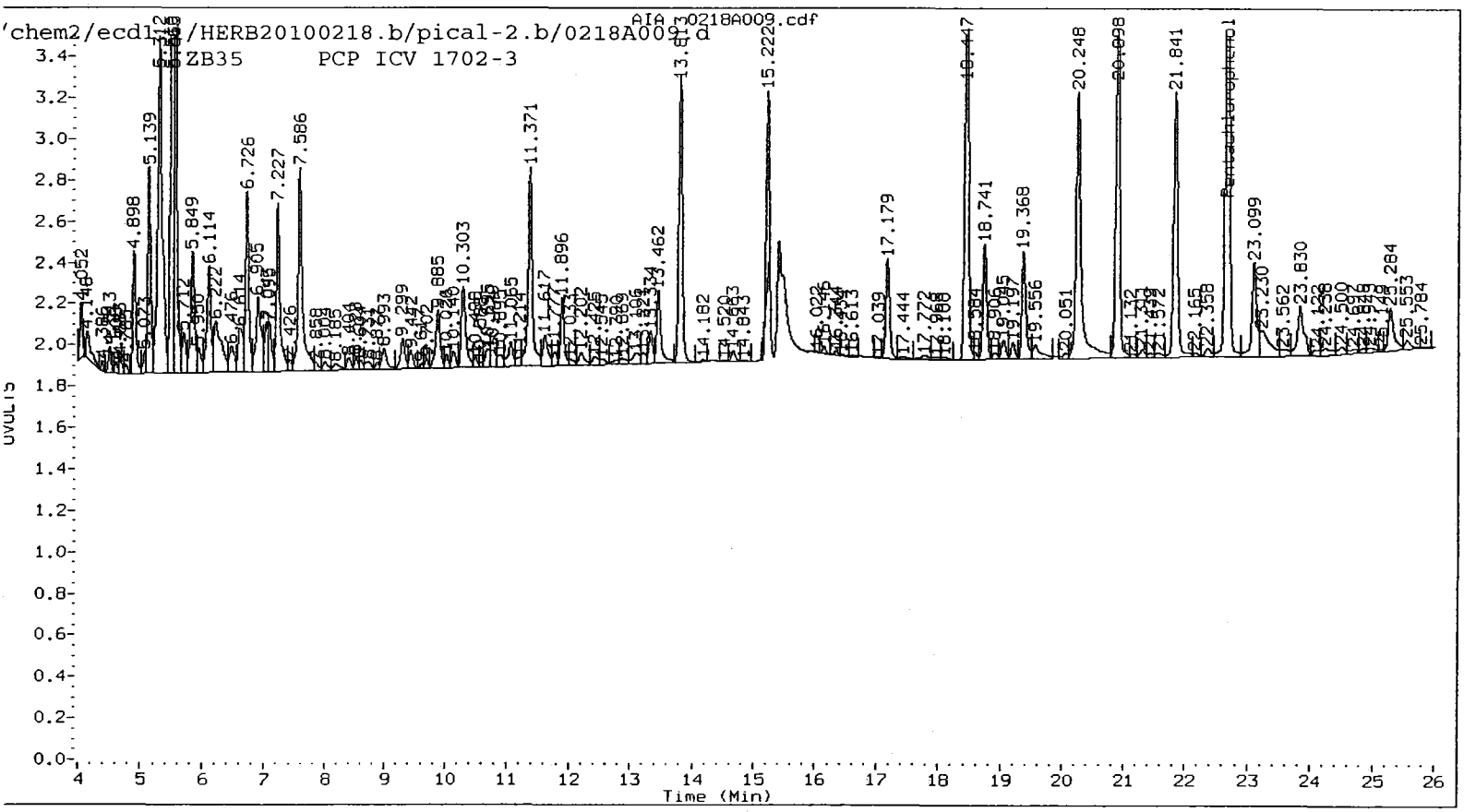
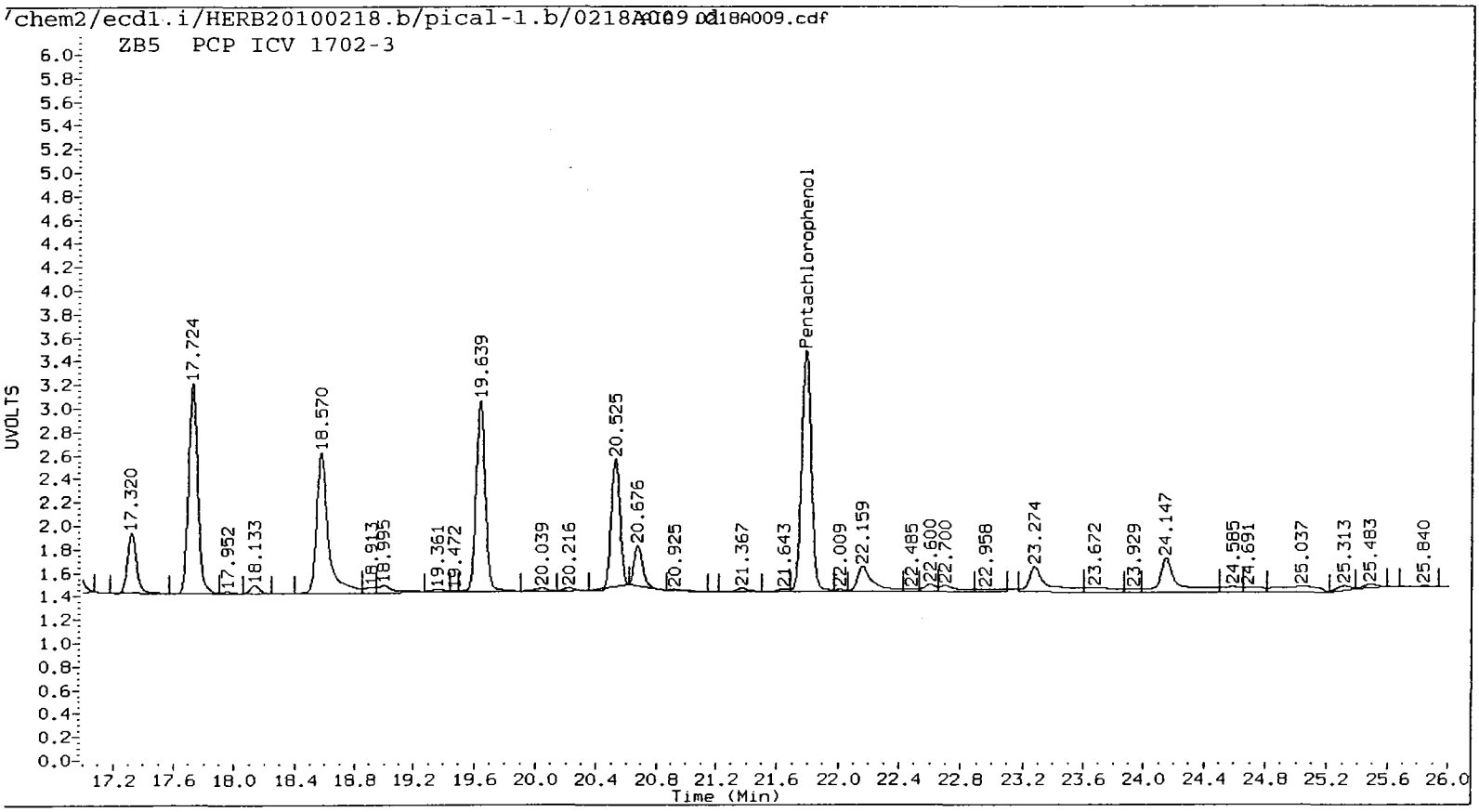
AIA 0218A009.cdf
ZB5 PCP ICV 1702-3
UVOLTS
Time (Min)
Pentachlorophenol


/chem2/ecd1.i/HERB20100218.b/pical-2.b/0218A009.d
AIA 0218A009.cdf
ZB35 PCP ICV 1702-3
UVOLTS
Time (Min)
Pentachlorophenol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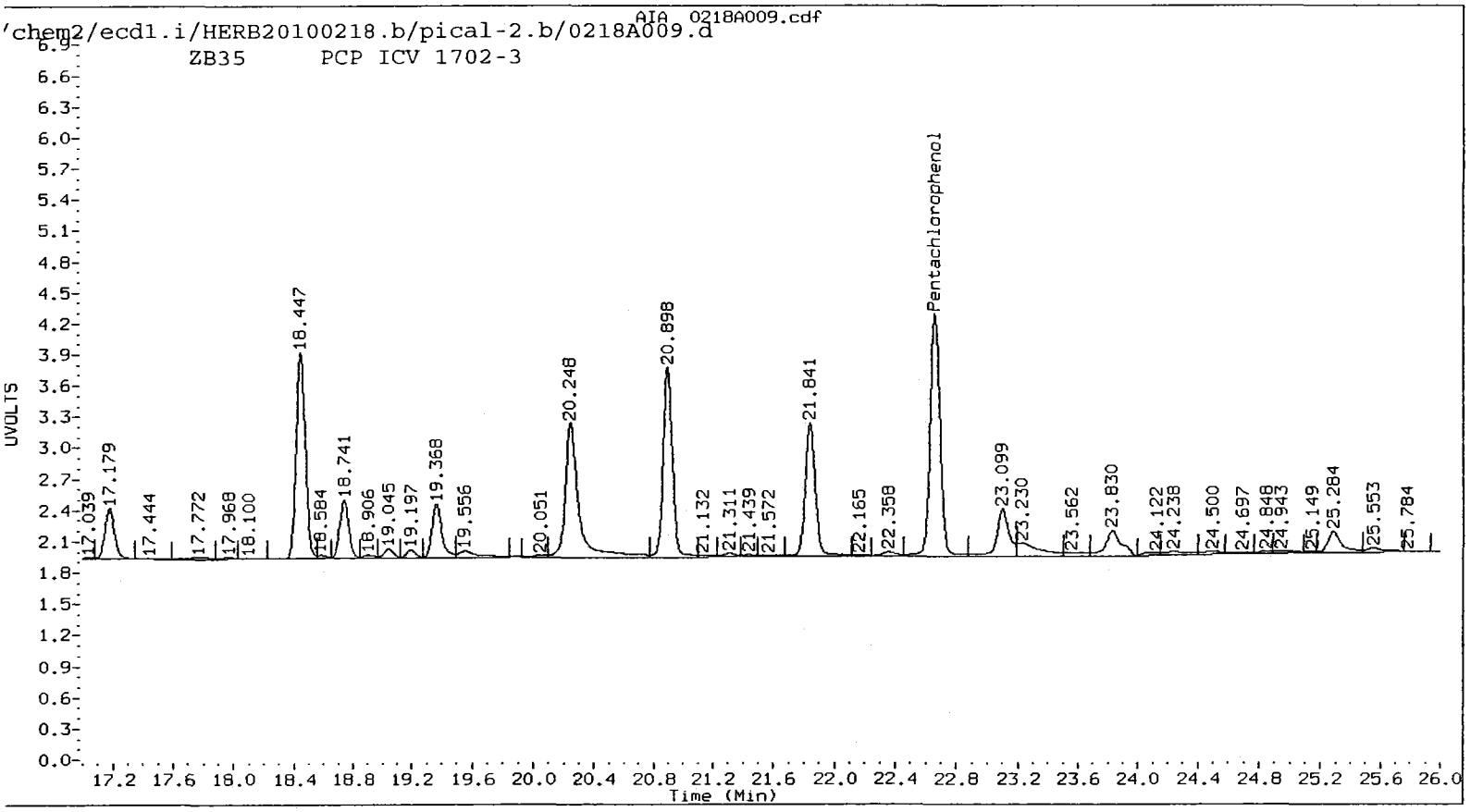
AIA 0218A009.cdf
ZB5 PCP ICV 1702-3
UVOLTS
Time (Min)
17.320
17.724
17.952
18.133
18.570
18.813
18.995
19.361
19.472
19.639
20.039
20.216
20.525
20.676
20.925
21.367
21.643
Pentachlorophenol
22.009
22.159
22.485
22.600
22.700
22.958
23.274
23.672
23.929
24.147
24.585
24.691
25.037
25.313
25.483
25.840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AIA 0218A009.cdf
ZB35 PCP ICV 1702-3
UVOLTS
Time (Min)
17.039
17.179
17.444
17.772
17.968
18.100
18.447
18.584
18.741
18.906
19.045
19.197
19.368
19.556
20.051
20.248
20.898
21.132
21.311
21.439
21.572
21.841
22.165
22.358
Pentachlorophenol
23.099
23.230
23.562
23.830
24.122
24.238
24.500
24.697
24.848
24.943
25.149
25.284
25.553
25.784

Data File: /chem2/ecd1.i/HERB20100218.b/pical-1.b/0218A009.d

Date : 18-FEB-2010 19:05

Client ID:

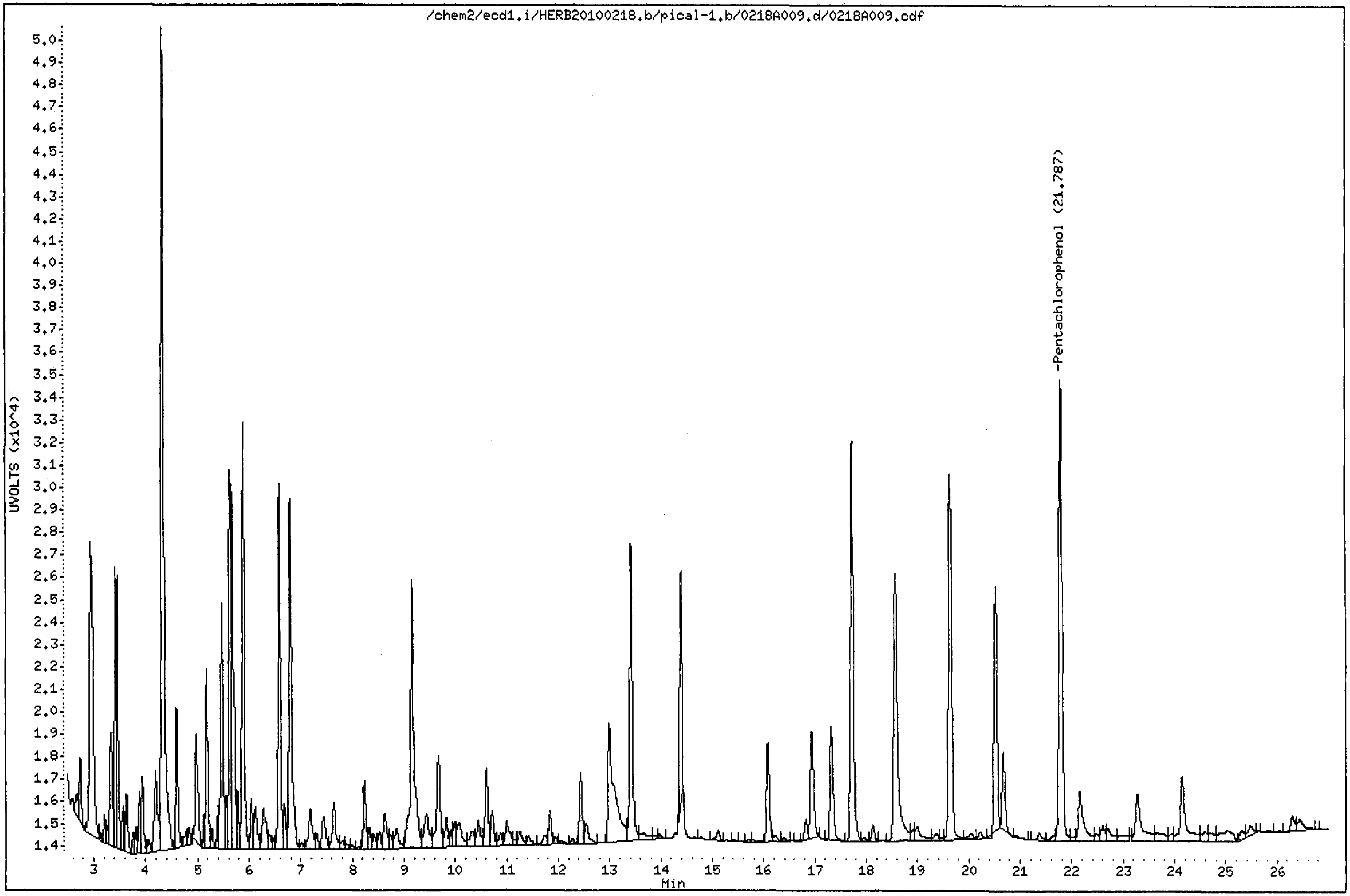
Instrument: ecd1.i

Sample Info: PCP ICV 1702-3

Operator: ar

Column phase: DB5

Column diameter: 0.53



7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 02/18/10 02/18/10

Client Sample No.(PCP): Date Analyzed :04/02/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2051

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.13	11.05	11.19	25.8	25.0	3.2
2,4,6-Trichlorophenol	7.20	7.12	7.26	29.6	25.0	18.4
2,3,6-Trichlorophenol	7.55	7.47	7.61	24.0	25.0	-4.0
2,4,5-Trichlorophenol	8.15	8.07	8.21	26.5	25.0	6.0
2,3,4-Trichlorophenol	8.70	8.61	8.75	26.7	25.0	6.8
2,3,5,6-Tetrachlorophenol	8.92	8.84	8.98	26.4	25.0	5.6
2,3,4,5-Tetrachlorophenol	10.32	10.23	10.37	25.8	25.0	3.2
2,4-Dichlorophenol	6.83	6.75	6.89	247	250	-1.2
2,4,6-Tribromophenol (surr	9.91	9.83	9.97	25.2	25.0	0.8

AVERAGE %D = 5.5

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 02/18/10 02/18/10

Client Sample No.(PCP): Date Analyzed :04/02/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2051

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.58	11.51	11.65	26.0	25.0	4.0
2,4,6-Trichlorophenol	7.26	7.19	7.33	26.0	25.0	4.0
2,3,6-Trichlorophenol	7.79	7.72	7.86	25.8	25.0	3.2
2,4,5-Trichlorophenol	8.52	8.45	8.59	25.7	25.0	2.8
2,3,4-Trichlorophenol	9.28	9.21	9.35	25.4	25.0	1.6
2,3,5,6-Tetrachlorophenol	9.19	9.11	9.25	25.0	25.0	0.0
2,3,4,5-Tetrachlorophenol	11.03	10.95	11.09	25.0	25.0	0.0
2,4-Dichlorophenol	7.09	7.02	7.16	261	250	4.4
2,4,6-Tribromophenol (surr	10.55	10.48	10.62	25.7	25.0	2.8

AVERAGE %D = 2.5

FORM VII PCP

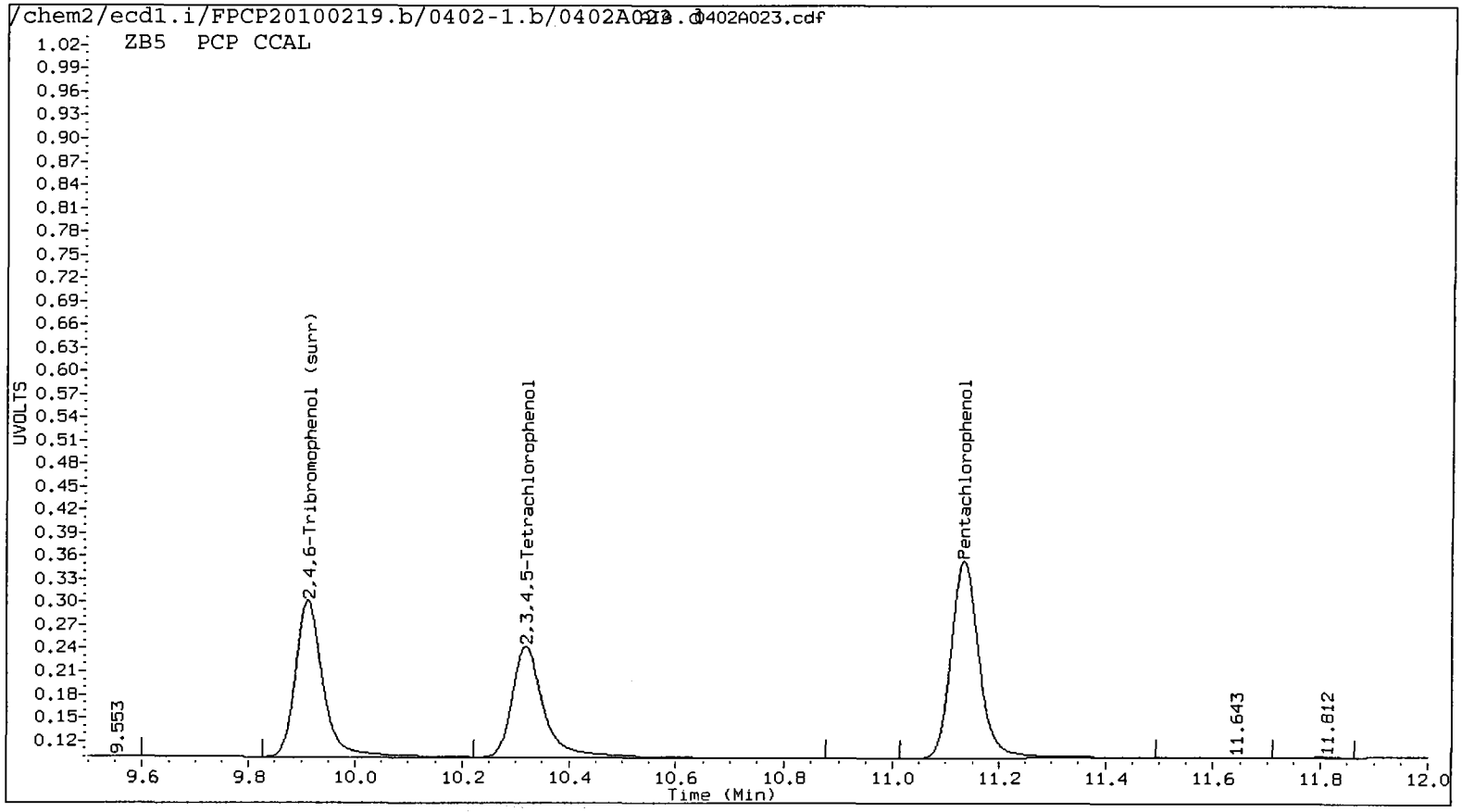
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A023.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A023.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 02-APR-2010 20:51
Compound Sublist: all Report Date: 04/03/2010 11:24
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.134	0.010	472125	11.579	0.003	535422	25.7848	26.0484	1.0	Pentachlorophenol
7.198	0.008	299280	7.264	0.002	295867	29.6172	26.0108	13.0	2,4,6-Trichlorophenol
7.549	0.009	240256	7.790	0.003	291305	23.9766	25.8260	7.4	2,3,6-Trichlorophenol
8.152	0.015	134036	8.521	0.001	151663	26.4822	25.7022	3.0	2,4,5-Trichlorophenol
8.698	0.017	188761	9.281	0.001	198321	26.6888	25.4025	4.9	2,3,4-Trichlorophenol
8.922	0.010	404631	9.185	0.002	425422	26.3613	25.0426	5.1	2,3,5,6-Tetrachlorophenol
10.319	0.017	303105	11.027	0.003	327622	25.8101	25.0450	3.0	2,3,4,5-Tetrachlorophenol
6.826	0.009	121578	7.093	0.002	147316	246.9426	261.1185	5.6	2,4-Dichlorophenol
9.912	0.013	368360	10.549	0.003	429270	25.2	25.7	1.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	103.1	104.2
2,4,6-Trichlorophenol	118.5	104.0
2,3,6-Trichlorophenol	95.9	103.3
2,4,5-Trichlorophenol	105.9	102.8
2,3,4-Trichlorophenol	106.8	101.6
2,3,5,6-Tetrachlorophenol	105.4	100.2
2,3,4,5-Tetrachlorophenol	103.2	100.2
2,4-Dichlorophenol	98.8	104.4
2,4,6-TBP (surr)	100.9	102.8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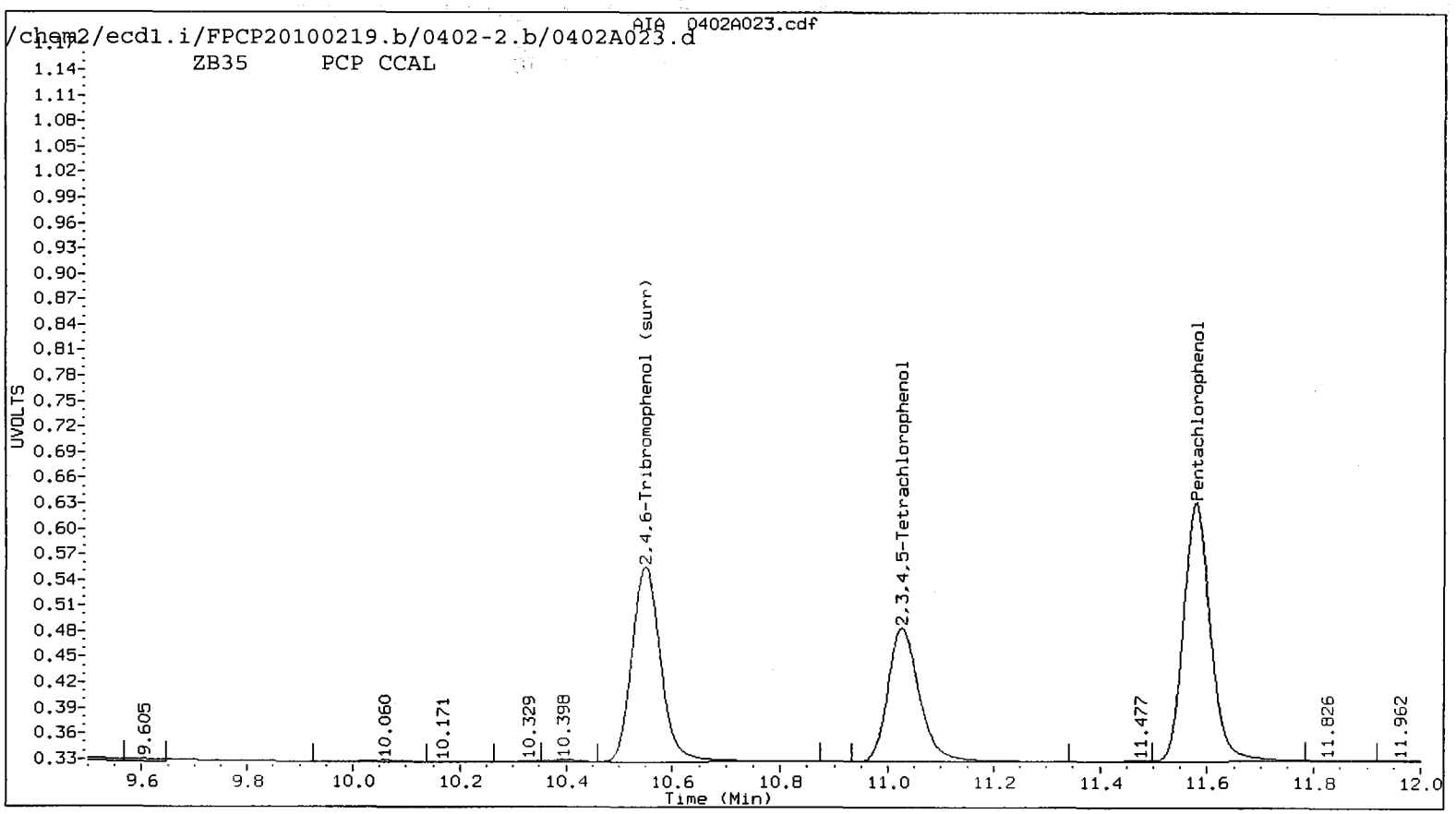
0402A023.cdf
ZB5 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.553
11.643
11.812
Time (Min)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AIA 0402A023.cdf
ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.605
10.060
10.171
10.329
10.398
11.477
11.826
11.962
Time (Min)

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 02/18/10 02/18/10

Client Sample No.(PCP): Date Analyzed :04/03/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2350

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.13	11.05	11.19	25.2	25.0	0.8
2,4,6-Trichlorophenol	7.20	7.12	7.26	30.8	25.0	23.2
2,3,6-Trichlorophenol	7.55	7.47	7.61	24.1	25.0	-3.6
2,4,5-Trichlorophenol	8.15	8.07	8.21	26.2	25.0	4.8
2,3,4-Trichlorophenol	8.70	8.61	8.75	25.9	25.0	3.6
2,3,5,6-Tetrachlorophenol	8.92	8.84	8.98	25.9	25.0	3.6
2,3,4,5-Tetrachlorophenol	10.32	10.23	10.37	24.8	25.0	-0.8
2,4-Dichlorophenol	6.83	6.75	6.89	249	250	-0.4
2,4,6-Tribromophenol (surr	9.91	9.83	9.97	24.8	25.0	-0.8

AVERAGE %D = 4.6

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: QQ20 Project: LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 02/18/10 02/18/10

Client Sample No.(PCP): Date Analyzed :04/03/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2350

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.58	11.51	11.65	26.0	25.0	4.0
2,4,6-Trichlorophenol	7.27	7.19	7.33	26.2	25.0	4.8
2,3,6-Trichlorophenol	7.79	7.72	7.86	25.9	25.0	3.6
2,4,5-Trichlorophenol	8.52	8.45	8.59	25.6	25.0	2.4
2,3,4-Trichlorophenol	9.28	9.21	9.35	25.0	25.0	0.0
2,3,5,6-Tetrachlorophenol	9.19	9.11	9.25	25.1	25.0	0.4
2,3,4,5-Tetrachlorophenol	11.03	10.95	11.09	24.5	25.0	-2.0
2,4-Dichlorophenol	7.09	7.02	7.16	261	250	4.4
2,4,6-Tribromophenol (surr	10.55	10.48	10.62	25.4	25.0	1.6

AVERAGE %D = 2.6

FORM VII PCP

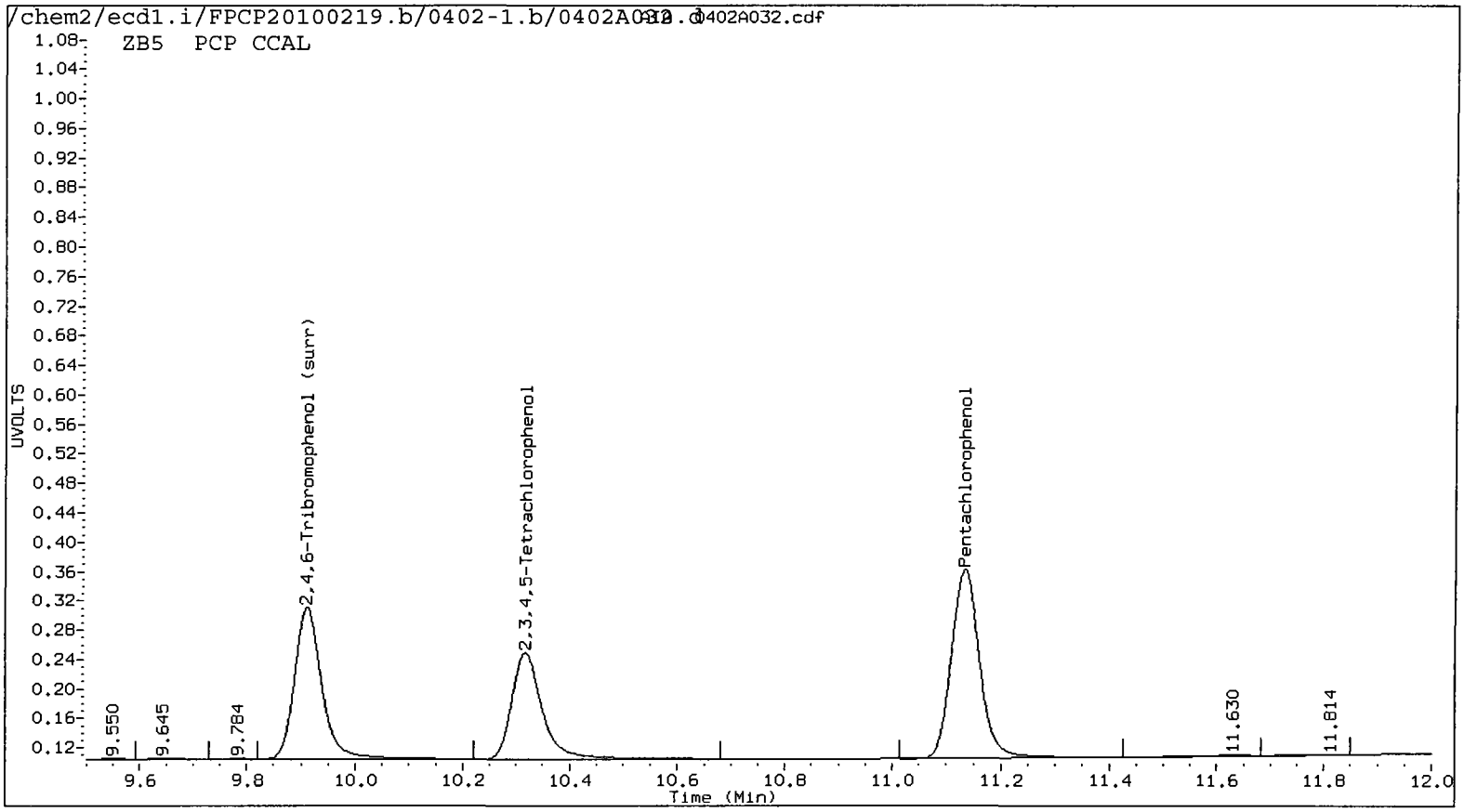
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A032.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A032.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 03-APR-2010 23:50
Compound Sublist: all Report Date: 04/03/2010 11:24
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.134	0.011	460647	11.579	0.003	533718	25.1580	25.9655	3.2	Pentachlorophenol
7.198	0.008	310771	7.266	0.004	298011	30.7544	26.1994	16.0	2,4,6-Trichlorophenol
7.550	0.010	241661	7.791	0.004	291735	24.1169	25.8641	7.0	2,3,6-Trichlorophenol
8.152	0.015	132593	8.522	0.002	150826	26.1971	25.5605	2.5	2,4,5-Trichlorophenol
8.697	0.017	183484	9.281	0.001	195069	25.9427	24.9858	3.8	2,3,4-Trichlorophenol
8.922	0.010	398197	9.187	0.003	426417	25.9421	25.1012	3.3	2,3,5,6-Tetrachlorophenol
10.318	0.016	291070	11.027	0.004	320358	24.7853	24.4897	1.2	2,3,4,5-Tetrachlorophenol
6.827	0.010	122583	7.094	0.004	147316	248.9839	261.1186	4.8	2,4-Dichlorophenol
9.911	0.012	362956	10.550	0.004	424314	24.9	25.4	2.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	100.6	103.9
2,4,6-Trichlorophenol	123.0	104.8
2,3,6-Trichlorophenol	96.5	103.5
2,4,5-Trichlorophenol	104.8	102.2
2,3,4-Trichlorophenol	103.8	99.9
2,3,5,6-Tetrachlorophenol	103.8	100.4
2,3,4,5-Tetrachlorophenol	99.1	98.0
2,4-Dichlorophenol	99.6	104.4
2,4,6-TBP (surr)	99.4	101.6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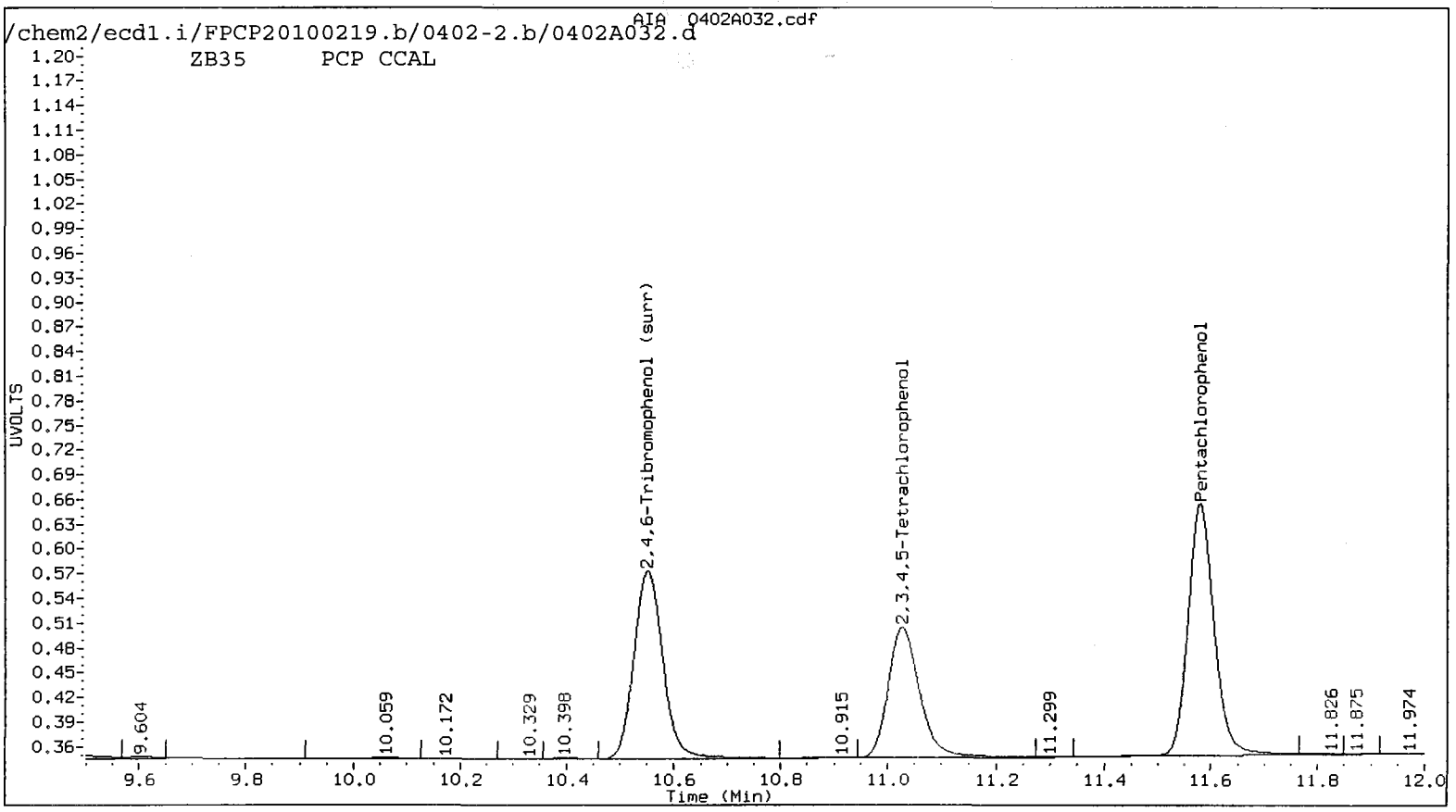
AIA 0402A032.cdf
ZB5 PCP CCAL
UVOLTS
Time (Min)
9.550
9.645
9.784
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
11.630
11.814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AIA 0402A032.cdf
ZB35 PCP CCAL
UVOLTS
Time (Min)
9.604
10.059
10.172
10.329
10.398
2,4,6-Tribromophenol (surr)
10.915
2,3,4,5-Tetrachlorophenol
11.299
Pentachlorophenol
11.826
11.875
11.974

PCP/Chlorophenols ANALYSIS
QC Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: MB-033010
METHOD BLANK

Lab Sample ID: MB-033010
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 21:11
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	78.4%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

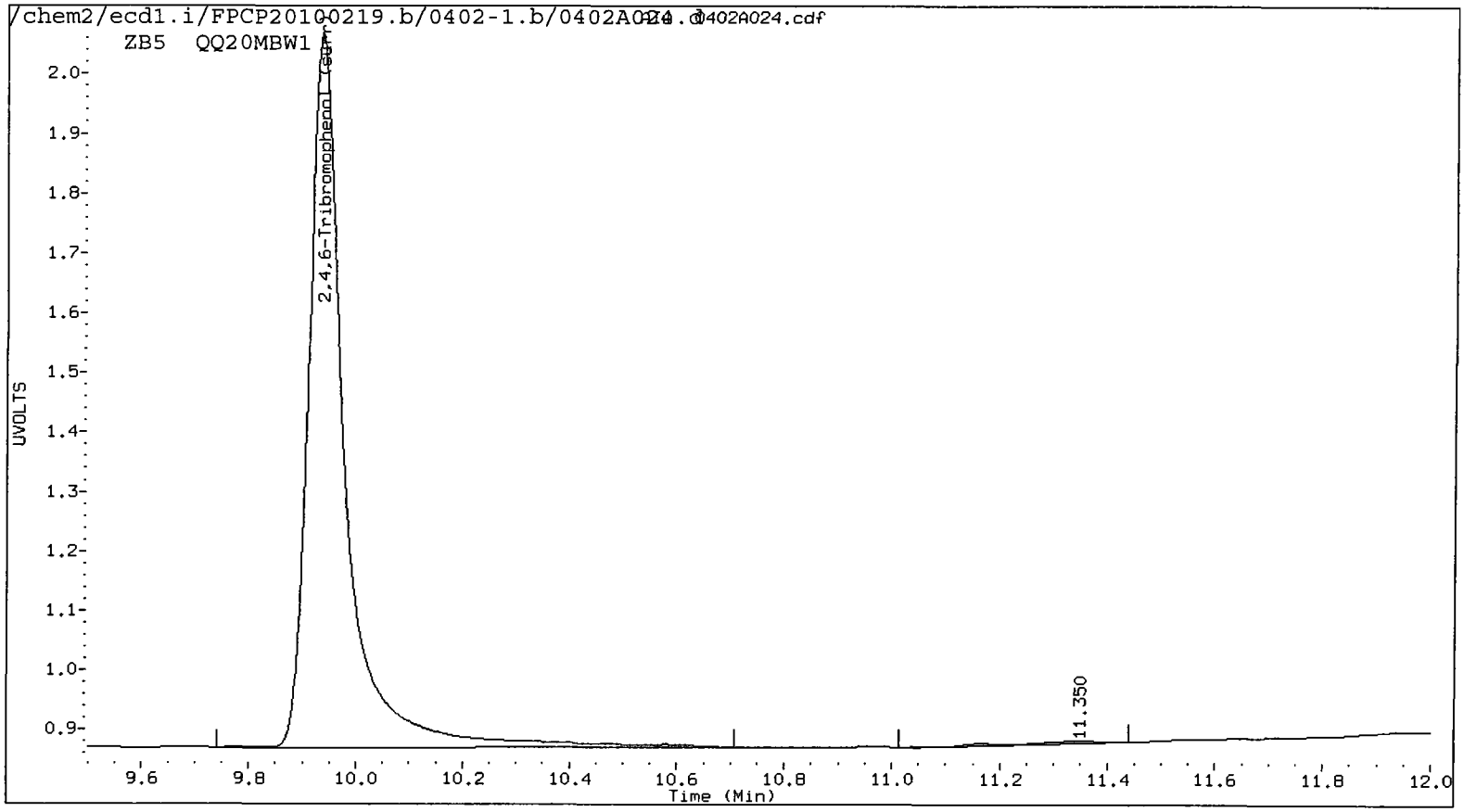
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A024.d ARI ID: QQ20MBW1
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A024.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 02-APR-2010 21:11
Compound Sublist: all Report Date: 04/06/2010 08:27
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

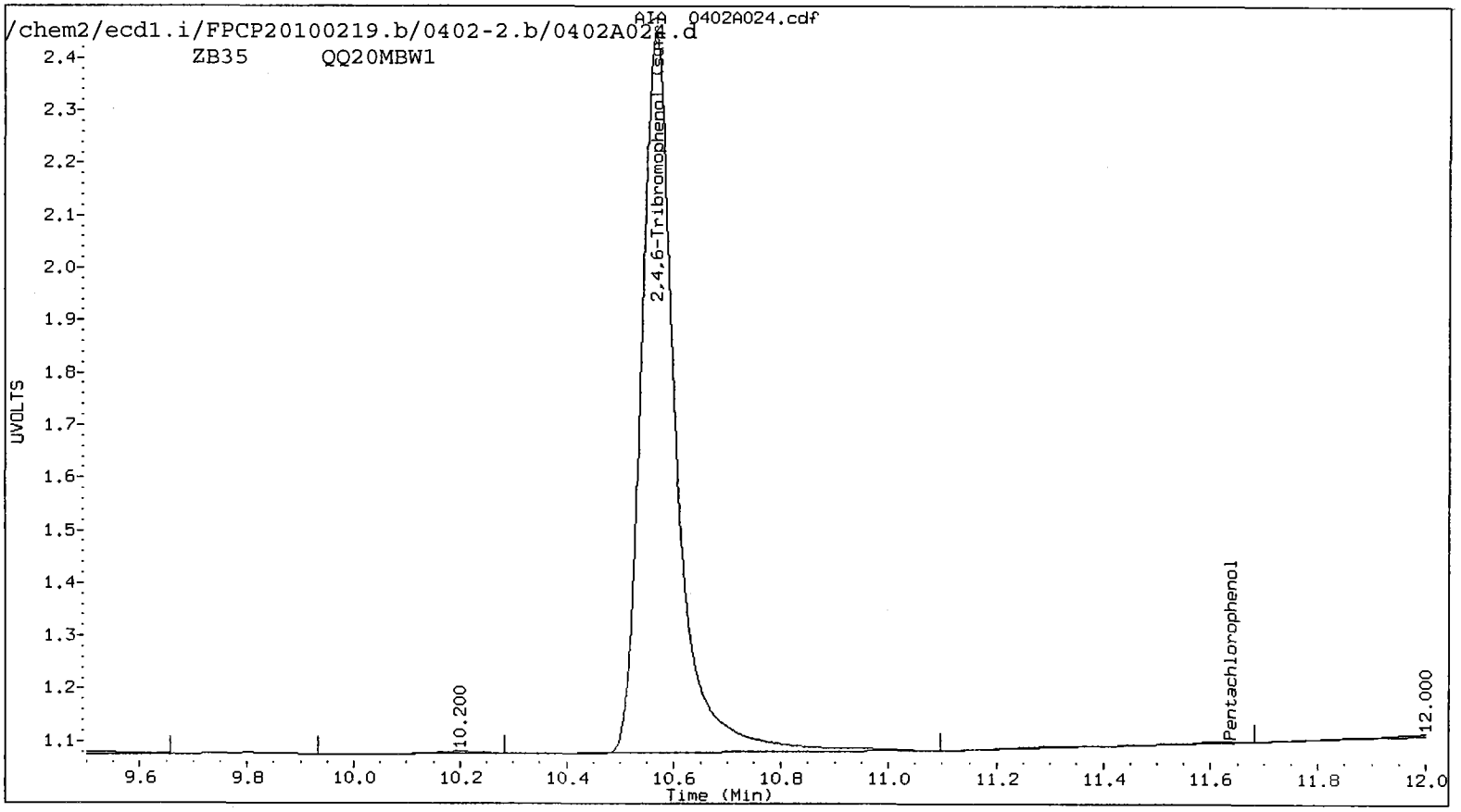
ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
----			11.636	0.060	622	0.0000	0.0303	---	Pentachlorophenol
7.228	0.038	13168	7.266	0.004	619	1.3031	0.0544	184.0*	2,4,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,4-Dichlorophenol
9.935	0.036	285770	10.565	0.019	306624	19.6	18.4	6.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	78.3	73.4

JR 04/06/10


/chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A024.d
ZB5 QQ20MBW1
2,4,6-Tribromophenol (surr)
11.350
UVOLTS
Time (Min)


/chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A024.d
ZB35 QQ20MBW1
2,4,6-Tribromophenol (surr)
10.200
Pentachlorophenol
12.000
UVOLTS
Time (Min)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 22:10
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	76.8%

FORM I

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

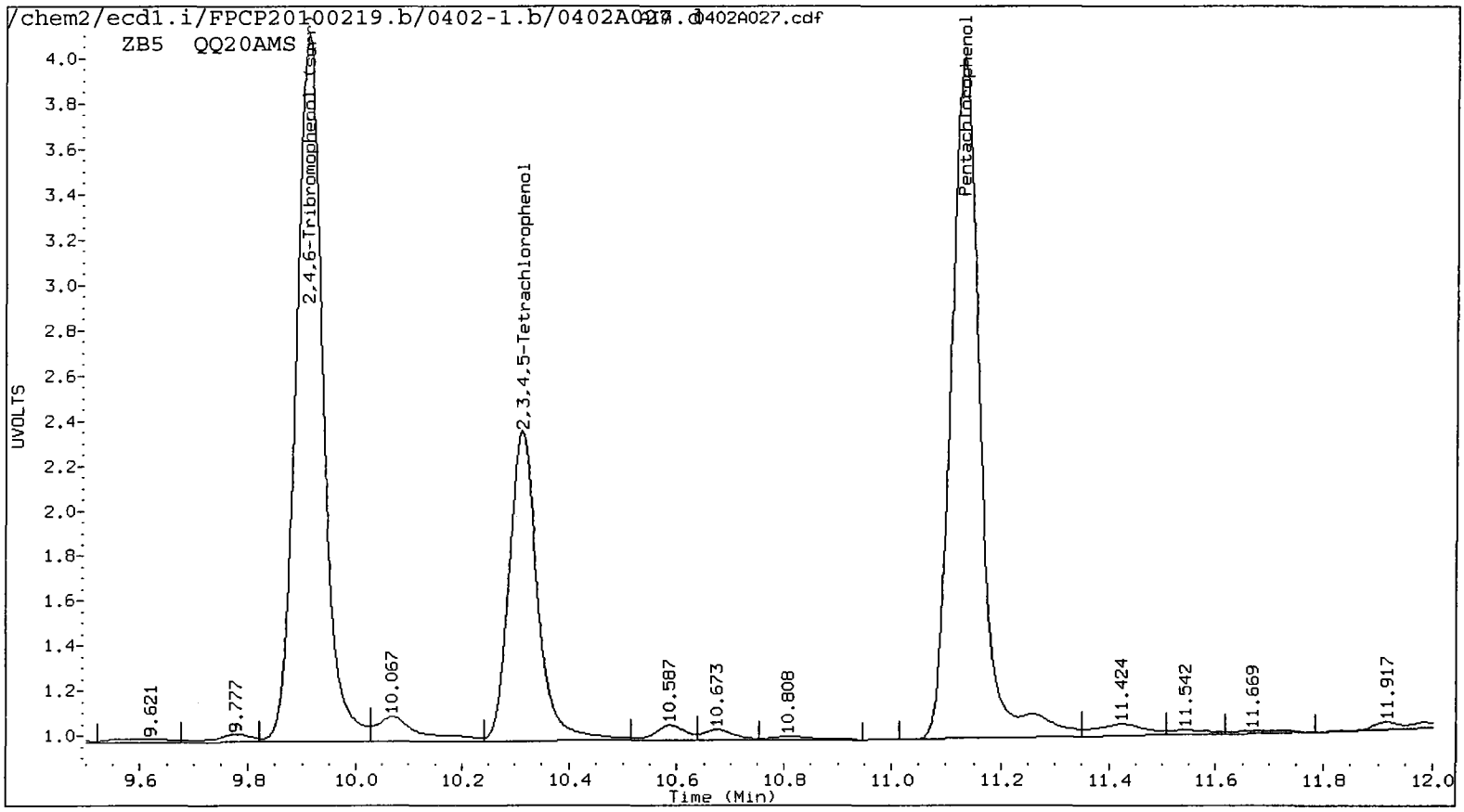
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A027.d ARI ID: QQ20AMS
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A027.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 02-APR-2010 22:10
Compound Sublist: all Report Date: 04/06/2010 08:27
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

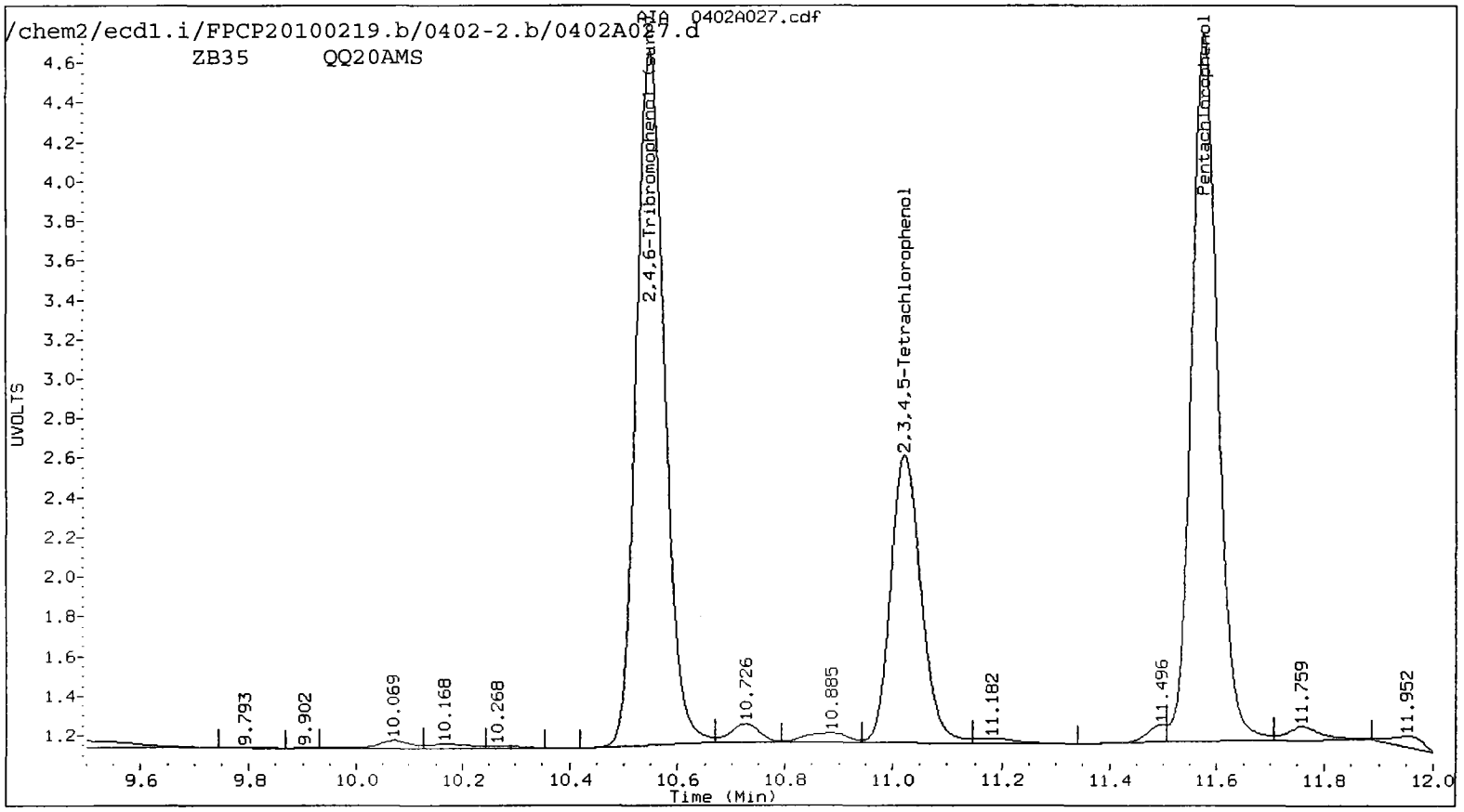
ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.131	0.008	555473	11.576	0.000	611458	30.3368	29.7476	2.0	Pentachlorophenol
7.199	0.009	233618	7.266	0.003	243428	23.1192	21.4007	7.7	2,4,6-Trichlorophenol
7.552	0.012	333945	7.791	0.004	263018	33.3264	23.3181	35.3	2,3,6-Trichlorophenol
8.156	0.019	138282	8.522	0.002	101327	27.3209	17.1718	45.6*	2,4,5-Trichlorophenol
8.699	0.018	118200	9.281	0.001	100647	16.7122	12.8916	25.8	2,3,4-Trichlorophenol
8.923	0.011	370363	9.186	0.002	395251	24.1287	23.2666	3.6	2,3,5,6-Tetrachlorophenol
10.312	0.010	253940	11.023	-0.001	282879	21.6236	21.6246	0.0	2,3,4,5-Tetrachlorophenol
6.833	0.016	23902	7.097	0.006	25802	48.5482	45.7340	6.0	2,4-Dichlorophenol
9.910	0.011	549078	10.548	0.001	640821	37.6	38.4	2.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	150.4	153.4

JR 04/06/10


/chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A027.d
0402A027.cdf
ZB5 QQ20AMS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)
9.621
9.777
10.067
10.587
10.673
10.808
11.424
11.542
11.669
11.917


/chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A027.d
0402A027.cdf
ZB35 QQ20AMS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)
9.793
9.902
10.069
10.168
10.268
10.726
10.885
11.182
11.496
11.759
11.952

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB31A032510COMP
MATRIX SPIKE DUP

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Date Extracted: 03/30/10
Date Analyzed: 04/02/10 22:30
Instrument/Analyst: ECD1/JGR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	79.0%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

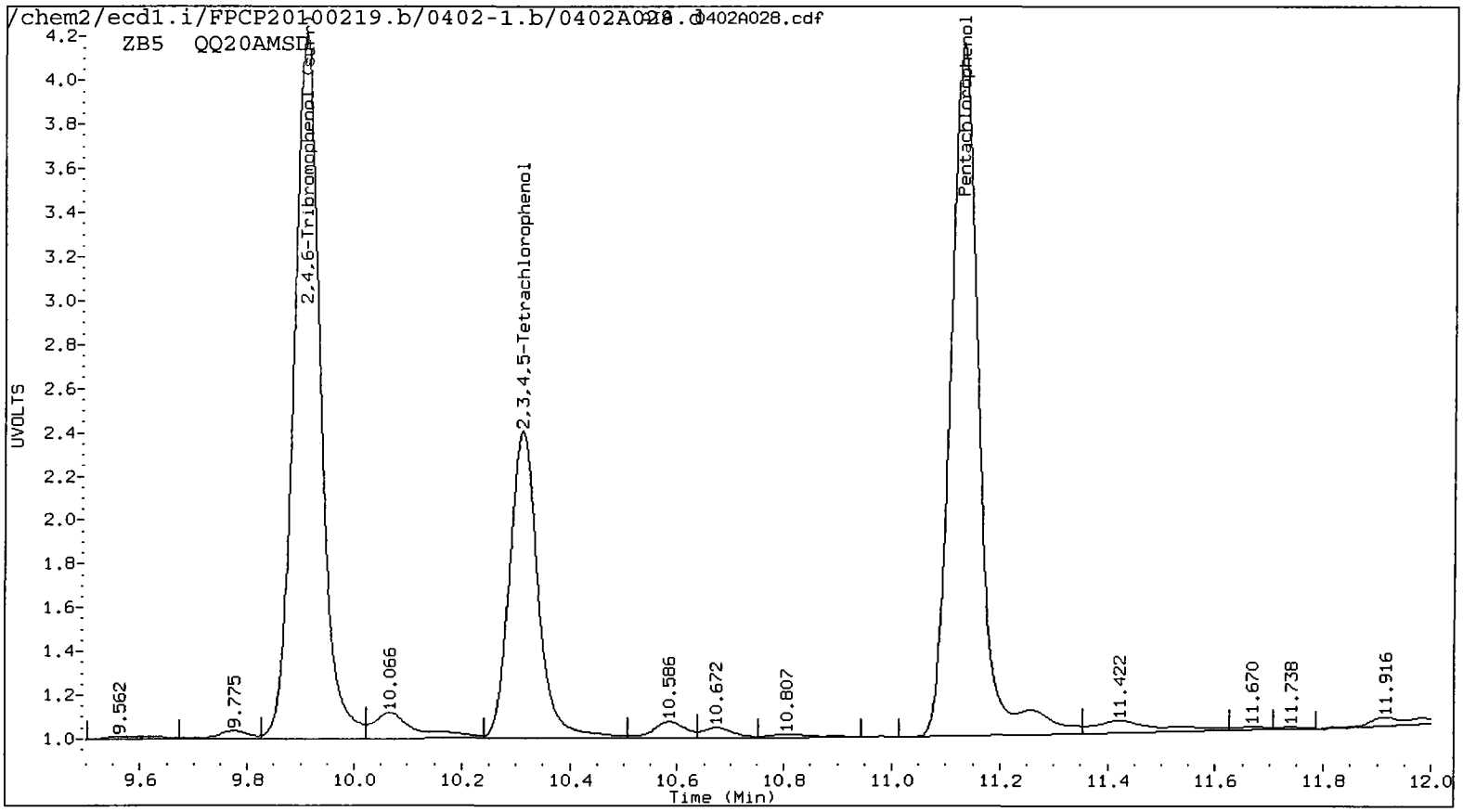
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A028.d ARI ID: QQ20AMSD
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A028.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 02-APR-2010 22:30
Compound Sublist: all Report Date: 04/06/2010 08:27
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

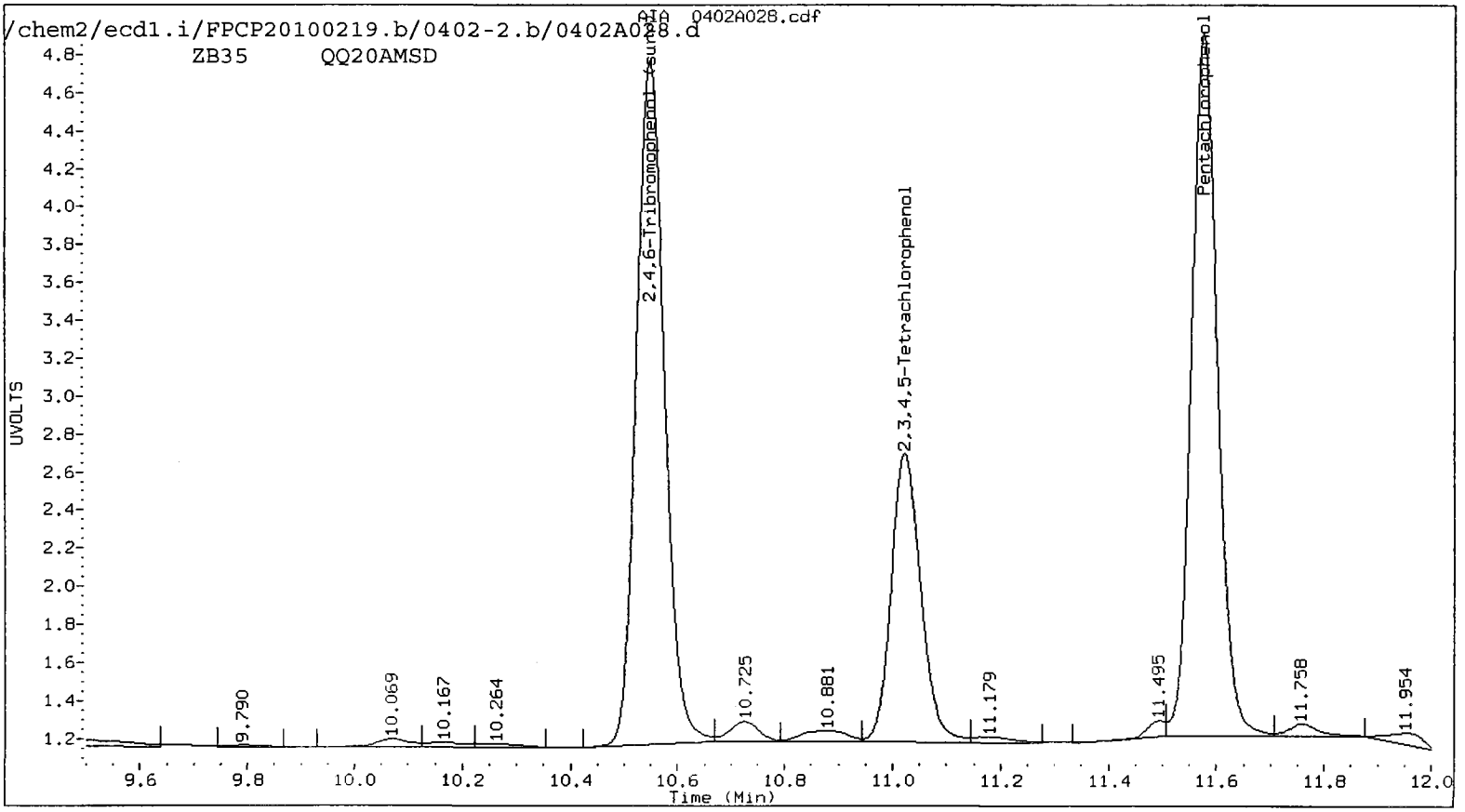
ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.130	0.007	574480	11.576	0.000	626418	31.3749	30.4754	2.9	Pentachlorophenol
7.198	0.008	234116	7.265	0.003	249098	23.1685	21.8992	5.6	2,4,6-Trichlorophenol
7.550	0.010	346850	7.790	0.003	252024	34.6143	22.3434	43.1*	2,3,6-Trichlorophenol
8.154	0.016	138318	8.521	0.001	103978	27.3280	17.6210	43.2*	2,4,5-Trichlorophenol
8.697	0.016	106613	9.281	0.001	97903	15.0739	12.5401	18.4	2,3,4-Trichlorophenol
8.922	0.010	377111	9.186	0.002	409027	24.5683	24.0775	2.0	2,3,5,6-Tetrachlorophenol
10.311	0.009	257572	11.023	0.000	289603	21.9328	22.1386	0.9	2,3,4,5-Tetrachlorophenol
6.833	0.016	23124	7.095	0.005	23843	46.9680	42.2617	10.5	2,4-Dichlorophenol
9.908	0.009	561443	10.547	0.001	660039	38.5	39.5	2.7	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	153.8	158.0

04/06/10


/chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A028.d
0402A028.cdf
ZB5 QQ20AMSD
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.562
9.775
10.066
10.586
10.672
10.807
11.422
11.670
11.738
11.916
UVOLTS
Time (Min)


/chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A028.d
0402A028.cdf
ZB35 QQ20AMSD
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.790
10.069
10.167
10.264
10.725
10.881
11.179
11.495
11.758
11.954
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

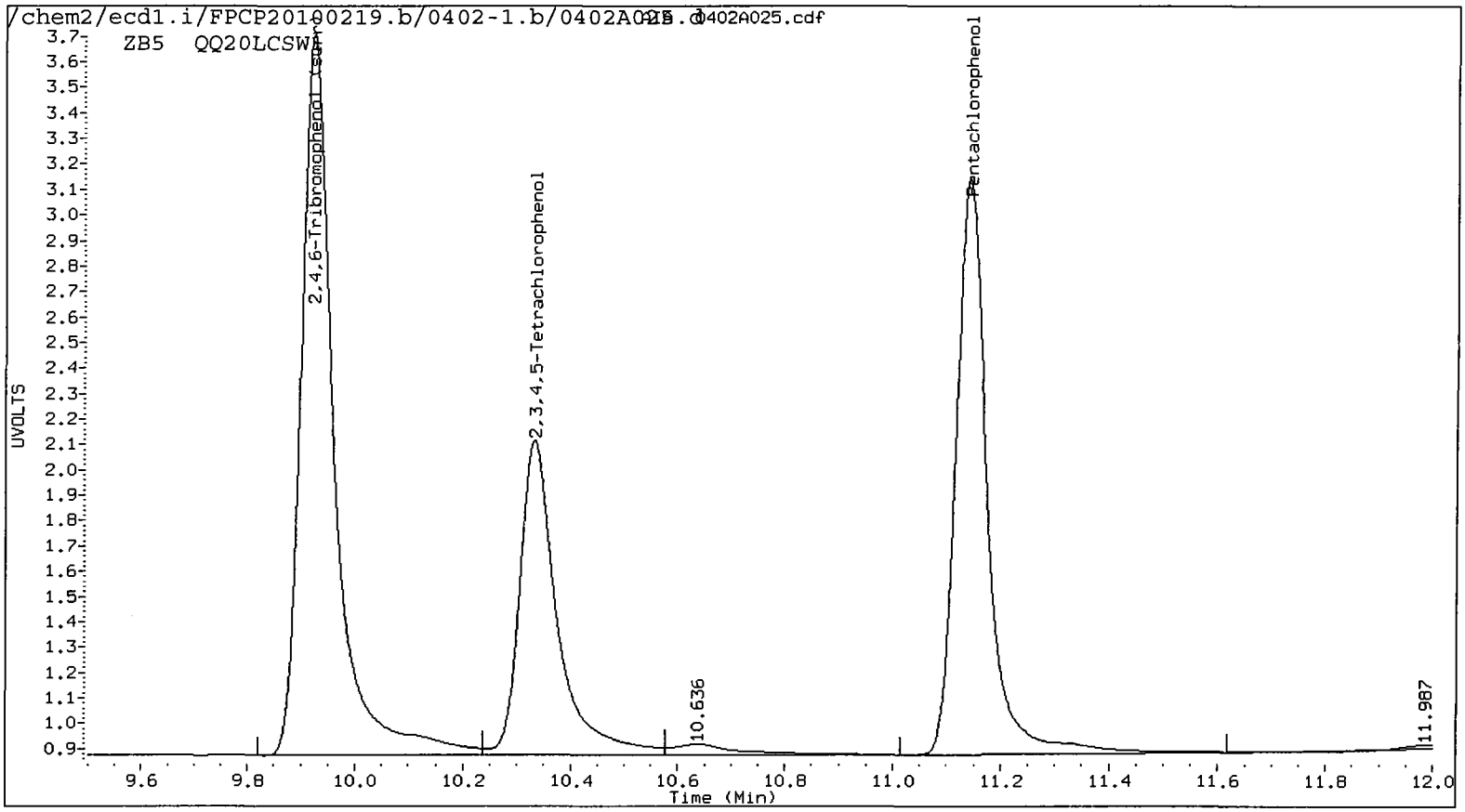
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0402-1.b/0402A025.d ARI ID: QQ20LCSW1
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A025.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 02-APR-2010 21:30
Compound Sublist: all Report Date: 04/06/2010 08:27
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.142	0.019	459460	11.583	0.007	509820	25.0931	24.8029	1.2	Pentachlorophenol
7.199	0.009	229895	7.267	0.005	258693	22.7507	22.7427	0.0	2,4,6-Trichlorophenol
7.554	0.014	265520	7.793	0.006	263725	26.4979	23.3808	12.5	2,3,6-Trichlorophenol
8.172	0.034	131170	8.533	0.013	136210	25.9158	23.0834	11.6	2,4,5-Trichlorophenol
8.720	0.039	145144	9.295	0.015	182303	20.5217	23.3507	12.9	2,3,4-Trichlorophenol
8.933	0.021	395287	9.194	0.010	393138	25.7525	23.1422	10.7	2,3,5,6-Tetrachlorophenol
10.333	0.030	303891	11.036	0.013	323511	25.8770	24.7307	4.5	2,3,4,5-Tetrachlorophenol
6.833	0.016	46880	7.098	0.007	60390	95.2196	107.0411	11.7	2,4-Dichlorophenol
9.924	0.025	611499	10.558	0.012	680534	41.9	40.7	2.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	167.5	162.9

JC 04/06/10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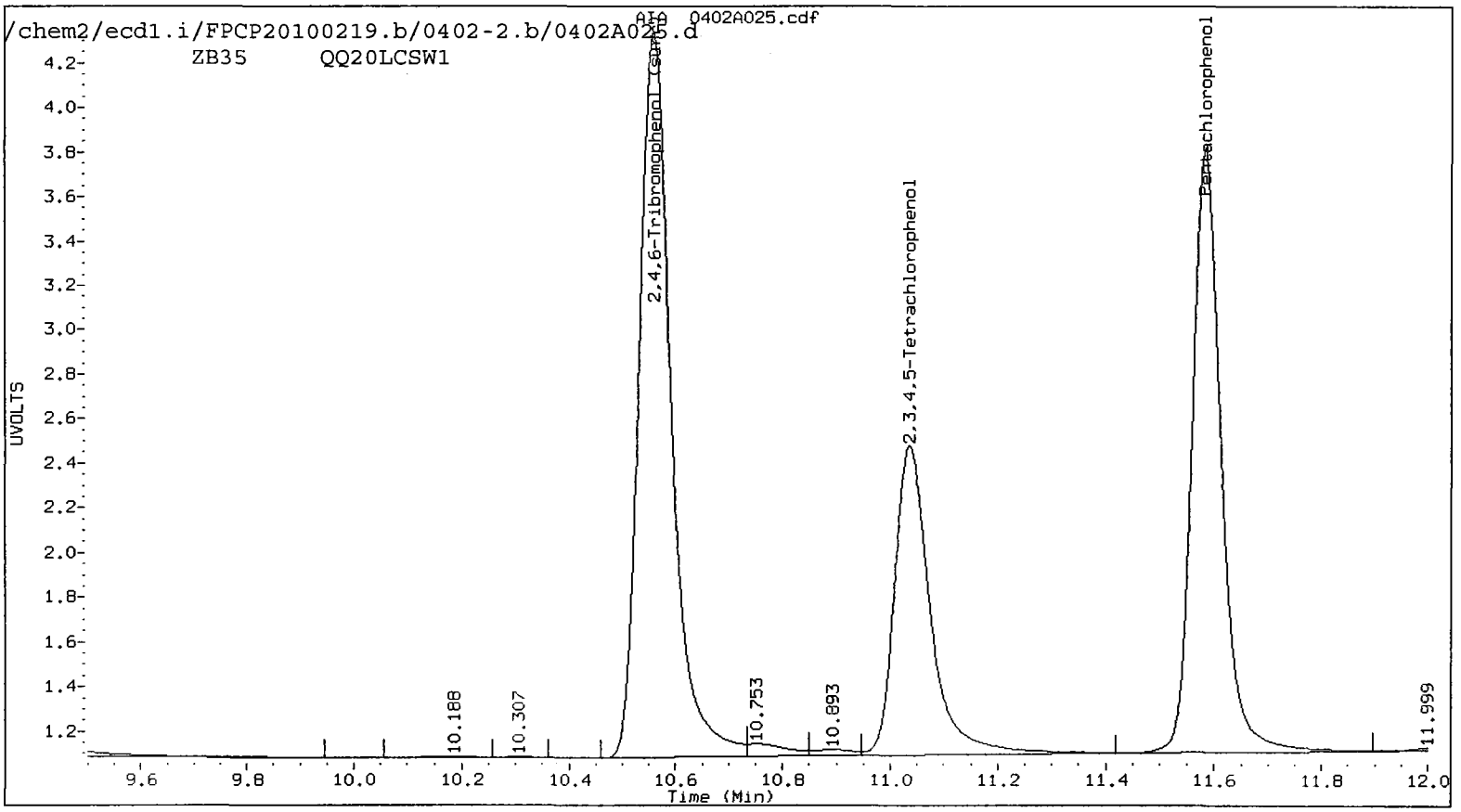
0402A025.cdf
ZB5 QQ20LCSW1
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
10.636
11.987
UVOLTS
Time (Min)


/chem2/ecd1.i/FPCP20100219.b/0402-2.b/0402A025.d
0402A025.cdf
ZB35 QQ20LCSW1
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
10.188
10.307
10.753
10.893
11.999
UVOLTS
Time (Min)

PCP/Chlorophenols ANALYSIS
Extraction Bench Sheets/Run Logs

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

8041 PCP – Water
Separatory Funnel (3510C) (SOP # 3311S)

Preparation Test PCP # 1

ARI Job No(s) QQ20

In-House (0.25ppb)
Batch set up by: SP

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	KD Exchange To Hexane (X 2)	Turbo Vap 1 (2) 3	Final Effective Volume	Volume to Lab	Derivitize	Comments
	QQ20 MB	Date 3-30-10	500mL			50mL	1-2mL	w/ ~9mL	
	↓ SB	↓	↓			↓	↓	derivatized	
	SB Dup.		↓			↓	↓		
3,5,7	QQ20 A	Verified	500mL					hexane	
	AMS								
↓	AMSD								
2	B								
	C								
↓	D	↓	↓	↓	↓	↓	↓		
								Dazald IS445	
								3N NaOH 5757-6	
								AP 4/2/2010	
								Dil. 5x to	
								50mL FV.	
Analyst/Date:	PP 3-30-10			TS 3-30-10	CJZ 4/1/10	———	→		

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	**F**	**100µL**	12/9/10	PD	WW
Spike	**6**	**100µL**	9/24/10	PD	WW
Extraction Time: 13:35					

SPECIAL INSTRUCTIONS: 1. Add surr/spike. 2. Acidify all with 1:1 Sulfuric Acid 3. Extract 3X with 30mL DCM.

4. KD (NO Drying Column) at 80° to 5mL. 5. Exchange (2 X with 20mL) Hexane at 100°. 6. Turbo Vap to 1-2mL

7. Pipet using Hexane into Herb Tubes. 8. GC Analyst to Derivitize. A. Archive Y / (N)

3016F

Revision 012
02/01/2010

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: QQ20 Client ID: Floyd-Snider

Parameter: PCP Client Project: Lora Lake Apartments

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☐ Wet sediment/sludge=	
☐ Standing Water Decanted=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☐ Rocks/Organics=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☑ Turbid/Color= A, B, C, D, are tan.	PD 3-30-16
☑ Particulates= A, B, C, D.	PD 3-30-16
☑ Emulsions= A, B, C, D.	PD 3-30-16
☐ Other (Details)=	
☐ Other Notes/Comments=	

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 2/18/2010 Analysis: Herb/PCP Analyst: JR & AR

GC Program: HERB.M & Column No: 150608/148446 Column Type: ZB5/ZB35

Instrument Tune (.U or .CT.): PCPFACT.M EM Voltage: NA

Calibration File: FPCP20100219.b & HERB20100818.b Curve Date: 2/18/2010

IS/SS	Ical/Ccal	LCS/ICV
	1654-1	1353-2
	1663-2	1324-1
		1702-3

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20100218.b/ical-2.l

	Inject Date/Time	Filename	DF	LabID	ClientID
1	18-FEB-2010 14:52	0218A002.d	1	PCPD	
2	18-FEB-2010 15:28	0218A003.d	1	PCPA	
3	18-FEB-2010 16:04	0218A004.d	1	PCPB	
4	18-FEB-2010 16:40	0218A005.d	1	PCPC	
5	18-FEB-2010 17:17	0218A006.d	1	PCPE	
6	18-FEB-2010 17:53	0218A007.d	1	PCPF	
7	18-FEB-2010 18:29	0218A008.d	1	PCP ICV 1324-1	
8	18-FEB-2010 19:05	0218A009.d	1	PCP ICV 1702-3	
9	18-FEB-2010 19:41	0218A010.d	1	DRVBLK 021810	
10	18-FEB-2010 20:17	0218A011.d	1	PCPD	
11	18-FEB-2010 20:37	0218A012.d	1	PCPA	
12	18-FEB-2010 20:57	0218A013.d	1	PCPB	
13	18-FEB-2010 21:17	0218A014.d	1	PCPC	
14	18-FEB-2010 21:37	0218A015.d	1	PCPE	
15	18-FEB-2010 21:56	0218A016.d	1	PCPF	
16	18-FEB-2010 22:16	0218A017.d	1	PCP ICV 1324-1	
17	18-FEB-2010 22:36	0218A018.d	1	PCP ICV 1702-3	
18	18-FEB-2010 22:56	0218A019.d	1	DRVBLK 021810	
19	18-FEB-2010 23:16	0218A020.d	1	PCP CCAL	
20	18-FEB-2010 23:35	0218A021.d	1	QJ18MBW1	QJ18MBW1
21	18-FEB-2010 23:55	0218A022.d	1	QJ18LCSW1	QJ18LCSW1
22	19-FEB-2010 00:15	0218A023.d	1000	QJ18A	SW 13#
23	19-FEB-2010 00:35	0218A024.d	1	QJ18B	SW 2#
24	19-FEB-2010 00:55	0218A025.d	50	QJ18C	SW 15#
25	19-FEB-2010 01:15	0218A026.d	1	PCP	
26	19-FEB-2010 01:34	0218A027.d	1	PCP CCAL	
27	19-FEB-2010 01:54	0218A028.d	1	QJ36MBW1	QJ36MBW1
28	19-FEB-2010 02:14	0218A029.d	1	QJ36LCSW1	QJ36LCSW1
29	19-FEB-2010 02:34	0218A030.d	1	QJ36LCSDW1	QJ36LCSDW1
30	19-FEB-2010 02:54	0218A031.d	1	QJ36A	MW-2
31	19-FEB-2010 03:13	0218A032.d	1	QJ36B	MW-3
32	19-FEB-2010 03:33	0218A033.d	10	QJ36C	MW-15
33	19-FEB-2010 03:53	0218A034.d	1	QJ36D	MW-16
34	19-FEB-2010 04:13	0218A035.d	1	QJ36E	MW-17
35	19-FEB-2010 04:33	0218A036.d	1	QJ36F	MW-18
36	19-FEB-2010 04:52	0218A037.d	1	QJ36G	MW-22
37	19-FEB-2010 05:12	0218A038.d	1	PCP	
38	19-FEB-2010 05:32	0218A039.d	1	PCP CCAL	
39	19-FEB-2010 05:52	0218A040.d	40	QJ36H	MW-23
40	19-FEB-2010 06:12	0218A041.d	1	QJ36I	MW-24
41	19-FEB-2010 06:32	0218A042.d	10	QJ36J	MW-25
42	19-FEB-2010 06:51	0218A043.d	1	QJ36K	MW-26
43	19-FEB-2010 07:11	0218A044.d	1	QJ36L	MW-27
44	19-FEB-2010 07:31	0218A045.d	1	QJ36M	MW-28
45	19-FEB-2010 07:51	0218A046.d	1	QJ36N	MW-29
46	19-FEB-2010 08:11	0218A047.d	1	QJ36O	MW-30
47	19-FEB-2010 08:30	0218A048.d	1	QJ36P	MW-31
48	19-FEB-2010 08:50	0218A049.d	200	QJ36Q	MW-32
49	19-FEB-2010 09:10	0218A050.d	1	PCP	
50	19-FEB-2010 09:30	0218A051.d	1	PCP CCAL	

AR 2/23/2010

Maintenance / Comments

Cleaned inlet, cleaned liner & diggal loop from pre-column

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: Herb Curve Client ID: ARI

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) **Other**

Parameter(s): NA

Instrument: FID-3A FID-3B FID-4A FID-4B FID-7 FID-8
ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 2/18/2010 Analysis Start: 2/18/2010

Endrin/DDT Breakdown <15%? YES / NO / NA Method Blank In Control? YES / NO / NA

ICal Meets RF & %RSD Criteria? YES / NO LCS/LCSD Recovery In Control? YES / NO / NA

CCal Meets RF & %RSD Criteria YES / NO Surrogate Recovery In Control? YES / NO

Internal Standard Meets Criteria? YES / NO / NA Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

*-PCP only included

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 2/22/2010

Reviewer's Signature: _____ **Date:** 2/23/10

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 4/2/2010 Analysis: Herb/PCP Analyst: JR

GC Program: HERB.M & Column No: 150606/148146 Column Type: 2B5/2B35

Instrument Tune (.U or .CT.): PCPFAST.M EM Voltage: NA

Calibration File: HERB20100218 & PCP20100219 Curve Date: 2/18/2010

IS/SS	Ical/Ccal	LCS/ICV

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/HERB2

	Inject Date/Time	Filename	DF	LabID
1	02-APR-2010 08:07	0402A001.d	1	RINSE
2	02-APR-2010 08:43	0402A002.d	1	RINSE
3	02-APR-2010 09:19	0402A003.d	1	HERB CCAL
4	02-APR-2010 09:55	0402A004.d	1	QP45MBW1
5	02-APR-2010 10:31	0402A005.d	1	QP45LCSW1
6	02-APR-2010 11:08	0402A006.d	1	QP45B
7	02-APR-2010 11:44	0402A007.d	1	QP45BMS
8	02-APR-2010 12:20	0402A008.d	1	HERB CCAL
9	02-APR-2010 12:56	0402A009.d	1	HERB CCAL
10	02-APR-2010 13:33	0402A010.d	1	DIR BLK
11	02-APR-2010 14:09	0402A011.d	1	QP84MBW1
12	02-APR-2010 14:45	0402A012.d	1	QP84LCSW1
13	02-APR-2010 15:21	0402A013.d	1	QP84LCSDW1
14	02-APR-2010 15:57	0402A014.d	1	QP84B
15	02-APR-2010 16:34	0402A015.d	1	QP95D
16	02-APR-2010 17:10	0402A016.d	1	QP95E
17	02-APR-2010 17:46	0402A017.d	1	QP95F
18	02-APR-2010 18:22	0402A018.d	1	QQ25B
19	02-APR-2010 18:58	0402A019.d	1	HERB CCAL
20	02-APR-2010 19:35	0402A020.d	1	HERB CCAL
21	02-APR-2010 20:11	0402A021.d	1	DIR BLK
22	02-APR-2010 20:31	0402A022.d	1	PCP CCAL
23	02-APR-2010 20:51	0402A023.d	1	PCP CCAL
24	02-APR-2010 21:11	0402A024.d	1	QQ20MBW1
25	02-APR-2010 21:30	0402A025.d	1	QQ20LCSW1
26	02-APR-2010 21:50	0402A026.d	1	QQ20A
27	02-APR-2010 22:10	0402A027.d	1	QQ20AMS
28	02-APR-2010 22:30	0402A028.d	1	QQ20AMSD
29	02-APR-2010 22:50	0402A029.d	1	QQ20B
30	03-APR-2010 23:10	0402A030.d	1	QQ20C
31	03-APR-2010 23:30	0402A031.d	1	QQ20D
32	03-APR-2010 23:50	0402A032.d	1	PCP CCAL
33	03-APR-2010 00:10	0402A033.d	1	PCP CCAL
34	03-APR-2010 00:29	0402A034.d	1	QQ59MBW1
35	03-APR-2010 00:49	0402A035.d	1	QQ59LCSW1
36	03-APR-2010 01:09	0402A036.d	1	QQ59A
37	03-APR-2010 01:29	0402A037.d	1	QQ59B
38	03-APR-2010 01:49	0402A038.d	1	QQ59C
39	03-APR-2010 02:09	0402A039.d	1	QQ59CMS
40	03-APR-2010 02:29	0402A040.d	1	QQ59CMSD
41	03-APR-2010 02:48	0402A041.d	1	QQ59D
42	03-APR-2010 03:08	0402A042.d	1	PCP CCAL
43	03-APR-2010 03:28	0402A043.d	1	PCP CCAL

Maintenance / Comments AR 4/14/2010

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: QQ20 Client ID: Iora lake Apt.

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) [**Other**]

Parameter(s): Chlorinated Phenols, Method 8041, SOP 412S

Instrument: FID-3A FID-3B FID-4A FID-4B FID-7 FID-8
[ECD-1] ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 02/19/10 Analysis Start: 04/02/10

Endrin/DDT Breakdown <15%? YES / NO / [NA] Method Blank In Control? (YES) / NO / NA

ICal Meets RF & %RSD Criteria? (YES) / NO LCS/LCSD Recovery In Control? (YES) / NO / NA (1)

CCal Meets RF & %RSD Criteria (YES) / NO Surrogate Recovery In Control? (YES) / NO

Internal Standard Meets Criteria? YES / NO / [NA] Special Analysis Criteria Met? YES / NO / (NA)

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

1 – The surrogate spiking volume is doubled when entering into LIMS, in the LCS/LCSD/MS&MSD; this is because the spike also contains surrogate and when both are spiked the concentration is double what it would be when only the surrogate is spiked.

Additional Details on Reverse: Yes / (No)

Analyst Signature: [signature] **Date:** 04/06/10

Reviewer's Signature: [signature] **Date:** 4/6/10

TPHD Analysis
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	OTER	TOT OUT
CB31A032910GRAB	73.6%	0
CB4857032910GRAB	69.6%	0
MB-033010	80.0%	0
LCS-033010	83.4%	0
CB1032910GRAB	75.8%	0
CB1032910GRAB MS	71.3%	0
CB1032910GRAB MSD	97.8%	0
CB100032910GRAB	85.4%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(51-120)	(41-121)

Prep Method: SW3510C
Log Number Range: 10-8052 to 10-8055

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: CB1032910GRAB**
Page 1 of 1 **MS/MSD**

Lab Sample ID: QQ22C
LIMS ID: 10-8054
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Date Extracted MS/MSD: 03/30/10

Sample Amount MS: 500 mL
MSD: 500 mL

Date Analyzed MS: 03/31/10 18:50
MSD: 03/31/10 19:10

Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL

Instrument/Analyst MS: FID/MS
MSD: FID/MS

Dilution Factor MS: 1.00
MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	< 0.25	1.97	3.00	65.7%	2.58	3.00	86.0%	26.8%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	71.3%	97.8%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: LCS-033010**
LAB CONTROL

Lab Sample ID: LCS-033010
LIMS ID: 10-8054
Matrix: Water
Data Release Authorized:
Reported: 04/06/10

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/29/10
Date Received: 03/29/10

Date Extracted: 03/30/10
Date Analyzed: 03/31/10 15:53
Instrument/Analyst: FID/MS

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.24	3.00	74.7%

TPHD Surrogate Recovery

o-Terphenyl	83.4%

Results reported in mg/L

TPH METHOD BLANK SUMMARY

BLANK NO.

QQ33MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: QQ22 Project No.: LLA

Date Extracted: 03/30/10 Matrix: LIQUID

Date Analyzed : 03/31/10 Instrument ID : FID9

Time Analyzed : 1533

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	QQ33LCSW1	QQ33LCSW1	03/31/10
02	CB31A032910G	QQ22A	03/31/10
03	CB4857032910	QQ22B	03/31/10
04	CB1032910GRA	QQ22C	03/31/10
05	CB1032910GRA	QQ22CMS	03/31/10
06	CB1032910GRA	QQ22CMSD	03/31/10
07	CB100032910G	QQ22D	03/31/10

FORM IV TPH

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: QQ22 Project: LLA

Instrument ID: FID9 GC Column: RTX-1

Run Date: 03/31/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.91 TRIAC: 7.08

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	03/31/10	1315	4.91	7.08
02	IB	IB	03/31/10	1335	4.91	7.08
03	ZZZZZ	ZZZZZ	03/31/10	1354	4.91	7.08
04	MOIL#1	MOIL#1	03/31/10	1414	4.92	7.09
05	DIESEL#1	DIESEL#1	03/31/10	1513	4.92	7.08
06	QQ33MBW1	QQ33MBW1	03/31/10	1533	4.91	7.08
07	QQ33LCSW1	QQ33LCSW1	03/31/10	1553	4.92	7.08
08	ZZZZZ	ZZZZZ	03/31/10	1612	4.91	7.08
09	ZZZZZ	ZZZZZ	03/31/10	1632	4.91	7.08
10	ZZZZZ	ZZZZZ	03/31/10	1652	4.91	7.08
11	DIESEL#2	DIESEL#2	03/31/10	1712	4.91	7.08
12	MOIL#2	MOIL#2	03/31/10	1732	4.92	7.09
13	CB31A032910G	QQ22A	03/31/10	1751	4.91	7.09
14	CB4857032910	QQ22B	03/31/10	1811	4.91	7.08
15	CB1032910GRA	QQ22C	03/31/10	1831	4.91	7.08
16	CB1032910GRA	QQ22CMS	03/31/10	1850	4.91	7.08
17	CB1032910GRA	QQ22CMSD	03/31/10	1910	4.92	7.08
18	CB100032910G	QQ22D	03/31/10	1930	4.91	7.09
19	DIESEL#3	DIESEL#3	03/31/10	1949	4.91	7.08
20	MOIL#3	MOIL#3	03/31/10	2009	4.92	7.09

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

FORM VIII TPH

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: QQ22 Project: LLA

Instrument ID: FID9 GC Column: RTX-1

Run Date: 03/31/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.91 TRIAC: 7.08

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	03/30/10	1856	4.91	7.08
02	ZZZZZ	ZZZZZ	03/30/10	1915	4.91	7.08
03	ZZZZZ	ZZZZZ	03/30/10	1935	4.91	7.09
04	IB	IB	03/30/10	1955	4.91	7.08
05	ZZZZZ	ZZZZZ	03/30/10	2024	4.92	7.10
06	ZZZZZ	ZZZZZ	03/30/10	2057	4.92	7.10
07	ZZZZZ	ZZZZZ	03/30/10	2117	4.91	7.09
08	ZZZZZ	ZZZZZ	03/30/10	2136	4.91	7.08
09	DIESEL 50	DIESEL 50	03/30/10	2156	4.91	7.08
10	DIESEL 100	DIESEL 100	03/30/10	2216	4.91	7.08
11	DIESEL 250	DIESEL 250	03/30/10	2235	4.91	7.09
12	DIESEL 500	DIESEL 500	03/30/10	2255	4.92	7.08
13	DIESEL 1000	DIESEL 1000	03/30/10	2314	4.93	7.08
14	DIESEL 2500	DIESEL 2500	03/30/10	2334	4.98*	7.09
15	DIESEL ICV	DIESEL ICV	03/30/10	2354	4.91	7.08
16	ZZZZZ	ZZZZZ	03/31/10	0013	4.91	7.08
17	MOIL 100	MOIL 100	03/31/10	0033	4.92	7.07
18	MOIL 250	MOIL 250	03/31/10	0052	4.92	7.08
19	MOIL 500	MOIL 500	03/31/10	0112	4.92	7.09
20	MOIL 1000	MOIL 1000	03/31/10	0131	4.91	7.11
21	ZZZZZ	ZZZZZ	03/31/10	0151	4.91	7.08
22	MOIL 2500	MOIL 2500	03/31/10	0210	4.91	7.12
23	ZZZZZ	ZZZZZ	03/31/10	0230	4.91	7.08
24	MOIL 5000	MOIL 5000	03/31/10	0249	4.91	7.14*
25	MOIL ICV	MOIL ICV	03/31/10	0309	4.92	7.09

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

FORM VIII TPH

TPHD Analysis
Sample Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1
Matrix: Water

QC Report No: QQ22-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Data Release Authorized:
Reported: 04/06/10

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
QQ22A	CB31A032910GRAB	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8052	HC ID: **MOTOR OIL**		FID9	1.0	**Motor Oil**	**0.50**	**1.1**
					o-Terphenyl		73.6%
QQ22B	CB4857032910GRAB	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8053	HC ID: **MOTOR OIL**		FID9	1.0	**Motor Oil**	**0.50**	**0.68**
					o-Terphenyl		69.6%
MB-033010	Method Blank	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8054	HC ID: ---		FID9	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		80.0%
QQ22C	CB1032910GRAB	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8054	HC ID: ---		FID9	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		75.8%
QQ22D	CB100032910GRAB	03/30/10	03/31/10	1.00	Diesel	0.25	< 0.25 U
10-8055	HC ID: **MOTOR OIL**		FID9	1.0	**Motor Oil**	**0.50**	**1.0**
					o-Terphenyl		85.4%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A014.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: QQ22A
Client ID: CB31A032910GRAB
Injection: 31-MAR-2010 17:51

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.879	0.022	2729	4061	GAS (Tol-C12)	125707	10
C8	2.032	0.041	2435	2545	DIESEL (C12-C24)	1532410	75
C10	2.619	0.003	1329	718	M.OIL (C24-C38)	7009235	530
C12	3.205	-0.007	504	480	AK-102 (C10-C25)	1822334	80
C14	3.747	0.005	87	29	AK-103 (C25-C36)	6211576	657
C16	4.224	0.010	1273	1660			
C18	4.678	-0.002	3833	7822			
C20	5.219	-0.002	11549	12348			
C22	5.693	-0.004	25947	31524			
C24	6.102	-0.003	50826	47173			
C25	6.290	-0.002	89352	180740			
C26	6.463	-0.001	78248	118380			
C28	6.781	0.000	97121	178144			
C32	7.376	0.002	73157	88739			
C34	7.719	0.000	49647	97348	BUNKERC (C10-C38)	8585948	979
Filter Peak	7.599	0.002	40328	43331			
C36	8.145	-0.004	34310	46533			
C38	8.697	-0.002	18101	42927			
C40	9.426	0.000	10143	18507			
o-terph	4.907	-0.002	970768	817972			
Triacon Surr	7.087	0.005	1120281	790163			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	817972	33.1	73.6
Triacontane	790163	34.6	76.9

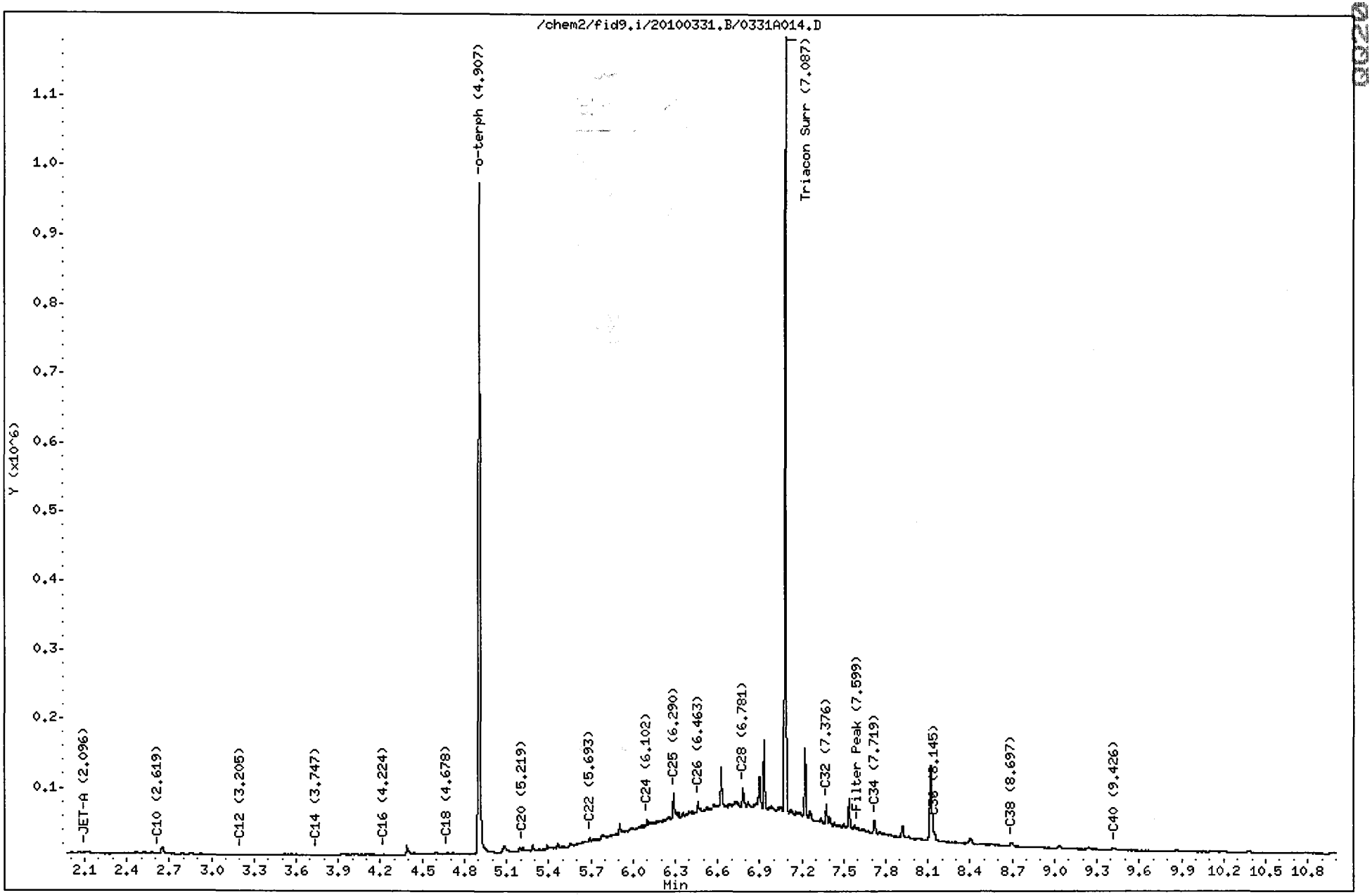
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A014.D
Date : 31-MAR-2010 17:51
Client ID: CB31A032910GRAB
Sample Info: QQ22A

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A015.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: QQ22B
Client ID: CB4857032910GRAB
Injection: 31-MAR-2010 18:11
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.843	-0.014	2758	4602	GAS (Tol-C12)	112936	9
C8	2.033	0.042	2141	2432	DIESEL (C12-C24)	940883	46
C10	2.621	0.004	1214	720	M.OIL (C24-C38)	4462357	338
C12	3.204	-0.008	494	546	AK-102 (C10-C25)	1146333	50
C14	3.745	0.003	53	22	AK-103 (C25-C36)	3950342	418
C16	4.204	-0.010	578	381			
C18	4.681	0.001	2225	4193			
C20	5.221	0.001	6766	8281			
C22	5.695	-0.002	15457	20891			
C24	6.104	-0.001	31925	34736			
C25	6.289	-0.003	58300	62279			
C26	6.461	-0.003	48587	56999			
C28	6.778	-0.003	61611	66601			
C32	7.371	-0.003	44856	55916			
C34	7.715	-0.003	30550	65039	BUNKERC (C10-C38)	5438392	620
Filter Peak	7.600	0.003	25719	33458			
C36	8.162	0.013	13880	11130			
C38	8.686	-0.013	11043	22734			
C40	9.424	-0.003	6279	3801			
o-terph	4.908	-0.001	831412	772959			
Triacon Surr	7.082	0.000	1079410	745150			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	772959	31.3	69.6
Triacontane	745150	32.6	72.5

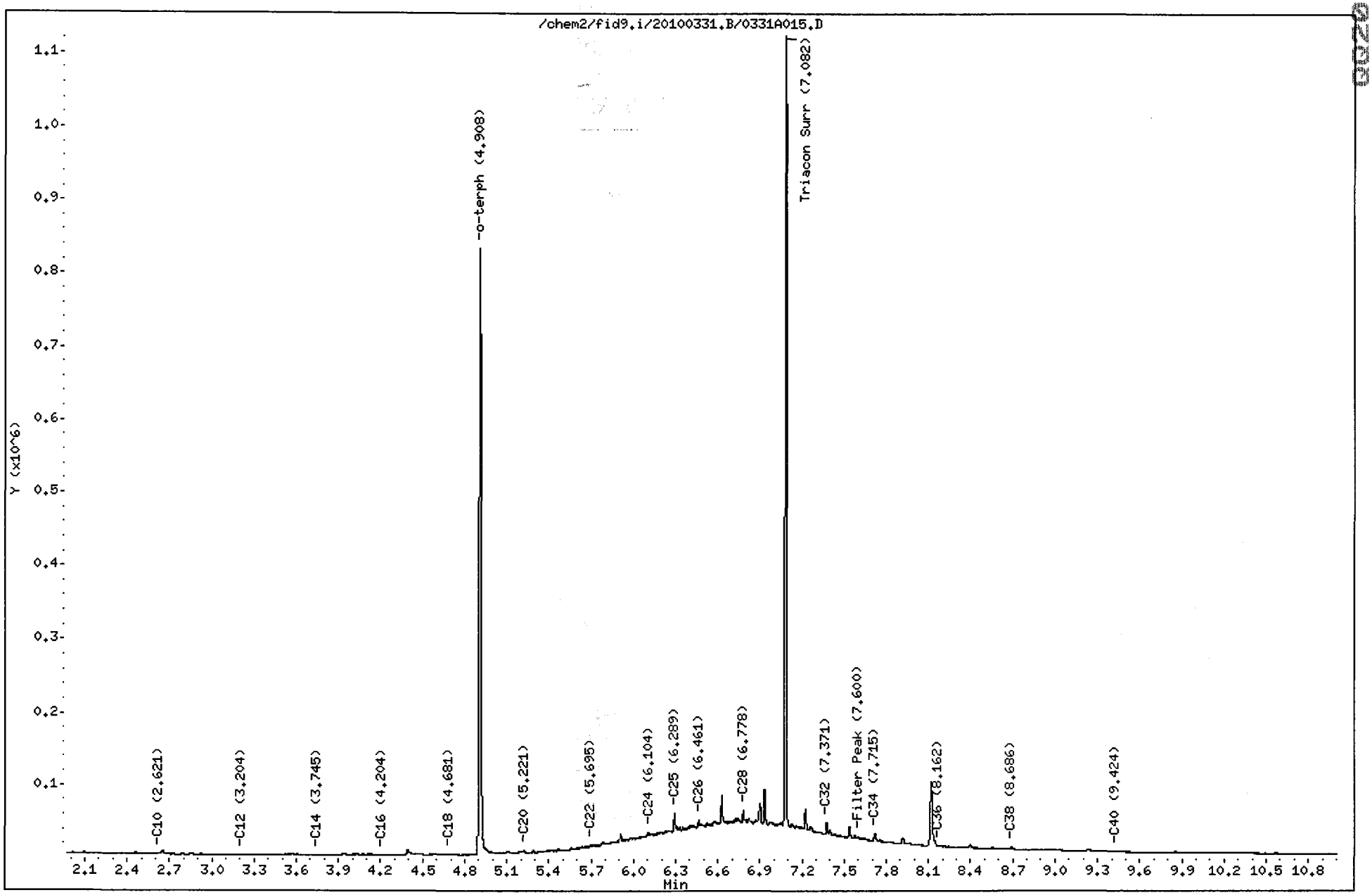
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A015.D
Date : 31-MAR-2010 18:11
Client ID: CB4857032910GRAB
Sample Info: QQ22B

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Mn 4/5/10

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A016.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: QQ22C
Client ID: CB1032910GRAB
Injection: 31-MAR-2010 18:31
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.844	-0.014	2677	6265	GAS (Tol-C12)	121081	9
C8	2.035	0.044	1996	2234	DIESEL (C12-C24)	130109	6
C10	2.635	0.018	1818	2229	M.OIL (C24-C38)	552440	42
C12	3.205	-0.008	733	1181	AK-102 (C10-C25)	187095	8
C14	3.748	0.005	352	260	AK-103 (C25-C36)	494956	52
C16	4.207	-0.008	615	834			
C18	4.681	0.001	439	465			
C20	5.213	-0.008	648	389			
C22	5.692	-0.005	1237	1476			
C24	6.111	0.005	3000	3573			
C25	6.294	0.002	13583	15084			
C26	6.465	0.001	4147	5730			
C28	6.780	-0.002	5228	5871			
C32	7.375	0.001	4974	7382			
C34	7.719	0.000	2546	3437	BUNKERC (C10-C38)	725050	83
Filter Peak	7.601	0.004	2601	3966			
C36	8.125	-0.024	60363	139194			
C38	8.703	0.003	1434	1415			
C40	9.429	0.002	1266	527			
o-terph	4.909	-0.001	729964	842026			
Triacon Surr	7.081	-0.001	1211056	806270			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	842026	34.1	75.8
Triacontane	806270	35.3	78.5

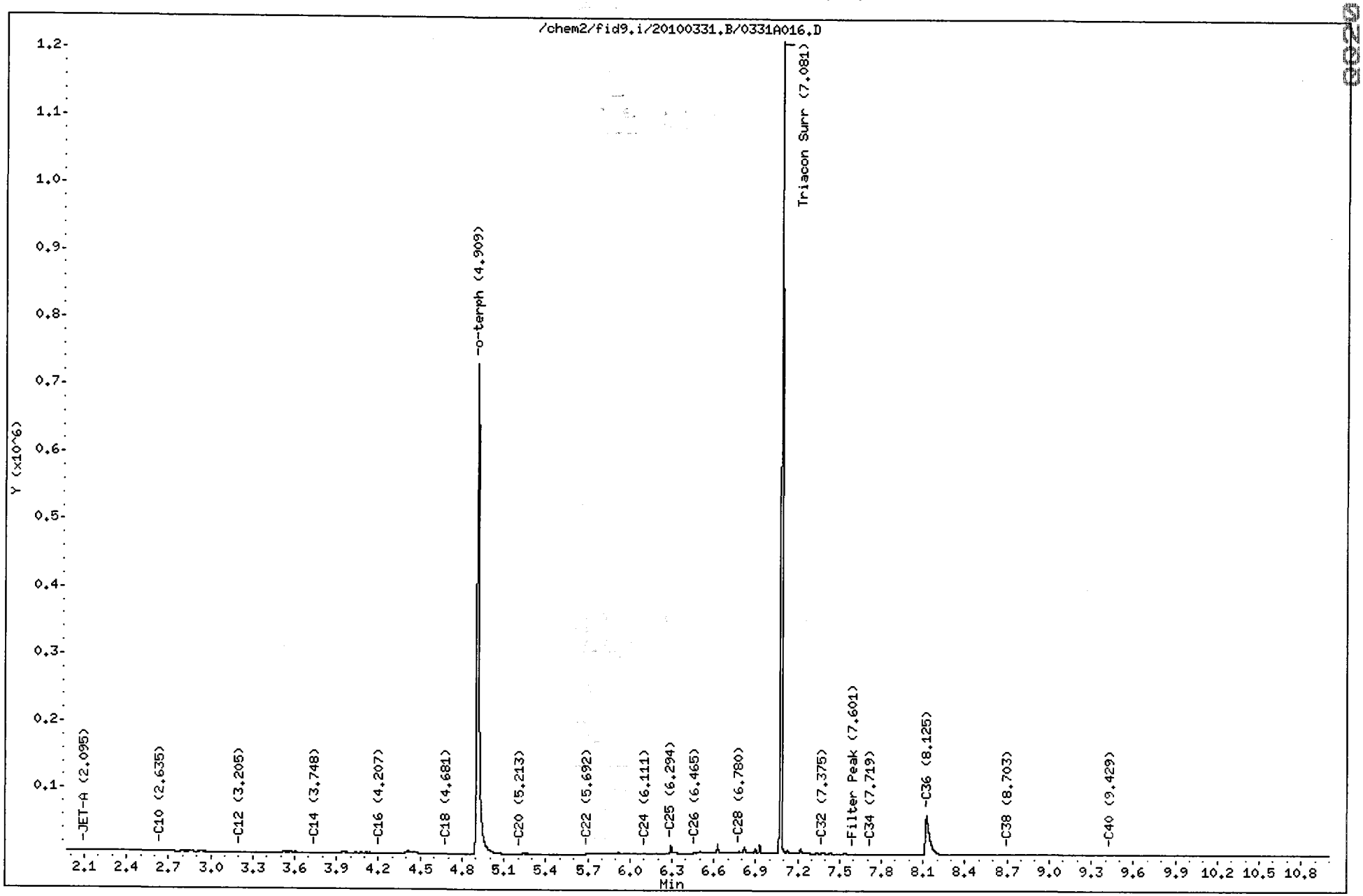
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A016.D
Date : 31-MAR-2010 18:31
Client ID: CB1032910GRAB
Sample Info: QQ22C

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A019.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: QQ22D
Client ID: CB100032910GRAB
Injection: 31-MAR-2010 19:30
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.843	-0.014	2775	4201	GAS (Tol-C12)	126936	10
C8	2.033	0.042	2263	1771	DIESEL (C12-C24)	1473565	72
C10	2.621	0.004	1158	614	M.OIL (C24-C38)	6909253	523
C12	3.205	-0.007	641	502	AK-102 (C10-C25)	1770587	77
C14	3.731	-0.011	34	8	AK-103 (C25-C36)	6142803	650
C16	4.224	0.009	1718	1426			
C18	4.679	-0.001	3833	6253			
C20	5.219	-0.002	11221	11212			
C22	5.694	-0.003	24611	25991			
C24	6.103	-0.002	50447	52539			
C25	6.290	-0.002	87685	115131			
C26	6.464	0.000	78607	88618			
C28	6.783	0.001	97602	185091			
C32	7.377	0.003	71108	83127			
C34	7.720	0.001	48376	88588	BUNKERC (C10-C38)	8423010	960
Filter Peak	7.599	0.002	38287	9868			
C36	8.128	-0.021	205493	280907			
C38	8.701	0.002	17150	42219			
C40	9.426	0.000	9767	7988			
o-terph	4.909	-0.001	1175244	948467			
Triacon Surr	7.088	0.006	1239465	915004			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	948467	38.4	85.4
Triacontane	915004	40.1	89.0

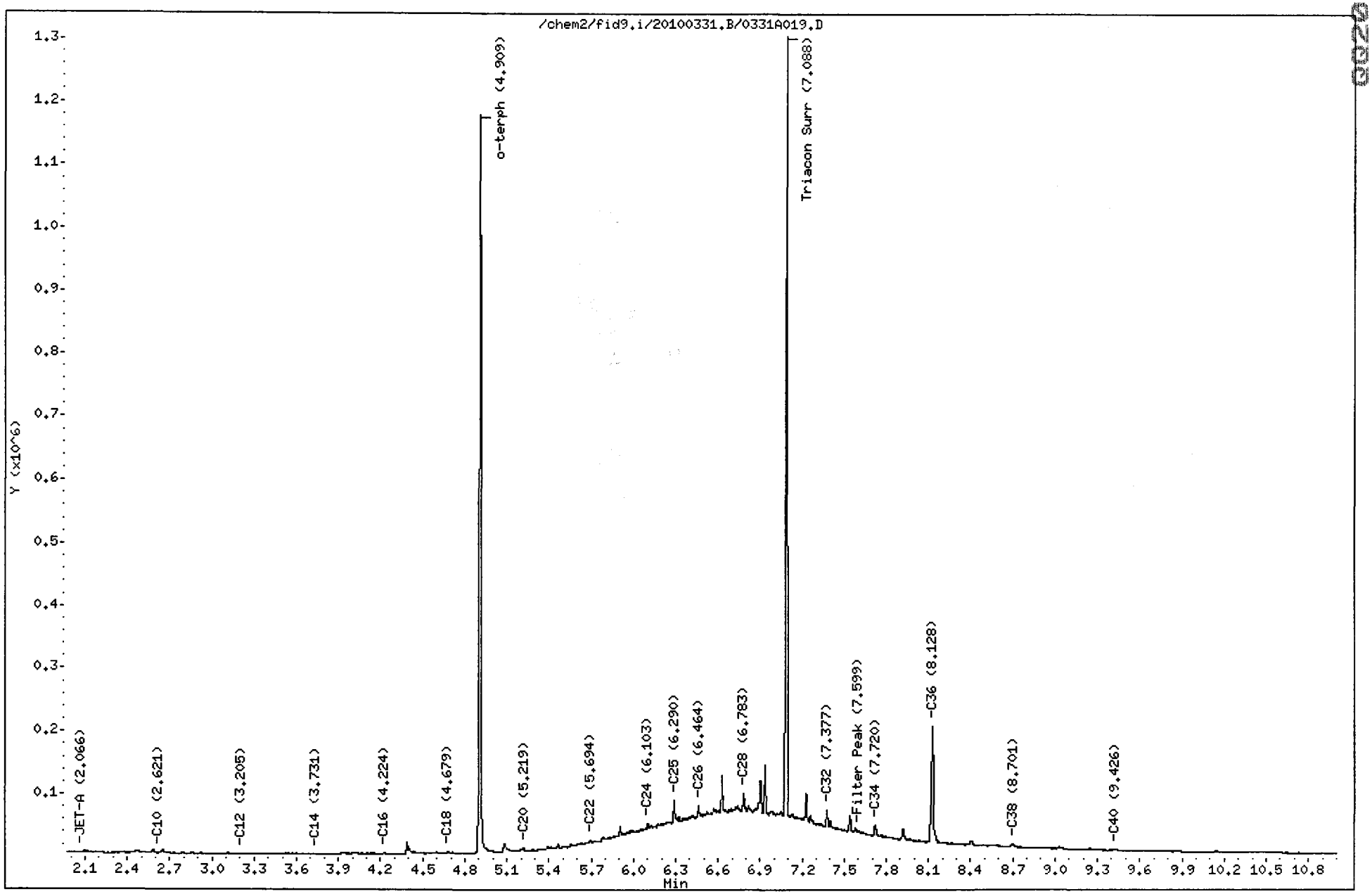
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A019.D
Date : 31-MAR-2010 19:30
Client ID: CB100032910GRAB
Sample Info: QQ22D

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Water
Date Received: 03/29/10

ARI Job: QQ22
Project: Lora Lake Apartments
POS-LLA

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
10-8052-QQ22A	CB31A032910GRAB	500 mL	1.00 mL	03/30/10
10-8053-QQ22B	CB4857032910GRAB	500 mL	1.00 mL	03/30/10
10-8054-033010MB1	Method Blank	500 mL	1.00 mL	03/30/10
10-8054-033010LCS1	Lab Control	500 mL	1.00 mL	03/30/10
10-8054-QQ22C	CB1032910GRAB	500 mL	1.00 mL	03/30/10
10-8054-QQ22CMS	CB1032910GRAB	500 mL	1.00 mL	03/30/10
10-8054-QQ22CMSD	CB1032910GRAB	500 mL	1.00 mL	03/30/10
10-8055-QQ22D	CB100032910GRAB	500 mL	1.00 mL	03/30/10

TPHD Analysis
Standard Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

6a
NW DIESEL INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

Instrument: FID9.I Project: LLA

Calibration Date: 30-MAR-2010 SDG No.: QQ22

Diesel Range	RF1 50	RF2 100	RF3 250	RF4 500	RF5 1000	RF6 2500	Ave RF	%RSD
WA Diesel	20916	20631	19798	20380	19708	21051	20414	2.8
AK Diesel	23772	23205	22176	22742	21923	23441	22876	3.2
OR Diesel	23870	23306	22304	22890	22090	23630	23015	3.1
o-Terph	21497	23322	24625	25434	24275	28974	24688	10.1

<- Indicates %RSD outside limits
Surrogate areas are not included in Diesel RF calculation.

Quant Ranges : WA Diesel C12-C24 (3.216-6.107)
AK Diesel C10-C25 (2.631-6.294)
OR Diesel C10-C28 (2.631-6.782)

Calibration Files	Analysis Time
0330A017.D	30-MAR-2010 21:56
0330A018.D	30-MAR-2010 22:16
0330A019.D	30-MAR-2010 22:35
0330A020.D	30-MAR-2010 22:55
0330A021.D	30-MAR-2010 23:14
0330A022.D	30-MAR-2010 23:34

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-MAY-2009 14:08
End Cal Date : 31-MAR-2010 02:49
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem2/fid9.i/20100330.B/ftphfid9a.m
Cal Date : 31-Mar-2010 13:30 marys
Curve Type : Average

Calibration File Names:
Level 1: /chem2/fid9.i/20100330.B/0330A009.D
Level 2: /chem2/fid9.i/20100330.B/0330A017.D
Level 3: /chem2/fid9.i/20100330.B/0330A018.D
Level 4: /chem2/fid9.i/20100330.B/0330A019.D
Level 5: /chem2/fid9.i/20100330.B/0330A020.D
Level 6: /chem2/fid9.i/20100330.B/0330A021.D
Level 7: /chem2/fid9.i/20100330.B/0330A022.D
Level 8: /chem2/fid9.i/20100330.B/0330A025.D
Level 9: /chem2/fid9.i/20100330.B/0330A026.D
Level 10: /chem2/fid9.i/20100330.B/0330A027.D
Level 11: /chem2/fid9.i/20100330.B/0330A028.D
Level 12: /chem2/fid9.i/20100330.B/0330A030.D
Level 13: /chem2/fid9.i/20100330.B/0330A032.D

Compound	0.000e+00 Level 1	0.000e+00 Level 2	0.000e+00 Level 3	0.000e+00 Level 4	0.000e+00 Level 5	0.000e+00 Level 6	RRF	% RSD	
	0.000e+00 Level 7	0.000e+00 Level 8	0.000e+00 Level 9	0.000e+00 Level 10	0.000e+00 Level 11	0.000e+00 Level 12			
	0.000e+00 Level 13								
1 Toluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
~~37 JET A~~	+++++	~~61.92000~~	~~25.15000~~	2.00400	19.53000	3.37100			
	~~16.64680~~	+++++	+++++	+++++	+++++	+++++			
	+++++						~~21.43697~~	~~101.845~~	<-

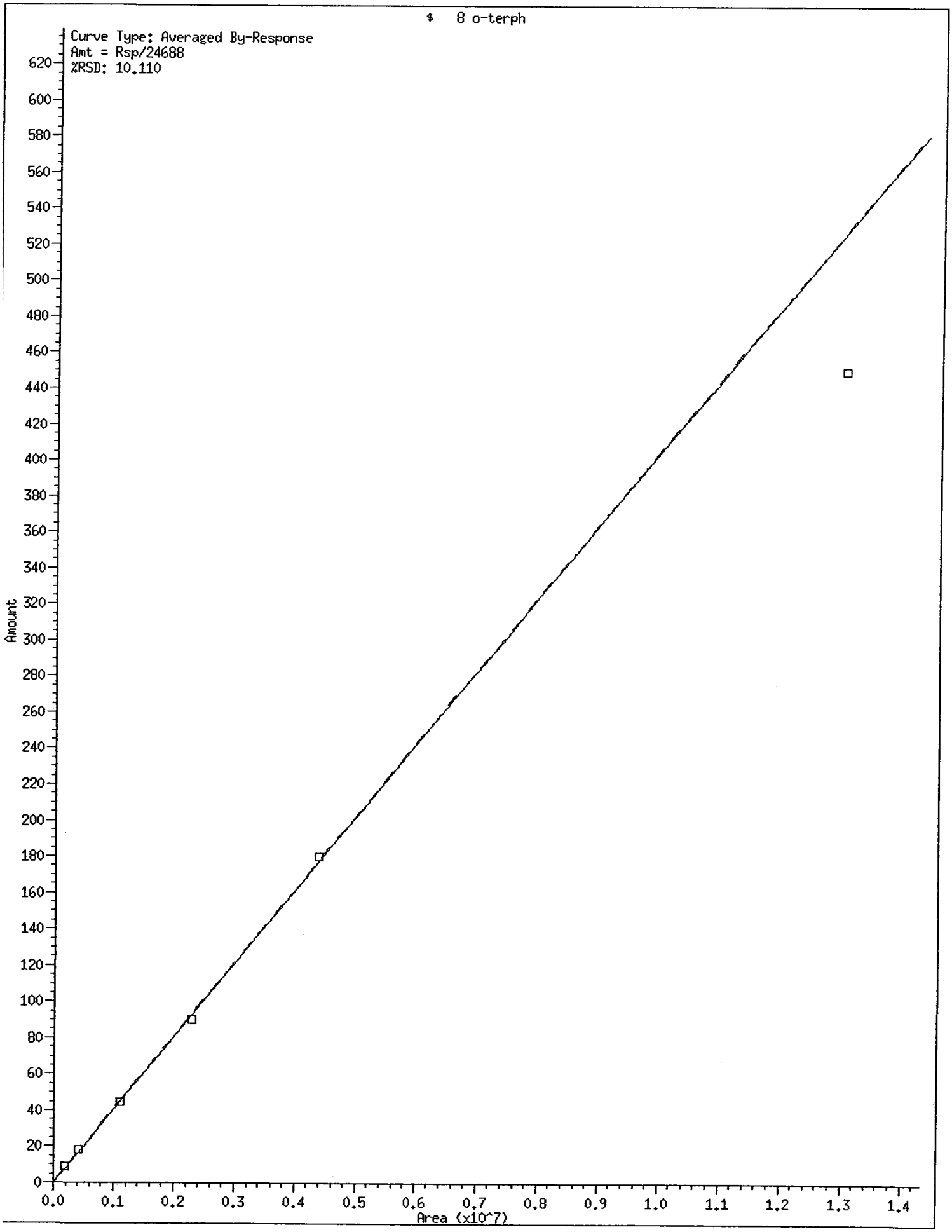
MP.

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-MAY-2009 14:08
End Cal Date : 31-MAR-2010 02:49
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem2/fid9.i/20100330.B/ftphfid9a.m
Cal Date : 31-Mar-2010 13:30 marys
Curve Type : Average

Compound	0.000e+00 Level 1	0.000e+00 Level 2	0.000e+00 Level 3	0.000e+00 Level 4	0.000e+00 Level 5	0.000e+00 Level 6	RRF	% RSD	
	0.000e+00 Level 7	0.000e+00 Level 8	0.000e+00 Level 9	0.000e+00 Level 10	0.000e+00 Level 11	0.000e+00 Level 12			
	0.000e+00 Level 13								
38 Bunker C	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
39 Creosote	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
$ 8 o-terph	+++++	21497	23322	24625	25434	24275			
	28974	+++++	+++++	+++++	+++++	+++++			
	+++++						24688	10.110	
$ 15 Triacon Surr	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	21257	24868	25078	25181	19861			
	20762						22835	10.780	


8 o-terph
Curve Type: Averaged By-Response
Amt = Rsp/24688
%RSD: 10.110
Amount
Area (x10^7)
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A009.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: RT
Client ID:
Injection: 30-MAR-2010 18:56

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.859	0.000	1849382	725042	GAS (Tol-C12)	424779128	32819
C8	2.032	0.000	365755	197363	DIESEL (C12-C24)	1941473	95
C10	2.631	0.000	553690	303271	M.OIL (C24-C38)	2519460	191
C12	3.216	0.000	462441	299408	AK-102 (C10-C25)	2597032	114
C14	3.742	0.000	476699	305952	AK-103 (C25-C36)	2154908	228
C16	4.215	0.000	524815	310034			
C18	4.682	0.000	497835	315447			
C20	5.223	0.000	472375	313366			
C22	5.699	0.000	544052	326900			
C24	6.107	0.000	584734	324587			
C25	6.294	0.000	798157	451025			
C26	6.465	0.000	576386	320091			
C28	6.782	0.000	573864	324327			
C32	7.376	0.000	455265	314185			
C34	7.722	0.000	368316	308048	BUNKERC (C10-C38)	5111593	583
Filter Peak	7.597	0.000	2110	1130			
C36	8.152	0.000	278694	298836			
C38	8.707	0.000	195285	310963			
C40	9.437	0.000	137868	302932			
o-terph	4.912	0.000	1238656	1043518			
Triacon Surr	7.083	0.000	1492765	1083949			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1043518	42.3	93.9
Triacontane	1083949	47.5	105.5

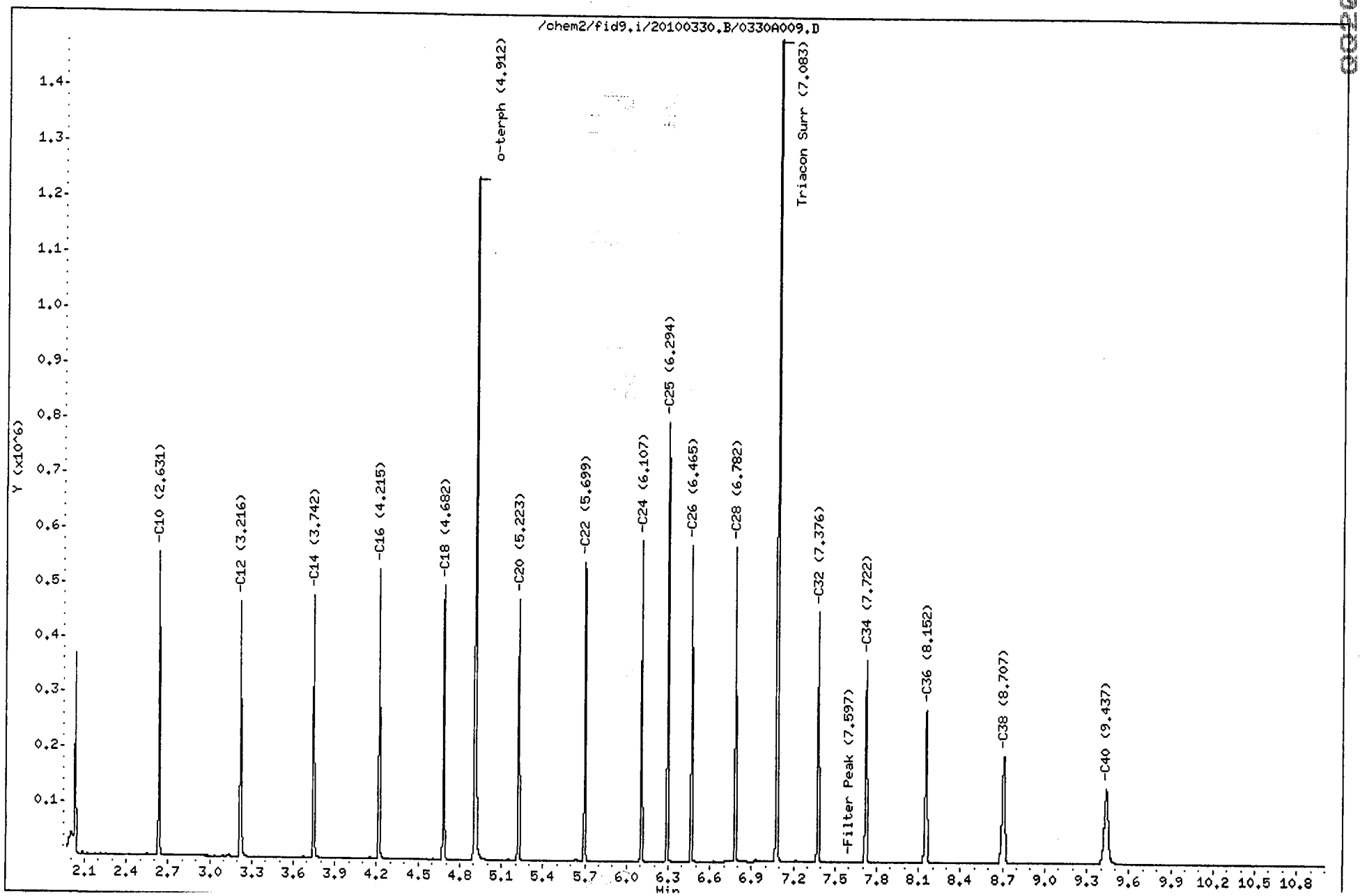
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A009.D
Date : 30-MAR-2010 18:56
Client ID:
Sample Info: RT

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A012.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: IB
Client ID:
Injection: 30-MAR-2010 19:55

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.863	0.004	3482	2162	GAS (Tol-C12)	156568	12
C8	2.030	-0.002	2550	3421	DIESEL (C12-C24)	39779	2
C10	2.639	0.009	1576	3052	M.OIL (C24-C38)	228604	17
C12	3.216	0.000	875	936	AK-102 (C10-C25)	88421	4
C14	3.742	0.000	542	366	AK-103 (C25-C36)	164567	17
C16	4.219	0.003	227	61			
C18	4.683	0.001	62	57			
C20	5.218	-0.005	369	305			
C22	5.698	-0.001	57	35			
C24	6.109	0.002	405	204			
C25	6.278	-0.016	383	330			
C26	6.459	-0.006	226	81			
C28	6.782	0.000	3085	6035			
C32	7.372	-0.004	2507	7951			
C34	----				BUNKERC (C10-C38)	312302	36
Filter Peak	7.599	0.002	2241	2087			
C36	8.148	-0.004	1845	694			
C38	8.707	0.000	2051	651			
C40	9.433	-0.004	2021	2522			
o-terph	4.909	-0.003	1172486	1217896			
Triacon Surr	7.079	-0.004	1251116	940779			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1217896	49.3	109.6
Triacontane	940779	41.2	91.6

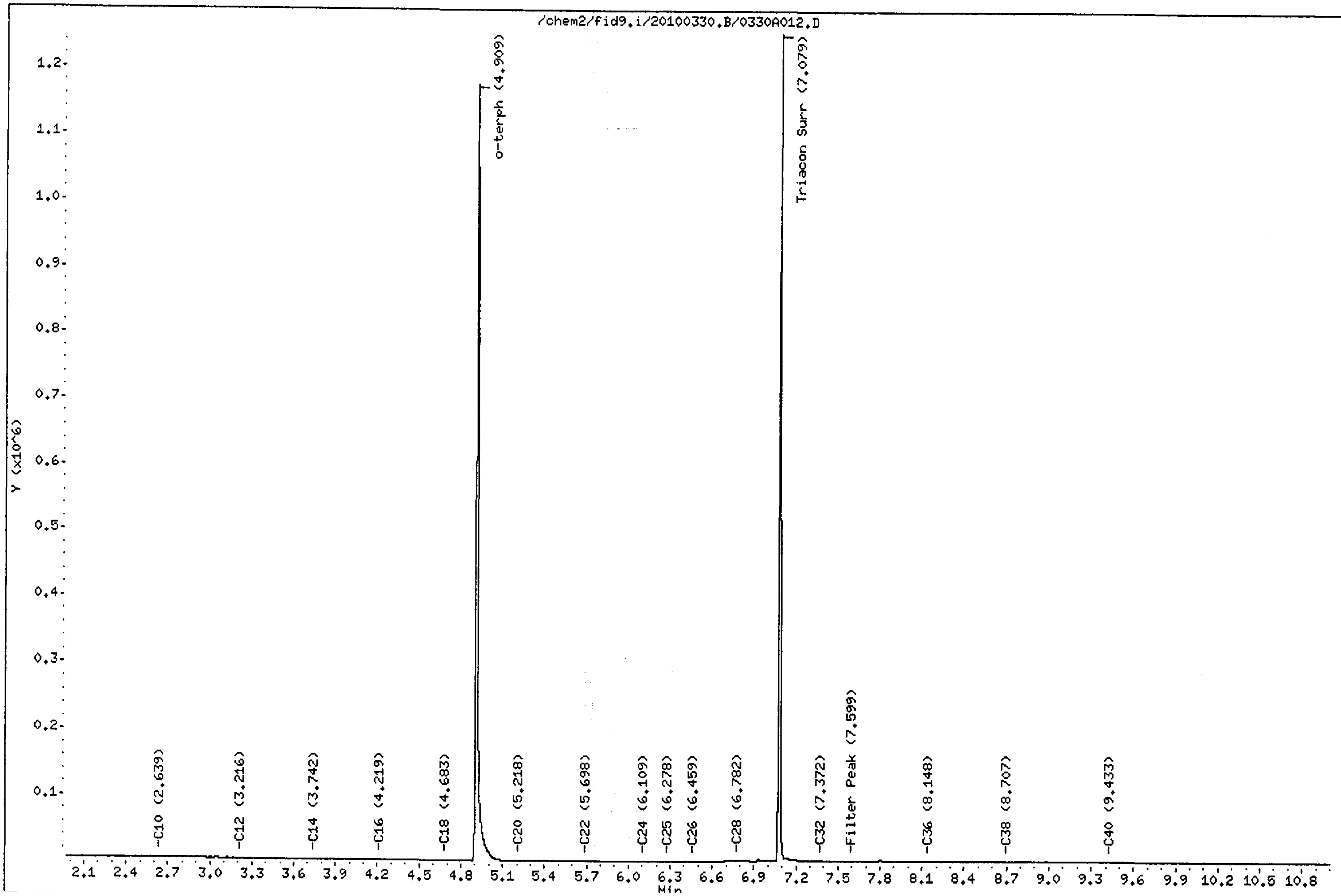
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A012.D
Date : 30-MAR-2010 19:55
Client ID:
Sample Info: IB

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A017.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL 50
Client ID:
Injection: 30-MAR-2010 21:56

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.848	-0.012	4164	5065	GAS (Tol-C12)	259596	20
C8	2.035	0.004	2644	3151	DIESEL (C12-C24)	1045792	51
C10	2.627	-0.003	1910	793	M.OIL (C24-C38)	55961	4
C12	3.204	-0.012	11342	11220	AK-102 (C10-C25)	1188593	52
C14	3.745	0.003	18348	26016	AK-103 (C25-C36)	37199	4
C16	4.217	0.002	34764	42384			
C18	4.684	0.002	26603	31220			
C20	5.213	-0.009	3937	781			
C22	5.693	-0.006	2148	1091			
C24	6.105	-0.001	817	1084			
C25	6.304	0.010	326	157			
C26	6.459	-0.006	135	99			
C28	6.785	0.003	51	33			
C32	7.374	-0.002	406	175			
C34	7.726	0.004	479	262	BUNKERC (C10-C38)	1243184	142
Filter Peak	7.593	-0.004	499	385			
C36	8.152	0.001	533	231			
C38	8.707	0.000	579	206			
C40	9.438	0.001	620	305			
o-terph	4.910	-0.002	185343	193475			
Triacon Surr	7.082	-0.002	231	87			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	193475	7.8	17.4
Triacontane	87	0.0	0.0

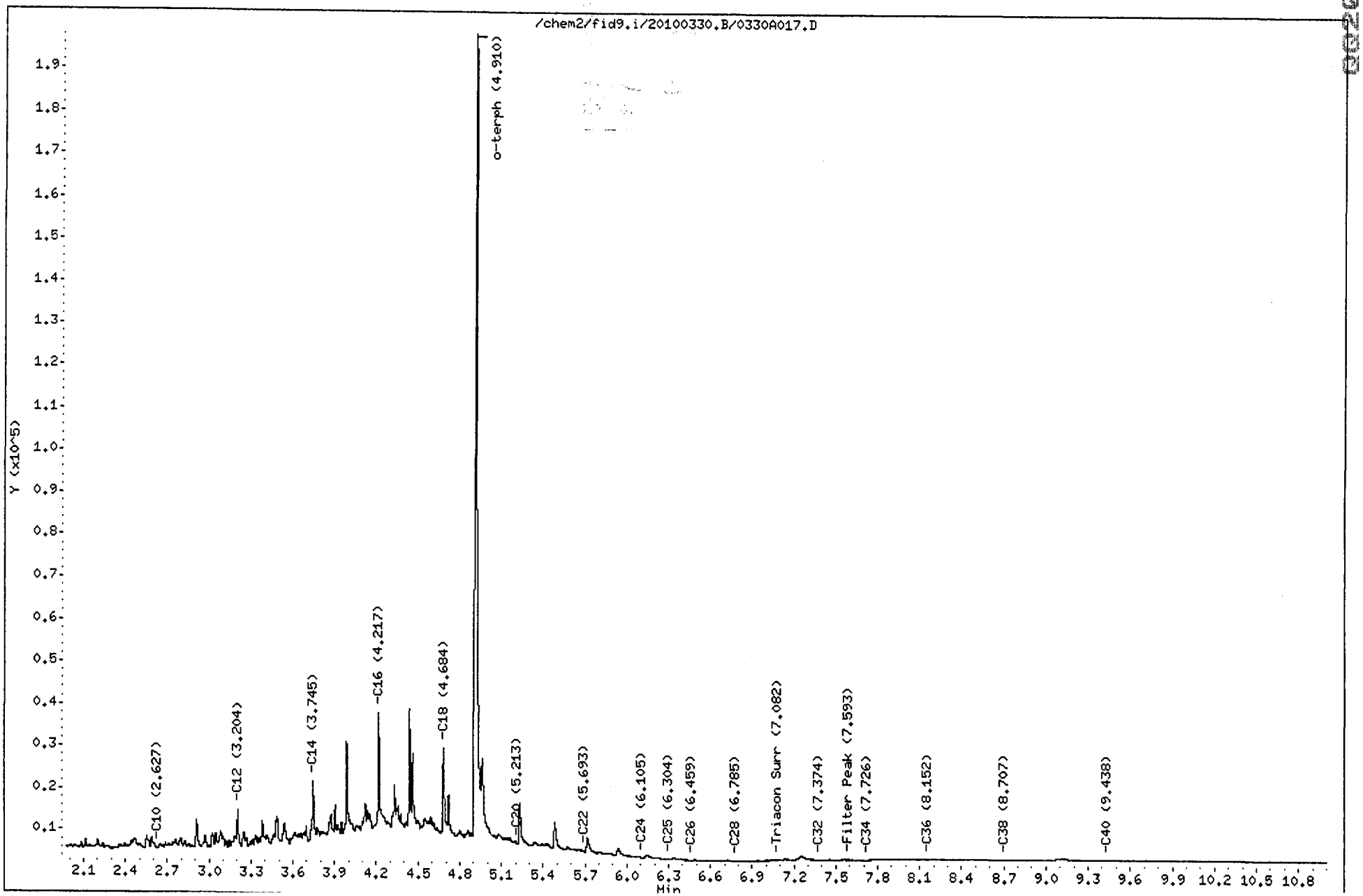
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A017.D
Date : 30-MAR-2010 21:56
Client ID:
Sample Info: DIESEL 50

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A018.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL 100
Client ID:
Injection: 30-MAR-2010 22:16

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.844	-0.015	4700	5686	GAS (Tol-C12)	406757	31
C8	2.033	0.001	3188	4051	DIESEL (C12-C24)	2063112	101
C10	2.645	0.015	4603	7264	M.OIL (C24-C38)	58328	4
C12	3.204	-0.012	22048	21283	AK-102 (C10-C25)	2320504	101
C14	3.742	0.000	42578	31123	AK-103 (C25-C36)	38495	4
C16	4.214	-0.001	81045	72473			
C18	4.680	-0.002	64451	54185			
C20	5.225	0.003	35056	37343			
C22	5.693	-0.006	4083	812			
C24	6.107	0.000	1782	1083			
C25	6.294	0.001	845	487			
C26	6.474	0.009	331	115			
C28	6.782	0.000	24	10			
C32	7.372	-0.003	307	254			
C34	7.724	0.002	380	233	BUNKERC (C10-C38)	2373569	271
Filter Peak	7.602	0.005	387	179			
C36	8.154	0.003	403	216			
C38	8.706	-0.001	452	187			
C40	9.441	0.004	525	307			
o-terph	4.908	-0.004	471147	419801			
Triacon Surr	7.084	0.001	170	83			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	419801	17.0	37.8
Triacontane	83	0.0	0.0

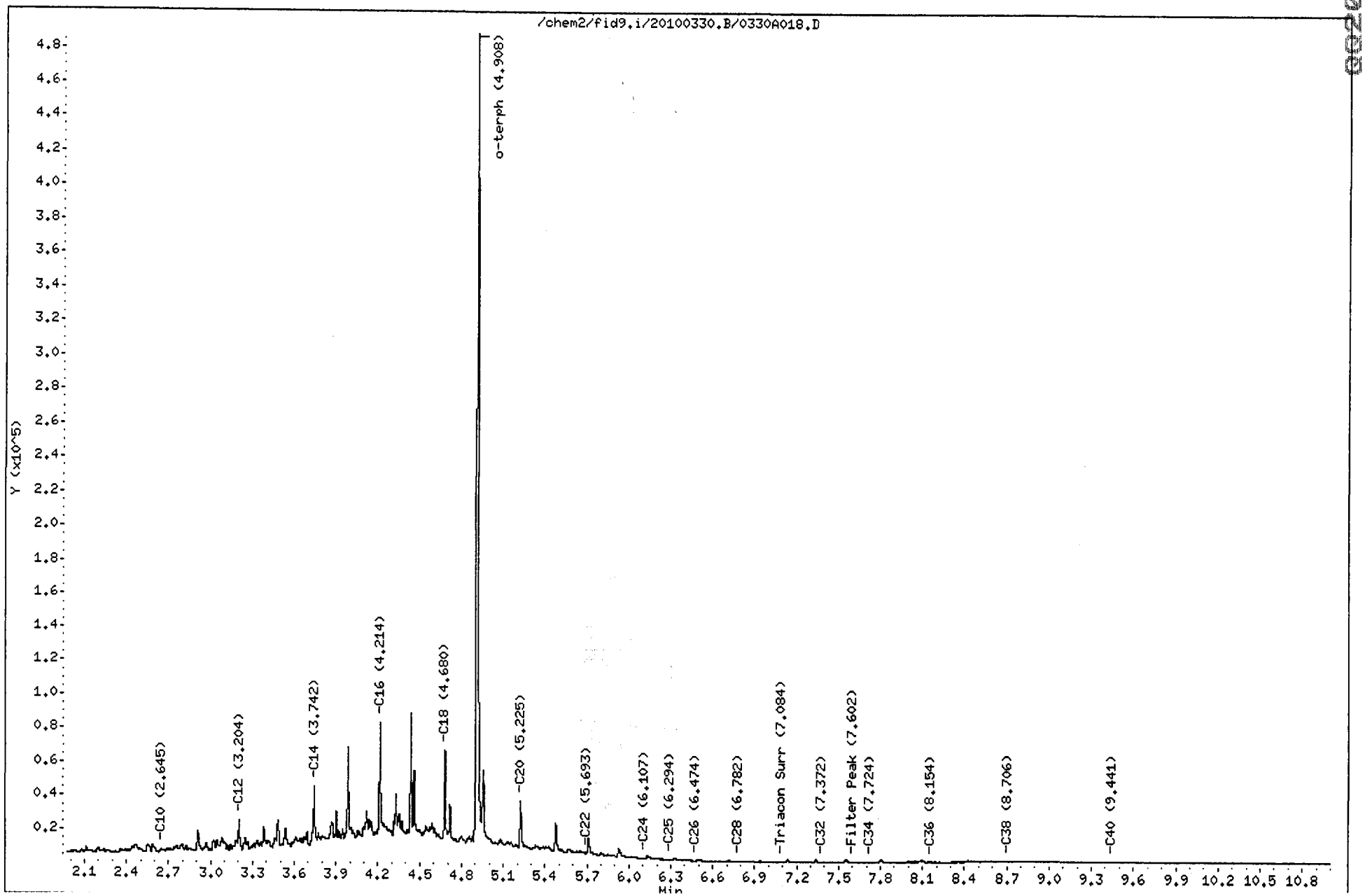
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A018.D
Date : 30-MAR-2010 22:16
Client ID:
Sample Info: DIESEL 100

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A019.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL 250
Client ID:
Injection: 30-MAR-2010 22:35
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.851	-0.008	5466	7986	GAS (Tol-C12)	837292	65
C8	2.036	0.004	4348	7353	DIESEL (C12-C24)	4949393	242
C10	2.627	-0.004	5385	2012	M.OIL (C24-C38)	63645	5
C12	3.204	-0.012	53388	49892	AK-102 (C10-C25)	5543960	242
C14	3.739	-0.003	111614	73430	AK-103 (C25-C36)	40461	4
C16	4.212	-0.003	223842	142100			
C18	4.679	-0.003	169942	134682			
C20	5.221	-0.002	104124	93844			
C22	5.700	0.001	46016	49369			
C24	6.121	0.014	10889	19975			
C25	6.294	0.000	2173	558			
C26	6.472	0.007	975	401			
C28	6.783	0.001	73	44			
C32	7.374	-0.002	83	11			
C34	7.718	-0.004	138	109	BUNKERC (C10-C38)	5590148	637
Filter Peak	7.593	-0.004	143	82			
C36	8.153	0.002	155	52			
C38	8.708	0.000	199	64			
C40	9.437	0.000	240	105			
o-terph	4.913	0.001	1380045	1108107			
Triacon Surr	7.087	0.003	34	8			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1108107	44.9	99.7
Triacontane	8	0.0	0.0

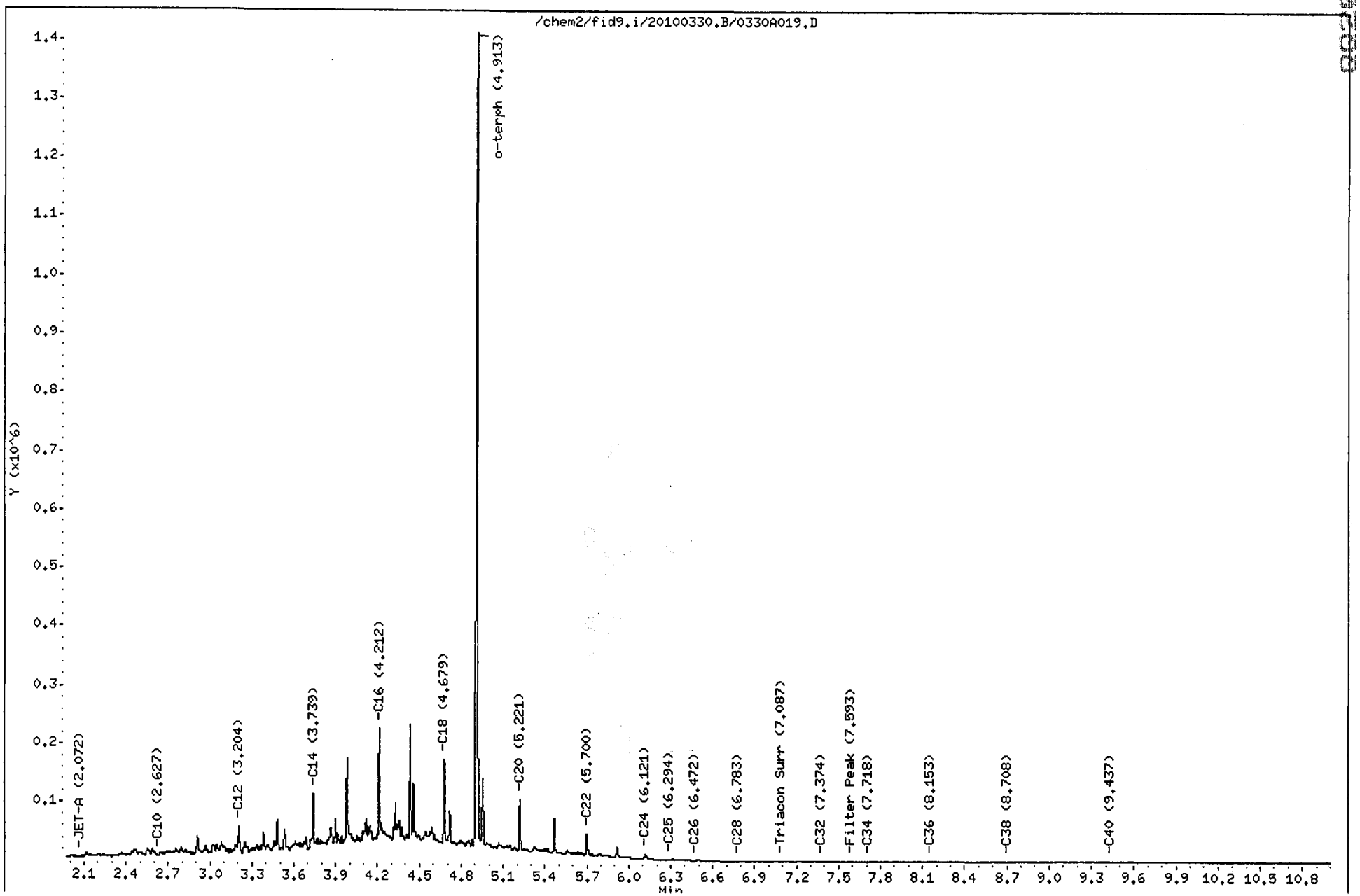
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A019.D
Date : 30-MAR-2010 22:35
Client ID:
Sample Info: DIESEL 250

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A020.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL 500
Client ID:
Injection: 30-MAR-2010 22:55

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.854	-0.005	6846	10513	GAS (Tol-C12)	1572175	121
C8	2.037	0.005	6609	14247	DIESEL (C12-C24)	10189897	499
C10	2.629	-0.001	9698	4176	M.OIL (C24-C38)	120405	9
C12	3.205	-0.011	110902	100116	AK-102 (C10-C25)	11370907	497
C14	3.737	-0.005	228677	140978	AK-103 (C25-C36)	80992	9
C16	4.212	-0.003	466661	342765			
C18	4.681	-0.001	344573	264565			
C20	5.221	-0.001	215884	191066			
C22	5.697	-0.001	104797	92783			
C24	6.113	0.006	27282	39565			
C25	6.284	-0.009	4517	900			
C26	6.456	-0.009	2393	2268			
C28	6.781	-0.001	376	284			
C32	7.372	-0.004	52	32			
C34	7.723	0.001	41	10	BUNKERC (C10-C38)	11455014	1306
Filter Peak	7.599	0.002	47	8			
C36	8.144	-0.008	66	40			
C38	8.706	-0.001	80	49			
C40	9.432	-0.005	85	28			
o-terph	4.921	0.009	2398897	2289081			
Triacon Surr	7.084	0.000	86	26			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	2289081	92.7	206.0
Triacontane	26	0.0	0.0

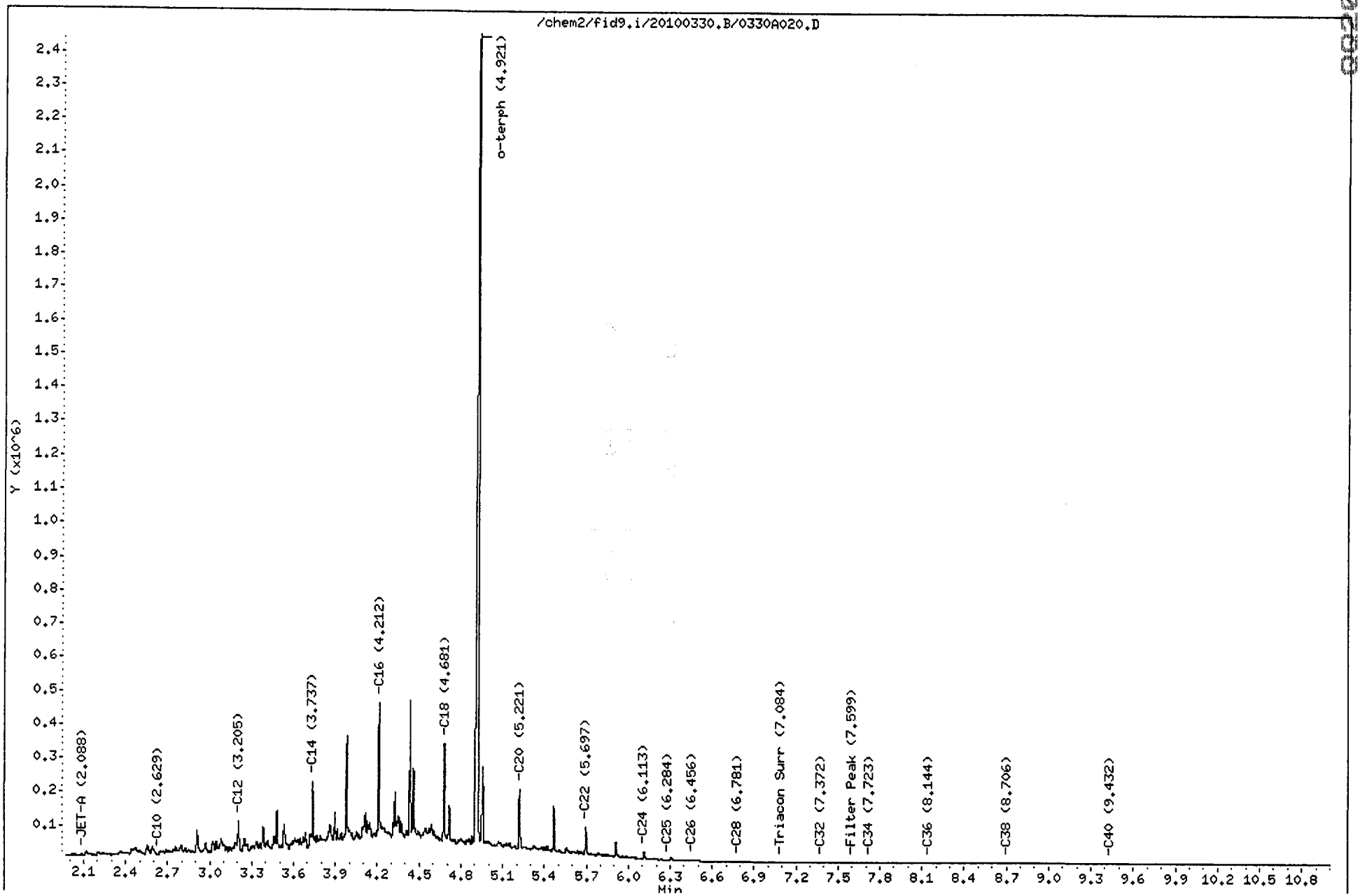
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A020.D
Date : 30-MAR-2010 22:55
Client ID:
Sample Info: DIESEL 500

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A021.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL 1000
Client ID:
Injection: 30-MAR-2010 23:14

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.867	0.007	8888	13590	GAS (Tol-C12)	2921364	226
C8	2.025	-0.007	16854	24254	DIESEL (C12-C24)	19708340	965
C10	2.650	0.019	41705	64583	M.OIL (C24-C38)	258072	20
C12	3.206	-0.010	223573	186682	AK-102 (C10-C25)	21923110	958
C14	3.738	-0.004	432636	276266	AK-103 (C25-C36)	184421	20
C16	4.214	-0.001	906720	556601			
C18	4.685	0.003	641996	542758			
C20	5.227	0.005	408710	367972			
C22	5.700	0.001	217065	182134			
C24	6.106	-0.001	59290	64625			
C25	6.297	0.003	24906	42256			
C26	6.457	-0.009	4721	1758			
C28	6.776	-0.006	1093	1160			
C32	7.376	0.000	145	102			
C34	7.722	0.000	74	40	BUNKERC (C10-C38)	22110454	2521
Filter Peak	7.593	-0.004	113	49			
C36	8.153	0.001	97	72			
C38	8.705	-0.003	61	29			
C40	9.433	-0.004	50	20			
o-terph	4.935	0.022	3289448	4369560			
Triacon Surr	7.082	-0.002	383	97			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	4369560	177.0	393.3
Triacontane	97	0.0	0.0

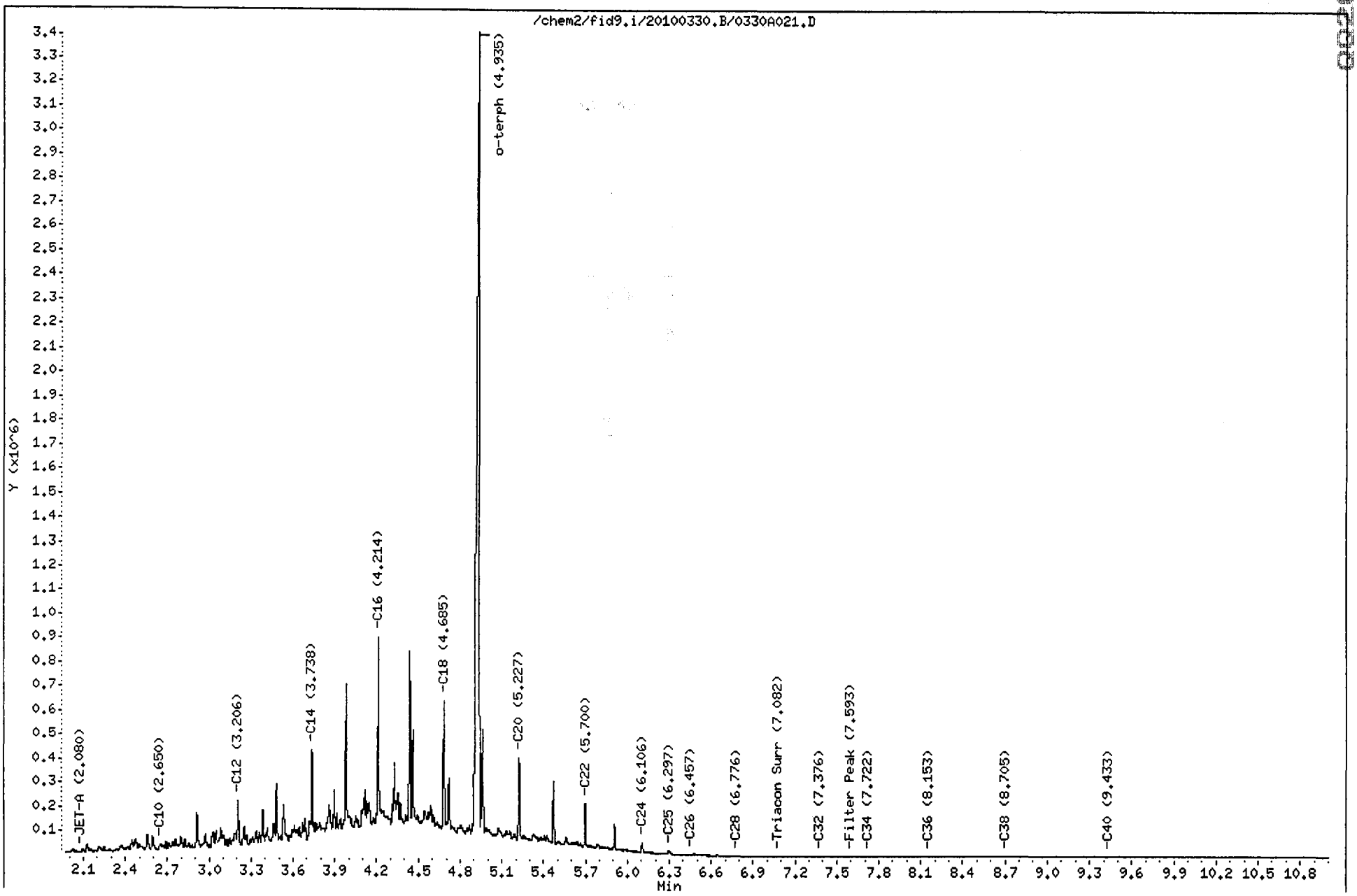
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A021.D
Date : 30-MAR-2010 23:14
Client ID:
Sample Info: DIESEL 1000

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A022.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL 2500
Client ID:
Injection: 30-MAR-2010 23:34
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.868	0.008	13634	13654	GAS (Tol-C12)	7636087	590
C8	2.022	-0.010	10234	13580	DIESEL (C12-C24)	52627207	2578
C10	2.634	0.004	31906	9409	M.OIL (C24-C38)	758414	57
C12	3.209	-0.007	666283	491463	AK-102 (C10-C25)	58603348	2562
C14	3.741	-0.002	1155121	756796	AK-103 (C25-C36)	545347	58
C16	4.221	0.005	2058734	1928941			
C18	4.677	-0.005	322649	121748			
C20	5.213	-0.010	244162	326210			
C22	5.715	0.016	556335	507253			
C24	6.113	0.006	198944	151819			
C25	6.295	0.001	89038	112517			
C26	6.466	0.000	31703	39301			
C28	6.782	0.000	3453	2242			
C32	7.381	0.005	686	214			
C34	7.726	0.004	437	195	BUNKERC (C10-C38)	59158291	6745
Filter Peak	7.598	0.001	521	163			
C36	8.144	-0.007	330	313			
C38	8.711	0.004	139	95			
C40	9.439	0.002	94	51			
o-terph	4.979	0.066	4615248	13038452			
Triacon Surr	7.092	0.008	3077	4745			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	13038452	528.1	1173.6
Triacontane	4745	0.2	0.5

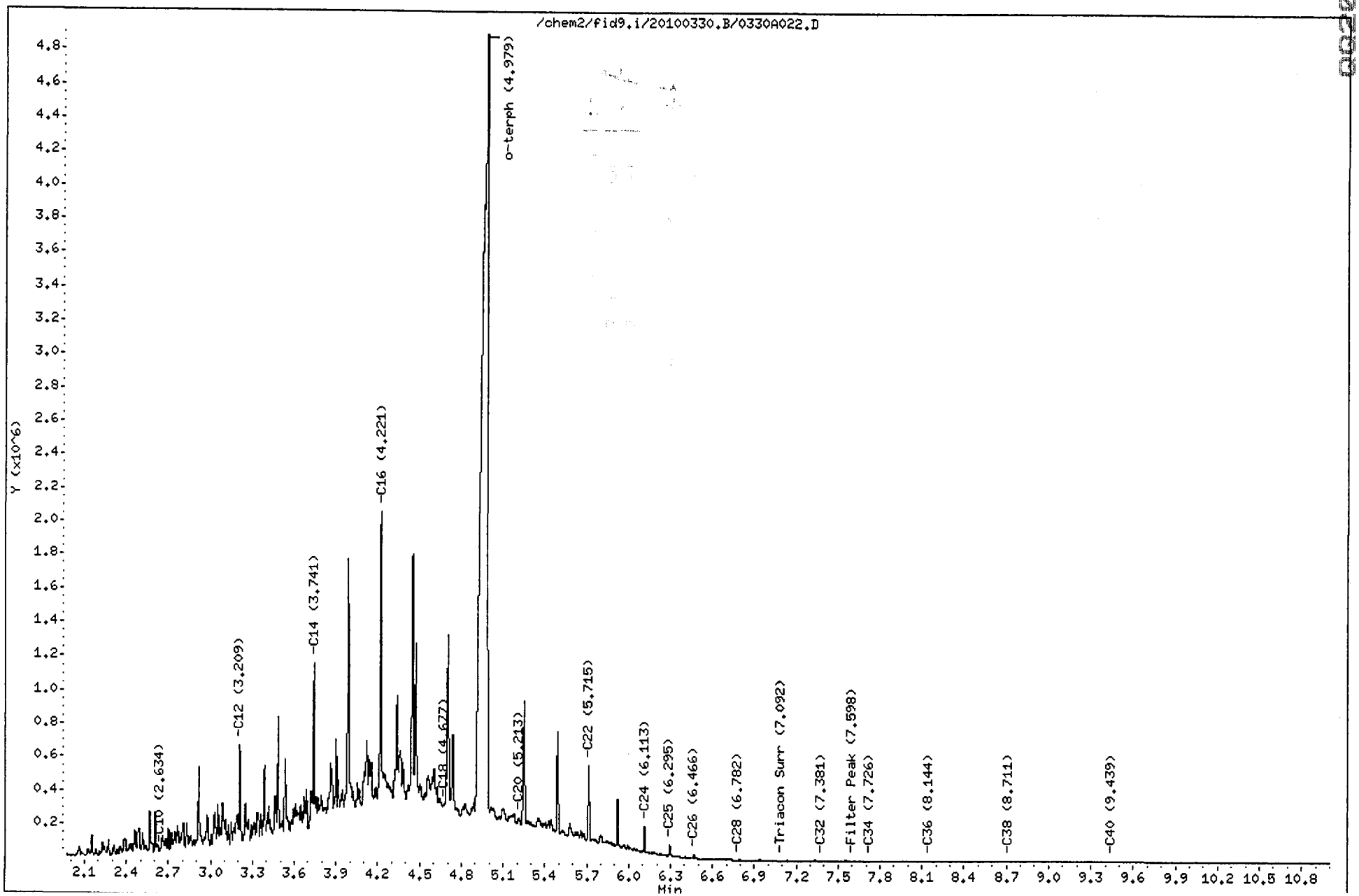
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A022.D
Date : 30-MAR-2010 23:34
Client ID:
Sample Info: DIESEL 2500

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A023.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL ICV
Client ID:
Injection: 30-MAR-2010 23:54

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.860	0.000	6708	4764	GAS (Tol-C12)	1140349	88
C8	2.030	-0.001	7877	14401	DIESEL (C12-C24)	4735817	232
C10	2.646	0.016	13898	20053	M.OIL (C24-C38)	45790	3
C12	3.203	-0.013	86660	73353	AK-102 (C10-C25)	5526809	242
C14	3.737	-0.005	142604	87141	AK-103 (C25-C36)	30150	3
C16	4.210	-0.005	177327	145825			
C18	4.675	-0.006	112378	91410			
C20	5.216	-0.006	75311	75388			
C22	5.699	0.000	30692	38171			
C24	6.097	-0.010	3264	1470			
C25	6.291	-0.002	1669	232			
C26	6.477	0.012	859	300			
C28	6.786	0.004	74	41			
C32	7.377	0.001	46	11			
C34	7.721	-0.001	70	41	BUNKERC (C10-C38)	5560123	634
Filter Peak	7.603	0.006	80	67			
C36	8.157	0.006	73	22			
C38	8.705	-0.002	113	29			
C40	9.432	-0.004	196	130			
o-terph	4.910	-0.002	1459248	1167687			
Triacon Surr	7.084	0.001	38	23			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1167687	47.3	105.1
Triacontane	23	0.0	0.0

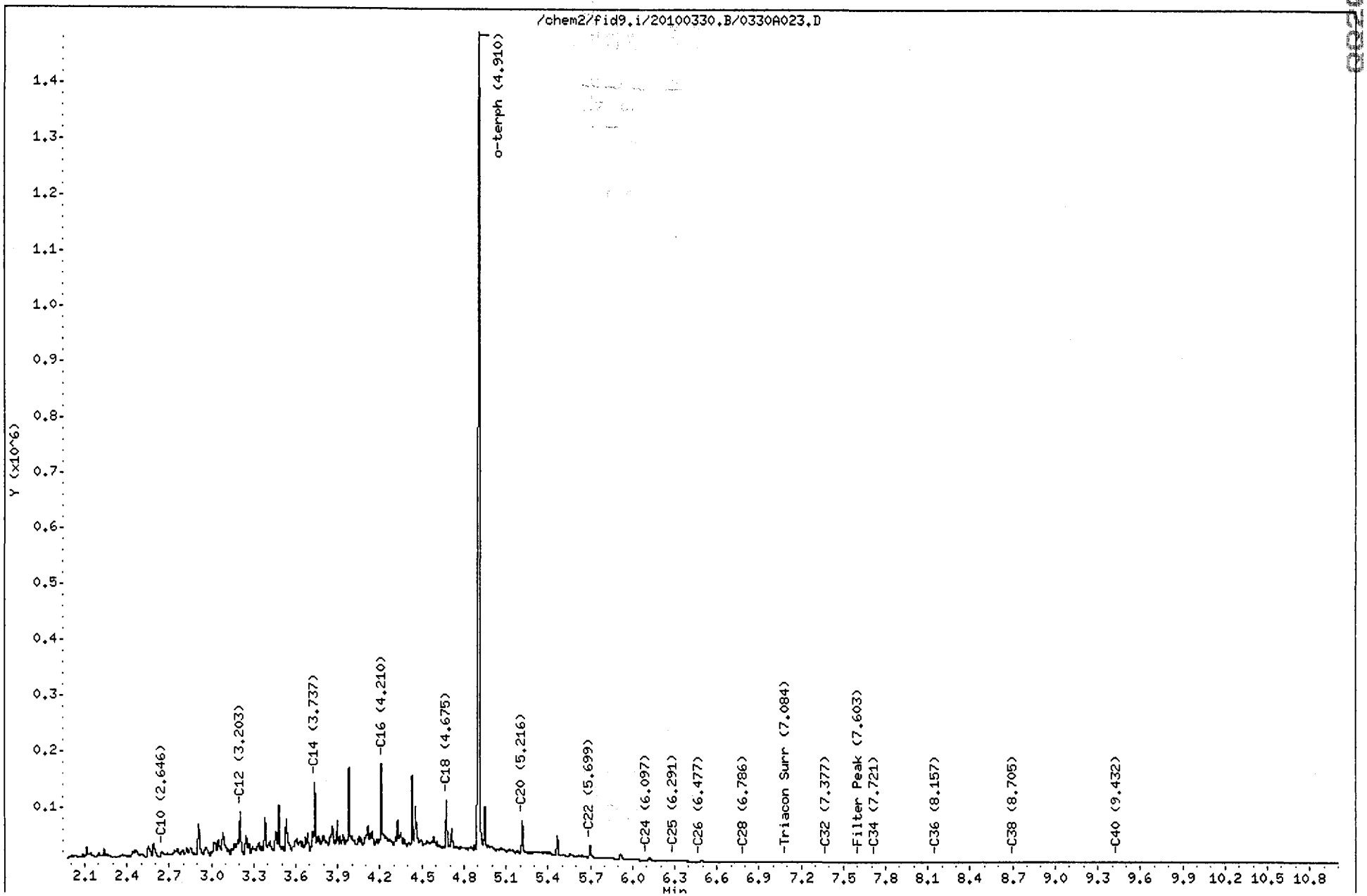
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A023.D
Date : 30-MAR-2010 23:54
Client ID:
Sample Info: DIESEL ICV

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



6a

NW MOTOR OIL INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

Instrument: FID9.I Project: LLA

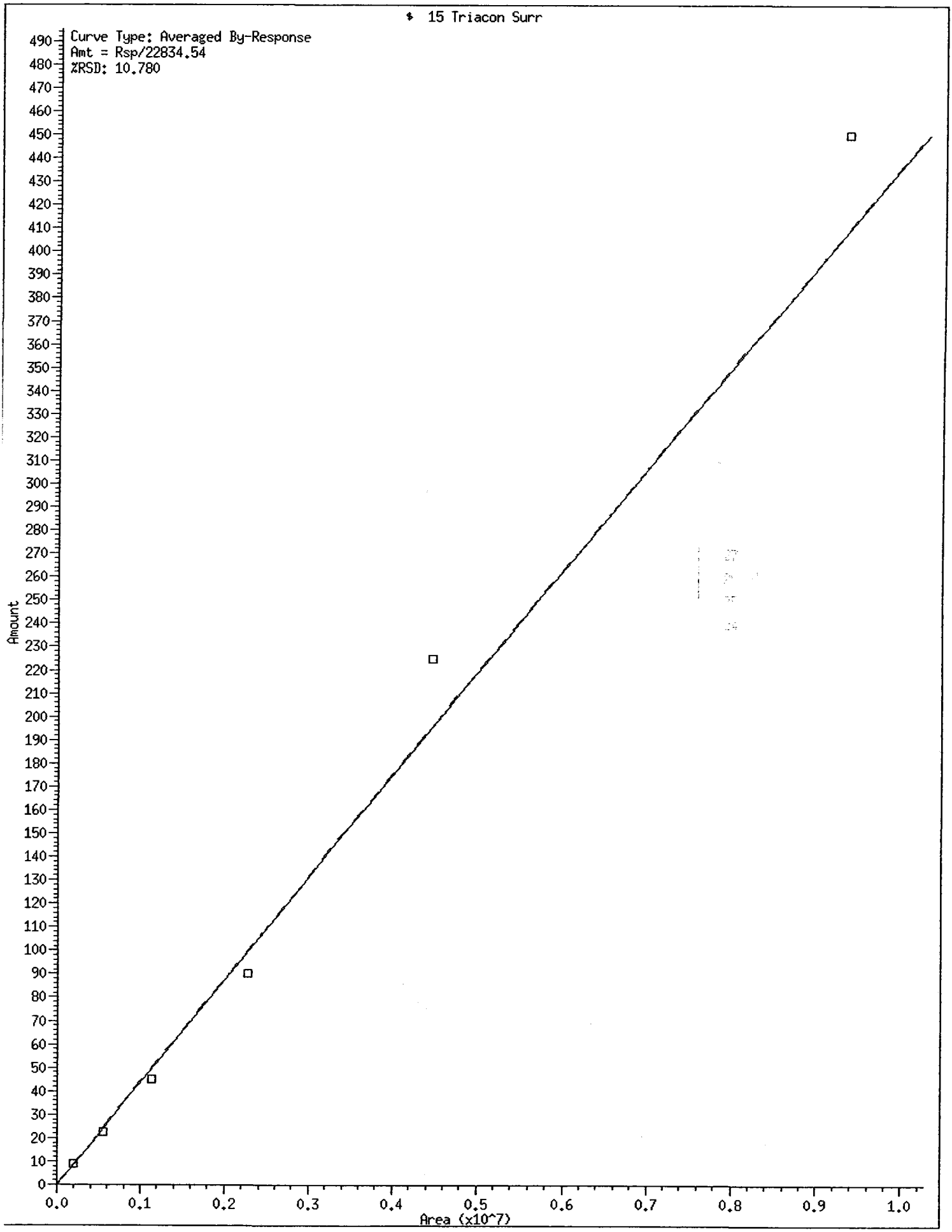
Calibration Date: 31-MAR-2010 SDG No.: QQ22

Motor Oil Range	RF1 100	RF2 250	RF3 500	RF4 1000	RF5 2500	RF6 5000	Ave RF	%RSD
WA M.Oil	11524	14860	14537	14822	11876	11702	13220	12.6
AK M.Oil	10092	12800	12524	12751	10140	10211	11420	12.2
OR M.Oil	9320	12257	11871	12315	9921	9218	10817	13.7
Triac Surr	21257	24868	25078	25181	19861	20762	22835	10.8

<- Indicates %RSD outside limits
Surrogate areas are not included in Motor Oil RF calculation.

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36
OR M.Oil C28-C40

Calibration Files	Analysis Time
0330A025.D	31-MAR-2010 00:33
0330A026.D	31-MAR-2010 00:52
0330A027.D	31-MAR-2010 01:12
0330A028.D	31-MAR-2010 01:31
0330A030.D	31-MAR-2010 02:10
0330A032.D	31-MAR-2010 02:49


$ 15 Triacon Surr
Curve Type: Averaged By-Response
Amt = Rsp/22834.54
%RSD: 10.780
Amount
Area (x10^7)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A009.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: RT
Client ID:
Injection: 30-MAR-2010 18:56

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.859	0.000	1849382	725042	GAS (Tol-C12)	424779128	32819
C8	2.032	0.000	365755	197363	DIESEL (C12-C24)	1941473	95
C10	2.631	0.000	553690	303271	M.OIL (C24-C38)	2519460	191
C12	3.216	0.000	462441	299408	AK-102 (C10-C25)	2597032	114
C14	3.742	0.000	476699	305952	AK-103 (C25-C36)	2154908	228
C16	4.215	0.000	524815	310034			
C18	4.682	0.000	497835	315447			
C20	5.223	0.000	472375	313366			
C22	5.699	0.000	544052	326900			
C24	6.107	0.000	584734	324587			
C25	6.294	0.000	798157	451025			
C26	6.465	0.000	576386	320091			
C28	6.782	0.000	573864	324327			
C32	7.376	0.000	455265	314185			
C34	7.722	0.000	368316	308048	BUNKERC (C10-C38)	5111593	583
Filter Peak	7.597	0.000	2110	1130			
C36	8.152	0.000	278694	298836			
C38	8.707	0.000	195285	310963			
C40	9.437	0.000	137868	302932			
o-terph	4.912	0.000	1238656	1043518			
Triacon Surr	7.083	0.000	1492765	1083949			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1043518	42.3	93.9
Triacontane	1083949	47.5	105.5

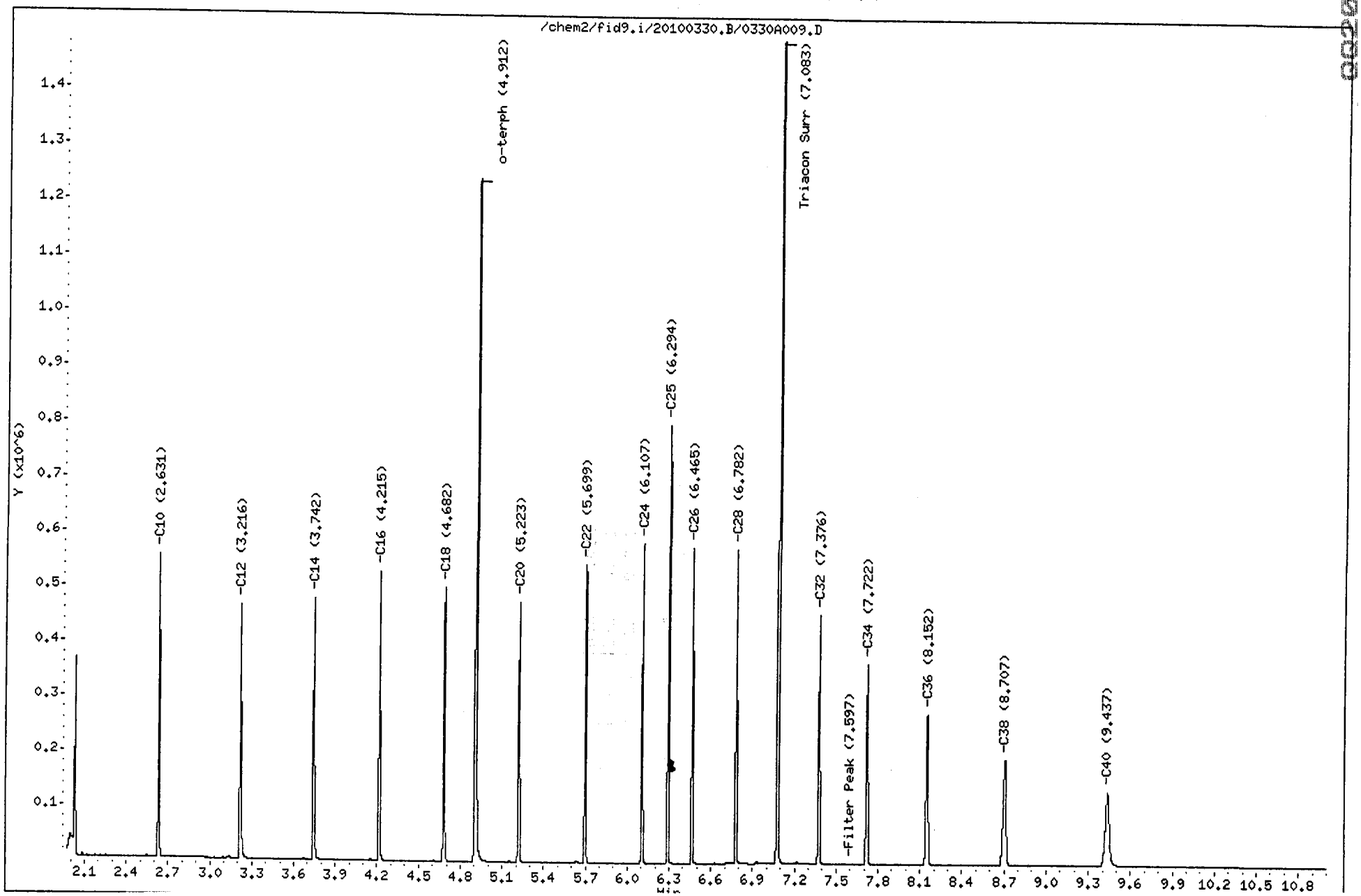
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A009.D
Date : 30-MAR-2010 18:56
Client ID:
Sample Info: RT

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A012.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: IB
Client ID:
Injection: 30-MAR-2010 19:55

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.863	0.004	3482	2162	GAS (Tol-C12)	156568	12
C8	2.030	-0.002	2550	3421	DIESEL (C12-C24)	39779	2
C10	2.639	0.009	1576	3052	M.OIL (C24-C38)	228604	17
C12	3.216	0.000	875	936	AK-102 (C10-C25)	88421	4
C14	3.742	0.000	542	366	AK-103 (C25-C36)	164567	17
C16	4.219	0.003	227	61			
C18	4.683	0.001	62	57			
C20	5.218	-0.005	369	305			
C22	5.698	-0.001	57	35			
C24	6.109	0.002	405	204			
C25	6.278	-0.016	383	330			
C26	6.459	-0.006	226	81			
C28	6.782	0.000	3085	6035			
C32	7.372	-0.004	2507	7951			
C34	----				BUNKERC (C10-C38)	312302	36
Filter Peak	7.599	0.002	2241	2087			
C36	8.148	-0.004	1845	694			
C38	8.707	0.000	2051	651			
C40	9.433	-0.004	2021	2522			
o-terph	4.909	-0.003	1172486	1217896			
Triacon Surr	7.079	-0.004	1251116	940779			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1217896	49.3	109.6
Triacontane	940779	41.2	91.6

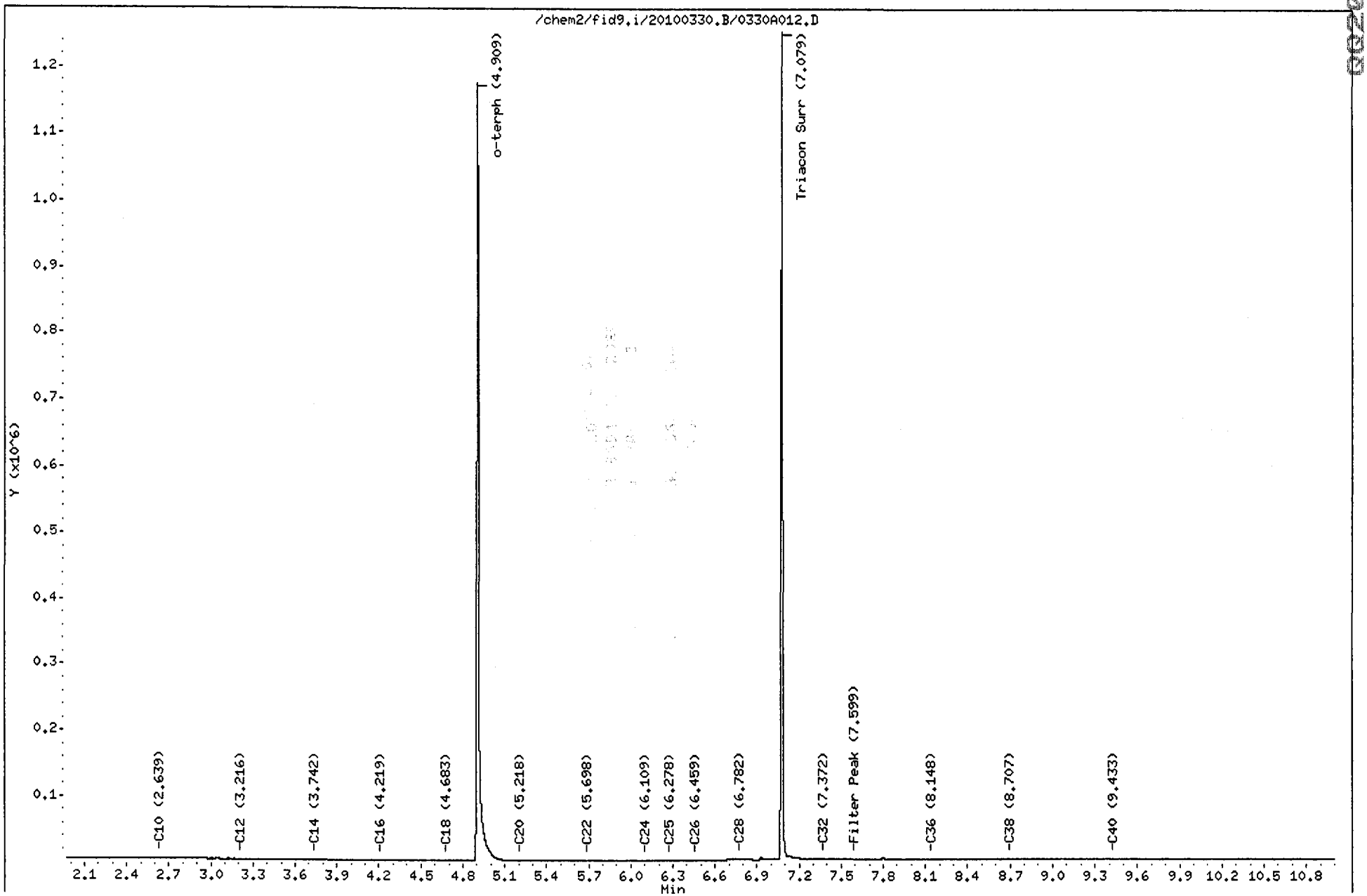
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A012.D
Date : 30-MAR-2010 19:55
Client ID:
Sample Info: IB

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A025.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL 100
Client ID:
Injection: 31-MAR-2010 00:33
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.872	0.012	1674	1669	GAS (Tol-C12)	74710	6
C8	2.033	0.001	1103	1217	DIESEL (C12-C24)	341792	17
C10	2.623	-0.008	368	198	M.OIL (C24-C38)	1152385	87
C12	3.203	-0.013	3824	2572	AK-102 (C10-C25)	394501	17
C14	3.751	0.009	3725	7068	AK-103 (C25-C36)	1009208	107
C16	4.212	-0.004	2408	1516			
C18	4.691	0.009	6963	9000			
C20	5.229	0.007	5301	5254			
C22	5.701	0.002	4290	5359			
C24	6.106	-0.001	5133	5593			
C25	6.290	-0.004	6228	4874			
C26	6.462	-0.004	7729	5432			
C28	6.779	-0.003	10338	4705			
C32	7.368	-0.008	11210	14635			
C34	7.726	0.004	8638	9663	BUNKERC (C10-C38)	1521078	173
Filter Peak	7.601	0.004	8990	5245			
C36	8.151	0.000	5260	4530			
C38	8.706	-0.001	2950	2033			
C40	9.442	0.005	1410	981			
o-terph	4.916	0.003	81864	95663			
Triacon Surr	7.074	-0.010	336686	191316			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	95663	3.9	8.6
Triacontane	191316	8.4	18.6

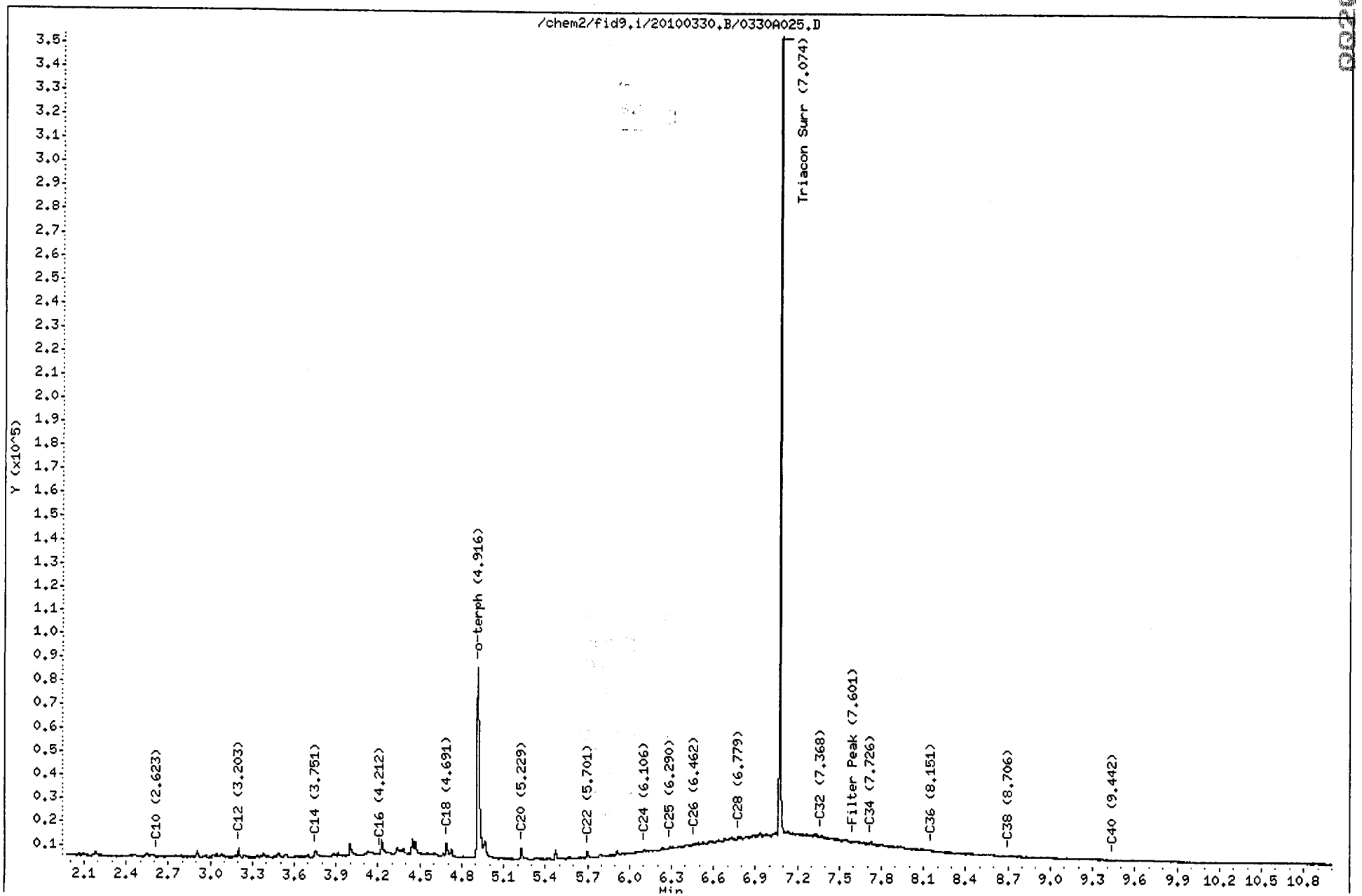
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A025.D
Date : 31-MAR-2010 00:33
Client ID:
Sample Info: MOIL 100

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A026.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL 250
Client ID:
Injection: 31-MAR-2010 00:52

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.872	0.012	4196	6340	GAS (Tol-C12)	154646	12
C8	2.034	0.002	3359	3205	DIESEL (C12-C24)	451181	22
C10	2.630	0.000	1660	1400	M.OIL (C24-C38)	3715081	281
C12	3.218	0.002	800	560	AK-102 (C10-C25)	591943	26
C14	3.736	-0.006	380	193	AK-103 (C25-C36)	3199906	338
C16	4.210	-0.005	161	141			
C18	4.671	-0.010	3431	3369			
C20	5.230	0.007	1372	1221			
C22	5.700	0.001	6743	4900			
C24	6.105	-0.002	15657	14851			
C25	6.288	-0.005	20162	7173			
C26	6.459	-0.006	25818	20063			
C28	6.782	0.000	33520	17746			
C32	7.371	-0.004	33322	25309			
C34	7.724	0.002	25252	11038	BUNKERC (C10-C38)	4211779	480
Filter Peak	7.600	0.004	27124	7493			
C36	8.154	0.003	16899	8595			
C38	8.710	0.003	10740	8913			
C40	9.435	-0.002	6680	6191			
o-terph	4.920	0.008	2209	2483			
Triacon Surr	7.084	0.000	869661	559530			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	2483	0.1	0.2
Triacontane	559530	24.5	54.5

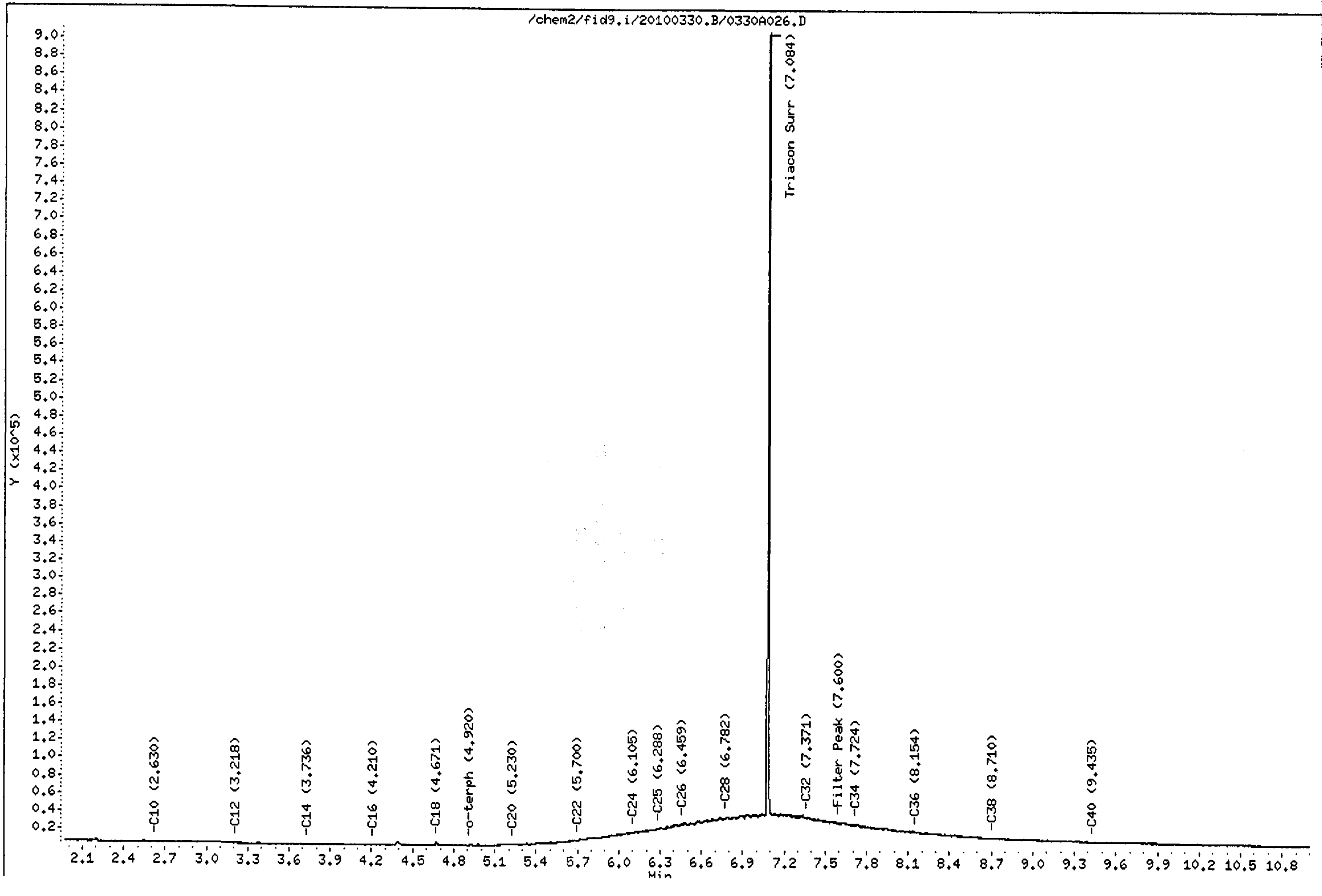
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A026.D
Date : 31-MAR-2010 00:52
Client ID:
Sample Info: MOIL 250

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A027.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL 500
Client ID:
Injection: 31-MAR-2010 01:12

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.852	-0.007	5898	9013	GAS (Tol-C12)	148512	11
C8	2.038	0.006	3330	3268	DIESEL (C12-C24)	866473	42
C10	2.631	0.000	1630	1517	M.OIL (C24-C38)	7268452	550
C12	3.205	-0.011	1014	1322	AK-102 (C10-C25)	1088416	48
C14	3.738	-0.005	325	120	AK-103 (C25-C36)	6262010	662
C16	4.215	0.000	77	52			
C18	4.666	-0.016	7514	7067			
C20	5.224	0.002	2713	2281			
C22	5.696	-0.003	13477	17563			
C24	6.103	-0.004	31377	21984			
C25	6.290	-0.004	39581	12593			
C26	6.472	0.007	51572	18105			
C28	6.776	-0.006	67382	55070			
C32	7.378	0.002	66817	22355			
C34	7.721	-0.001	51163	15022	BUNKERC (C10-C38)	8178419	932
Filter Peak	7.601	0.004	54271	34150			
C36	8.154	0.003	33179	27757			
C38	8.704	-0.004	20528	11373			
C40	9.429	-0.008	13100	11195			
o-terph	4.916	0.004	1089	1269			
Triacon Surr	7.087	0.003	1312249	1128502			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1269	0.1	0.1
Triacontane	1128502	49.4	109.8

Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A027.D

Date : 31-MAR-2010 01:12

Client ID:

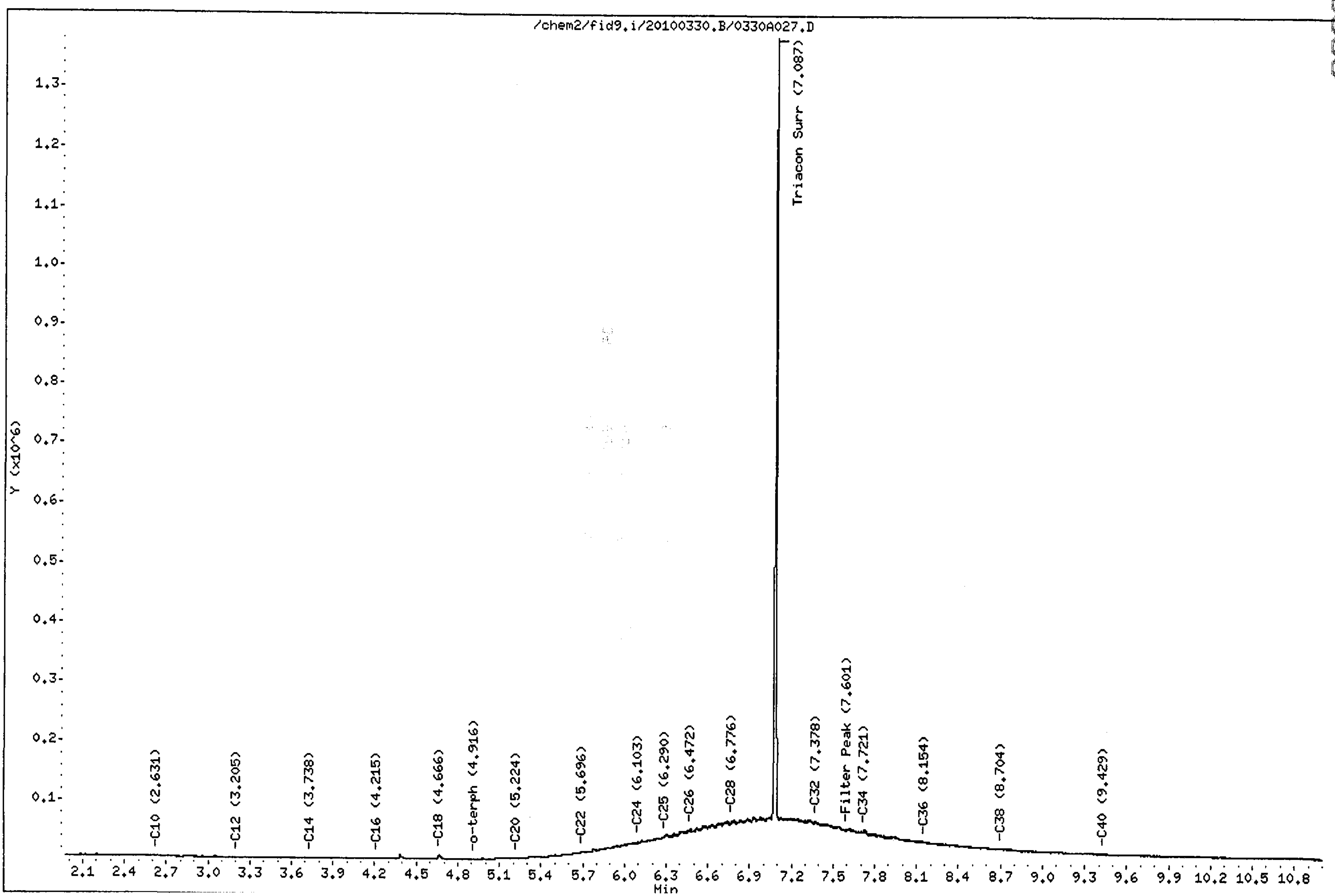
Sample Info: MOIL 500

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A028.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL 1000
Client ID:
Injection: 31-MAR-2010 01:31

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.849	-0.011	6196	6330	GAS (Tol-C12)	143483	11
C8	2.035	0.003	3113	3059	DIESEL (C12-C24)	1821124	89
C10	2.629	-0.001	1505	1241	M.OIL (C24-C38)	14822439	1121
C12	3.220	0.004	716	524	AK-102 (C10-C25)	2183163	95
C14	3.742	0.000	283	312	AK-103 (C25-C36)	12750671	1348
C16	4.215	0.000	54	23			
C18	4.663	-0.019	17113	15296			
C20	5.222	-0.001	5885	4876			
C22	5.697	-0.002	27929	39845			
C24	6.109	0.002	62970	27438			
C25	6.290	-0.004	81677	43696			
C26	6.464	-0.002	103858	50987			
C28	6.784	0.002	132039	49655			
C32	7.374	-0.002	131683	44229			
C34	7.723	0.001	99246	50666	BUNKERC (C10-C38)	16685181	1902
Filter Peak	7.596	-0.001	110033	51347			
C36	8.149	-0.002	68086	20294			
C38	8.708	0.001	45833	25939			
C40	9.431	-0.006	28096	27126			
o-terph	4.911	-0.001	1858	2532			
Triacon Surr	7.105	0.022	2453140	2266281			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	2532	0.1	0.2
Triacontane	2266281	99.2	220.6

Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A028.D

Date : 31-MAR-2010 01:31

Client ID:

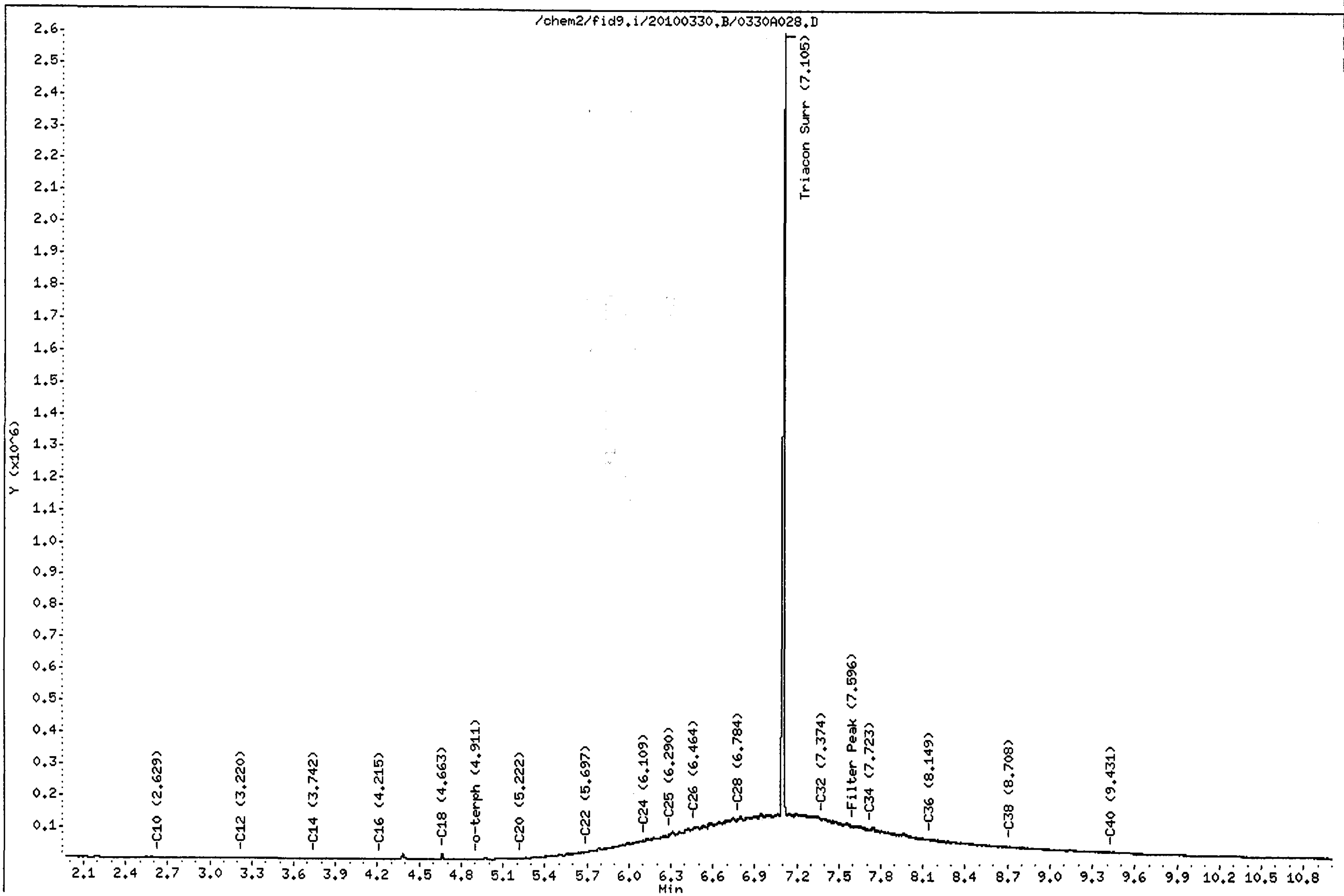
Sample Info: MOIL 1000

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A030.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL 2500
Client ID:
Injection: 31-MAR-2010 02:10
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.872	0.012	2989	2787	GAS (Tol-C12)	114082	9
C8	2.035	0.003	1791	1866	DIESEL (C12-C24)	3492988	171
C10	2.622	-0.009	1213	840	M.OIL (C24-C38)	29689765	2246
C12	3.203	-0.012	1702	1946	AK-102 (C10-C25)	4207196	184
C14	3.741	-0.001	253	100	AK-103 (C25-C36)	25349055	2680
C16	4.212	-0.003	76	25			
C18	4.661	-0.021	38711	31723			
C20	5.220	-0.002	12024	10730			
C22	5.696	-0.002	53959	68885			
C24	6.109	0.003	124970	92670			
C25	6.296	0.002	161146	53773			
C26	6.465	-0.001	193478	49441			
C28	6.781	-0.001	243948	77407			
C32	7.375	-0.001	269189	111910			
C34	7.726	0.004	202140	76119	BUNKERC (C10-C38)	33220900	3788
Filter Peak	7.600	0.004	221929	65938			
C36	8.150	-0.001	152597	80730			
C38	8.706	-0.001	94546	20718			
C40	9.439	0.002	49177	32856			
o-terph	4.911	-0.001	3913	5278			
Triacon Surr	7.125	0.041	3971163	4468694			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	5278	0.2	0.5
Triacontane	4468694	195.7	434.9

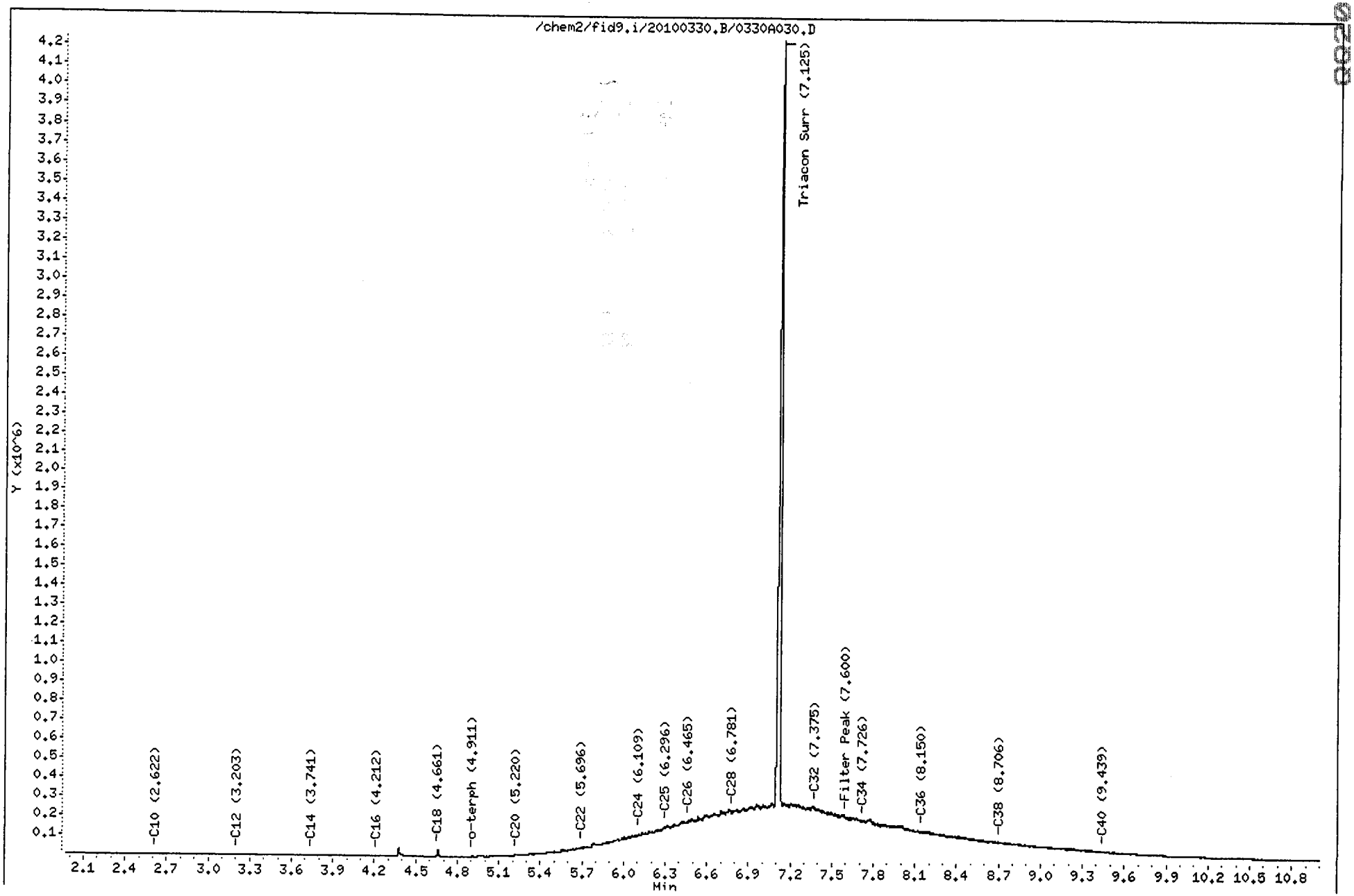
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A030.D
Date : 31-MAR-2010 02:10
Client ID:
Sample Info: MOIL 2500

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A032.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL 5000
Client ID:
Injection: 31-MAR-2010 02:49

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.891	0.032	2289	1651	GAS (Tol-C12)	97739	8
C8	2.036	0.004	1291	1179	DIESEL (C12-C24)	6990529	342
C10	2.637	0.007	1018	1170	M.OIL (C24-C38)	58512458	4426
C12	3.202	-0.014	2770	2628	AK-102 (C10-C25)	8474399	370
C14	3.749	0.007	1502	1487	AK-103 (C25-C36)	51056819	5399
C16	4.219	0.004	980	903			
C18	4.699	0.017	2566	1571			
C20	5.219	-0.004	25672	25996			
C22	5.700	0.002	111251	148007			
C24	6.107	0.001	247609	163787			
C25	6.298	0.005	315875	272493			
C26	6.462	-0.003	375053	208894			
C28	6.775	-0.007	513487	522813			
C32	7.375	0.000	528266	345257			
C34	7.721	-0.001	424543	101149	BUNKERC (C10-C38)	65537910	7472
Filter Peak	7.594	-0.003	462369	353910			
C36	8.152	0.001	265525	42331			
C38	8.708	0.001	135784	53380			
C40	9.438	0.002	53349	31796			
o-terph	4.908	-0.004	8077	11429			
Triacon Surr	7.143	0.060	4650341	9343042			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	11429	0.5	1.0
Triacontane	9343042	409.2	909.3

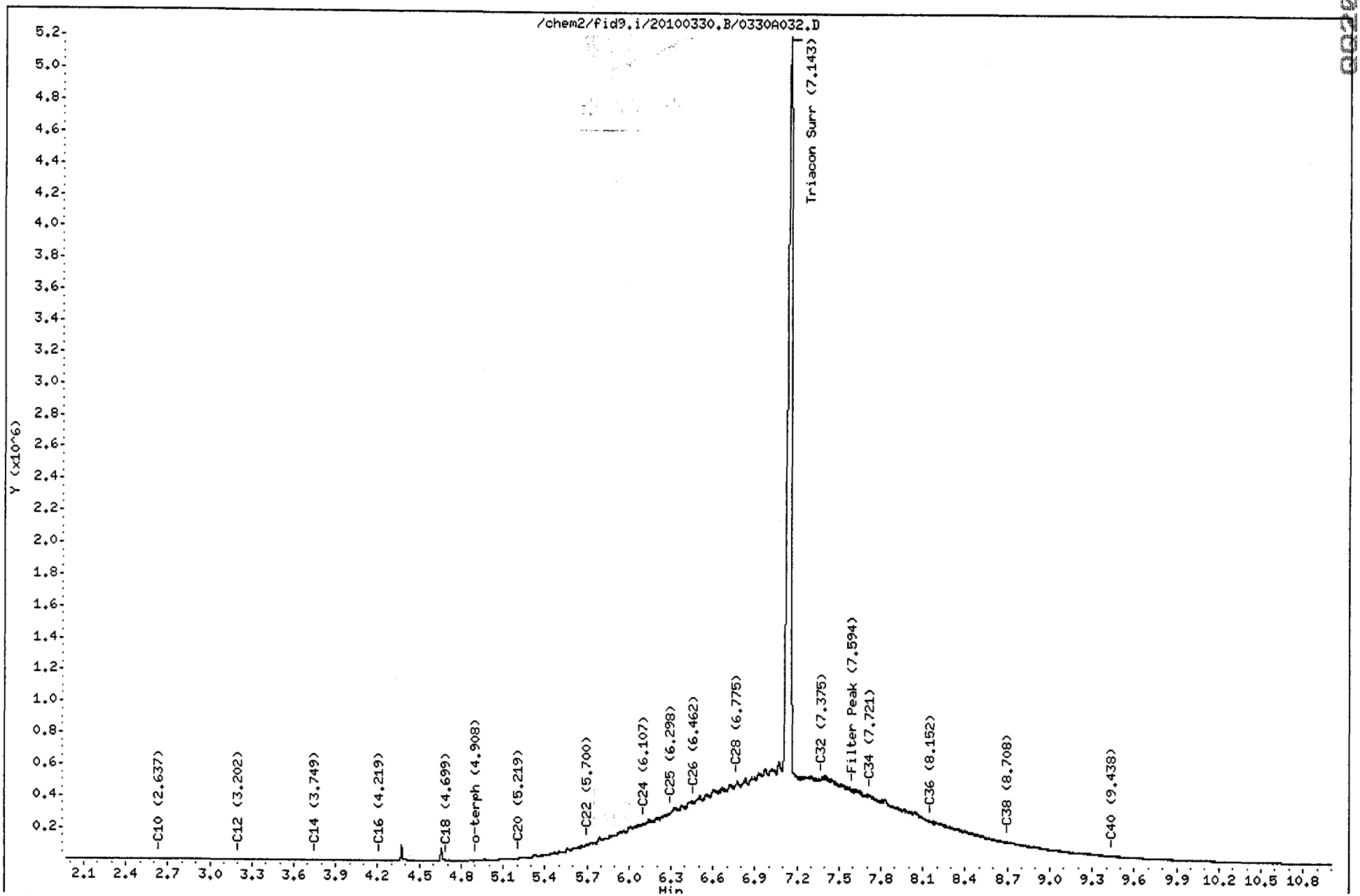
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A032.D
Date : 31-MAR-2010 02:49
Client ID:
Sample Info: MOIL 5000

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100330.B/0330A033.D
Method: /chem2/fid9.i/20100330.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 03/31/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL ICV
Client ID:
Injection: 31-MAR-2010 03:09

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.872	0.012	3749	5542	GAS (Tol-C12)	133419	10
C8	2.035	0.003	2732	2719	DIESEL (C12-C24)	685116	34
C10	2.630	-0.001	1368	1095	M.OIL (C24-C38)	6476517	490
C12	3.204	-0.012	943	1285	AK-102 (C10-C25)	862883	38
C14	3.741	-0.001	273	156	AK-103 (C25-C36)	5409283	572
C16	4.211	-0.004	79	54			
C18	4.668	-0.014	4942	4932			
C20	5.225	0.003	2275	2081			
C22	5.694	-0.004	10099	12411			
C24	6.106	-0.001	23975	12755			
C25	6.304	0.010	32819	55751			
C26	6.460	-0.005	39056	41143			
C28	6.780	-0.002	52068	18525			
C32	7.376	0.000	60040	56276			
C34	7.727	0.005	48429	24608	BUNKERC (C10-C38)	7201367	821
Filter Peak	7.602	0.005	49966	35483			
C36	8.152	0.001	35313	15320			
C38	8.712	0.005	25105	21865			
C40	9.432	-0.005	16082	18317			
o-terph	4.916	0.004	1110	1279			
Triacon Surr	7.088	0.004	1420001	1214099			

Range Times: NW Diesel(3.216 - 6.107) AK102(2.63 - 6.29) Jet A(2.63 - 4.68)
NW M.Oil(6.11 - 8.71) AK103(6.29 - 8.15) OR Diesel(2.63 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1279	0.1	0.1
Triacontane	1214099	53.2	118.2

Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100330.B/0330A033.D

Date : 31-MAR-2010 03:09

Client ID:

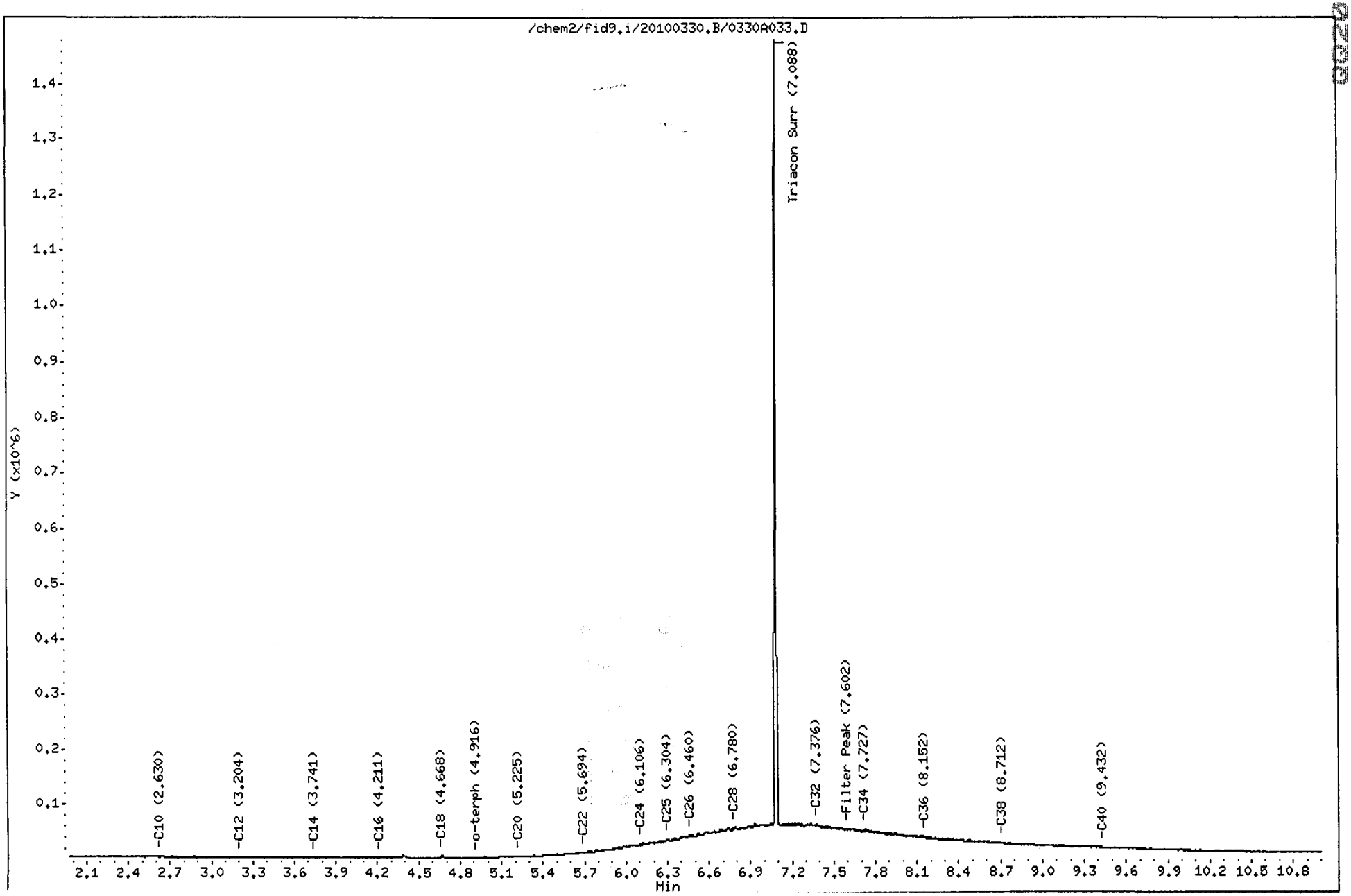
Sample Info: MOIL ICV

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

4/5/10

Data file: /chem2/fid9.i/20100331.B/0331A002.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: RT
Client ID: RT
Injection: 31-MAR-2010 13:15

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.858	0.000	111432	170486	GAS (Tol-C12)	1269244	98
C8	1.991	0.000	327878	173395	DIESEL (C12-C24)	1726760	85
C10	2.617	0.000	561240	268613	M.OIL (C24-C38)	2077621	157
C12	3.212	0.000	413459	265260	AK-102 (C10-C25)	2304096	101
C14	3.742	0.000	385299	271835	AK-103 (C25-C36)	1806884	191
C16	4.215	0.000	444915	276336			
C18	4.680	0.000	433584	282985			
C20	5.221	0.000	420506	282103			
C22	5.697	0.000	482817	294021			
C24	6.105	0.000	515702	289020			
C25	6.292	0.000	686017	402684			
C26	6.464	0.000	515361	285421			
C28	6.782	0.000	503155	283895			
C32	7.375	0.000	397683	267933			
C34	7.719	0.000	307975	259169	BUNKERC (C10-C38)	4380202	499
Filter Peak	7.597	0.000	916	182			
C36	8.149	0.000	219711	240959			
C38	8.700	0.000	173322	241340			
C40	9.427	0.000	90606	234306			
o-terph	4.910	0.000	1086506	936255			
Triacon Surr	7.082	0.000	1304458	953586			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	936255	37.9	84.3
Triacontane	953586	41.8	92.8

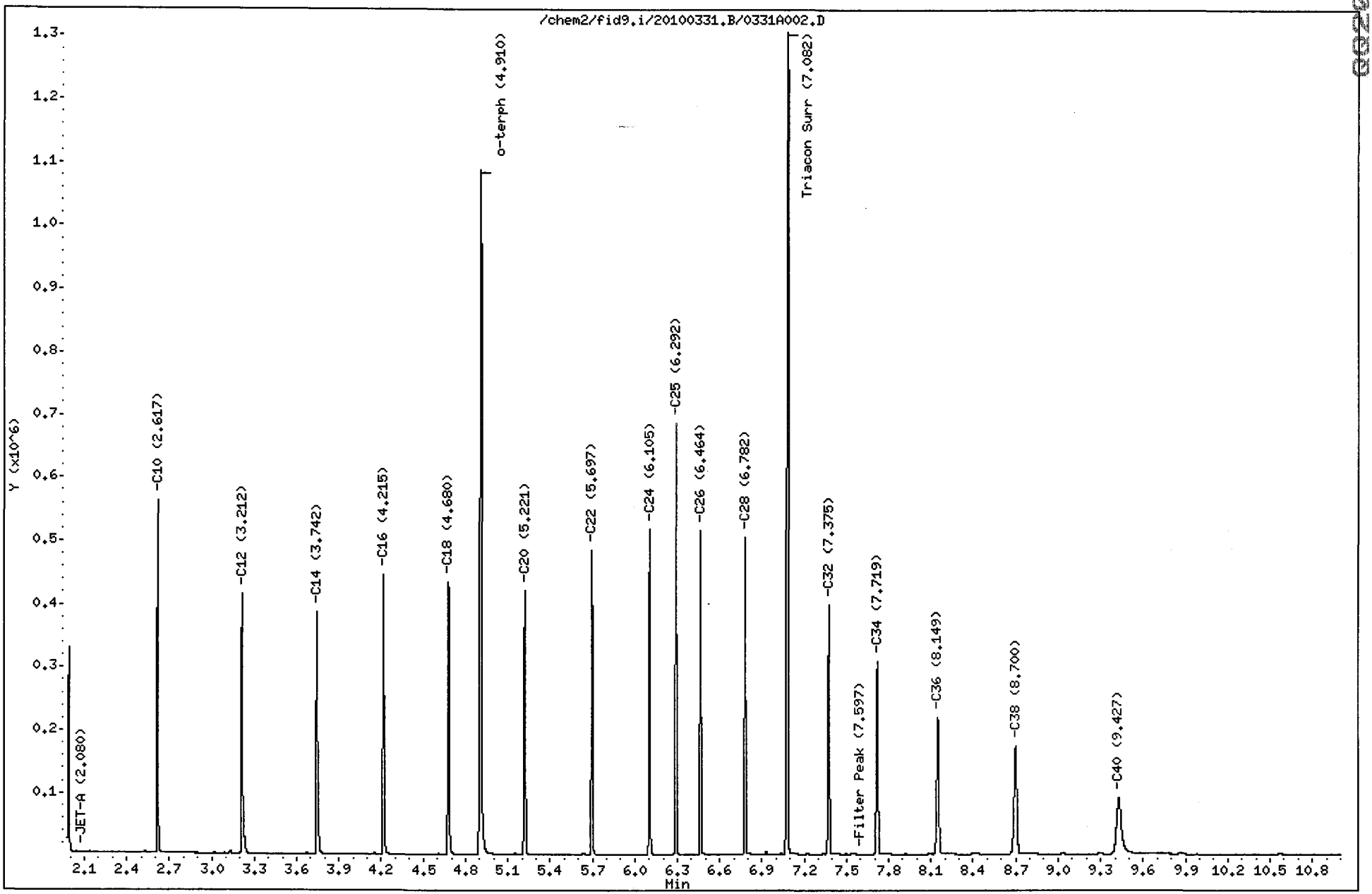
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A002.D
Date : 31-MAR-2010 13:15
Client ID: RT
Sample Info: RT

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A003.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: IB
Client ID: IB
Injection: 31-MAR-2010 13:35
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.860	0.003	2493	2867	GAS (Tol-C12)	99247	8
C8	2.041	0.050	1568	468	DIESEL (C12-C24)	31710	2
C10	2.637	0.020	1116	837	M.OIL (C24-C38)	118078	9
C12	3.204	-0.009	824	1369	AK-102 (C10-C25)	68844	3
C14	3.743	0.001	394	191	AK-103 (C25-C36)	90541	10
C16	4.215	0.000	146	138			
C18	4.680	0.000	54	39			
C20	5.212	-0.009	452	499			
C22	5.690	-0.007	123	125			
C24	6.111	0.006	125	38			
C25	6.293	0.001	146	53			
C26	6.459	-0.005	193	114			
C28	6.782	0.000	1427	1478			
C32	7.374	-0.001	906	803			
C34	7.720	0.001	871	619	BUNKERC (C10-C38)	186112	21
Filter Peak	7.596	-0.001	900	499			
C36	8.155	0.006	904	658			
C38	8.699	0.000	970	614			
C40	9.424	-0.003	994	236			
o-terph	4.909	0.000	1244391	1331580			
Triacon Surr	7.080	-0.003	1347403	981269			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1331580	53.9	119.9
Triacontane	981269	43.0	95.5

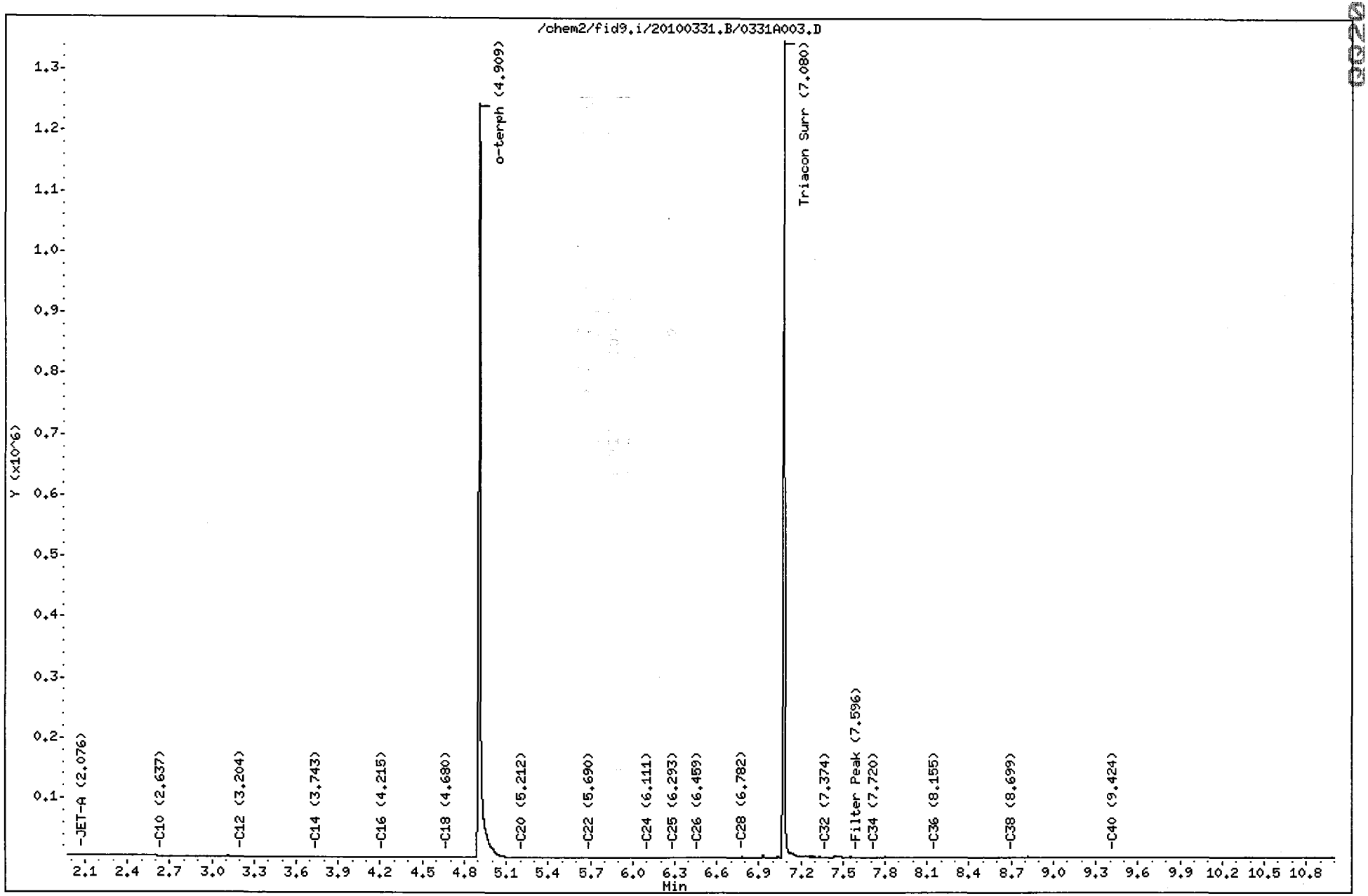
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A003.D
Date : 31-MAR-2010 13:35
Client ID: IB
Sample Info: IB

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 30-MAR-2010 Project: LLA

CCal Date: 31-MAR-2010 SDG No.: QQ22

Analysis Time: 14:14 Lab ID: MOIL#1

Instrument: FID9.I Lab File Name: 0331A005.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D
WAMoil(C24-C38)	6380782	482.7	500	-3.5
AK103 (C25-C36)	5463391	577.7	500	15.5
n-Triacontane	957719	41.9	45	-6.8

* Surrogate areas are subtracted from range areas

<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

4/6/10

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A005.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL#1
Client ID: MOIL#1
Injection: 31-MAR-2010 14:14
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.842	-0.015	2722	5275	GAS (Tol-C12)	83208	6
C8	2.029	0.038	1493	1319	DIESEL (C12-C24)	742425	36
C10	2.626	0.009	925	673	M.OIL (C24-C38)	6380782	483
C12	3.204	-0.008	768	1066	AK-102 (C10-C25)	920763	40
C14	3.744	0.001	216	132	AK-103 (C25-C36)	5463391	578
C16	4.215	0.000	36	18			
C18	4.668	-0.012	6018	5715			
C20	5.232	0.011	2467	3964			
C22	5.698	0.001	11719	10540			
C24	6.104	-0.001	26896	16346			
C25	6.296	0.005	36224	13394			
C26	6.460	-0.004	43873	36930			
C28	6.782	0.001	56328	30070			
C32	7.377	0.002	57220	62493			
C34	7.720	0.001	43519	18030	BUNKERC (C10-C38)	7150786	815
Filter Peak	7.598	0.001	47341	22368			
C36	8.145	-0.004	31347	25873			
C38	8.697	-0.003	19677	13286			
C40	9.426	-0.001	12373	4378			
o-terph	4.917	0.008	1041	1241			
Triacon Surr	7.088	0.005	1205113	957719			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1241	0.1	0.1
Triacontane	957719	41.9	93.2

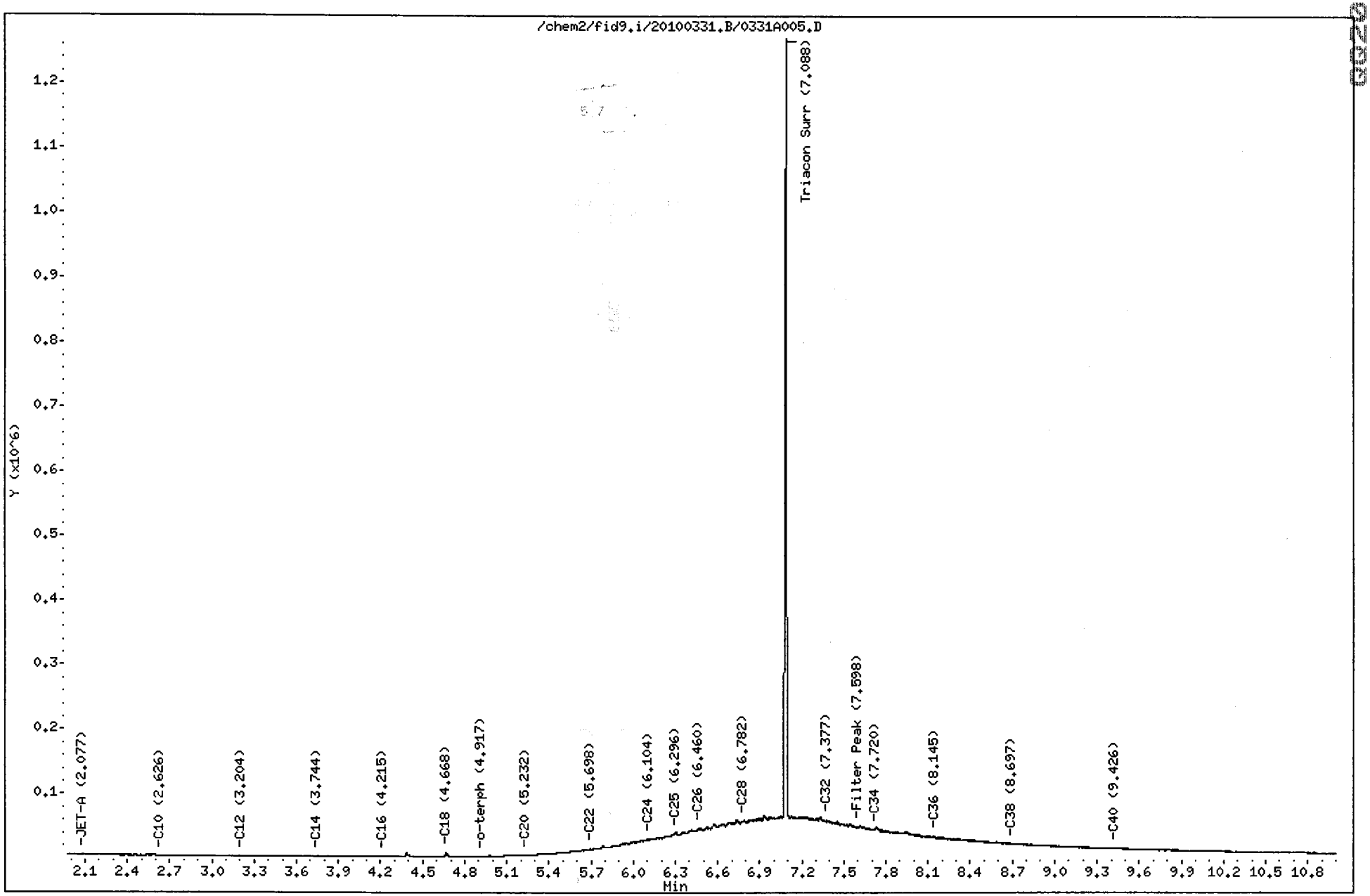
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A005.D
Date : 31-MAR-2010 14:14
Client ID: MOIL#1
Sample Info: MOIL#1

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 30-MAR-2010 Project: LLA

CCal Date: 31-MAR-2010 SDG No.: QQ22

Analysis Time: 15:13 Lab ID: DIESEL#1

Instrument: FID9.I Lab File Name: 0331A006.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	4601883	225.4	250	-9.8
AK102 (C10-C25)	5115078	223.6	250	-10.6
Terphenyl	1008808	40.9	45	-9.2

* Surrogate areas are subtracted from range areas

<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

4/6/10

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A006.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL#1
Client ID: DIESEL#1
Injection: 31-MAR-2010 15:13
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.858	0.000	3286	4297	GAS (Tol-C12)	691363	53
C8	2.022	0.031	2360	4824	DIESEL (C12-C24)	4601883	225
C10	2.649	0.032	8343	13730	M.OIL (C24-C38)	89587	7
C12	3.207	-0.006	48107	44787	AK-102 (C10-C25)	5115078	224
C14	3.743	0.001	99974	65376	AK-103 (C25-C36)	71800	8
C16	4.217	0.002	200896	132641			
C18	4.686	0.005	155361	119939			
C20	5.227	0.006	92431	86731			
C22	5.708	0.010	39627	46883			
C24	6.102	-0.004	4086	2869			
C25	6.286	-0.006	2195	2445			
C26	6.461	-0.003	1001	663			
C28	6.780	-0.002	845	565			
C32	7.384	0.009	310	233			
C34	7.736	0.017	129	79	BUNKERC (C10-C38)	5195458	592
Filter Peak	7.607	0.010	356	77			
C36	8.153	0.004	251	70			
C38	8.704	0.004	318	155			
C40	9.426	-0.001	277	81			
o-terph	4.919	0.009	1289999	1008808			
Triacon Surr	7.079	-0.003	315	210			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1008808	40.9	90.8
Triacontane	210	0.0	0.0

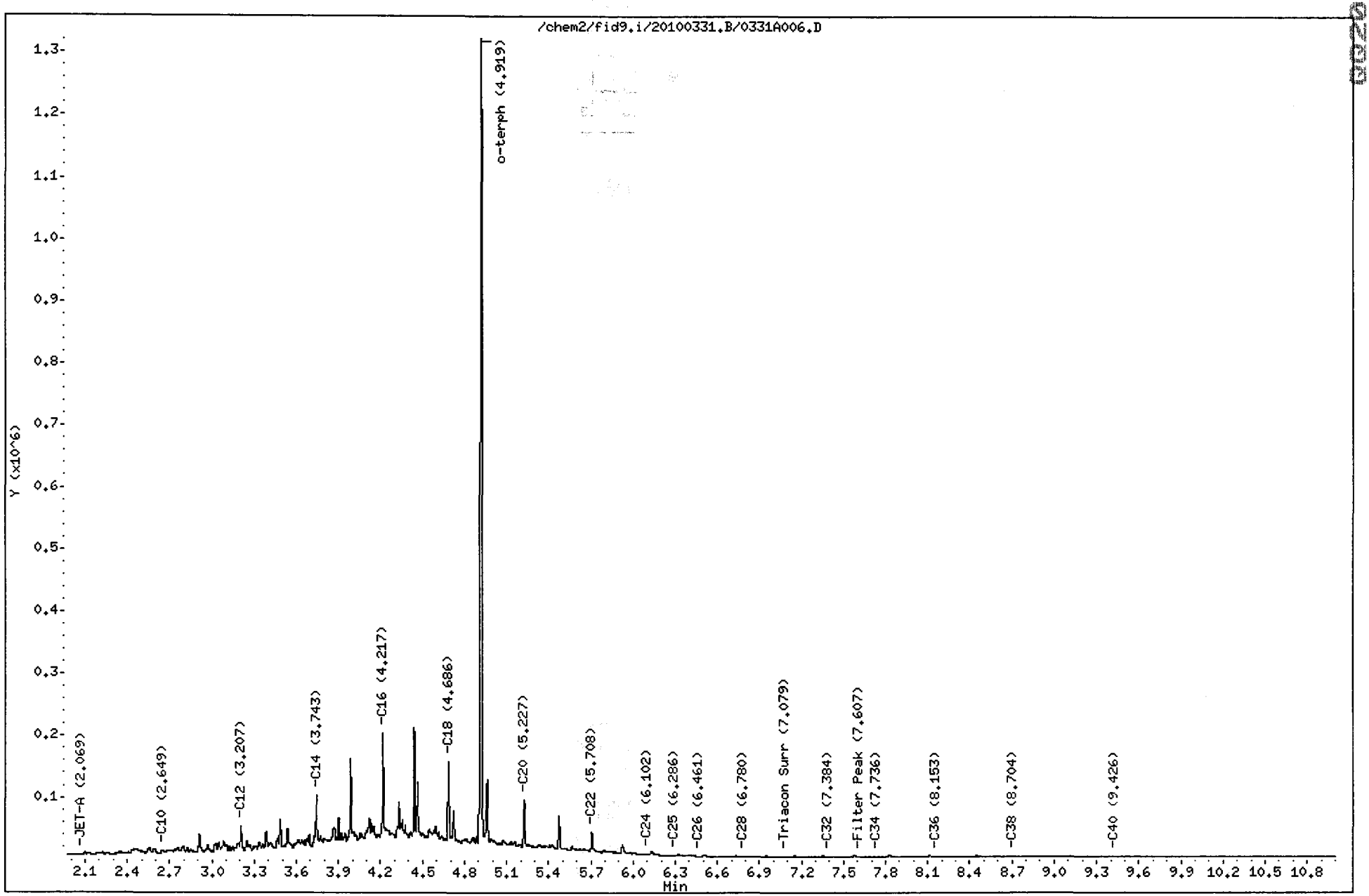
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A006.D
Date : 31-MAR-2010 15:13
Client ID: DIESEL#1
Sample Info: DIESEL#1

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 30-MAR-2010 Project: LLA

CCal Date: 31-MAR-2010 SDG No.: QQ22

Analysis Time: 17:12 Lab ID: DIESEL#2

Instrument: FID9.I Lab File Name: 0331A012.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	4630264	226.8	250	-9.3
AK102 (C10-C25)	5161415	225.6	250	-9.7
Terphenyl	1020010	41.3	45	-8.2

* Surrogate areas are subtracted from range areas

<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

Mn 4/6/10

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A012.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL#2
Client ID: DIESEL#2
Injection: 31-MAR-2010 17:12
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.850	-0.008	3662	5150	GAS (Tol-C12)	716100	55
C8	2.014	0.023	2661	7850	DIESEL (C12-C24)	4630264	227
C10	2.643	0.026	8653	14312	M.OIL (C24-C38)	53105	4
C12	3.203	-0.009	48499	45765	AK-102 (C10-C25)	5161415	226
C14	3.739	-0.003	101168	66233	AK-103 (C25-C36)	38133	4
C16	4.212	-0.003	203963	134849			
C18	4.680	-0.001	161604	123814			
C20	5.220	-0.001	94116	87962			
C22	5.701	0.004	38130	47718			
C24	6.097	-0.008	4153	2911			
C25	6.291	-0.001	2068	1215			
C26	6.465	0.001	1010	785			
C28	6.775	-0.006	217	142			
C32	7.372	-0.003	77	42			
C34	7.714	-0.005	76	47	BUNKERC (C10-C38)	5203091	593
Filter Peak	7.593	-0.004	138	67			
C36	8.149	0.000	61	40			
C38	8.704	0.004	116	28			
C40	9.432	0.005	140	41			
o-terph	4.912	0.002	1280291	1020010			
Triacon Surr	7.077	-0.005	50	36			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1020010	41.3	91.8
Triacontane	36	0.0	0.0

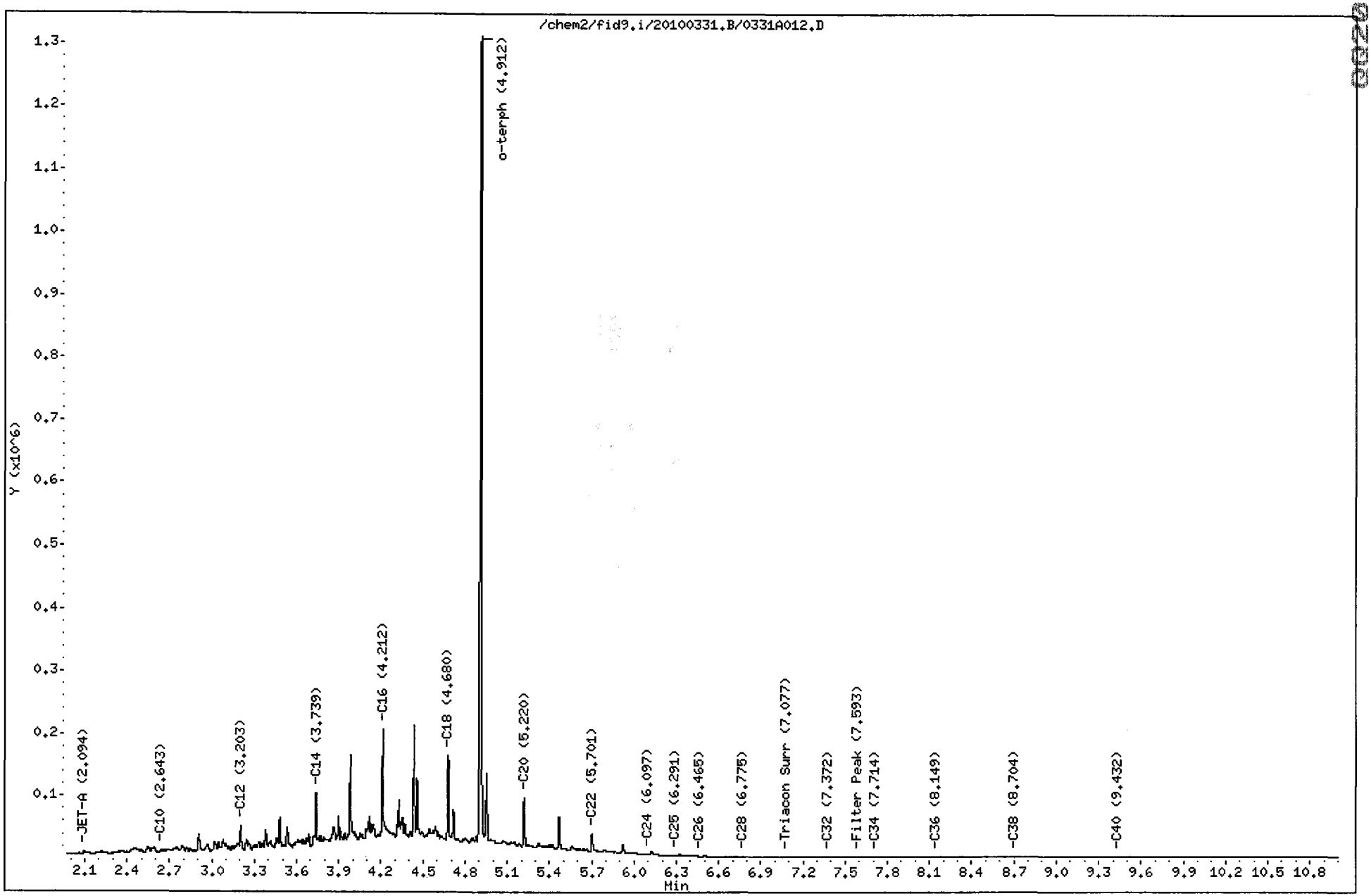
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A012.D
Date : 31-MAR-2010 17:12
Client ID: DIESEL#2
Sample Info: DIESEL#2

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 30-MAR-2010 Project: LLA

CCal Date: 31-MAR-2010 SDG No.: QQ22

Analysis Time: 17:32 Lab ID: MOIL#2

Instrument: FID9.I Lab File Name: 0331A013.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D
WAMoil(C24-C38)	6459025	488.6	500	-2.3
AK103 (C25-C36)	5523134	584.0	500	16.8
n-Triacontane	961627	42.1	45	-6.4

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A013.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL#2
Client ID: MOIL#2
Injection: 31-MAR-2010 17:32
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.864	0.007	2410	2606	GAS (Tol-C12)	90034	7
C8	2.028	0.037	1609	1149	DIESEL (C12-C24)	744331	36
C10	2.632	0.015	979	134	M.OIL (C24-C38)	6459025	489
C12	3.203	-0.010	778	1038	AK-102 (C10-C25)	947478	41
C14	3.746	0.004	218	149	AK-103 (C25-C36)	5523134	584
C16	4.213	-0.002	48	6			
C18	4.669	-0.011	5566	5596			
C20	5.228	0.007	2363	1887			
C22	5.697	-0.001	11721	13684			
C24	6.101	-0.004	26978	16926			
C25	6.290	-0.002	34699	8300			
C26	6.461	-0.003	44652	31347			
C28	6.784	0.002	56865	29190			
C32	7.379	0.004	57393	43015			
C34	7.713	-0.006	43311	8543	BUNKERC (C10-C38)	7233844	825
Filter Peak	7.594	-0.002	47480	15905			
C36	8.151	0.002	29816	20569			
C38	8.688	-0.012	20456	17541			
C40	9.427	0.000	12698	11759			
o-terph	4.918	0.008	1123	1383			
Triacon Surr	7.088	0.006	1211335	961627			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1383	0.1	0.1
Triacontane	961627	42.1	93.6

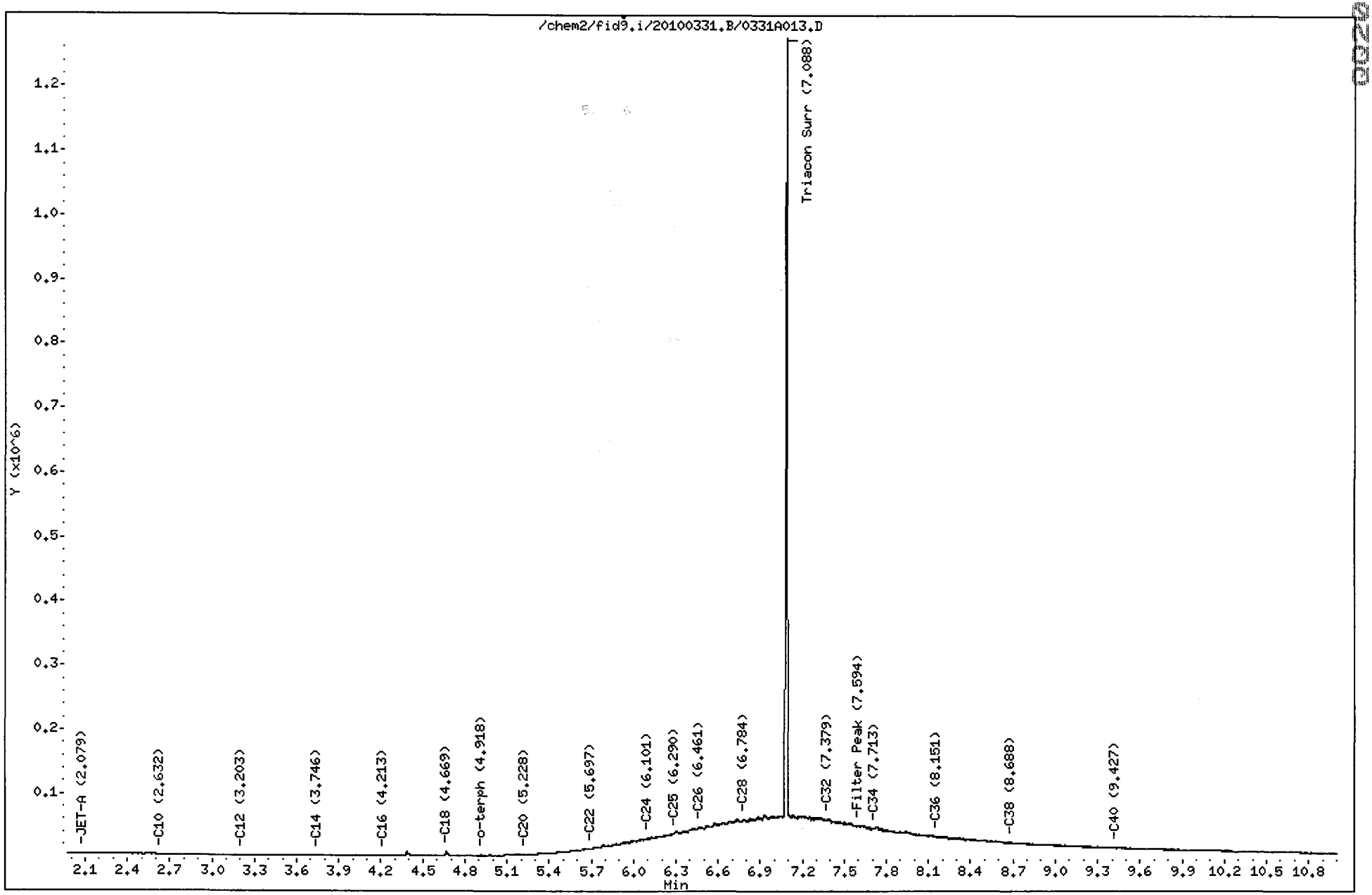
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A013.D
Date : 31-MAR-2010 17:32
Client ID: MOIL#2
Sample Info: MOIL#2

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 30-MAR-2010 Project: LLA

CCal Date: 31-MAR-2010 SDG No.: QQ22

Analysis Time: 19:49 Lab ID: DIESEL#3

Instrument: FID9.I Lab File Name: 0331A020.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	4727176	231.6	250	-7.4
AK102 (C10-C25)	5264603	230.1	250	-7.9
Terphenyl	1041926	42.2	45	-6.2

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A020.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: DIESEL#3
Client ID: DIESEL#3
Injection: 31-MAR-2010 19:49
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.849	-0.009	3462	4629	GAS (Tol-C12)	708497	55
C8	2.017	0.025	2449	2445	DIESEL (C12-C24)	4727176	232
C10	2.645	0.028	8482	13829	M.OIL (C24-C38)	70467	5
C12	3.204	-0.009	49463	45438	AK-102 (C10-C25)	5264603	230
C14	3.739	-0.004	106018	68831	AK-103 (C25-C36)	49326	5
C16	4.212	-0.003	208021	132020			
C18	4.679	-0.001	163157	128149			
C20	5.220	-0.001	94803	91333			
C22	5.702	0.005	41211	44690			
C24	6.096	-0.009	4301	3458			
C25	6.291	-0.001	2031	759			
C26	6.476	0.012	833	196			
C28	6.790	0.008	371	159			
C32	7.378	0.003	454	774			
C34	7.722	0.003	113	48	BUNKERC (C10-C38)	5318266	606
Filter Peak	7.596	0.000	269	79			
C36	8.150	0.001	59	32			
C38	8.703	0.003	163	87			
C40	9.426	-0.001	135	87			
o-terph	4.912	0.002	1333524	1041926			
Triacon Surr	7.080	-0.002	141	62			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1041926	42.2	93.8
Triacontane	62	0.0	0.0

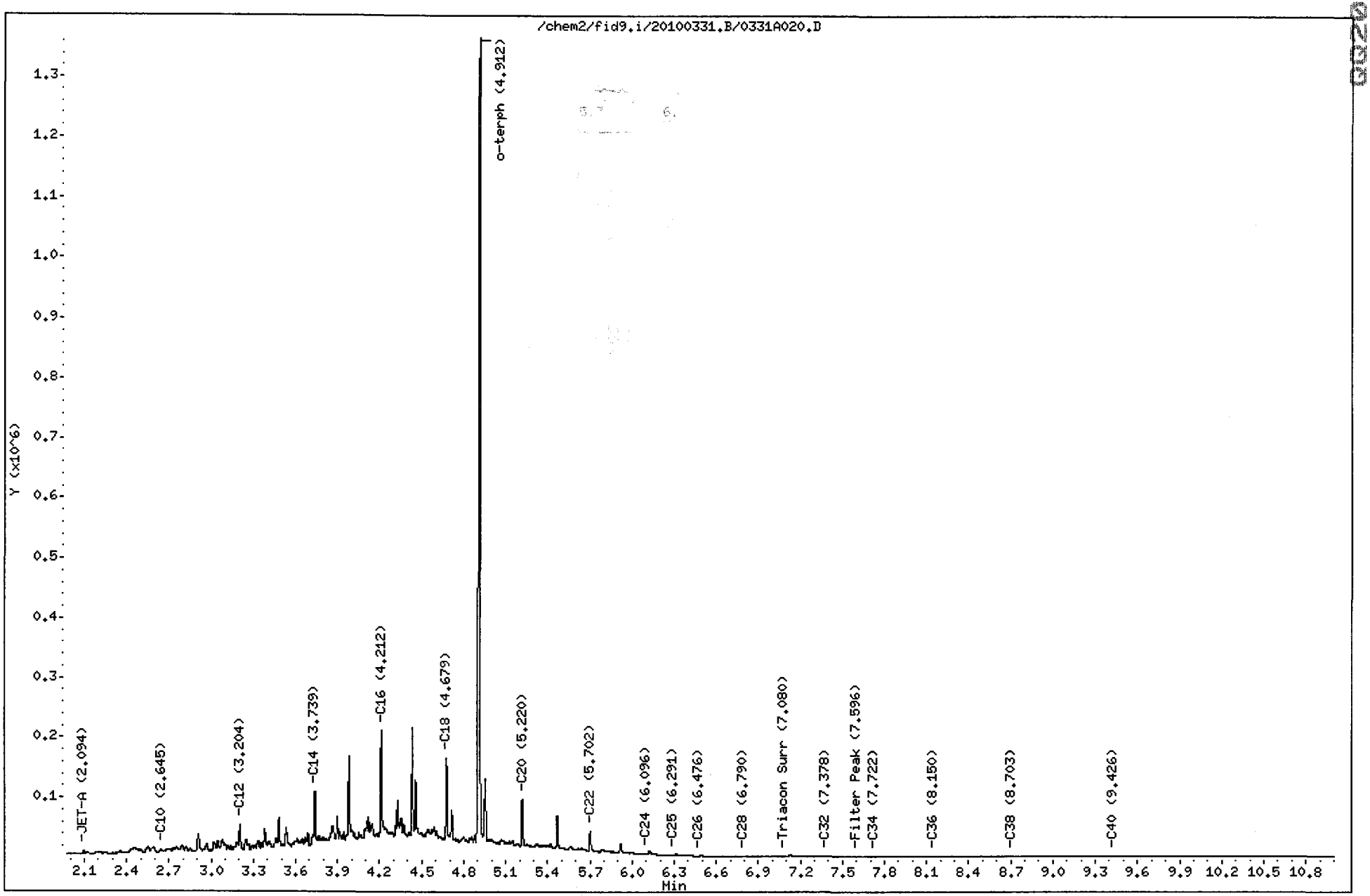
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A020.D
Date : 31-MAR-2010 19:49
Client ID: DIESEL#3
Sample Info: DIESEL#3

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 30-MAR-2010 Project: LLA

CCal Date: 31-MAR-2010 SDG No.: QQ22

Analysis Time: 20:09 Lab ID: MOIL#3

Instrument: FID9.I Lab File Name: 0331A021.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D
WAMoil(C24-C38)	6566278	496.7	500	-0.7
AK103 (C25-C36)	5625405	594.8	500	19.0
n-Triacontane	979313	42.9	45	-4.7

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A021.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: MOIL#3
Client ID: MOIL#3
Injection: 31-MAR-2010 20:09
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.867	0.009	2347	3457	GAS (Tol-C12)	92960	7
C8	2.030	0.039	1603	1992	DIESEL (C12-C24)	773711	38
C10	2.638	0.021	956	1231	M.OIL (C24-C38)	6566278	497
C12	3.203	-0.009	772	1116	AK-102 (C10-C25)	944286	41
C14	3.734	-0.008	196	175	AK-103 (C25-C36)	5625405	595
C16	4.210	-0.005	59	52			
C18	4.668	-0.013	5749	5669			
C20	5.224	0.003	2487	1960			
C22	5.697	0.000	12050	16094			
C24	6.102	-0.003	27652	15136			
C25	6.295	0.003	37095	20917			
C26	6.467	0.003	44772	15102			
C28	6.782	0.001	57998	42883			
C32	7.376	0.002	59368	36783			
C34	7.724	0.005	46575	44228	BUNKERC (C10-C38)	7369606	840
Filter Peak	7.594	-0.003	47743	35944			
C36	8.149	0.000	30929	13452			
C38	8.700	0.000	20812	17495			
C40	9.421	-0.006	12609	11627			
o-terph	4.916	0.006	2167	2422			
Triacon Surr	7.086	0.004	1275064	979313			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	2422	0.1	0.2
Triacontane	979313	42.9	95.3

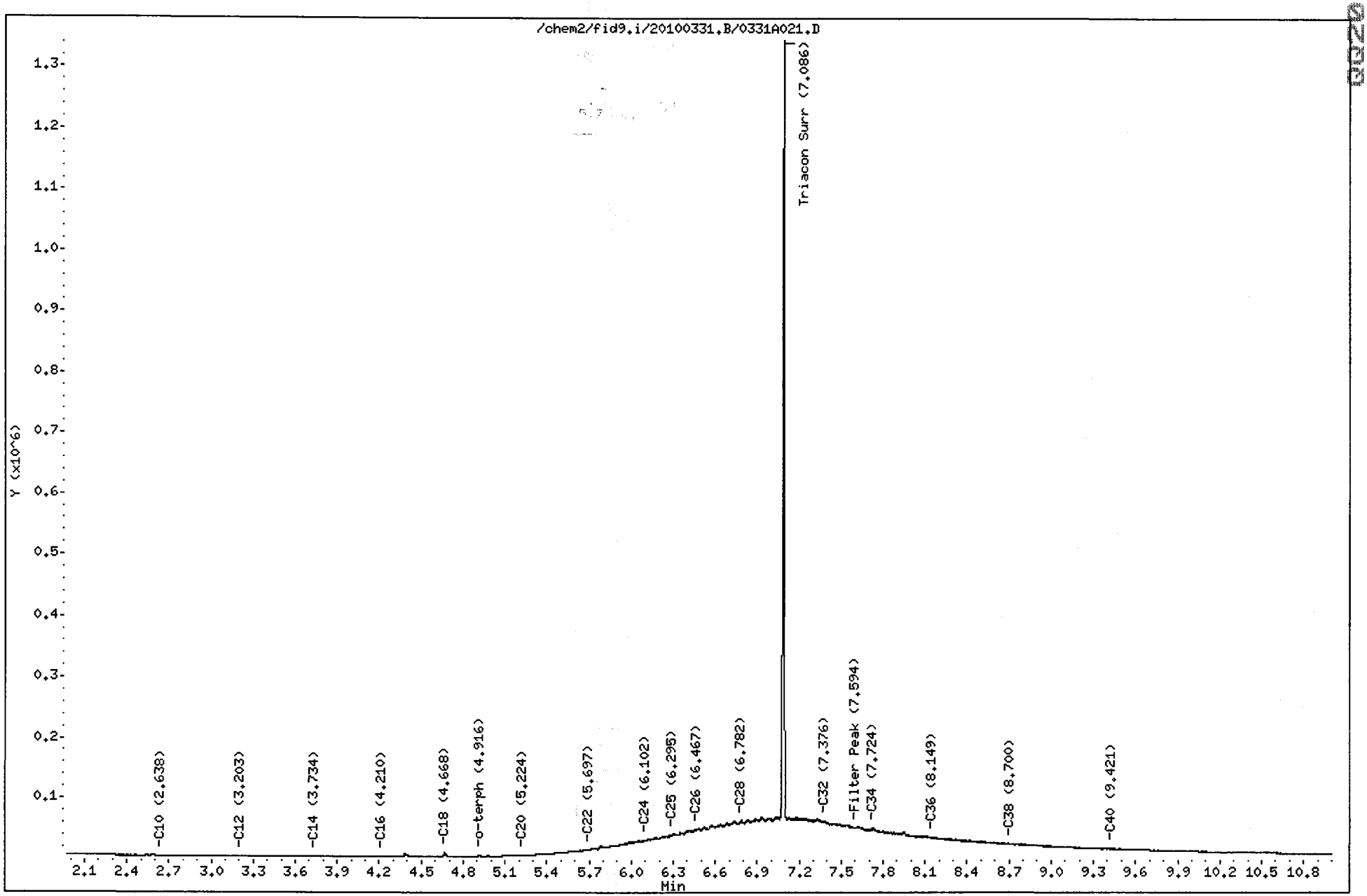
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A021.D
Date : 31-MAR-2010 20:09
Client ID: MOIL#3
Sample Info: MOIL#3

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



TPHD Analysis
QC Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A007.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: QQ33MBW1
Client ID: QQ33MBW1
Injection: 31-MAR-2010 15:33

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.868	0.011	2189	1628	GAS (Tol-C12)	120531	9
C8	2.052	0.061	2825	5584	DIESEL (C12-C24)	114998	6
C10	2.632	0.016	2138	2831	M.OIL (C24-C38)	280386	21
C12	3.217	0.005	536	390	AK-102 (C10-C25)	160400	7
C14	3.741	-0.001	349	230	AK-103 (C25-C36)	246790	26
C16	4.204	-0.010	848	1121			
C18	4.677	-0.003	693	998			
C20	5.220	0.000	786	832			
C22	5.697	0.000	778	869			
C24	6.111	0.006	676	524			
C25	6.285	-0.007	714	789			
C26	6.459	-0.005	658	205			
C28	6.781	-0.001	1513	1382			
C32	7.379	0.005	2616	3693			
C34	7.723	0.004	1005	636	BUNKERC (C10-C38)	435530	50
Filter Peak	7.594	-0.003	1075	382			
C36	8.130	-0.018	40598	116471			
C38	8.695	-0.004	876	691			
C40	9.424	-0.003	848	370			
o-terph	4.905	-0.004	746445	888897			
Triacon Surr	7.080	-0.002	1258315	839760			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	888897	36.0	80.0
Triacontane	839760	36.8	81.7

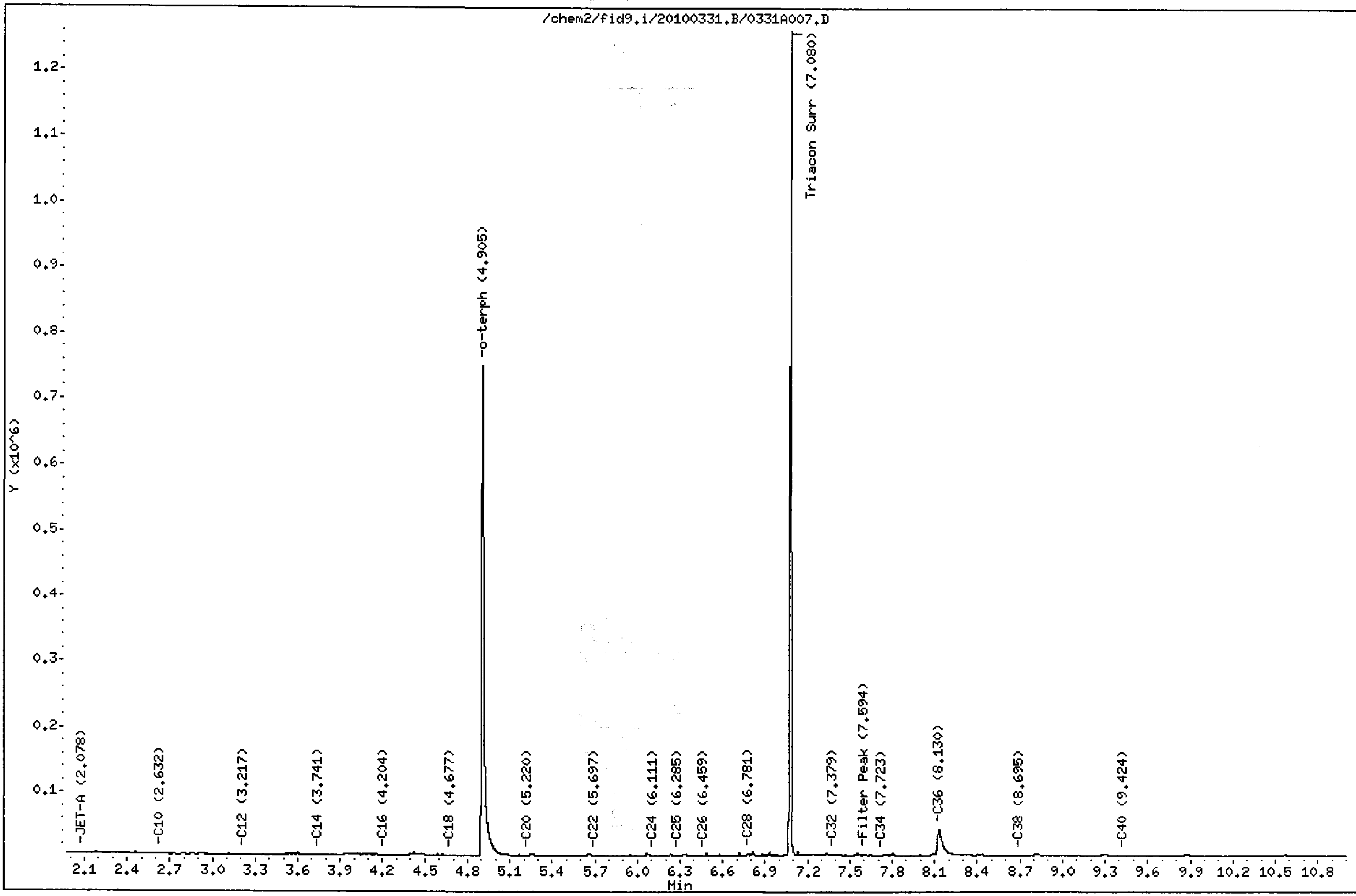
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A007.D
Date : 31-MAR-2010 15:33
Client ID: QQ33MBW1
Sample Info: QQ33MBW1

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A017.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: QQ22CMS
Client ID: CB1032910GRAB MS
Injection: 31-MAR-2010 18:50

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.853	-0.004	6483	7507	GAS (Tol-C12)	2593762	200
C8	2.043	0.052	4764	3947	DIESEL (C12-C24)	20105269	985
C10	2.647	0.030	32358	51961	M.OIL (C24-C38)	673298	51
C12	3.206	-0.007	193175	191128	AK-102 (C10-C25)	22179323	970
C14	3.737	-0.005	452249	281544	AK-103 (C25-C36)	579784	61
C16	4.213	-0.002	945556	720404			
C18	4.684	0.004	699333	574481			
C20	5.224	0.003	457320	378955			
C22	5.698	0.000	241340	193996			
C24	6.103	-0.002	74429	60526			
C25	6.289	-0.003	47328	57207			
C26	6.461	-0.003	17898	21651			
C28	6.779	-0.003	6529	11235			
C32	7.374	0.000	4103	5781			
C34	7.717	-0.002	1772	2997	BUNKERC (C10-C38)	22773956	2597
Filter Peak	7.599	0.002	1821	2841			
C36	8.123	-0.026	72154	146253			
C38	8.702	0.003	363	114			
C40	9.432	0.005	186	107			
o-terph	4.913	0.004	1061755	792253			
Triacon Surr	7.080	-0.003	1144117	783512			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	792253	32.1	71.3
Triacontane	783512	34.3	76.3

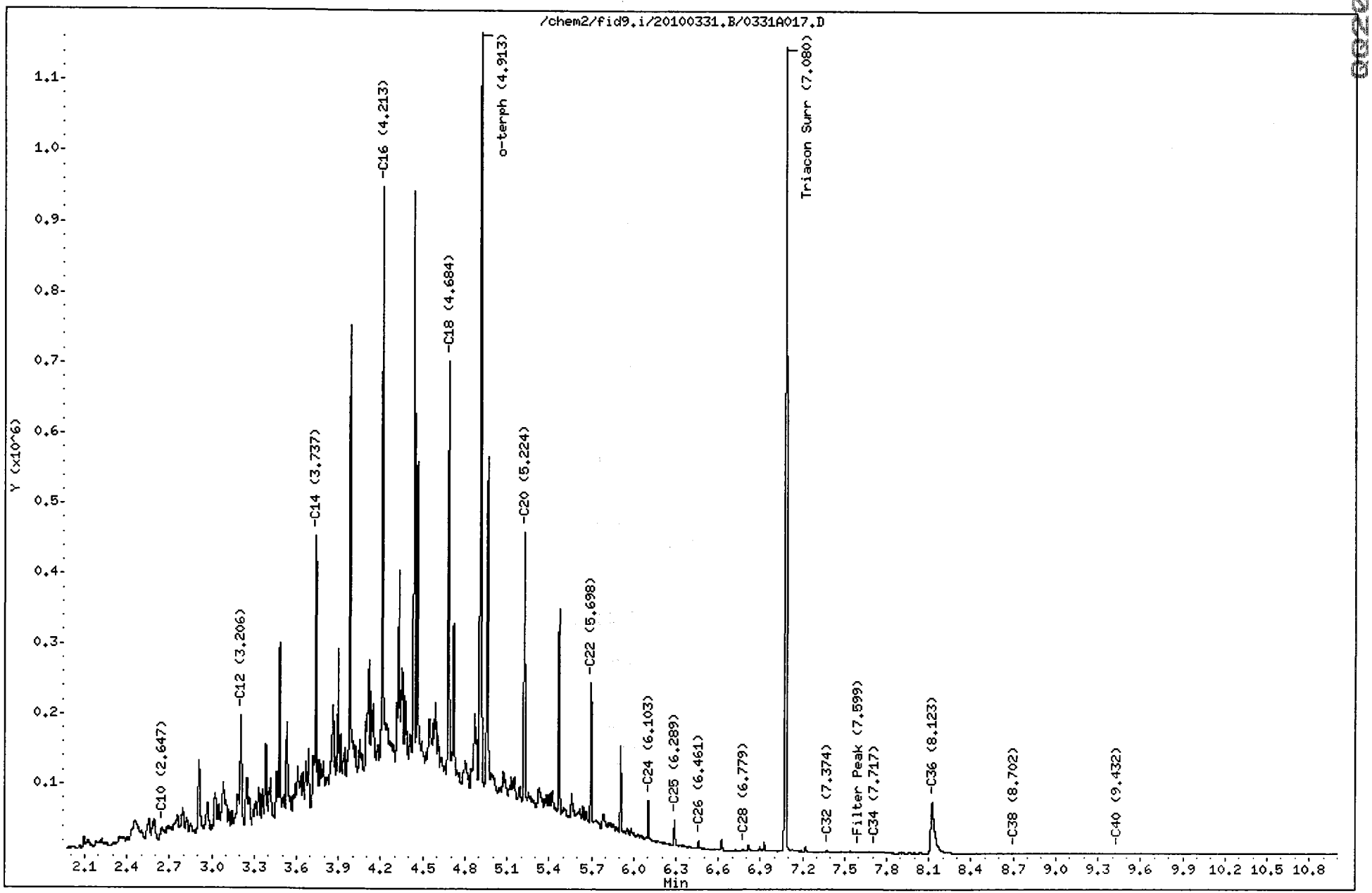
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A017.D
Date : 31-MAR-2010 18:50
Client ID: CB1032910GRAB MS
Sample Info: QQ22CMS

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



MS 4/5/10

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A018.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: QQ22CMSD
Client ID: CB1032910GRAB MSD
Injection: 31-MAR-2010 19:10

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.855	-0.003	7785	8720	GAS (Tol-C12)	3497523	270
C8	2.042	0.051	5832	1391	DIESEL (C12-C24)	26334720	1290
C10	2.648	0.031	43244	69354	M.OIL (C24-C38)	925842	70
C12	3.206	-0.007	273085	254444	AK-102 (C10-C25)	29174913	1275
C14	3.738	-0.004	609280	373112	AK-103 (C25-C36)	785167	83
C16	4.215	0.000	1268445	791516			
C18	4.689	0.008	899398	771215			
C20	5.229	0.008	600318	504606			
C22	5.701	0.004	319760	246566			
C24	6.106	0.000	104989	83379			
C25	6.290	-0.002	74234	80786			
C26	6.462	-0.002	25480	29658			
C28	6.779	-0.002	9437	12124			
C32	7.374	0.000	5945	6958			
C34	7.719	0.000	2647	5199	BUNKERC (C10-C38)	29981304	3418
Filter Peak	7.603	0.007	2515	4840			
C36	8.126	-0.023	81249	150895			
C38	8.698	-0.001	570	275			
C40	9.434	0.007	283	181			
o-terph	4.918	0.008	1379915	1086387			
Triacon Surr	7.084	0.002	1388910	1069307			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1086387	44.0	97.8
Triacontane	1069307	46.8	104.1

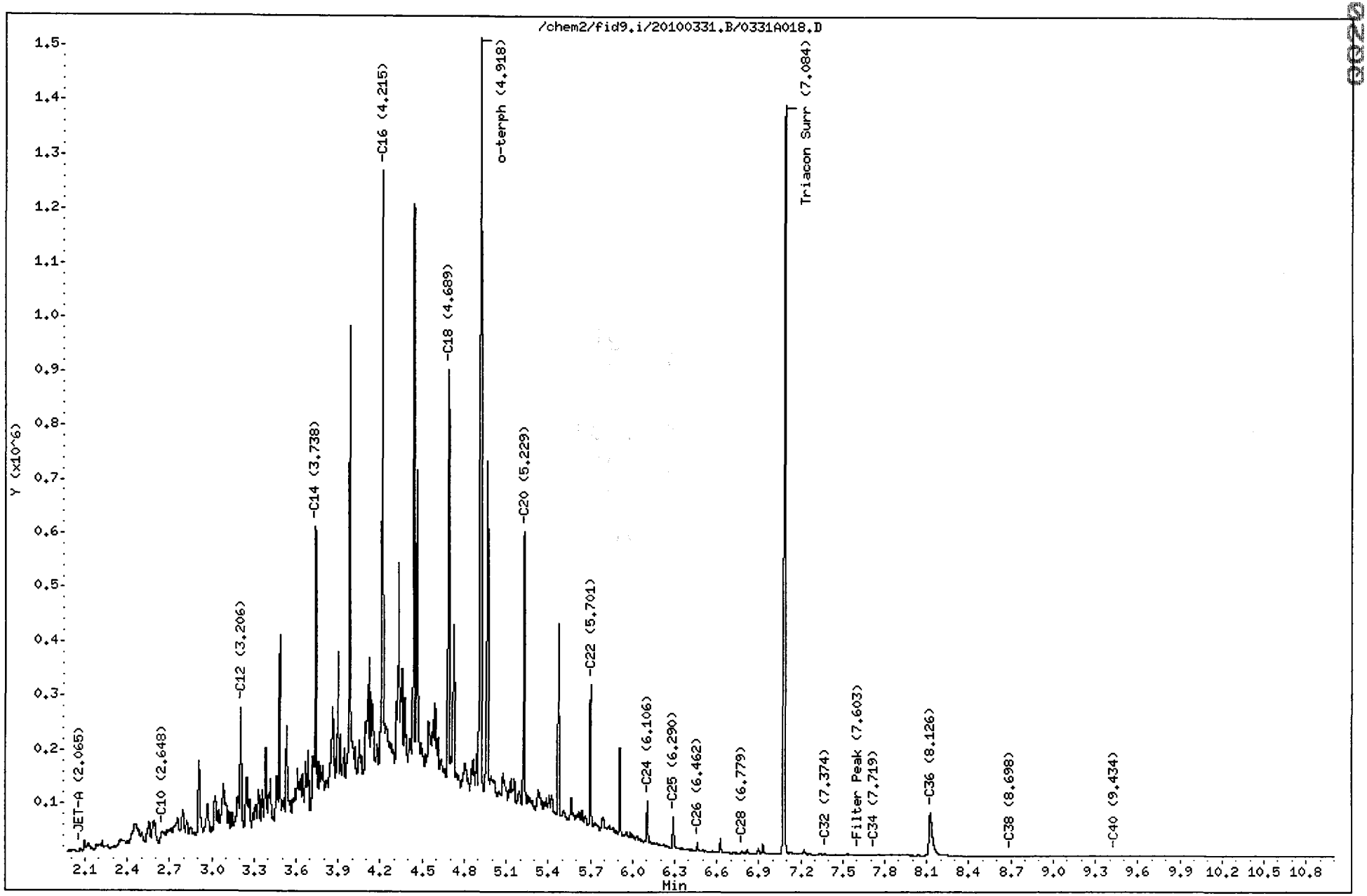
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A018.D
Date : 31-MAR-2010 19:10
Client ID: CB1032910GRAB MSD
Sample Info: QQ22CMSD

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



MS 4/5/10

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100331.B/0331A008.D
Method: /chem2/fid9.i/20100331.B/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 04/05/2010
Macro: 30-MAR-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:30-MAR-2010 M.Oil:30-MAR-2010

ARI ID: QQ33LCSW1
Client ID: QQ33LCSW1
Injection: 31-MAR-2010 15:53

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.856	-0.002	6633	7530	GAS (Tol-C12)	2803635	217
C8	2.047	0.056	4690	3083	DIESEL (C12-C24)	22821423	1118
C10	2.646	0.029	33796	55623	M.OIL (C24-C38)	448948	34
C12	3.205	-0.007	215867	207656	AK-102 (C10-C25)	25059422	1095
C14	3.738	-0.004	519793	324952	AK-103 (C25-C36)	366384	39
C16	4.215	0.000	1093418	685783			
C18	4.687	0.007	810959	677105			
C20	5.227	0.006	523934	468440			
C22	5.699	0.002	277161	214766			
C24	6.104	-0.001	90483	71140			
C25	6.290	-0.002	39141	49544			
C26	6.463	-0.001	16466	21294			
C28	6.780	-0.001	3508	4608			
C32	7.379	0.005	2242	2405			
C34	7.720	0.001	296	247	BUNKERC (C10-C38)	25429605	2899
Filter Peak	7.601	0.004	572	629			
C36	8.126	-0.023	45071	118574			
C38	8.706	0.006	60	13			
C40	9.422	-0.005	39	23			
o-terph	4.916	0.006	1209108	926725			
Triacon Surr	7.079	-0.003	1310851	912676			

Range Times: NW Diesel(3.212 - 6.105) AK102(2.62 - 6.29) Jet A(2.62 - 4.68)
NW M.Oil(6.11 - 8.70) AK103(6.29 - 8.15) OR Diesel(2.62 - 6.78)

Surrogate	Area	Amount	%Rec
o-Terphenyl	926725	37.5	83.4
Triacontane	912676	40.0	88.8

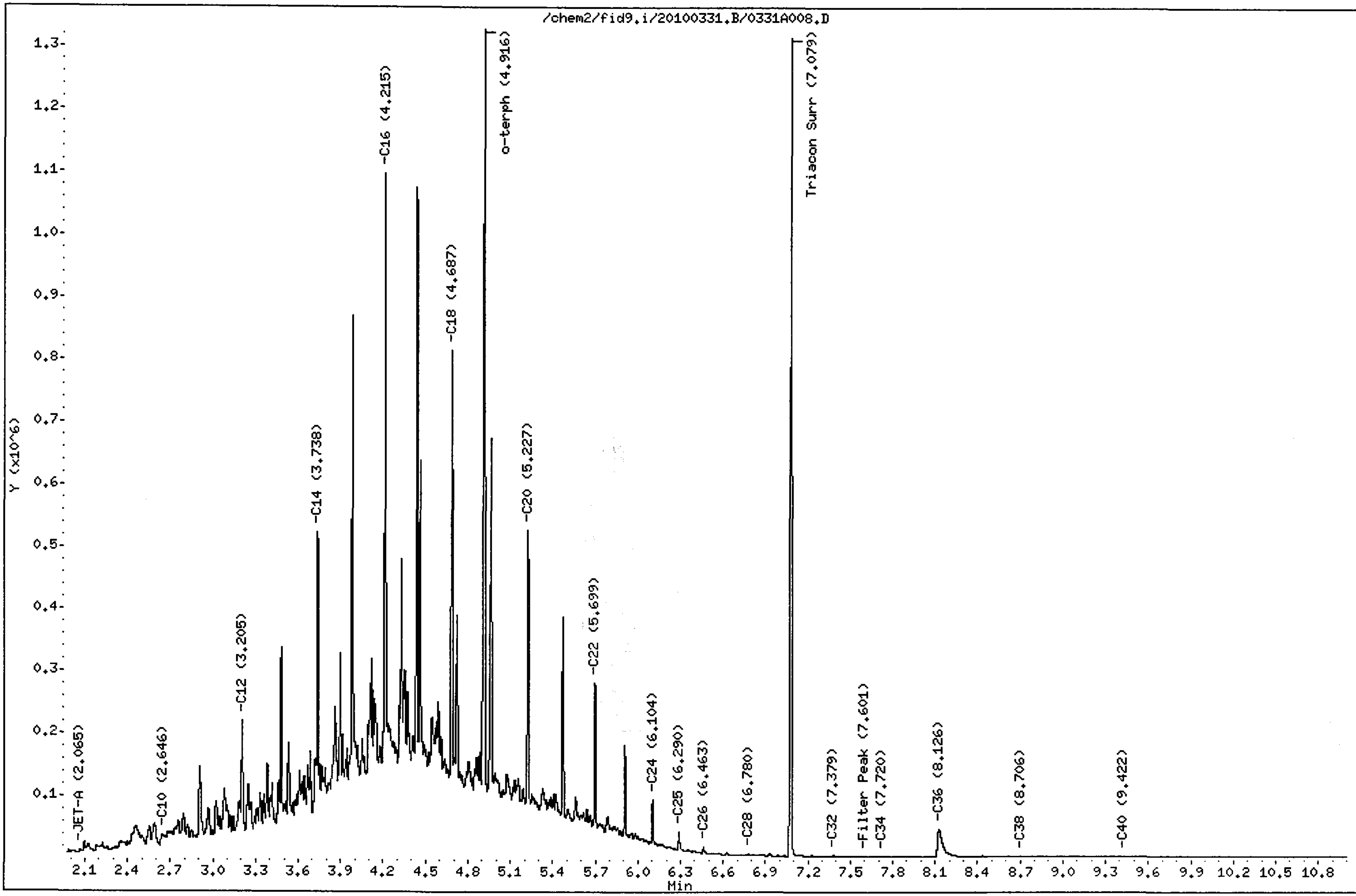
Analyte	RF	Curve Date
o-Terph Surr	24688.0	30-MAR-2010
Triacon Surr	22834.5	31-MAR-2010
Gas	12943.2	01-OCT-2009
Diesel	20414.0	30-MAR-2010
Motor Oil	13220.0	30-MAR-2010
AK102	22876.0	30-MAR-2010
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100331.B/0331A008.D
Date : 31-MAR-2010 15:53
Client ID: QQ33LCSW1
Sample Info: QQ33LCSW1

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



TPHD Analysis
Extraction Bench Sheets/Run Logs

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

NWTPHD/ NWHCID –Water
Separatory Funnel (3510C) (SOP # 3311S)

Preparation Test TPHD/HCID # 1
ARI Job No(s) QQ33, QQ22

In-House (0.25-0.50ppm)
Batch set up by: WW

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	DryVap Or KD	Turbo Vap 1/2/3	Acid/Silica Clean (1:1) (Y)/ N	Final Effective Volume	Volume to Lab	Comments
	QQ33 MBW	Date 03/30/10	500mL			1mL	1mL	1mL	
	SBW	↓	↓			↓	↓	↓	
	SBW Dup.		↓			↓	↓	↓	
	A	checked	500mL						
	B								
	C								
	QQ22 A								
	B								
	C								
	CMS								
	CMSD								
	D								

Analyst/Date: AR 03/30/10 → 3-30-10 TS 3/30/10 →

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	O	100µL	7/02/10		SP
Spike	11	100µL	9/07/10		SP
Extraction Time:	0905				

SPECIAL INSTRUCTIONS: 1. Add Surr/Spk. 2. Acidify with 1 pipet of 1:1 Sulfuric Acid. 3. Check pH.

4. Extract 2X with 30mL DCM. 5. DryVap or KD at 80°. 6. TurboVap if KD. 7. Acid/Silica Clean-ups? (Y)/ N.

8. Vial in DCM.

A. Archive (Y) N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: QQ22 Client ID: Floyd/Snider

Parameter: TPHD Client Project: Lora Lake Apartments

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☐ Wet sediment/sludge=	
☐ Standing Water Decanted=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☐ Rocks/Organics=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☑ No Anomalies QQ22 Samples is Clean, Clear	AR 03/30/10
☑ Turbid/Color= QQ22 Samples A,B,D are slightly turbid, grey in color	AR 03/30/10
☑ Particulates= Samples A,B,D have .5% particulates	AR 03/30/10
☐ Emulsions=	
☐ Other (Details)=	
☐ Other Notes/Comments=	

Analytical Resources Inc.: Organics Instrument Log

FID-9 Agilent 6850 - Serial No.: US10404004

Date: 3/30/10 Analysis: TPHD Analyst: MS

GC Program: TPH Column No: 802037 Column Type: RTX-1

Instrument Tune (.U or .CT.): — EM Voltage: —

Calibration File: — Curve Date: 3/30/10

IS/SS	Ical/Ccal	LCS/ICV
1	1686 3 1687 -7 1694-1 1639-1	2

INTERNAL STANDARD SUMMARY FOR DA

	Time	Filename	LabID	ClientId	DF	
1	1510	0330A001.d	RINSE		1	
2	1530	0330A002.d	RT		1	
3	1549	0330A003.d	IB		1	
4	1609	0330A004.d	DIESEL#1		1	
5	1629	0330A005.d	MOIL#1		1	
6	1657	0330A006.d	IB		1	
7	1816	0330A007.d	DIESEL#1		1	
8	1836	0330A008.d	MOIL#1		1	
9	1856	0330A009.D	RT		1	
10	1915	0330A010.D	DIESEL#1		1	
11	1935	0330A011.D	MOIL#1		1	
12	1955	0330A012.D	IB		1	
13	2024	0330A013.D	MOIL#1		1	
14	2057	0330A014.D	DIESEL#1		1	
15	2117	0330A015.D	MOIL#1		1	
16	2136	0330A016.D	RINSE		1	
17	2156	0330A017.D	DIESEL 50		1	
18	2216	0330A018.D	DIESEL 100		1	
19	2235	0330A019.D	DIESEL 250		1	
20	2255	0330A020.D	DIESEL 500		1	
21	2314	0330A021.D	DIESEL 1000		1	
22	2334	0330A022.D	DIESEL 2500		1	

INTERNAL STANDARD SUMMARY FOR DA

	Time	Filename	LabID	ClientId	DF	
23	2354	0330A023.D	DIESEL ICV		1	
24	0013	0330A024.D	RINSE		1	
25	0033	0330A025.D	MOIL 100		1	
26	0052	0330A026.D	MOIL 250		1	
27	0112	0330A027.D	MOIL 500		1	
28	0131	0330A028.D	MOIL 1000		1	
29	0151	0330A029.D	RINSE		1	
30	0210	0330A030.D	MOIL 2500		1	
31	0230	0330A031.D	RINSE		1	
32	0249	0330A032.D	MOIL 5000		1	
33	0309	0330A033.D	MOIL ICV		1	
34	0328	0330A034.D	RINSE		1	
35	0348	0330A035.D	RINSE		1	
36	0407	0330A036.D	DIESEL#1		1	
37	0427	0330A037.D	MOIL#1		1	
38	0446	0330A038.D	QQ33A		1	
39	0506	0330A039.D	QQ33B		1	
40	0525	0330A040.D	QQ33C		1	
41	0545	0330A041.D	QQ22A		1	
42	0605	0330A042.D	QQ22B		1	
43	0624	0330A043.D	QQ22C		1	
44	0644	0330A044.D	QQ22CMS		1	
45	0703	0330A045.D	QQ22CMSD		1	

INTERNAL STANDARD SUMMARY FOR DA

	Time	Filename	LabID	ClientId	DF	
46	0723	0330A046.D	QQ22D		1	
47	0743	0330A047.D	QQ33LCSW1		1	
48	0802	0330A048.D	QQ33MBW1		1	
49	0822	0330A049.D	DIESEL#2		1	
50	0841	0330A050.D	MOIL#2		1	

Maintenance / Comments

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: Diesel Curve AK102 Client ID: ART

ARI SOP: 403S(PCB) 405S(Herbicides) (407S(TPH-D)) 409S(HCID) 423S(Pesticides) Other

Parameter(s): Diesel, AK102, o-Terph.

Instrument: FID-3A FID-3B FID-4A FID-4B FID-7 FID-8 FID9
ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 3/30/10 Analysis Start: 3/30/10

Endrin/DDT Breakdown <15%? YES / NO / (NA) Method Blank In Control? YES / NO (M

ICal Meets RF & %RSD Criteria? (YES) / NO LCS/LCSD Recovery In Control? YES / NO

CCal Meets RF & %RSD Criteria (YES) / NO Surrogate Recovery In Control? (YES) / NO (L

Internal Standard Meets Criteria? YES / NO / (NA) Special Analysis Criteria Met? YES / NO / (NA)

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / (No)

Analyst Signature: MO Date: 3/31/10

Reviewer's Signature: JNB Date: 3/31/10

m 4060F

Version 006

10/14/08

GC Analyst Notes / Corrective Action Log

ARI Project ID: 30 wt MOil, n-Tria Client ID: ARI

ARI SOP: **403S(PCB)** **405S(Herbicides)** **407S(TPH-D)** **409S(HCID)** **423S(Pesticides)** **Other**

Parameter(s): 30 wt MOil, n-Triacontane

Instrument: FID-3A FID-3B FID-4A FID-4B FID-7 FID-8 (FID9)
ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 3/30/10 - 3/31/10 Analysis Start: 3/30/10

Endrin/DDT Breakdown <15%? YES / NO / (NA) Method Blank In Control? YES / NO

ICal Meets RF & %RSD Criteria? (YES) / NO LCS/LCSD Recovery In Control? YES / NO

CCal Meets RF & %RSD Criteria (YES) / NO Surrogate Recovery In Control? (YES) / NO

Internal Standard Meets Criteria? YES / NO / (NA) Special Analysis Criteria Met? YES / NO / (NA)

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / (No)

Analyst Signature: MD **Date:** 3/31/10

Reviewer's Signature: [illegible] **Date:** 3/31/10

Analytical Resources Inc.: Organics Instrument Log

FID-9 Agilent 6850 - Serial No.: US10404004

Date: 3/31/10 Analysis: DHP Analyst: JM

GC Program: DPH Column No: 802637 Column Type: RTX-1

Instrument Tune (.U or .CT.): — EM Voltage: —

Calibration File: — Curve Date: 3/30/10

IS/SS

S

Ical/Ccal

1686-3
1686-1
1694-1
1694-1

LCS/ICV

L

INTERNAL STANDARD SUMMARY FOR DA1

	Time	Filename	LabID	ClientId	DF
1	1255	0331A001.D	RINSE		1
2	1315	0331A002.D	RT		1
3	1335	0331A003.D	IB		1
4	1354	0331A004.D	DIESEL#1		1
5	1414	0331A005.D	MOIL#1		1
6	1513	0331A006.D	DIESEL#1		1
7	1533	0331A007.D	QQ33MBW1	QQ33MBW1	1
8	1553	0331A008.D	QQ33LCSW1	QQ33LCSW1	1
9	1612	0331A009.D	QQ33A	LC B1	1
10	1632	0331A010.D	QQ33B	LC B2	1
11	1652	0331A011.D	QQ33C	LC B3	1
12	1712	0331A012.D	DIESEL#2		1
13	1732	0331A013.D	MOIL#2		1
14	1751	0331A014.D	QQ22A		1
15	1811	0331A015.D	QQ22B		1
16	1831	0331A016.D	QQ22C		1
17	1850	0331A017.D	QQ22CMS		1
18	1910	0331A018.D	QQ22CMSD		1
19	1930	0331A019.D	QQ22D		1
20	1949	0331A020.D	DIESEL#3		1
21	2009	0331A021.D	MOIL#3		1
22	2225	0331A022.D	QQ71MBS1		1
23	2245	0331A023.D	QQ71LCSS1		1
24	2304	0331A024.D	QQ71A		1
25	2324	0331A025.D	QQ71B		1
26	2343	0331A026.D	QQ71C		1
27	0003	0331A027.D	QQ71CMS		1
28	0022	0331A028.D	QQ71CMSD		1
29	0042	0331A029.D	QQ71D		1
30	0101	0331A030.D	QQ71E		1
31	0121	0331A031.D	QQ71F		1
32	0140	0331A032.D	QQ71G		1
33	0200	0331A033.D	QQ71H		1
34	0219	0331A034.D	DIESEL#4		1
35	0238	0331A035.D	MOIL#4		1
36	0258	0331A036.D	QQ71I		1
37	0317	0331A037.D	QQ71J		1
38	0337	0331A038.D	QQ71K		1
39	0356	0331A039.D	QQ71L		1
40	0416	0331A040.D	QQ71M		1
41	0435	0331A041.D	QQ71N		1
42	0455	0331A042.D	QQ71O		1
43	0514	0331A043.D	QQ71P		1
44	0534	0331A044.D	QQ71Q		1
45	0553	0331A045.D	QQ71R		1
46	0613	0331A046.D	QQ71S		1
47	0632	0331A047.D	QQ71T		1
48	0652	0331A048.D	DIESEL#5		1
49	0711	0331A049.D	MOIL#5		1

Maintenance / Comments

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: QQ22 Client ID: FLOYD-SNIDER

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) **Other**

Parameter(s): Diesel, M.Oil, 0-Teaph.

Instrument: FID-3A FID-3B FID-4A FID-4B FID-7 FID-8 FID9

ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 3/30/10 Analysis Start: 3/31/10

Endrin/DDT Breakdown <15%? YES / NO / NA Method Blank In Control? YES / NO

ICal Meets RF & %RSD Criteria? YES / NO LCS/LCSD Recovery In Control? YES / NO

CCal Meets RF & %RSD Criteria YES / NO Surrogate Recovery In Control? YES / NO

Internal Standard Meets Criteria? YES / NO / NA Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst Signature: MP **Date:** 4/6/10

Reviewer's Signature: [illegible] **Date:** 4/6/10

Metals Analysis
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

SDG: QQ20

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
CB31A032510COMP	QQ20A	10-8030	
CB31A032510COMPD	QQ20ADUP	10-8030	
CB31A032510COMPS	QQ20ASPK	10-8030	
CB4857032510COMP	QQ20B	10-8031	
PBW	QQ20MB1	10-8031	
LCSW	QQ20MB1SPK	10-8031	
CB1032510COMP	QQ20C	10-8032	
CB101032510COMP	QQ20D	10-8033	
CB31A032510COMP	QQ20E	10-8034	
CB31A032510COMPD	QQ20EDUP	10-8034	
CB31A032510COMPS	QQ20ESPK	10-8034	
CB4857032510COMP	QQ20F	10-8035	
PBW	QQ20MB2	10-8035	
LCSW	QQ20MB2SPK	10-8035	
CB1032510COMP	QQ20G	10-8036	
CB101032510COMP	QQ20H	10-8037	

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 4/15/10 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	1.07	26.2	25.0	101%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: CB31A032510COMP
DUPLICATE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	1.1	1.1	0.0%	+/- 20%	

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: QQ20LCS
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.1	25.0	100%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: QQ20MB
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A032510COMP
MATRIX SPIKE

Lab Sample ID: QQ20E
LIMS ID: 10-8034
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.570	26.1	25.0	102%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A032510COMP
DUPLICATE

Lab Sample ID: QQ20E
LIMS ID: 10-8034
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.6	0.6	0.0%	+/- 0.2	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: QQ20LCS
LIMS ID: 10-8035
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.4	25.0	102%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: METHOD BLANK

Lab Sample ID: QQ20MB
LIMS ID: 10-8035
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

SDG: QQ20

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS041481	50.0	48.78	97.6	50.0	49.48	99.0	49.28	98.6	48.51	97.0	48.81	97.6	49.27	98.5

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

UNITS:ug/L

SDG: QQ20

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Arsenic	AS	PMS	MS041481	50.0	49.29	98.6	49.65	99.3	49.24	98.5						

Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (1)

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

SDG: QQ20

UNITS: ug/L

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Arsenic	AS	PMS	MS041481	0.2	0.19	95.0										

Control Limits: no control limits have been established by the EPA at this time.

FORM II (2)

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

SDG: QQ20

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS041481	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U

FORM III

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

SDG: QQ20

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Arsenic	AS	PMS	MS041481	10.0	0.2	0.2	U	0.2	U	0.2	U						

FORM III

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

SDG: QQ20

ICS SOURCE: I.V.

RUNID: MS041481

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Arsenic		20	0.0	18.7	**93.5**						
Cadmium		20	0.0	18.8	**94.0**						
Chromium		20	0.5	19.1	**95.5**						
Cobalt		20	0.0	18.5	**92.5**						
Copper		20	0.4	18.5	**92.5**						
Manganese		20	0.1	18.5	**92.5**						
Molybdenum	400	400	402.1	376.4	**94.1**						
Nickel		20	0.5	18.6	**93.0**						
Selenium			0.1	0.1							
Silver		20	0.0	17.1	**85.5**						
Vanadium			0.0	-0.4							
Zinc		20	0.3	17.6	**88.0**						

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

SDG: QQ20 UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Arsenic	AS	PMS	PE ELAN 6000 MS	0.00		10	0.2	4/1/2009		

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments

SDG: QQ20

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 3/31/2010

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
CB31A032510COMP	QQ20A	0.000	50.0	25.0
CB31A032510COMPD	QQ20ADUP	0.000	50.0	25.0
CB31A032510COMPS	QQ20ASPK	0.000	50.0	25.0
CB4857032510COMP	QQ20B	0.000	50.0	25.0
CB1032510COMP	QQ20C	0.000	50.0	25.0
CB101032510COMP	QQ20D	0.000	50.0	25.0
CB31A032510COMP	QQ20E	0.000	50.0	25.0
CB31A032510COMPD	QQ20EDUP	0.000	50.0	25.0
CB31A032510COMPS	QQ20ESPK	0.000	50.0	25.0
CB4857032510COMP	QQ20F	0.000	50.0	25.0
CB1032510COMP	QQ20G	0.000	50.0	25.0
CB101032510COMP	QQ20H	0.000	50.0	25.0
PBW	QQ20MB1	0.000	50.0	25.0
LCSW	QQ20MB1SPK	0.000	50.0	25.0
PBW	QQ20MB2	0.000	50.0	25.0
LCSW	QQ20MB2SPK	0.000	50.0	25.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments — INSTRUMENT ID: PE ELAN 6000 MS — START DATE: 4/14/2010

SDG: QQ20 — RUNID: MS041481 — METHOD: PMS — END DATE: 4/14/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10580				X																										
S1	S1	1.00	11060				X																										
S2	S2	1.00	11140				X																										
S3	S3	1.00	11210				X																										
S4	S4	1.00	11290				X																										
ZZZZZZ	Rinse Sampl	1.00	11370																														
ICV	MICV	1.00	11450				X																										
ICB	ICB	1.00	11520				X																										
CCV	MCCV1	1.00	12000				X																										
CCB	CCB1	1.00	12070				X																										
CRI	MCRI	1.00	12140				X																										
ICSA	ICSAI	1.00	12220				X																										
ICSAB	ICSABI	1.00	12300				X																										
ZZZZZZ	LR200	1.00	12370																														
ZZZZZZ	LR300	1.00	12440																														
CCV	MCCV2	1.00	12510				X																										
CCB	CCB2	1.00	12580				X																										
ZZZZZZ	QP83MB	2.00	13070																														
ZZZZZZ	QP83MBSPK	2.00	13140																														
ZZZZZZ	QP83A	2.00	13210																														
ZZZZZZ	QO76A	2.00	13280																														
ZZZZZZ	QO76B	2.00	13350																														
ZZZZZZ	QO98B	2.00	13410																														
ZZZZZZ	QO98C	2.00	13480																														
ZZZZZZ	QO98F	2.00	13550																														
ZZZZZZ	QO98I	2.00	14020																														
ZZZZZZ	QO98J	2.00	14090																														
CCV	MCCV3	1.00	14160				X																										
CCB	CCB3	1.00	14240				X																										
ZZZZZZ	QP28MB1	20.00	14360																														
ZZZZZZ	QP28MB1SPK	20.00	14430																														
ZZZZZZ	QO98M	5.00	14500																														
ZZZZZZ	QN20B	2.00	14570																														
ZZZZZZ	QN20E	2.00	15030																														
ZZZZZZ	QN20F	2.00	15100																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments   INSTRUMENT ID: PE ELAN 6000 MS   START DATE: 4/14/2010

SDG: QQ20   RUNID: MS041481   METHOD: PMS   END DATE: 4/14/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	QN20G	2.00	15170																														
ZZZZZZ	QN20J	2.00	15240																														
ZZZZZZ	QN20K	2.00	15310																														
ZZZZZZ	QP28REF1	20.00	15370																														
CCV	MCCV4	1.00	15440				X																										
CCB	CCB4	1.00	15520				X																										
ZZZZZZ	QO76A	5.00	16130																														
ZZZZZZ	QO76B	5.00	16200																														
ZZZZZZ	QO98C	5.00	16270																														
ZZZZZZ	QO98F	5.00	16340																														
ZZZZZZ	QO98I	5.00	16410																														
ZZZZZZ	QO98J	5.00	16480																														
ZZZZZZ	QN20E	5.00	16540																														
ZZZZZZ	QN20F	5.00	17010																														
ZZZZZZ	QN20G	5.00	17080																														
ZZZZZZ	QO98B	5.00	17150																														
CCV	MCCV5	1.00	17220				X																										
CCB	CCB5	1.00	17300				X																										
ZZZZZZ	QP82MB1	20.00	17370																														
ZZZZZZ	QP82MB1SPK	20.00	17440																														
ZZZZZZ	QP28BDUP	20.00	17510																														
ZZZZZZ	QP28B	20.00	17580																														
ZZZZZZ	QP28BSPK	20.00	18040																														
ZZZZZZ	QP28C	20.00	18110																														
ZZZZZZ	QP28D	20.00	18180																														
ZZZZZZ	QP28E	20.00	18250																														
ZZZZZZ	QP39A	20.00	18320																														
ZZZZZZ	QP39C	20.00	18390																														
CCV	MCCV6	1.00	18460				X																										
CCB	CCB6	1.00	18530				X																										
PBW	QQ20MB1	2.00	19010				X																										
LCSW	QQ20MB1SPK	2.00	19080				X																										
ZZZZZZ	QP39B	20.00	19150																														
ZZZZZZ	QP82A	20.00	19210																														
ZZZZZZ	QP82B	20.00	19280																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apartments | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 4/14/2010

SDG: QQ20 | RUNID: MS041481 | METHOD: PMS | END DATE: 4/14/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
CB31A032510COMPD	QQ20ADUP	2.00	19350				X																										
CB31A032510COMP	QQ20A	2.00	19420				X																										
CB31A032510COMPS	QQ20ASPK	2.00	19480				X																										
CB4857032510COMP	QQ20B	2.00	19550				X																										
CB1032510COMP	QQ20C	2.00	20020				X																										
CCV	MCCV7	1.00	20090				X																										
CCB	CCB7	1.00	20170				X																										
PBW	QQ20MB2	2.00	20240				X																										
LCSW	QQ20MB2SPK	2.00	20310				X																										
CB31A032510COMPD	QQ20EDUP	2.00	20380				X																										
CB31A032510COMP	QQ20E	2.00	20450				X																										
CB31A032510COMPS	QQ20ESPK	2.00	20520				X																										
CB101032510COMP	QQ20D	2.00	20580				X																										
CB4857032510COMP	QQ20F	2.00	21050				X																										
CB1032510COMP	QQ20G	2.00	21120				X																										
CB101032510COMP	QQ20H	2.00	21190				X																										
ZZZZZZ	QN20J	5.00	21260																														
CCV	MCCV8	1.00	21330				X																										
CCB	CCB8	1.00	21410				X																										

Metals Analysis
Sample Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A032510COMP
SAMPLE

Lab Sample ID: QQ20A
LIMS ID: 10-8030
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**1.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB4857032510COMP
SAMPLE

Lab Sample ID: QQ20B
LIMS ID: 10-8031
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.9**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB1032510COMP
SAMPLE

Lab Sample ID: QQ20C
LIMS ID: 10-8032
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB101032510COMP
SAMPLE

Lab Sample ID: QQ20D
LIMS ID: 10-8033
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.8**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: CB31A032510COMP
SAMPLE

Lab Sample ID: QQ20E
LIMS ID: 10-8034
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB4857032510COMP
SAMPLE

Lab Sample ID: QQ20F
LIMS ID: 10-8035
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.5**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB1032510COMP
SAMPLE

Lab Sample ID: QQ20G
LIMS ID: 10-8036
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB101032510COMP
SAMPLE

Lab Sample ID: QQ20H
LIMS ID: 10-8037
Matrix: Water
Data Release Authorized:
Reported: 04/15/10

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/31/10	200.8	04/14/10	**7440-38-2**	**Arsenic**	0.2	**0.5**	

U-Analyte undetected at given RL
RL-Reporting Limit

Metals Analysis
Instrument Raw Data and Logs

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 4.14.10 **Analyst:** JB **Page:** 1 **of** 4

All corrections made by analyst unless otherwise noted. 4.14.10 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD 0			2696-4
		1			-5
		2			-6
		3			2697-7
		4			2696-8
		Rinse Sample			
		ICV			2695-4
		ICB			
		CCV1			
		CCB1			
		LowCheck			✓ [illegible]
		ICSA			
		ICSAB			
		~~CCV2~~ LR200			✓
		~~CCB2~~ LR300			[illegible]
		CCV2			
		CCB2			
		QP83 MB	REN	2	✓
		MBSpk			✓
		A			
	✓	Q076 A			rerun my (As, Cr)
	✓	B			
	✓	Q098 B			As
	✓	C			

5036F

Version 002
7/21/06

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 4/14/10 **Analyst:** JB **Page:** 2 of 4

All corrections made by analyst unless otherwise noted. 4/14/10 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	Q098 F	REN	2	Rerun 5X As
	✓	↓ I	↓	↓	↓
	✓	↓ J	↓	↓	↓
		CCV3			
		CCB3			53Cr, As2, 78Se ling
		QP28 MB1	SWN	20	✓
		b MB1spk	b	b	✓
		QP98 M	REN	5	As
		QN20 B	↓	2	
		↓ E	↓	↓	Sch rr Cr 5x
		↓ F	↓	↓	↓
		↓ G	↓	↓	↓
		↓ J	↓	↓	↓
		↓ K	b	↓	↓
		QP28 REF1	SWN	20 ✓	
		CCV4			
		CCB4			
		Q076 A	REN	5	As, Se
		↓ B	↓	↓	
		Q098 C	↓	↓	As
		↓ F	↓	↓	↓
		↓ I	↓	↓	↓
		↓ J	↓	↓	↓
		QN20 E	b	↓	Cr

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 4.14.10 **Analyst:** JLD **Page:** 3 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		QN20 F	REN	5	Cr
		" G	"	"	"
		QQ20 B	"	"	"
		CCV5			
		CCB5			
		QP82MB1	SWN	20	✓
		" MB1SPK	"	"	✓
		4.15.10 JLD QP82DUP	"	"	✓
		" B	"	"	
		" BSPK	"	"	✓
		" C	"	"	
		" D	"	"	
		" E	"	"	
		QP29 A	"	"	
		" C	"	"	
		CCV6			
		CCB6			
		QQ20 MB1	REN	2	✓
		" MB1SPK	"	"	
		QP29 B	SWN	20	
		QP82 A	"	"	
		" B	"	"	
		QQ20 ADUP	REN	2	✓
		" A	"	"	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 4.14.10 **Analyst:** JB **Page:** 4 **of** 4

All corrections made by analyst unless otherwise noted. 4.14.10 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		QG20 Aspk	~~FLM~~ REN	~~20~~ 2 ✓	
		↓ B	↓	↓	
		↓ C	↓	↓	
		CCV7			
		CCB7			As72, 78Se high
		QG20MB2	REN	2 ✓	
		MB2SPK	↓	↓ ✓	
		EDUP	↓	↓ ✓	
		E	↓	↓	
		ESPK	↓	↓ ✓	
		D	↓	↓	
		F	↓	↓	
		G	↓	↓	
		H ✓	↓	↓	
		QN20 J	↓	5	Cr
		CCV8			
		CCB8			As72, 78Se high
	✓	QO21 A	WMN		from bottle Pb ck
		QN20 K	REN	5	Cr
		CCV9			
		CCB9			
		5% HNO3 Rinse			
		DI Rinse			

JB 4.15.10

JB 4/15/10

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 4.14.10

	Analyst JLB 4.16.10	Peer AM 4.15	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓		
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	SEE LOG
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	SEE LOG
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	

#4

Instrument Tuning Report

File Name: 2008.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	8.975	2020	2169	0.686	
Mg	23.985	23.979	5655	2280	0.687	
Co	58.933	58.979	14152	2552	0.702	
In	114.904	114.879	27762	3005	0.692	
Pb	207.977	207.974	50413	3777	0.689	

Instrument Tuning Report

File Name: 2008.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	8.975	2020	2175	0.659	
Mg	23.985	23.979	5655	2283	0.675	
Co	58.933	58.979	14152	2555	0.677	
In	114.904	114.879	27762	3005	0.711	
Pb	207.977	207.974	50413	3777	0.686	

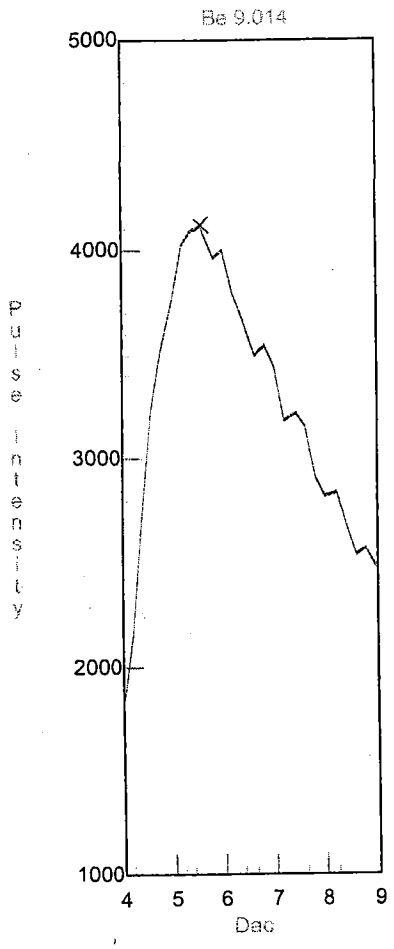
#1

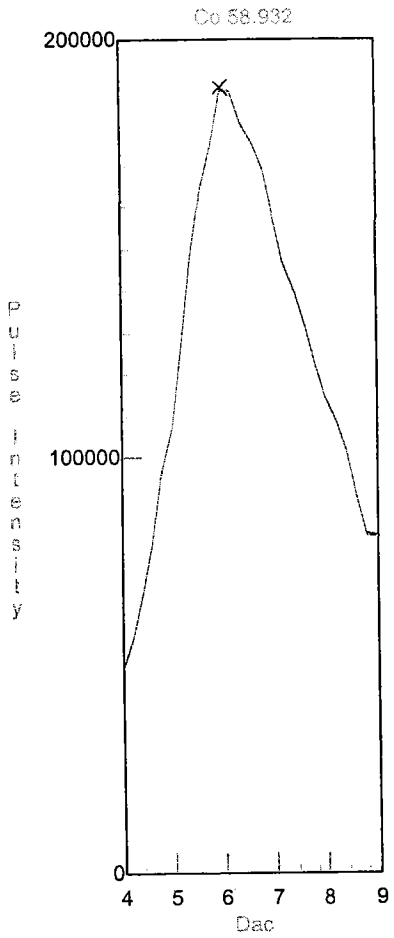
Instrument Tuning Report

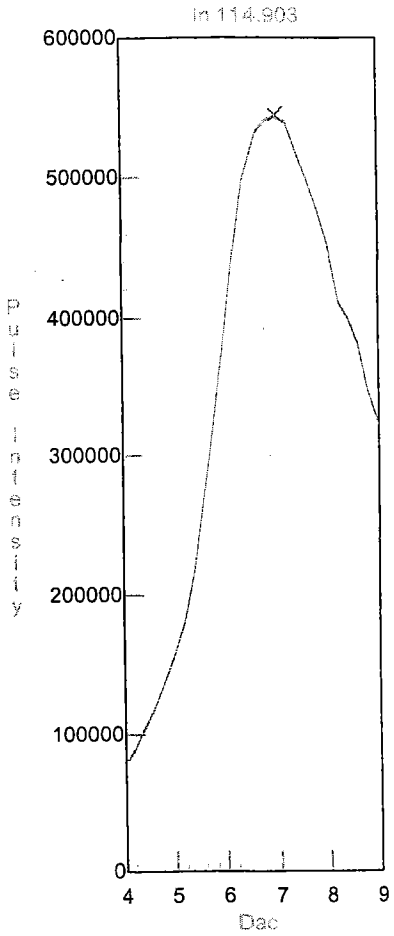
File Name: 2008.tun
File Path: c:\elandata\Tuning

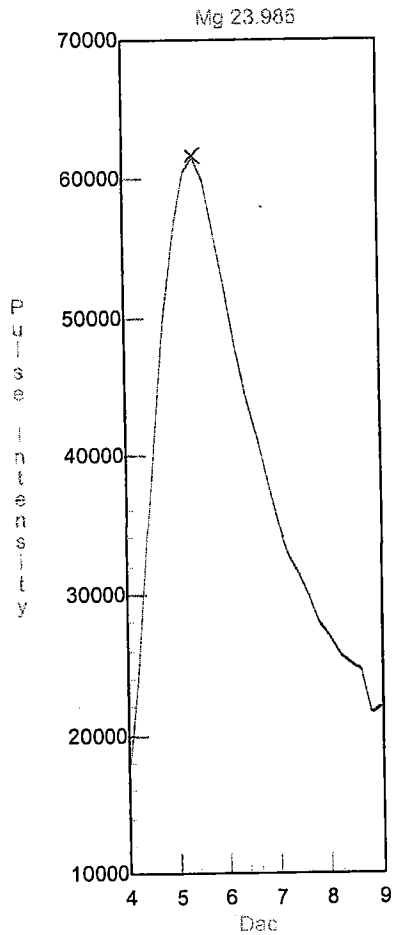
Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.028	2026	2175	0.673	
Mg	23.985	24.029	5659	2283	0.683	
Co	58.933	58.929	14144	2555	0.681	
In	114.904	114.929	27764	3005	0.699	
Pb	207.977	207.976	50427	3777	0.686	

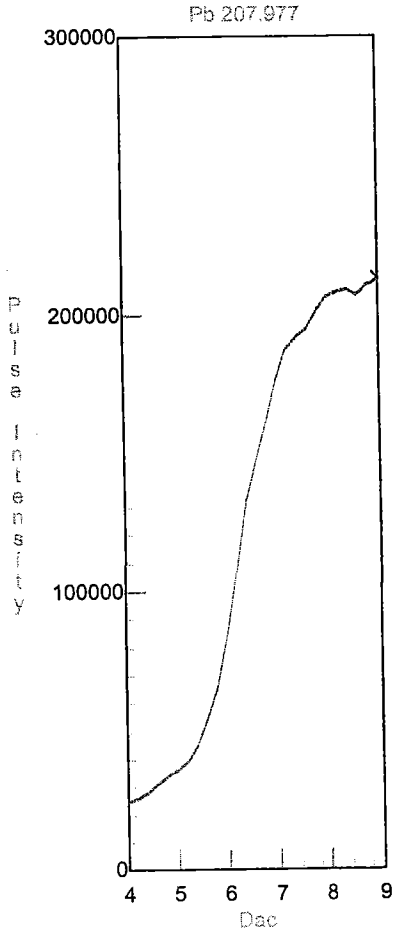
4.14.10

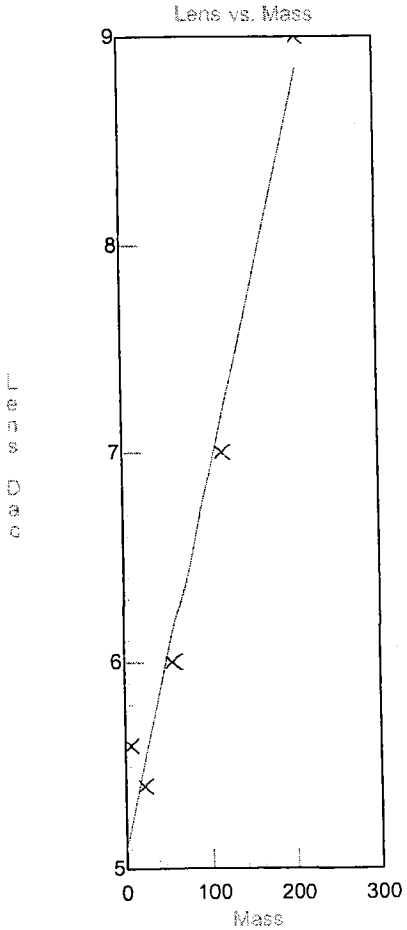

Be 9.014
Pulse Intensity
5000
4000
3000
2000
1000
4 5 6 7 8 9
Dac


Co 58.932
Pulse Intensity
200000
100000
0
4 5 6 7 8 9
Dac


In 114.903
Pulse Intensity
600000
500000
400000
300000
200000
100000
0
4 5 6 7 8 9
Dac


Mg 23.985
Pulse Intensity
70000
60000
50000
40000
30000
20000
10000
4 5 6 7 8 9
Dac


Pb 207.977
Pulse Intensity
300000
200000
100000
0
4 5 6 7 8 9
Dac


Lens vs. Mass
Lens Dac
9
8
7
6
5
0 100 200 300
Mass

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, April 14, 2010 10:04:46
Sample Description:
Sample File: 1120.sam
Method File: c:\elandata\Method\aridailyperf.mth
Dataset File: c:\elandata\Dataset\daily performance\Sample.6681
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Number of Replicates: 5
Dual Detector Mode: Pulse

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	52688.553	474.086	0.900
	In	115	539490.616	4346.923	0.806
	Pb	208	213964.038	1759.645	0.822
⌈>	Ba	138	335298.035	3333.197	0.994
⌊	Ba++	69	0.016	0.000	2.339
⌈>	Ce	140	396438.671	2219.654	0.560
⌊	CeO	156	0.021	0.000	1.969
	Bkgd	220	4.500	1.677	37.268

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, April 14, 2010 10:36:53
Sample Description:
Sample File: 1120.sam
Method File: c:\elandata\Method\aridailyperf.mth
Dataset File: c:\elandata\Dataset\daily performance\Sample.6682
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Number of Replicates: 5
Dual Detector Mode: Pulse

after dual det
MDL 0.95ppt

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	58320.903	626.682	1.075
	In	115	601235.326	4552.964	0.757
	Pb	208	251824.610	1881.292	0.747
⌈>	Ba	138	376372.974	3991.263	1.060
⌊	Ba++	69	0.014	0.000	1.219
⌈>	Ce	140	437971.532	3645.002	0.832
⌊	CeO	156	0.021	0.001	2.792
	Bkgd	220	6.501	2.236	34.401

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 10:58:32
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
							348253	1
Li	6		ug/L				6	0
Be	9		ug/L				9248	0
C	13		mg/L				3694160	0
Cl	37		mg/L				341955	0
Sc	45		ug/L				2779	5
V-1	51		ug/L				3697	0
V	51		ug/L				8350	1
Cr	52		ug/L				1237	3
Cr	53		ug/L				1384	1
Mn	55		ug/L				187	10
Co	59		ug/L				454122	0
Ge	72		ug/L				92	9
Ni	60		ug/L				75	8
Ni	62		ug/L				383	3
Cu	63		ug/L				187	16
Cu	65		ug/L				2618	8
Zn	66		ug/L				483	4
Zn	67		ug/L				8781	4
Zn	68		ug/L				246	6
As-1	75		ug/L				10545	0
As	75		ug/L				-19	40
Se	82		ug/L				10704	0
Se	78		ug/L				1302	22
Mo	98		ug/L				367089	0
Y	89		ug/L				194	3
Kr	83		ug/L				476899	0
In	115		ug/L				181	14
Ag	107		ug/L				230	12
Cd	111		ug/L				76	13
Cd	114		ug/L				306	4
Sb	121		ug/L				216	8
Sb	123		ug/L				75	25
Ba	135		ug/L				134	14
Ba	137		ug/L				437353	0
Tb	159		ug/L				340	7
Tl	205		ug/L				909	7
Pb	208		ug/L				362800	0
Bi	209		ug/L				304	22
Th	232		ug/L				193	11
U	238		ug/L					

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 11:06:19
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	344307	0
Be	9	10.000	ug/L	0.202	2	6	5061	2
C	13		mg/L			9248	7322	2
Cl	37		mg/L			3694160	3687162	0
Sc	45		ug/L			341955	338260	0
V-1	51	10.000	ug/L	0.085	0	2779	161436	0
V	51	10.000	ug/L	0.067	0	3697	165165	0
Cr	52	10.000	ug/L	0.083	0	8350	150160	0
Cr	53	10.000	ug/L	0.064	0	1237	18160	0
Mn	55	10.000	ug/L	0.045	0	1384	243801	0
Co	59	10.000	ug/L	0.092	0	187	187518	0
Ge	72		ug/L			454122	449534	1
Ni	60	10.000	ug/L	0.156	1	92	39785	0
Ni	62	10.000	ug/L	0.133	1	75	6045	1
Cu	63	10.000	ug/L	0.078	0	383	92197	0
Cu	65	10.000	ug/L	0.055	0	187	43889	0
Zn	66	10.000	ug/L	0.142	1	2618	30470	0
Zn	67	10.000	ug/L	0.262	2	483	5043	2
Zn	68	10.000	ug/L	0.172	1	8781	28469	1
As-1	75	10.000	ug/L	0.184	1	246	25594	1
As	75	10.000	ug/L	0.172	1	10545	35762	0
Se	82	10.000	ug/L	0.288	2	-19	2513	1
Se	78	10.000	ug/L	0.345	3	10704	17011	0
Mo	98	10.000	ug/L	0.143	1	1302	85260	0
Y	89		ug/L			367089	360690	0
Kr	83		ug/L			194	195	4
In	115		ug/L			476899	465377	0
Ag	107	10.000	ug/L	0.115	1	181	164473	1
Cd	111	10.000	ug/L	0.184	1	230	39708	1
Cd	114	10.000	ug/L	0.041	0	76	92187	0
Sb	121	10.000	ug/L	0.044	0	306	134354	0
Sb	123	10.000	ug/L	0.079	0	216	101241	0
Ba	135	10.000	ug/L	0.030	0	75	28561	0
Ba	137	10.000	ug/L	0.025	0	134	48781	0
Tb	159		ug/L			437353	433554	0
Tl	205	10.000	ug/L	0.153	1	340	310894	1
Pb	208	10.000	ug/L	0.159	1	909	430394	1
Bi	209		ug/L			362800	358199	1
Th	232	10.000	ug/L	0.056	0	304	506961	0
U	238	10.000	ug/L	0.091	0	193	559466	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 11:14:07
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	349675	0
Be	9	20.010	ug/L	0.496	2	6	10299	1
C	13		mg/L			9248	7342	1
Cl	37		mg/L			3694160	3692741	1
Sc	45		ug/L			341955	339985	1
V-1	51	19.998	ug/L	0.181	0	2779	321632	1
V	51	20.012	ug/L	0.193	0	3697	329343	1
Cr	52	19.987	ug/L	0.151	0	8350	292638	0
Cr	53	20.030	ug/L	0.096	0	1237	35534	0
Mn	55	20.006	ug/L	0.239	1	1384	489442	1
Co	59	19.994	ug/L	0.244	1	187	376219	1
Ge	72		ug/L			454122	450246	1
Ni	60	20.022	ug/L	0.288	1	92	80054	1
Ni	62	19.959	ug/L	0.517	2	75	11911	1
Cu	63	20.018	ug/L	0.107	0	383	185156	0
Cu	65	20.008	ug/L	0.185	0	187	87908	0
Zn	66	20.143	ug/L	0.092	0	2618	60499	1
Zn	67	20.241	ug/L	0.342	1	483	10200	1
Zn	68	20.131	ug/L	0.154	0	8781	49659	0
As-1	75	20.052	ug/L	0.064	0	246	51693	1
As	75	20.041	ug/L	0.111	0	10545	61705	0
Se	82	20.068	ug/L	0.104	0	-19	5143	0
Se	78	20.013	ug/L	0.248	1	10704	23505	0
Mo	98	20.050	ug/L	0.388	1	1302	171620	0
Y	89		ug/L			367089	361994	0
Kr	83		ug/L			194	183	6
In	115		ug/L			476899	469671	1
Ag	107	19.979	ug/L	0.255	1	181	330032	0
Cd	111	19.964	ug/L	0.166	0	230	79218	0
Cd	114	19.970	ug/L	0.125	0	76	184600	0
Sb	121	20.030	ug/L	0.125	0	306	272916	0
Sb	123	20.003	ug/L	0.350	1	216	204273	1
Ba	135	19.978	ug/L	0.354	1	75	57254	0
Ba	137	19.998	ug/L	0.209	1	134	98269	0
Tb	159		ug/L			437353	433295	0
Tl	205	20.017	ug/L	0.322	1	340	623645	1
Pb	208	20.039	ug/L	0.181	0	909	867821	0
Bi	209		ug/L			362800	357105	0
Th	232	20.066	ug/L	0.188	0	304	1029941	0
U	238	20.030	ug/L	0.074	0	193	1126403	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 11:21:55
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	342412	0
Be	9	49.798	ug/L	0.337	0	6	24596	0
C	13		mg/L			9248	7769	0
Cl	37		mg/L			3694160	3729749	1
Sc	45		ug/L			341955	343770	1
V-1	51	49.723	ug/L	0.550	1	2779	782734	0
V	51	49.737	ug/L	0.594	1	3697	801040	0
Cr	52	49.752	ug/L	0.328	0	8350	706666	0
Cr	53	49.792	ug/L	0.474	0	1237	85707	0
Mn	55	49.729	ug/L	0.213	0	1384	1195755	0
Co	59	49.830	ug/L	0.717	1	187	931875	0
Ge	72		ug/L			454122	453093	0
Ni	60	49.738	ug/L	0.284	0	92	194882	0
Ni	62	49.802	ug/L	0.405	0	75	29223	0
Cu	63	49.637	ug/L	0.257	0	383	445312	0
Cu	65	49.665	ug/L	0.307	0	187	212227	0
Zn	66	49.695	ug/L	0.220	0	2618	142108	0
Zn	67	49.726	ug/L	0.565	1	483	23877	0
Zn	68	49.586	ug/L	0.332	0	8781	106236	0
As-1	75	49.837	ug/L	0.238	0	246	126869	0
As	75	49.824	ug/L	0.346	0	10545	136530	0
Se	82	49.726	ug/L	0.484	0	-19	12510	0
Se	78	49.682	ug/L	0.104	0	10704	41898	0
Mo	98	49.860	ug/L	0.135	0	1302	421712	0
Y	89		ug/L			367089	365686	0
Kr	83		ug/L			194	197	2
In	115		ug/L			476899	475626	1
Ag	107	49.672	ug/L	0.337	0	181	804363	1
Cd	111	49.750	ug/L	0.442	0	230	194720	1
Cd	114	49.699	ug/L	0.627	1	76	451525	0
Sb	121	49.792	ug/L	0.482	0	306	672556	0
Sb	123	49.775	ug/L	0.330	0	216	503134	0
Ba	135	49.733	ug/L	0.584	1	75	140480	0
Ba	137	49.714	ug/L	0.128	0	134	240349	1
Tb	159		ug/L			437353	434024	0
Tl	205	49.770	ug/L	0.457	0	340	1517932	0
Pb	208	49.695	ug/L	0.548	1	909	2090700	0
Bi	209		ug/L			362800	352958	0
Th	232	49.837	ug/L	0.505	1	304	2520822	0
U	238	49.893	ug/L	0.384	0	193	2780428	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 11:29:45
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	322859	2
Be	9	100.657	ug/L	1.761	1	6	47912	1
C	13		mg/L			9248	6076	3
Cl	37		mg/L			3694160	3826790	1
Sc	45		ug/L			341955	348761	0
V-1	51	100.422	ug/L	1.140	1	2779	1623845	1
V	51	100.364	ug/L	1.376	1	3697	1656285	1
Cr	52	100.106	ug/L	1.638	1	8350	1439103	1
Cr	53	99.949	ug/L	1.813	1	1237	172993	2
Mn	55	100.215	ug/L	0.959	0	1384	2460954	1
Co	59	99.944	ug/L	1.027	1	187	1892696	1
Ge	72		ug/L			454122	466442	2
Ni	60	99.929	ug/L	1.658	1	92	401968	1
Ni	62	99.949	ug/L	0.922	0	75	60188	1
Cu	63	99.809	ug/L	1.760	1	383	915332	0
Cu	65	99.691	ug/L	1.944	1	187	433761	0
Zn	66	100.862	ug/L	1.601	1	2618	302708	1
Zn	67	100.907	ug/L	0.215	0	483	50893	2
Zn	68	101.150	ug/L	0.652	0	8781	221860	1
As-1	75	99.951	ug/L	1.404	1	246	261201	1
As	75	99.994	ug/L	1.486	1	10545	271066	1
Se	82	99.574	ug/L	1.293	1	-19	25442	1
Se	78	99.749	ug/L	1.662	1	10704	74968	1
Mo	98	99.993	ug/L	1.572	1	1302	868897	0
Y	89		ug/L			367089	364820	0
Kr	83		ug/L			194	205	3
In	115		ug/L			476899	491367	2
Ag	107	99.799	ug/L	0.808	0	181	1658124	1
Cd	111	99.793	ug/L	1.655	1	230	400420	0
Cd	114	100.116	ug/L	0.898	0	76	943227	1
Sb	121	100.229	ug/L	1.212	1	306	1408958	0
Sb	123	100.279	ug/L	0.964	0	216	1056741	1
Ba	135	100.133	ug/L	1.182	1	75	293402	0
Ba	137	100.062	ug/L	1.759	1	134	500530	0
Tb	159		ug/L			437353	437254	1
Tl	205	100.449	ug/L	0.879	0	340	3132722	0
Pb	208	100.299	ug/L	0.504	0	909	4292954	0
Bi	209		ug/L			362800	351976	0
Th	232	100.536	ug/L	1.947	1	304	5215231	0
U	238	100.417	ug/L	1.501	1	193	5716540	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 11:37:33
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	325566	1
Be	9	0.001	ug/L	0.010	1014	6	6	72
C	13		mg/L			9248	8618	1
Cl	37		mg/L			3694160	3872912	0
Sc	45		ug/L			341955	346574	0
V-1	51	-0.004	ug/L	0.006	174	2779	2759	4
V	51	-0.012	ug/L	0.006	52	3697	3546	2
Cr	52	0.010	ug/L	0.010	99	8350	8607	1
Cr	53	-0.017	ug/L	0.031	178	1237	1224	3
Mn	55	-0.018	ug/L	0.000	2	1384	970	1
Co	59	0.001	ug/L	0.001	89	187	216	11
Ge	72		ug/L			454122	462407	1
Ni	60	-0.001	ug/L	0.002	143	92	90	7
Ni	62	0.028	ug/L	0.009	31	75	93	4
Cu	63	-0.002	ug/L	0.002	148	383	377	6
Cu	65	-0.003	ug/L	0.005	152	187	175	12
Zn	66	-0.667	ug/L	0.014	2	2618	698	5
Zn	67	-0.594	ug/L	0.020	3	483	198	4
Zn	68	-0.558	ug/L	0.055	9	8781	7778	1
As-1	75	0.009	ug/L	0.006	69	246	275	7
As	75	-0.010	ug/L	0.063	606	10545	10709	0
Se	82	0.071	ug/L	0.035	49	-19	-2	423
Se	78	-0.027	ug/L	0.260	948	10704	10880	0
Mo	98	-0.104	ug/L	0.008	7	1302	432	15
Y	89		ug/L			367089	366950	0
Kr	83		ug/L			194	192	4
In	115		ug/L			476899	486673	0
Ag	107	0.009	ug/L	0.004	41	181	335	18
Cd	111	0.008	ug/L	0.004	52	230	267	6
Cd	114	0.002	ug/L	0.001	60	76	100	13
Sb	121	0.033	ug/L	0.009	27	306	768	16
Sb	123	0.034	ug/L	0.007	21	216	574	14
Ba	135	-0.011	ug/L	0.001	12	75	45	8
Ba	137	-0.011	ug/L	0.005	40	134	80	28
Tb	159		ug/L			437353	435072	0
Tl	205	0.006	ug/L	0.002	33	340	522	11
Pb	208	-0.000	ug/L	0.003	6268	909	902	15
Bi	209		ug/L			362800	360605	1
Th	232	0.058	ug/L	0.011	19	304	3304	16
U	238	0.007	ug/L	0.004	55	193	575	37

Quantitative Analysis - Calibration Report

Sample Date/Time: Wednesday, April 14, 2010 11:29:45
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	r Corr Coeff	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	0.9999	0.0015	10	20	50	100	
C	13							
Cl	37							
Sc	45							
V-1	51	1.0000	0.0463	10	20	50	100	
V	51	1.0000	0.0472	10	20	50	100	
Cr	52	1.0000	0.0410	10	20	50	100	
Cr	53	1.0000	0.0049	10	20	50	100	
Mn	55	1.0000	0.0704	10	20	50	100	
Co	59	1.0000	0.0543	10	20	50	100	
Ge	72							
Ni	60	1.0000	0.0086	10	20	50	100	
Ni	62	1.0000	0.0013	10	20	50	100	
Cu	63	1.0000	0.0197	10	20	50	100	
Cu	65	1.0000	0.0093	10	20	50	100	
Zn	66	0.9999	0.0064	10	20	50	100	
Zn	67	0.9998	0.0011	10	20	50	100	
Zn	68	0.9997	0.0045	10	20	50	100	
As-1	75	1.0000	0.0056	10	20	50	100	
As	75	1.0000	0.0056	10	20	50	100	
Se	82	1.0000	0.0005	10	20	50	100	
Se	78	1.0000	0.0014	10	20	50	100	
Mo	98	1.0000	0.0186	10	20	50	100	
Y	89							
Kr	83							
In	115							
Ag	107	1.0000	0.0338	10	20	50	100	
Cd	111	1.0000	0.0082	10	20	50	100	
Cd	114	1.0000	0.0192	10	20	50	100	
Sb	121	1.0000	0.0286	10	20	50	100	
Sb	123	1.0000	0.0214	10	20	50	100	
Ba	135	1.0000	0.0060	10	20	50	100	
Ba	137	1.0000	0.0102	10	20	50	100	
Tb	159							
Tl	205	1.0000	0.0713	10	20	50	100	
Pb	208	1.0000	0.0979	10	20	50	100	
Bi	209							
Th	232	0.9999	0.1186	10	20	50	100	
U	238	1.0000	0.1302	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 11:45:03
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
> Li	6		ug/L			348253	338302	1
Be	9	48.944	ug/L	0.512	1	6	24418	1
C	13		mg/L			9248	6850	1
Cl	37		mg/L			3694160	3874566	0
> Sc	45		ug/L			341955	357014	0
V-1	51	49.327	ug/L	0.640	1	2779	817975	1
V	51	49.237	ug/L	0.659	1	3697	833719	1
Cr	52	49.005	ug/L	0.524	1	8350	725603	1
Cr	53	48.748	ug/L	0.572	1	1237	87028	0
Mn	55	48.680	ug/L	0.215	0	1384	1224451	0
Co	59	49.423	ug/L	0.317	0	187	958188	0
> Ge	72		ug/L			454122	474745	0
Ni	60	49.044	ug/L	0.020	0	92	200874	0
Ni	62	48.836	ug/L	0.613	1	75	29977	1
Cu	63	49.853	ug/L	0.327	0	383	465668	0
Cu	65	49.767	ug/L	0.602	1	187	220555	1
Zn	66	48.107	ug/L	0.885	1	2618	148414	1
Zn	67	47.909	ug/L	0.286	0	483	24860	0
Zn	68	47.515	ug/L	0.627	1	8781	110951	1
As-1	75	48.779	ug/L	0.492	1	246	129904	1
As	75	48.570	ug/L	0.451	0	10545	139705	0
Se	82	78.483	ug/L	0.497	0	-19	20410	0
Se	78	77.962	ug/L	0.771	0	10704	62093	0
Mo	98	49.029	ug/L	0.515	1	1302	434427	1
Y	89		ug/L			367089	376788	0
Kr	83		ug/L			194	193	4
> In	115		ug/L			476899	500173	0
Ag	107	46.467	ug/L	0.738	1	181	786004	1
Cd	111	49.534	ug/L	0.493	0	230	202471	0
Cd	114	49.369	ug/L	0.448	0	76	473527	0
Sb	121	48.937	ug/L	0.467	0	306	700487	0
Sb	123	49.093	ug/L	0.216	0	216	526765	0
Ba	135	49.453	ug/L	0.384	0	75	147556	0
Ba	137	49.612	ug/L	0.550	1	134	252739	0
> Tb	159		ug/L			437353	444572	0
Tl	205	49.410	ug/L	0.200	0	340	1567045	0
Pb	208	49.184	ug/L	0.089	0	909	2140927	0
Bi	209		ug/L			362800	368829	0
Th	232	49.900	ug/L	0.371	0	304	2632330	0
U	238	50.665	ug/L	0.266	0	193	2932875	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 11:52:32
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	330483	0
[	Be	9	0.001	ug/L	0.003	399	6	6	20
	C	13		mg/L			9248	8713	0
	Cl	37		mg/L			3694160	3891027	0
[>	Sc	45		ug/L			341955	346959	1
[	V-1	51	-0.010	ug/L	0.004	39	2779	2662	2
[	V	51	-0.015	ug/L	0.007	48	3697	3510	1
[	Cr	52	0.001	ug/L	0.013	1357	8350	8485	2
[	Cr	53	-0.015	ug/L	0.024	163	1237	1230	1
[	Mn	55	-0.021	ug/L	0.002	9	1384	882	4
[	Co	59	0.001	ug/L	0.002	262	187	201	14
[>	Ge	72		ug/L			454122	462025	0
[	Ni	60	-0.002	ug/L	0.003	149	92	85	15
[	Ni	62	0.005	ug/L	0.018	371	75	80	13
[	Cu	63	-0.005	ug/L	0.003	64	383	345	8
[	Cu	65	-0.005	ug/L	0.007	140	187	170	16
[	Zn	66	-0.706	ug/L	0.008	1	2618	584	4
[	Zn	67	-0.612	ug/L	0.048	7	483	189	12
[	Zn	68	-0.570	ug/L	0.093	16	8781	7746	2
[	As-1	75	0.010	ug/L	0.009	89	246	276	8
[	As	75	-0.043	ug/L	0.021	49	10545	10618	0
[	Se	82	0.060	ug/L	0.058	96	-19	-4	309
[	Se	78	-0.155	ug/L	0.059	38	10704	10792	0
[	Mo	98	-0.121	ug/L	0.007	5	1302	283	20
	Y	89		ug/L			367089	364110	0
	Kr	83		ug/L			194	196	3
[>	In	115		ug/L			476899	486906	0
[	Ag	107	0.004	ug/L	0.003	71	181	255	19
[	Cd	111	0.002	ug/L	0.005	357	230	240	8
[	Cd	114	-0.000	ug/L	0.001	1593	76	76	18
[	Sb	121	0.004	ug/L	0.004	121	306	363	17
[	Sb	123	0.005	ug/L	0.003	62	216	268	10
[	Ba	135	-0.011	ug/L	0.001	8	75	45	5
[	Ba	137	-0.013	ug/L	0.004	31	134	73	27
[>	Tb	159		ug/L			437353	433043	0
[	Tl	205	0.002	ug/L	0.002	116	340	402	19
[	Pb	208	-0.004	ug/L	0.003	78	909	751	16
[	Bi	209		ug/L			362800	361206	0
[	Th	232	0.031	ug/L	0.006	18	304	1915	16
[	U	238	0.004	ug/L	0.004	80	193	442	46

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:00:00
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	329369	0
[	Be	9	49.963	ug/L	0.262	0	6	24269	0
	C	13		mg/L			9248	7332	1
	Cl	37		mg/L			3694160	3890272	1
[>	Sc	45		ug/L			341955	345596	1
[	V-1	51	49.953	ug/L	0.175	0	2779	801813	1
[	V	51	49.993	ug/L	0.271	0	3697	819376	0
[	Cr	52	50.137	ug/L	0.165	0	8350	718422	1
[	Cr	53	50.250	ug/L	0.424	0	1237	86798	0
[	Mn	55	49.764	ug/L	0.139	0	1384	1211626	0
[	Co	59	49.768	ug/L	0.303	0	187	933973	0
[>	Ge	72		ug/L			454122	465340	0
[	Ni	60	49.778	ug/L	0.605	1	92	199829	0
[	Ni	62	49.734	ug/L	0.269	0	75	29921	0
[	Cu	63	49.667	ug/L	0.346	0	383	454726	0
[	Cu	65	49.814	ug/L	0.384	0	187	216381	0
[	Zn	66	48.493	ug/L	0.099	0	2618	146621	1
[	Zn	67	48.425	ug/L	0.465	0	483	24623	0
[	Zn	68	48.176	ug/L	0.465	0	8781	110145	1
[	As-1	75	49.484	ug/L	0.350	0	246	129160	0
[	As	75	49.445	ug/L	0.221	0	10545	139209	0
[	Se	82	49.661	ug/L	0.504	1	-19	12650	0
[	Se	78	49.509	ug/L	0.281	0	10704	42653	0
[	Mo	98	49.232	ug/L	0.762	1	1302	427543	0
	Y	89		ug/L			367089	365980	0
	Kr	83		ug/L			194	201	0
[>	In	115		ug/L			476899	482300	0
[	Ag	107	50.134	ug/L	0.422	0	181	817776	0
[	Cd	111	49.790	ug/L	0.192	0	230	196257	0
[	Cd	114	49.825	ug/L	0.200	0	76	460840	0
[	Sb	121	49.661	ug/L	0.459	0	306	685471	0
[	Sb	123	50.138	ug/L	0.424	0	216	518748	0
[	Ba	135	49.839	ug/L	0.493	0	75	143400	0
[	Ba	137	49.780	ug/L	0.463	0	134	244541	0
[>	Tb	159		ug/L			437353	433847	0
[	Tl	205	49.310	ug/L	0.526	1	340	1526062	0
[	Pb	208	49.544	ug/L	0.771	1	909	2104400	0
[	Bi	209		ug/L			362800	354795	0
[	Th	232	49.510	ug/L	0.730	1	304	2548713	1
[	U	238	49.385	ug/L	0.625	1	193	2789704	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:07:28
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	331818	0
Be	9	0.001	ug/L	0.003	423	6	6	20
C	13		mg/L			9248	8439	1
Cl	37		mg/L			3694160	3906548	0
Sc	45		ug/L			341955	345268	0
V-1	51	-0.010	ug/L	0.005	49	2779	2646	2
V	51	-0.022	ug/L	0.002	10	3697	3380	0
Cr	52	-0.006	ug/L	0.018	304	8350	8345	2
Cr	53	-0.042	ug/L	0.028	65	1237	1177	3
Mn	55	-0.022	ug/L	0.002	9	1384	852	4
Co	59	-0.001	ug/L	0.001	142	187	170	14
Ge	72		ug/L			454122	459759	1
Ni	60	-0.000	ug/L	0.003	1037	92	92	10
Ni	62	0.009	ug/L	0.026	291	75	82	19
Cu	63	-0.003	ug/L	0.003	99	383	362	7
Cu	65	-0.004	ug/L	0.006	167	187	173	14
Zn	66	-0.699	ug/L	0.015	2	2618	601	7
Zn	67	-0.630	ug/L	0.018	2	483	179	5
Zn	68	-0.715	ug/L	0.013	1	8781	7407	1
As-1	75	0.008	ug/L	0.010	123	246	270	8
As	75	-0.022	ug/L	0.057	260	10545	10619	0
Se	82	0.014	ug/L	0.047	325	-19	-16	72
Se	78	-0.096	ug/L	0.253	264	10704	10775	0
Mo	98	-0.123	ug/L	0.007	5	1302	264	22
Y	89		ug/L			367089	363256	1
Kr	83		ug/L			194	199	2
In	115		ug/L			476899	480370	0
Ag	107	0.004	ug/L	0.004	108	181	241	26
Cd	111	0.006	ug/L	0.005	86	230	254	7
Cd	114	0.001	ug/L	0.001	194	76	81	12
Sb	121	0.014	ug/L	0.006	42	306	505	16
Sb	123	0.017	ug/L	0.006	32	216	392	14
Ba	135	-0.011	ug/L	0.006	56	75	45	37
Ba	137	-0.015	ug/L	0.002	12	134	63	14
Tb	159		ug/L			437353	427467	0
Tl	205	0.001	ug/L	0.003	319	340	357	22
Pb	208	-0.004	ug/L	0.003	78	909	729	16
Bi	209		ug/L			362800	354713	0
Th	232	0.048	ug/L	0.007	14	304	2713	12
U	238	0.004	ug/L	0.003	85	193	407	44

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:14:54
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	343669	1
Be	9	0.173	ug/L	0.017	10	6	93	10
C	13		mg/L			9248	6727	1
Cl	37		mg/L			3694160	3885998	0
Sc	45		ug/L			341955	344875	1
V-1	51	0.176	ug/L	0.012	7	2779	5616	2
V	51	0.172	ug/L	0.005	3	3697	6528	0
Cr	52	0.490	ug/L	0.007	1	8350	15341	0
Cr	53	0.458	ug/L	0.019	4	1237	2025	2
Mn	55	0.472	ug/L	0.004	0	1384	12842	0
Co	59	0.202	ug/L	0.004	1	187	3965	1
Ge	72		ug/L			454122	454207	0
Ni	60	0.522	ug/L	0.010	1	92	2137	1
Ni	62	0.512	ug/L	0.050	9	75	375	7
Cu	63	0.509	ug/L	0.002	0	383	4930	1
Cu	65	0.514	ug/L	0.003	0	187	2363	1
Zn	66	3.232	ug/L	0.054	1	2618	11984	1
Zn	67	2.860	ug/L	0.070	2	483	1874	2
Zn	68	3.239	ug/L	0.014	0	8781	15420	0
As-1	75	0.191	ug/L	0.015	8	246	731	5
As	75	0.165	ug/L	0.022	13	10545	10964	0
Se	82	0.467	ug/L	0.061	13	-19	96	15
Se	78	0.418	ug/L	0.111	26	10704	10967	0
Mo	98	0.060	ug/L	0.004	7	1302	1810	2
Y	89		ug/L			367089	364589	1
Kr	83		ug/L			194	206	0
In	115		ug/L			476899	478004	0
Ag	107	0.193	ug/L	0.002	0	181	3294	0
Cd	111	0.210	ug/L	0.004	1	230	1050	1
Cd	114	0.197	ug/L	0.005	2	76	1878	2
Sb	121	0.189	ug/L	0.002	0	306	2890	0
Sb	123	0.190	ug/L	0.003	1	216	2164	1
Ba	135	0.487	ug/L	0.017	3	75	1463	3
Ba	137	0.488	ug/L	0.012	2	134	2508	2
Tb	159		ug/L			437353	431783	0
Tl	205	0.205	ug/L	0.002	0	340	6652	0
Pb	208	0.998	ug/L	0.011	1	909	43066	1
Bi	209		ug/L			362800	363763	0
Th	232	0.207	ug/L	0.003	1	304	10895	1
U	238	0.194	ug/L	0.006	3	193	11082	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:22:20
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			348253	378764	1
	Be	9	-0.005	ug/L	0.006	110	6	3	88
	C	13		mg/L			9248	25468	1
	Cl	37		mg/L			3694160	5736006	1
>	Sc	45		ug/L			341955	329154	0
	V-1	51	-0.025	ug/L	0.020	78	2779	2297	13
	V	51	0.615	ug/L	0.003	0	3697	13113	0
	Cr	52	0.481	ug/L	0.011	2	8350	14519	1
	Cr	53	2.411	ug/L	0.059	2	1237	5099	1
	Mn	55	0.115	ug/L	0.013	11	1384	4008	8
	Co	59	0.029	ug/L	0.004	14	187	707	11
>	Ge	72		ug/L			454122	436771	1
	Ni	60	0.479	ug/L	0.007	1	92	1892	2
	Ni	62	3.489	ug/L	0.032	0	75	2038	1
	Cu	63	0.397	ug/L	0.009	2	383	3775	3
	Cu	65	0.532	ug/L	0.024	4	187	2348	4
	Zn	66	0.324	ug/L	0.003	0	2618	3422	1
	Zn	67	0.935	ug/L	0.118	12	483	902	5
	Zn	68	-0.423	ug/L	0.040	9	8781	7611	0
	As-1	75	0.020	ug/L	0.012	61	246	286	11
	As	75	-0.040	ug/L	0.016	39	10545	10044	1
	Se	82	0.139	ug/L	0.036	25	-19	14	58
	Se	78	-0.107	ug/L	0.022	20	10704	10230	1
	Mo	98	402.076	ug/L	7.020	1	1302	3268471	1
	Y	89		ug/L			367089	353304	0
	Kr	83		ug/L			194	185	0
>	In	115		ug/L			476899	445577	1
	Ag	107	0.027	ug/L	0.001	4	181	583	1
	Cd	111	0.044	ug/L	0.028	64	230	375	28
	Cd	114	0.596	ug/L	0.010	1	76	5163	3
	Sb	121	0.036	ug/L	0.004	10	306	743	7
	Sb	123	0.038	ug/L	0.001	2	216	566	1
	Ba	135	0.018	ug/L	0.003	16	75	118	6
	Ba	137	0.016	ug/L	0.003	21	134	196	6
>	Tb	159		ug/L			437353	419465	0
	Tl	205	-0.003	ug/L	0.001	27	340	241	10
	Pb	208	0.036	ug/L	0.001	2	909	2353	0
	Bi	209		ug/L			362800	339563	0
	Th	232	0.035	ug/L	0.006	15	304	2045	13
	U	238	-0.002	ug/L	0.000	3	193	83	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:30:06
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	409240	1
[	Be	9	-0.002	ug/L	0.002	107	6	6	20
	C	13		mg/L			9248	25202	0
	Cl	37		mg/L			3694160	5416338	0
[>	Sc	45		ug/L			341955	337154	0
[	V-1	51	-0.355	ug/L	0.081	22	2779	-2794	44
[	V	51	0.573	ug/L	0.018	3	3697	12771	1
[	Cr	52	19.100	ug/L	0.058	0	8350	272091	0
[	Cr	53	20.774	ug/L	0.243	1	1237	35724	1
[	Mn	55	18.496	ug/L	0.176	0	1384	440186	1
[	Co	59	18.532	ug/L	0.040	0	187	339429	1
[>	Ge	72		ug/L			454122	446932	0
[	Ni	60	18.556	ug/L	0.195	1	92	71603	0
[	Ni	62	21.256	ug/L	0.170	0	75	12325	1
[	Cu	63	18.494	ug/L	0.147	0	383	162860	0
[	Cu	65	18.475	ug/L	0.113	0	187	77198	1
[	Zn	66	17.617	ug/L	0.243	1	2618	52793	0
[	Zn	67	15.983	ug/L	0.346	2	483	8124	1
[	Zn	68	16.157	ug/L	0.360	2	8781	41217	0
[	As-1	75	18.721	ug/L	0.157	0	246	47081	0
[	As	75	18.502	ug/L	0.180	0	10545	56522	0
[	Se	82	0.090	ug/L	0.034	37	-19	2	304
[	Se	78	-1.037	ug/L	0.116	11	10704	9897	0
[	Mo	98	376.428	ug/L	4.849	1	1302	3131210	0
	Y	89		ug/L			367089	364272	1
	Kr	83		ug/L			194	190	5
[>	In	115		ug/L			476899	451518	0
[	Ag	107	17.133	ug/L	0.192	1	181	261746	1
[	Cd	111	18.759	ug/L	0.109	0	230	69359	1
[	Cd	114	19.131	ug/L	0.095	0	76	165694	0
[	Sb	121	0.031	ug/L	0.002	5	306	695	2
[	Sb	123	0.031	ug/L	0.003	9	216	504	5
[	Ba	135	0.015	ug/L	0.006	38	75	111	14
[	Ba	137	0.016	ug/L	0.001	7	134	200	3
[>	Tb	159		ug/L			437353	437105	0
[	Tl	205	0.002	ug/L	0.001	43	340	410	7
[	Pb	208	0.034	ug/L	0.001	2	909	2348	1
[	Bi	209		ug/L			362800	352777	0
[	Th	232	0.020	ug/L	0.002	7	304	1323	5
[	U	238	-0.002	ug/L	0.000	8	193	76	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:37:51
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	373384	1
Be	9	190.770	ug/L	1.837	0	6	105022	1
C	13		mg/L			9248	6898	1
Cl	37		mg/L			3694160	3536304	1
Sc	45		ug/L			341955	330103	1
V-1	51	199.649	ug/L	0.995	0	2779	3053073	1
V	51	198.221	ug/L	0.646	0	3697	3092701	1
Cr	52	199.536	ug/L	1.482	0	8350	2707049	2
Cr	53	195.164	ug/L	0.705	0	1237	318569	1
Mn	55	196.463	ug/L	0.953	0	1384	4565047	1
Co	59	194.562	ug/L	2.965	1	187	3487199	2
Ge	72		ug/L			454122	440518	1
Ni	60	188.208	ug/L	1.829	0	92	715074	1
Ni	62	189.737	ug/L	1.314	0	75	107861	1
Cu	63	186.795	ug/L	1.386	0	383	1618049	1
Cu	65	188.200	ug/L	0.350	0	187	773430	1
Zn	66	182.250	ug/L	1.092	0	2618	514655	1
Zn	67	182.296	ug/L	0.614	0	483	86457	1
Zn	68	181.234	ug/L	0.332	0	8781	368711	1
As-1	75	195.134	ug/L	2.129	1	246	481448	0
As	75	194.903	ug/L	2.152	1	10545	489351	0
Se	82	195.850	ug/L	1.053	0	-19	47288	0
Se	78	194.965	ug/L	1.095	0	10704	128498	0
Mo	98	200.202	ug/L	2.457	1	1302	1642098	1
Y	89		ug/L			367089	354123	0
Kr	83		ug/L			194	206	1
In	115		ug/L			476899	447009	1
Ag	107	200.809	ug/L	1.536	0	181	3035300	1
Cd	111	199.596	ug/L	0.433	0	230	728531	1
Cd	114	198.346	ug/L	1.096	0	76	1700017	0
Sb	121	203.319	ug/L	2.204	1	306	2600272	1
Sb	123	201.062	ug/L	1.321	0	216	1927441	1
Ba	135	200.900	ug/L	2.473	1	75	535543	1
Ba	137	199.184	ug/L	0.707	0	134	906488	0
Tb	159		ug/L			437353	425008	0
Tl	205	196.485	ug/L	2.668	1	340	5956291	1
Pb	208	196.896	ug/L	1.633	0	909	8190819	1
Bi	209		ug/L			362800	334866	0
Th	232	200.313	ug/L	1.450	0	304	10101317	0
U	238	198.829	ug/L	1.738	0	193	11002921	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:44:35
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	353082	0
[	Be	9	292.951	ug/L	2.153	0	6	152514	0
	C	13		mg/L			9248	6940	3
	Cl	37		mg/L			3694160	3680911	0
[>	Sc	45		ug/L			341955	331466	0
[	V-1	51	302.285	ug/L	3.897	1	2779	4639957	0
[	V	51	300.467	ug/L	3.147	1	3697	4705284	0
[	Cr	52	300.998	ug/L	1.587	0	8350	4096046	0
[	Cr	53	295.504	ug/L	0.679	0	1237	483744	0
[	Mn	55	297.889	ug/L	2.128	0	1384	6949522	0
[	Co	59	292.440	ug/L	1.391	0	187	5263046	0
[>	Ge	72		ug/L			454122	446465	0
[	Ni	60	282.369	ug/L	0.792	0	92	1087219	1
[	Ni	62	281.217	ug/L	0.992	0	75	161981	0
[	Cu	63	284.899	ug/L	2.628	0	383	2500900	1
[	Cu	65	281.923	ug/L	0.686	0	187	1174146	0
[	Zn	66	271.393	ug/L	1.348	0	2618	775463	1
[	Zn	67	273.211	ug/L	1.883	0	483	131090	1
[	Zn	68	268.861	ug/L	1.738	0	8781	550210	1
[	As-1	75	291.233	ug/L	1.194	0	246	728164	0
[	As	75	291.237	ug/L	0.981	0	10545	736003	0
[	Se	82	289.337	ug/L	2.698	0	-19	70813	0
[	Se	78	289.415	ug/L	2.023	0	10704	188231	0
[	Mo	98	304.700	ug/L	1.305	0	1302	2532353	1
	Y	89		ug/L			367089	354510	0
	Kr	83		ug/L			194	225	2
[>	In	115		ug/L			476899	454815	1
[	Ag	107	303.016	ug/L	3.612	1	181	4659893	1
[	Cd	111	299.054	ug/L	4.006	1	230	1110366	0
[	Cd	114	296.637	ug/L	4.252	1	76	2586587	0
[	Sb	121	303.752	ug/L	0.932	0	306	3952321	1
[	Sb	123	303.164	ug/L	4.137	1	216	2956616	1
[	Ba	135	296.101	ug/L	2.515	0	75	803030	1
[	Ba	137	296.435	ug/L	1.564	0	134	1372565	1
[>	Tb	159		ug/L			437353	418518	1
[	Tl	205	300.703	ug/L	1.314	0	340	8976105	1
[	Pb	208	298.453	ug/L	1.241	0	909	12225335	1
[	Bi	209		ug/L			362800	297121	1
[	Th	232	304.437	ug/L	4.537	1	304	15116615	1
[	U	238	302.679	ug/L	0.791	0	193	16494198	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:51:21
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
> Li	6		ug/L			348253	378205	0
Be	9	47.737	ug/L	0.588	1	6	26625	0
C	13		mg/L			9248	7453	0
Cl	37		mg/L			3694160	3666851	0
> Sc	45		ug/L			341955	332521	1
V-1	51	48.456	ug/L	0.377	0	2779	748471	1
V	51	48.385	ug/L	0.187	0	3697	763160	1
Cr	52	48.865	ug/L	0.339	0	8350	673932	1
Cr	53	48.623	ug/L	0.336	0	1237	80851	0
Mn	55	48.352	ug/L	0.561	1	1384	1132759	1
Co	59	47.960	ug/L	0.428	0	187	866013	1
> Ge	72		ug/L			454122	435514	0
Ni	60	49.151	ug/L	0.304	0	92	184675	0
Ni	62	49.098	ug/L	0.281	0	75	27646	0
Cu	63	49.047	ug/L	0.193	0	383	420284	0
Cu	65	48.879	ug/L	0.295	0	187	198723	0
Zn	66	47.971	ug/L	0.398	0	2618	135768	0
Zn	67	47.845	ug/L	0.264	0	483	22775	0
Zn	68	47.021	ug/L	0.173	0	8781	100811	0
As-1	75	49.281	ug/L	0.103	0	246	120391	0
As	75	49.131	ug/L	0.078	0	10545	129526	0
Se	82	51.053	ug/L	0.082	0	-19	12173	0
Se	78	50.441	ug/L	0.266	0	10704	40478	0
Mo	98	49.800	ug/L	0.221	0	1302	404771	0
Y	89		ug/L			367089	354093	1
Kr	83		ug/L			194	181	6
> In	115		ug/L			476899	447579	1
Ag	107	49.970	ug/L	1.073	2	181	756323	1
Cd	111	50.526	ug/L	0.480	0	230	184800	0
Cd	114	49.408	ug/L	0.433	0	76	424076	1
Sb	121	49.376	ug/L	0.178	0	306	632475	0
Sb	123	49.368	ug/L	0.599	1	216	473987	0
Ba	135	49.981	ug/L	0.283	0	75	133454	0
Ba	137	49.819	ug/L	0.870	1	134	227084	0
> Tb	159		ug/L			437353	421118	0
Tl	205	49.192	ug/L	0.516	1	340	1477777	0
Pb	208	49.453	ug/L	0.549	1	909	2038983	0
Bi	209		ug/L			362800	344578	0
Th	232	50.217	ug/L	0.966	1	304	2509201	1
U	238	49.904	ug/L	0.616	1	193	2736422	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 12:58:49
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	382016	0
Be	9	0.000	ug/L	0.003	634	6	7	20
C	13		mg/L			9248	8308	0
Cl	37		mg/L			3694160	3662283	0
Sc	45		ug/L			341955	318644	1
V-1	51	-0.006	ug/L	0.012	190	2779	2493	6
V	51	0.014	ug/L	0.007	46	3697	3661	1
Cr	52	-0.011	ug/L	0.011	102	8350	7637	3
Cr	53	0.053	ug/L	0.030	56	1237	1236	4
Mn	55	-0.017	ug/L	0.003	17	1384	898	7
Co	59	0.002	ug/L	0.001	38	187	211	5
Ge	72		ug/L			454122	425424	0
Ni	60	0.000	ug/L	0.003	2575	92	87	13
Ni	62	0.001	ug/L	0.012	1077	75	71	9
Cu	63	0.001	ug/L	0.003	312	383	367	7
Cu	65	-0.007	ug/L	0.004	47	187	145	10
Zn	66	-0.720	ug/L	0.026	3	2618	498	13
Zn	67	-0.658	ug/L	0.045	6	483	153	12
Zn	68	-0.812	ug/L	0.032	3	8781	6668	1
As-1	75	0.022	ug/L	0.013	58	246	284	11
As	75	0.015	ug/L	0.015	101	10545	9914	0
Se	82	0.078	ug/L	0.032	41	-19	0	5728
Se	78	0.055	ug/L	0.080	145	10704	10059	0
Mo	98	-0.103	ug/L	0.010	9	1302	402	19
Y	89		ug/L			367089	348396	1
Kr	83		ug/L			194	182	2
In	115		ug/L			476899	437225	0
Ag	107	0.017	ug/L	0.003	18	181	418	10
Cd	111	0.004	ug/L	0.005	132	230	224	8
Cd	114	0.004	ug/L	0.001	14	76	99	4
Sb	121	0.037	ug/L	0.005	13	306	749	7
Sb	123	0.037	ug/L	0.013	34	216	544	20
Ba	135	-0.007	ug/L	0.001	9	75	49	2
Ba	137	-0.010	ug/L	0.005	46	134	77	26
Tb	159		ug/L			437353	414141	0
Tl	205	0.006	ug/L	0.002	34	340	503	12
Pb	208	0.000	ug/L	0.003	571	909	879	11
Bi	209		ug/L			362800	345405	0
Th	232	0.074	ug/L	0.011	14	304	3901	13
U	238	0.008	ug/L	0.003	33	193	612	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP83 MB REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 13:07:49
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	406786	0
Be	9	-0.001	ug/L	0.004	419	6	6	39
C	13		mg/L			9248	7114	3
Cl	37		mg/L			3694160	3620100	1
Sc	45		ug/L			341955	326849	0
V-1	51	0.001	ug/L	0.018	2225	2779	2667	9
V	51	0.013	ug/L	0.007	51	3697	3739	1
Cr	52	-0.040	ug/L	0.010	23	8350	7441	0
Cr	53	0.001	ug/L	0.028	4023	1237	1183	4
Mn	55	-0.018	ug/L	0.001	6	1384	916	2
Co	59	-0.001	ug/L	0.000	31	187	155	5
Ge	72		ug/L			454122	437091	0
Ni	60	-0.003	ug/L	0.001	37	92	77	5
Ni	62	-0.005	ug/L	0.012	226	75	70	8
Cu	63	U 0.021	ug/L	0.001	6	383	547	2
Cu	65	0.023	ug/L	0.002	10	187	273	3
Zn	66	U -0.116	ug/L	0.028	24	2618	2197	3
Zn	67	-0.166	ug/L	0.105	63	483	387	13
Zn	68	-0.360	ug/L	0.057	15	8781	7742	1
As-1	75	0.031	ug/L	0.021	68	246	312	16
As	75	-0.091	ug/L	0.016	18	10545	9927	0
Se	82	0.141	ug/L	0.058	40	-19	14	92
Se	78	-0.373	ug/L	0.032	8	10704	10078	0
Mo	98	-0.083	ug/L	0.007	8	1302	577	9
Y	89		ug/L			367089	363459	1
Kr	83		ug/L			194	181	3
In	115		ug/L			476899	449500	0
Ag	107	0.006	ug/L	0.001	9	181	265	3
Cd	111	-0.000	ug/L	0.004	822	230	215	6
Cd	114	-0.003	ug/L	0.001	26	76	46	14
Sb	121	0.004	ug/L	0.001	28	306	342	4
Sb	123	0.008	ug/L	0.002	26	216	276	6
Ba	135	-0.011	ug/L	0.000	3	75	42	1
Ba	137	-0.012	ug/L	0.002	13	134	69	10
Tb	159		ug/L			437353	433903	0
Tl	205	-0.005	ug/L	0.000	0	340	183	0
Pb	208	U -0.004	ug/L	0.001	27	909	717	6
Bi	209		ug/L			362800	359292	0
Th	232	0.033	ug/L	0.004	11	304	2027	10
U	238	0.000	ug/L	0.001	184	193	216	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP83 MBSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 13:14:36
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	405259	1
Be	9	23.199	ug/L	0.204	0	6	13870	1
C	13		mg/L			9248	7438	1
Cl	37		mg/L			3694160	3621217	0
Sc	45		ug/L			341955	327187	0
V-1	51	24.813	ug/L	0.488	1	2779	378413	1
V	51	24.792	ug/L	0.454	1	3697	386480	1
Cr	52	25.163	ug/L	0.271	1	8350	345338	1
Cr	53	25.076	ug/L	0.098	0	1237	41603	0
Mn	55	24.971	ug/L	0.435	1	1384	576224	1
Co	59	25.244	ug/L	0.119	0	187	448613	0
Ge	72		ug/L			454122	433584	0
Ni	60	24.989	ug/L	0.236	0	92	93515	0
Ni	62	25.045	ug/L	0.355	1	75	14075	1
Cu	63	25.686	ug/L	0.110	0	383	219298	0
Cu	65	25.879	ug/L	0.320	1	187	104826	0
Zn	66	75.423	ug/L	0.679	0	2618	211089	0
Zn	67	69.239	ug/L	0.312	0	483	32607	0
Zn	68	73.968	ug/L	0.953	1	8781	153075	1
As-1	75	25.580	ug/L	0.410	1	246	62325	1
As	75	24.944	ug/L	0.308	1	10545	70424	0
Se	82	80.415	ug/L	0.837	1	-19	19099	0
Se	78	78.562	ug/L	0.467	0	10704	57066	0
Mo	98	-0.104	ug/L	0.003	2	1302	407	4
Y	89		ug/L			367089	357816	0
Kr	83		ug/L			194	192	6
In	115		ug/L			476899	446182	0
Ag	107	24.870	ug/L	0.077	0	181	375379	0
Cd	111	25.141	ug/L	0.294	1	230	91782	1
Cd	114	25.010	ug/L	0.163	0	76	214035	0
Sb	121	0.006	ug/L	0.001	23	306	367	5
Sb	123	0.007	ug/L	0.003	46	216	268	11
Ba	135	25.377	ug/L	0.349	1	75	67585	1
Ba	137	25.541	ug/L	0.161	0	134	116136	0
Tb	159		ug/L			437353	429343	0
Tl	205	24.972	ug/L	0.174	0	340	765025	0
Pb	208	25.433	ug/L	0.241	0	909	1069552	0
Bi	209		ug/L			362800	359086	1
Th	232	24.660	ug/L	0.411	1	304	1256476	1
U	238	24.760	ug/L	0.202	0	193	1384331	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP83 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 13:21:24
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	282389	2
[	Be	9	0.001	ug/L	0.003	406	6	5	26
	C	13		mg/L			9248	8882	3
	Cl	37		mg/L			3694160	30162095	1
[>	Sc	45		ug/L			341955	344707	0
[	V-1	51	-0.288	ug/L	0.212	73	2779	-1807	188
[	V	51	6.685	ug/L	0.248	3	3697	112536	4
[	Cr	52	3.805	ug/L	0.011	0	8350	62159	0
[	Cr	53	24.930	ug/L	1.384	5	1237	43590	5
[	Mn	55	10.419	ug/L	0.084	0	1384	254115	0
[	Co	59	0.121	ug/L	0.002	1	187	2452	1
[>	Ge	72		ug/L			454122	435693	0
[	Ni	60	4.684	ug/L	0.071	1	92	17684	1
[	Ni	62	20.772	ug/L	2.368	11	75	11741	11
[	Cu	63	24.199	ug/L	0.227	0	383	207632	0
[	Cu	65	11.385	ug/L	0.129	1	187	46445	1
[	Zn	66	239.487	ug/L	1.459	0	2618	668061	0
[	Zn	67	214.414	ug/L	1.830	0	483	100492	0
[	Zn	68	233.079	ug/L	1.564	0	8781	466575	0
[	As-1	75	2.103	ug/L	0.055	2	246	5367	2
[	As	75	0.777	ug/L	0.038	4	10545	12006	0
[	Se	82	6.982	ug/L	0.183	2	-19	1649	2
[	Se	78	2.294	ug/L	0.200	8	10704	11644	0
[	Mo	98	5.927	ug/L	0.076	1	1302	49292	0
	Y	89		ug/L			367089	370405	0
	Kr	83		ug/L			194	331	1
[>	In	115		ug/L			476899	465204	1
[	Ag	107	0.046	ug/L	0.007	16	181	892	12
[	Cd	111	0.181	ug/L	0.107	59	230	911	43
[	Cd	114	0.645	ug/L	0.011	1	76	5825	2
[	Sb	121	1.306	ug/L	0.013	1	306	17685	1
[	Sb	123	1.301	ug/L	0.016	1	216	13192	1
[	Ba	135	44.293	ug/L	0.358	0	75	122943	2
[	Ba	137	43.728	ug/L	0.321	0	134	207225	2
[>	Tb	159		ug/L			437353	358029	1
[	Tl	205	0.016	ug/L	0.002	14	340	680	9
[	Pb	208	1.473	ug/L	0.015	1	909	52379	2
[	Bi	209		ug/L			362800	274574	1
[	Th	232	0.100	ug/L	0.005	5	304	4506	5
[	U	238	0.205	ug/L	0.005	2	193	9734	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO76 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 13:28:13
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

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	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	250922	2
[	Be	9	-0.001	ug/L	0.005	629	6	4	45
	C	13		mg/L			9248	7194	2
	Cl	37		mg/L			3694160	4553912	0
[>	Sc	45		ug/L			341955	465980	1
|	V-1	51	25.382	ug/L	0.181	0	2779	551187	0
|	V	51	25.763	ug/L	0.192	0	3697	571760	0
|	Cr	52	0.487	ug/L	0.008	1	8350	20669	1
|	Cr	53	3.149	ug/L	0.108	3	1237	8914	2
|	Mn	55	0.868	ug/L	0.006	0	1384	30343	0
[	Co	59	0.122	ug/L	0.005	3	187	3332	4
[>	Ge	72		ug/L			454122	501022	0
|	Ni	60	3.256	ug/L	0.015	0	92	14170	0
|	Ni	62	4.053	ug/L	0.289	7	75	2701	6
|	Cu	63	1.108	ug/L	0.020	1	383	11332	1
|	Cu	65	1.046	ug/L	0.013	1	187	5095	0
|	Zn	66	1.989	ug/L	0.012	0	2618	9245	0
|	Zn	67	8.057	ug/L	0.204	2	483	4855	1
|	Zn	68	4.994	ug/L	0.054	1	8781	20977	0
|	As-1	75	1.926	ug/L	0.015	0	246	5673	0
|	As	75	1.711	ug/L	0.066	3	10545	16417	0
|	Se	82	2.883	ug/L	0.043	1	-19	770	1
|	Se	78	2.021	ug/L	0.305	15	10704	13201	1
[	Mo	98	0.874	ug/L	0.019	2	1302	9584	1
	Y	89		ug/L			367089	384790	1
	Kr	83		ug/L			194	212	1
[>	In	115		ug/L			476899	550075	1
|	Ag	107	0.008	ug/L	0.002	20	181	351	7
|	Cd	111	0.019	ug/L	0.002	12	230	352	2
|	Cd	114	0.008	ug/L	0.002	21	76	176	11
|	Sb	121	0.184	ug/L	0.007	3	306	3242	2
|	Sb	123	0.180	ug/L	0.004	2	216	2370	3
|	Ba	135	112.786	ug/L	1.048	0	75	369991	0
[	Ba	137	111.779	ug/L	0.940	0	134	626041	0
[>	Tb	159		ug/L			437353	453862	0
|	Tl	205	-0.001	ug/L	0.000	38	340	313	4
|	Pb	208	0.960	ug/L	0.007	0	909	43582	0
|	Bi	209		ug/L			362800	372887	0
|	Th	232	0.023	ug/L	0.003	13	304	1544	10
[	U	238	1.140	ug/L	0.010	0	193	67581	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO76 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 13:35:02
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	246103	0
[	Be	9	0.000	ug/L	0.004	867	6	4	31
	C	13		mg/L			9248	7696	2
	Cl	37		mg/L			3694160	4330143	0
[>	Sc	45		ug/L			341955	478179	0
[	V-1	51	22.963	ug/L	0.434	1	2779	512043	1
[	V	51	23.147	ug/L	0.417	1	3697	527665	1
[	Cr	52	0.982	ug/L	0.051	5	8350	30903	2
[	Cr	53	2.869	ug/L	0.041	1	1237	8488	0
[	Mn	55	3.824	ug/L	0.045	1	1384	130613	0
[	Co	59	0.222	ug/L	0.003	1	187	6032	2
[>	Ge	72		ug/L			454122	510996	0
[	Ni	60	12.035	ug/L	0.107	0	92	53134	0
[	Ni	62	12.441	ug/L	0.277	2	75	8283	1
[	Cu	63	1.407	ug/L	0.016	1	383	14562	0
[	Cu	65	1.371	ug/L	0.009	0	187	6743	1
[	Zn	66	4.163	ug/L	0.107	2	2618	16513	1
[	Zn	67	12.739	ug/L	0.021	0	483	7514	0
[	Zn	68	9.646	ug/L	0.149	1	8781	32117	0
[	As-1	75	1.886	ug/L	0.055	2	246	5671	2
[	As	75	1.583	ug/L	0.081	5	10545	16380	0
[	Se	82	2.435	ug/L	0.016	0	-19	660	0
[	Se	78	1.205	ug/L	0.125	10	10704	12890	0
[	Mo	98	0.785	ug/L	0.004	0	1302	8928	1
	Y	89		ug/L			367089	389902	0
	Kr	83		ug/L			194	214	0
[>	In	115		ug/L			476899	556330	0
[	Ag	107	0.006	ug/L	0.001	14	181	323	4
[	Cd	111	0.051	ug/L	0.005	9	230	500	4
[	Cd	114	0.035	ug/L	0.002	4	76	461	3
[	Sb	121	0.278	ug/L	0.004	1	306	4776	1
[	Sb	123	0.283	ug/L	0.003	1	216	3632	0
[	Ba	135	205.655	ug/L	0.661	0	75	682294	0
[	Ba	137	205.158	ug/L	1.664	0	134	1162088	1
[>	Tb	159		ug/L			437353	460368	0
[	Tl	205	0.000	ug/L	0.000	38	340	373	1
[	Pb	208	1.552	ug/L	0.001	0	909	70897	0
[	Bi	209		ug/L			362800	380003	0
[	Th	232	0.033	ug/L	0.001	3	304	2137	2
[	U	238	0.925	ug/L	0.019	2	193	55626	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 13:41:51
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

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	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	264239	1
[	Be	9	0.103	ug/L	0.022	21	6	45	20
	C	13		mg/L			9248	11886	1
	Cl	37		mg/L			3694160	4961239	0
[>	Sc	45		ug/L			341955	488751	0
[	V-1	51	169.890	ug/L	1.663	0	2779	3846953	0
[	V	51	167.450	ug/L	1.670	0	3697	3868902	0
[	Cr	52	14.144	ug/L	0.073	0	8350	295186	0
[	Cr	53	16.035	ug/L	0.139	0	1237	40375	0
[	Mn	55	202.003	ug/L	1.996	0	1384	6949389	0
[	Co	59	11.091	ug/L	0.138	1	187	294565	1
[>	Ge	72		ug/L			454122	499035	1
[	Ni	60	17.286	ug/L	0.117	0	92	74490	1
[	Ni	62	19.311	ug/L	0.473	2	75	12507	1
[	Cu	63	12.016	ug/L	0.088	0	383	118300	1
[	Cu	65	11.444	ug/L	0.101	0	187	53467	1
[	Zn	66	9.131	ug/L	0.103	1	2618	31945	2
[	Zn	67	25.449	ug/L	0.250	0	483	14130	1
[	Zn	68	9.434	ug/L	0.179	1	8781	30885	0
[	As-1	75	13.618	ug/L	0.013	0	246	38316	1
[	As	75	13.453	ug/L	0.063	0	10545	49053	1
[	Se	82	1.271	ug/L	0.024	1	-19	326	3
[	Se	78	0.674	ug/L	0.203	30	10704	12224	0
[	Mo	98	25.114	ug/L	0.229	0	1302	234603	1
	Y	89		ug/L			367089	693264	0
	Kr	83		ug/L			194	274	0
[>	In	115		ug/L			476899	529655	1
[	Ag	107	0.055	ug/L	0.001	2	181	1179	3
[	Cd	111	0.322	ug/L	0.008	2	230	1648	3
[	Cd	114	0.058	ug/L	0.003	5	76	675	5
[	Sb	121	0.417	ug/L	0.003	0	306	6657	0
[	Sb	123	0.433	ug/L	0.013	3	216	5162	3
[	Ba	135	8.614	ug/L	0.118	1	75	27292	2
[	Ba	137	8.585	ug/L	0.084	0	134	46443	2
[>	Tb	159		ug/L			437353	458981	0
[	Tl	205	0.002	ug/L	0.001	44	340	432	8
[	Pb	208	0.973	ug/L	0.016	1	909	44665	1
[	Bi	209		ug/L			362800	381747	1
[	Th	232	0.326	ug/L	0.005	1	304	18093	1
[	U	238	0.205	ug/L	0.002	0	193	12426	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 13:48:41
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	271201	1
[	Be	9	0.019	ug/L	0.009	46	6	12	30
	C	13		mg/L			9248	9200	2
	Cl	37		mg/L			3694160	4301377	0
[>	Sc	45		ug/L			341955	479250	0
[	V-1	51	13.354	ug/L	0.013	0	2779	300111	0
[	V	51	13.511	ug/L	0.029	0	3697	310867	0
[	Cr	52	2.066	ug/L	0.021	1	8350	52272	1
[	Cr	53	3.224	ug/L	0.044	1	1237	9346	0
[	Mn	55	462.082	ug/L	5.260	1	1384	15584778	0
[	Co	59	4.112	ug/L	0.033	0	187	107243	0
[>	Ge	72		ug/L			454122	491265	1
[	Ni	60	4.227	ug/L	0.082	1	92	18006	1
[	Ni	62	4.637	ug/L	0.184	3	75	3018	2
[	Cu	63	4.262	ug/L	0.014	0	383	41572	1
[	Cu	65	3.956	ug/L	0.032	0	187	18325	0
[	Zn	66	5.115	ug/L	0.132	2	2618	18855	0
[	Zn	67	6.191	ug/L	0.182	2	483	3779	1
[	Zn	68	5.572	ug/L	0.173	3	8781	21846	0
[	As-1	75	4.962	ug/L	0.045	0	246	13912	0
[	As	75	4.797	ug/L	0.087	1	10545	24556	0
[	Se	82	1.100	ug/L	0.076	6	-19	274	6
[	Se	78	0.439	ug/L	0.243	55	10704	11874	0
[	Mo	98	5.585	ug/L	0.107	1	1302	52445	0
	Y	89		ug/L			367089	403438	0
	Kr	83		ug/L			194	225	4
[>	In	115		ug/L			476899	519479	1
[	Ag	107	0.001	ug/L	0.001	140	181	216	12
[	Cd	111	0.080	ug/L	0.016	19	230	590	10
[	Cd	114	0.049	ug/L	0.005	9	76	574	8
[	Sb	121	0.096	ug/L	0.003	3	306	1756	1
[	Sb	123	0.099	ug/L	0.006	6	216	1341	4
[	Ba	135	7.401	ug/L	0.045	0	75	23006	1
[	Ba	137	7.322	ug/L	0.061	0	134	38866	0
[>	Tb	159		ug/L			437353	435652	0
[	Tl	205	0.012	ug/L	0.000	2	340	705	1
[	Pb	208	0.021	ug/L	0.001	3	909	1790	1
[	Bi	209		ug/L			362800	352742	1
[	Th	232	0.027	ug/L	0.002	7	304	1681	6
[	U	238	0.043	ug/L	0.000	1	193	2613	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 13:55:32
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	287989	0
[	Be	9	0.080	ug/L	0.014	17	6	39	14
	C	13		mg/L			9248	12820	1
	Cl	37		mg/L			3694160	4774839	0
[>	Sc	45		ug/L			341955	471264	1
[	V-1	51	156.443	ug/L	0.946	0	2779	3415898	1
[	V	51	154.089	ug/L	0.955	0	3697	3433085	1
[	Cr	52	12.737	ug/L	0.105	0	8350	257463	2
[	Cr	53	14.165	ug/L	0.095	0	1237	34589	1
[	Mn	55	195.991	ug/L	1.353	0	1384	6501474	1
[	Co	59	10.527	ug/L	0.129	1	187	269604	1
[>	Ge	72		ug/L			454122	473065	1
[	Ni	60	16.592	ug/L	0.179	1	92	67779	1
[	Ni	62	18.484	ug/L	0.349	1	75	11353	1
[	Cu	63	6.181	ug/L	0.035	0	383	57879	1
[	Cu	65	5.482	ug/L	0.028	0	187	24382	1
[	Zn	66	5.173	ug/L	0.037	0	2618	18336	0
[	Zn	67	19.742	ug/L	0.074	0	483	10504	1
[	Zn	68	5.652	ug/L	0.077	1	8781	21209	0
[	As-1	75	12.728	ug/L	0.059	0	246	33965	1
[	As	75	12.604	ug/L	0.108	0	10545	44259	1
[	Se	82	1.165	ug/L	0.056	4	-19	281	6
[	Se	78	0.715	ug/L	0.201	28	10704	11615	1
[	Mo	98	23.519	ug/L	0.071	0	1302	208360	1
	Y	89		ug/L			367089	641463	1
	Kr	83		ug/L			194	253	2
[>	In	115		ug/L			476899	494393	0
[	Ag	107	0.041	ug/L	0.001	1	181	880	2
[	Cd	111	0.258	ug/L	0.008	3	230	1279	3
[	Cd	114	0.045	ug/L	0.002	4	76	501	4
[	Sb	121	0.366	ug/L	0.010	2	306	5501	3
[	Sb	123	0.368	ug/L	0.002	0	216	4129	1
[	Ba	135	6.460	ug/L	0.044	0	75	19123	1
[	Ba	137	6.450	ug/L	0.158	2	134	32601	2
[>	Tb	159		ug/L			437353	437881	0
[	Tl	205	0.006	ug/L	0.001	13	340	522	4
[	Pb	208	0.492	ug/L	0.004	0	909	21989	0
[	Bi	209		ug/L			362800	359536	1
[	Th	232	0.229	ug/L	0.002	0	304	12196	0
[	U	238	0.163	ug/L	0.003	1	193	9502	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 14:02:23
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	289715	0
Be	9	0.123	ug/L	0.019	15	6	57	13
C	13		mg/L			9248	12623	0
Cl	37		mg/L			3694160	4699090	0
Sc	45		ug/L			341955	482759	0
V-1	51	203.807	ug/L	0.379	0	2779	4557698	0
V	51	200.587	ug/L	0.414	0	3697	4576777	0
Cr	52	17.699	ug/L	0.204	1	8350	361886	0
Cr	53	19.026	ug/L	0.281	1	1237	46994	0
Mn	55	194.299	ug/L	2.072	1	1384	6602481	0
Co	59	11.117	ug/L	0.054	0	187	291636	0
Ge	72		ug/L			454122	461953	0
Ni	60	19.292	ug/L	0.277	1	92	76944	1
Ni	62	22.013	ug/L	0.142	0	75	13190	0
Cu	63	34.077	ug/L	0.257	0	383	309856	0
Cu	65	33.645	ug/L	0.172	0	187	145152	0
Zn	66	24.451	ug/L	0.076	0	2618	74710	0
Zn	67	41.193	ug/L	0.553	1	483	20867	1
Zn	68	24.121	ug/L	0.084	0	8781	59205	0
As-1	75	15.594	ug/L	0.207	1	246	40579	1
As	75	15.478	ug/L	0.257	1	10545	50628	1
Se	82	1.607	ug/L	0.057	3	-19	387	3
Se	78	1.314	ug/L	0.245	18	10704	11723	1
Mo	98	28.457	ug/L	0.239	0	1302	245909	0
Y	89		ug/L			367089	725813	0
Kr	83		ug/L			194	286	2
In	115		ug/L			476899	481349	0
Ag	107	0.092	ug/L	0.003	2	181	1674	1
Cd	111	0.446	ug/L	0.012	2	230	1985	2
Cd	114	0.113	ug/L	0.003	2	76	1122	3
Sb	121	0.589	ug/L	0.004	0	306	8417	0
Sb	123	0.591	ug/L	0.001	0	216	6315	0
Ba	135	12.738	ug/L	0.100	0	75	36633	0
Ba	137	12.692	ug/L	0.132	1	134	62326	0
Tb	159		ug/L			437353	436957	0
Tl	205	0.014	ug/L	0.000	1	340	774	1
Pb	208	3.047	ug/L	0.026	0	909	131226	0
Bi	209		ug/L			362800	382357	1
Th	232	0.557	ug/L	0.014	2	304	29186	2
U	238	0.329	ug/L	0.007	2	193	18935	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 14:09:14
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	270760	1
[	Be	9	0.032	ug/L	0.003	9	6	17	7
	C	13		mg/L			9248	8559	0
	Cl	37		mg/L			3694160	4117743	0
[>	Sc	45		ug/L			341955	424831	1
[	V-1	51	14.397	ug/L	0.260	1	2779	286485	0
[	V	51	14.507	ug/L	0.249	1	3697	295504	0
[	Cr	52	2.196	ug/L	0.045	2	8350	48596	0
[	Cr	53	3.268	ug/L	0.032	0	1237	8375	1
[	Mn	55	443.133	ug/L	3.599	0	1384	13248595	1
[	Co	59	4.020	ug/L	0.060	1	187	92937	0
[>	Ge	72		ug/L			454122	437959	1
[	Ni	60	3.948	ug/L	0.071	1	92	14998	0
[	Ni	62	4.481	ug/L	0.075	1	75	2604	2
[	Cu	63	4.042	ug/L	0.035	0	383	35168	0
[	Cu	65	3.646	ug/L	0.039	1	187	15074	0
[	Zn	66	4.804	ug/L	0.050	1	2618	15945	0
[	Zn	67	5.777	ug/L	0.131	2	483	3175	1
[	Zn	68	5.610	ug/L	0.055	0	8781	19553	1
[	As-1	75	5.069	ug/L	0.017	0	246	12665	0
[	As	75	5.162	ug/L	0.052	1	10545	22785	0
[	Se	82	1.111	ug/L	0.032	2	-19	247	3
[	Se	78	1.612	ug/L	0.122	7	10704	11293	0
[	Mo	98	5.459	ug/L	0.070	1	1302	45735	1
	Y	89		ug/L			367089	363696	0
	Kr	83		ug/L			194	228	3
[>	In	115		ug/L			476899	456673	1
[	Ag	107	-0.002	ug/L	0.000	18	181	135	5
[	Cd	111	0.069	ug/L	0.012	17	230	478	8
[	Cd	114	0.049	ug/L	0.003	5	76	505	3
[	Sb	121	0.095	ug/L	0.007	7	306	1539	4
[	Sb	123	0.096	ug/L	0.002	1	216	1147	1
[	Ba	135	7.103	ug/L	0.099	1	75	19410	0
[	Ba	137	6.999	ug/L	0.127	1	134	32662	0
[>	Tb	159		ug/L			437353	394517	0
[	Tl	205	0.020	ug/L	0.002	8	340	879	4
[	Pb	208	0.073	ug/L	0.005	6	909	3631	5
[	Bi	209		ug/L			362800	320585	1
[	Th	232	0.012	ug/L	0.001	10	304	818	6
[	U	238	0.043	ug/L	0.001	2	193	2373	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 14:16:44
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	243345	0
Be	9	51.727	ug/L	0.178	0	6	18564	0
C	13		mg/L			9248	6297	0
Cl	37		mg/L			3694160	3841354	1
Sc	45		ug/L			341955	295923	1
V-1	51	49.098	ug/L	0.959	1	2779	674718	0
V	51	49.593	ug/L	0.844	1	3697	695906	0
Cr	52	49.673	ug/L	0.562	1	8350	609452	0
Cr	53	51.156	ug/L	0.394	0	1237	75643	1
Mn	55	49.721	ug/L	0.773	1	1384	1036453	1
Co	59	50.044	ug/L	0.242	0	187	804203	1
Ge	72		ug/L			454122	411909	0
Ni	60	48.139	ug/L	0.615	1	92	171065	0
Ni	62	49.154	ug/L	0.125	0	75	26178	0
Cu	63	49.032	ug/L	0.281	0	383	397377	0
Cu	65	49.555	ug/L	0.058	0	187	190548	0
Zn	66	48.040	ug/L	0.205	0	2618	128595	0
Zn	67	47.651	ug/L	0.773	1	483	21454	1
Zn	68	48.414	ug/L	0.376	0	8781	97935	0
As-1	75	48.514	ug/L	0.332	0	246	112096	0
As	75	49.041	ug/L	0.343	0	10545	122296	0
Se	82	47.240	ug/L	0.380	0	-19	10651	0
Se	78	49.628	ug/L	0.372	0	10704	37823	0
Mo	98	48.062	ug/L	0.491	1	1302	369513	1
Y	89		ug/L			367089	313150	0
Kr	83		ug/L			194	239	6
In	115		ug/L			476899	430983	1
Ag	107	49.171	ug/L	0.274	0	181	716720	1
Cd	111	49.170	ug/L	0.598	1	230	173173	0
Cd	114	49.101	ug/L	0.485	0	76	405803	1
Sb	121	49.946	ug/L	0.599	1	306	616004	0
Sb	123	50.177	ug/L	0.325	0	216	463912	0
Ba	135	49.433	ug/L	0.106	0	75	127098	1
Ba	137	48.985	ug/L	0.558	1	134	215014	0
Tb	159		ug/L			437353	368220	0
Tl	205	49.824	ug/L	0.789	1	340	1308744	1
Pb	208	50.155	ug/L	0.134	0	909	1808227	0
Bi	209		ug/L			362800	305700	0
Th	232	51.042	ug/L	0.426	0	304	2230199	0
U	238	50.448	ug/L	0.540	1	193	2418828	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 14:24:12
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	239277	1
Be	9	0.006	ug/L	0.006	113	6	6	34
C	13		mg/L			9248	6869	1
Cl	37		mg/L			3694160	3867748	0
Sc	45		ug/L			341955	292763	1
V-1	51	-0.009	ug/L	0.025	283	2779	2257	14
V	51	0.293	ug/L	0.013	4	3697	7209	1
Cr	52	0.049	ug/L	0.005	10	8350	7736	0
Cr	53	0.970	ug/L	0.033	3	1237	2458	2
Mn	55	0.019	ug/L	0.003	18	1384	1574	3
Co	59	0.000	ug/L	0.001	537	187	165	13
Ge	72		ug/L			454122	408773	0
Ni	60	0.006	ug/L	0.003	45	92	105	10
Ni	62	0.274	ug/L	0.025	9	75	212	5
Cu	63	0.019	ug/L	0.001	7	383	497	2
Cu	65	0.000	ug/L	0.006	2433	187	169	11
Zn	66	-0.705	ug/L	0.012	1	2618	517	6
Zn	67	-0.492	ug/L	0.016	3	483	220	3
Zn	68	-0.031	ug/L	0.048	153	8781	7847	0
As-1	75	0.063	ug/L	0.013	21	246	367	9
As	75	0.540	ug/L	0.063	11	10545	10723	0
Se	82	-0.049	ug/L	0.040	80	-19	-28	30
Se	78	2.181	ug/L	0.295	13	10704	10860	0
Mo	98	-0.138	ug/L	0.001	1	1302	124	7
Y	89		ug/L			367089	309672	0
Kr	83		ug/L			194	242	3
In	115		ug/L			476899	431806	1
Ag	107	-0.004	ug/L	0.001	14	181	102	7
Cd	111	0.008	ug/L	0.005	59	230	237	7
Cd	114	0.009	ug/L	0.003	30	76	141	17
Sb	121	0.011	ug/L	0.005	45	306	414	13
Sb	123	0.011	ug/L	0.006	50	216	299	16
Ba	135	-0.013	ug/L	0.001	7	75	35	7
Ba	137	-0.014	ug/L	0.001	5	134	59	4
Tb	159		ug/L			437353	370711	0
Tl	205	0.012	ug/L	0.001	8	340	609	4
Pb	208	-0.005	ug/L	0.001	16	909	590	4
Bi	209		ug/L			362800	309065	0
Th	232	0.051	ug/L	0.007	13	304	2511	12
U	238	0.001	ug/L	0.002	197	193	204	39

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 MB1 SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 14:36:42
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			348253	252660	1
[	Be	9	0.002		ug/L	0.007	293	6	5	48
	C	13			mg/L			9248	7773	2
	Cl	37			mg/L			3694160	3911389	0
[>	Sc	45			ug/L			341955	304968	0
[	V-1	51	0.005		ug/L	0.016	325	2779	2549	9
[	V	51	0.224		ug/L	0.007	3	3697	6526	0
[	Cr	52	0.051		ug/L	0.013	25	8350	8087	1
[	Cr	53	0.721		ug/L	0.067	9	1237	2185	3
[	Mn	55	0.015		ug/L	0.001	9	1384	1560	2
[	Co	59	-0.001		ug/L	0.001	83	187	157	5
[>	Ge	72			ug/L			454122	416055	0
[	Ni	60	0.000		ug/L	0.001	629	92	85	5
[	Ni	62	0.192		ug/L	0.027	14	75	172	7
[	Cu	63	0.017		ug/L	0.003	19	383	492	4
[	Cu	65	0.002		ug/L	0.002	124	187	178	3
[	Zn	66	-0.202		ug/L	0.014	6	2618	1864	2
[	Zn	67	-0.008		ug/L	0.047	582	483	439	4
[	Zn	68	0.383		ug/L	0.078	20	8781	8764	0
[	As-1	75	u	0.044	ug/L	0.014	32	246	329	10
[	As	75		0.460	ug/L	0.044	9	10545	10729	0
[	Se	82	u	0.042	ug/L	0.068	161	-19	-8	183
[	Se	78		1.910	ug/L	0.220	11	10704	10899	0
[	Mo	98		-0.148	ug/L	0.001	0	1302	48	7
	Y	89			ug/L			367089	323345	1
	Kr	83			ug/L			194	219	6
[>	In	115			ug/L			476899	440394	0
[	Ag	107	-0.008		ug/L	0.001	6	181	46	17
[	Cd	111	0.005		ug/L	0.004	73	230	230	6
[	Cd	114	-0.000		ug/L	0.002	11307	76	70	19
[	Sb	121	-0.013		ug/L	0.002	13	306	114	20
[	Sb	123	-0.013		ug/L	0.001	9	216	77	14
[	Ba	135	-0.009		ug/L	0.001	15	75	47	8
[	Ba	137	-0.010		ug/L	0.002	19	134	77	11
[>	Tb	159			ug/L			437353	381796	0
[	Tl	205	u	-0.002	ug/L	0.002	87	340	243	19
[	Pb	208		-0.006	ug/L	0.000	4	909	587	1
[	Bi	209			ug/L			362800	319993	0
[	Th	232	0.002		ug/L	0.001	46	304	359	12
[	U	238	-0.003		ug/L	0.000	6	193	36	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 MB1SPK SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 14:43:34
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	255400	1
Be	9	26.393	ug/L	0.324	1	6	9943	1
C	13		mg/L			9248	6690	1
Cl	37		mg/L			3694160	3911376	0
Sc	45		ug/L			341955	301498	0
V-1	51	25.876	ug/L	0.322	1	2779	363531	1
V	51	26.059	ug/L	0.311	1	3697	374179	1
Cr	52	26.447	ug/L	0.112	0	8350	334080	0
Cr	53	26.975	ug/L	0.255	0	1237	41156	0
Mn	55	26.164	ug/L	0.280	1	1384	556337	1
Co	59	26.805	ug/L	0.294	1	187	438941	1
Ge	72		ug/L			454122	409404	0
Ni	60	26.047	ug/L	0.566	2	92	92031	1
Ni	62	26.441	ug/L	0.515	1	75	14027	1
Cu	63	27.144	ug/L	0.142	0	383	218804	0
Cu	65	27.222	ug/L	0.241	0	187	104108	0
Zn	66	79.409	ug/L	1.327	1	2618	209713	1
Zn	67	73.697	ug/L	0.139	0	483	32743	0
Zn	68	79.174	ug/L	0.364	0	8781	154152	0
As-1	75	25.629	ug/L	0.174	0	246	58962	0
As	75	26.223	ug/L	0.233	0	10545	69417	0
Se	82	78.263	ug/L	0.755	0	-19	17550	0
Se	78	81.604	ug/L	1.090	1	10704	55595	0
Mo	98	-0.136	ug/L	0.001	0	1302	140	4
Y	89		ug/L			367089	319325	0
Kr	83		ug/L			194	237	4
In	115		ug/L			476899	436762	0
Ag	107	24.946	ug/L	0.268	1	181	368563	0
Cd	111	25.474	ug/L	0.128	0	230	91031	0
Cd	114	25.479	ug/L	0.295	1	76	213435	0
Sb	121	-0.008	ug/L	0.001	7	306	186	4
Sb	123	-0.005	ug/L	0.000	5	216	150	1
Ba	135	25.828	ug/L	0.168	0	75	67330	0
Ba	137	25.549	ug/L	0.237	0	134	113716	0
Tb	159		ug/L			437353	380219	0
Tl	205	26.060	ug/L	0.175	0	340	706974	0
Pb	208	26.268	ug/L	0.063	0	909	978255	0
Bi	209		ug/L			362800	320305	0
Th	232	25.722	ug/L	0.133	0	304	1160638	0
U	238	25.537	ug/L	0.342	1	193	1264414	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 M REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 14:50:23
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	268790	1
[	Be	9	0.066	ug/L	0.020	29	6	30	26
	C	13		mg/L			9248	7992	2
	Cl	37		mg/L			3694160	4115455	0
[>	Sc	45		ug/L			341955	349995	1
[	V-1	51	100.991	ug/L	0.335	0	2779	1638786	0
[	V	51	99.466	ug/L	0.309	0	3697	1647286	0
[	Cr	52	9.049	ug/L	0.114	1	8350	138302	0
[	Cr	53	9.906	ug/L	0.069	0	1237	18346	0
[	Mn	55	96.722	ug/L	0.752	0	1384	2383586	1
[	Co	59	5.494	ug/L	0.074	1	187	104579	0
[>	Ge	72		ug/L			454122	405105	1
[	Ni	60	7.894	ug/L	0.010	0	92	27658	1
[	Ni	62	9.104	ug/L	0.289	3	75	4822	1
[	Cu	63	14.274	ug/L	0.142	0	383	114009	0
[	Cu	65	14.050	ug/L	0.173	1	187	53250	1
[	Zn	66	10.173	ug/L	0.055	0	2618	28622	0
[	Zn	67	16.501	ug/L	0.342	2	483	7590	3
[	Zn	68	10.798	ug/L	0.276	2	8781	27563	0
[	As-1	75	6.513	ug/L	0.063	0	246	14990	1
[	As	75	6.913	ug/L	0.067	0	10545	25035	1
[	Se	82	0.604	ug/L	0.035	5	-19	116	6
[	Se	78	2.494	ug/L	0.050	2	10704	10938	1
[	Mo	98	11.581	ug/L	0.087	0	1302	88449	1
	Y	89		ug/L			367089	451984	1
	Kr	83		ug/L			194	249	3
[>	In	115		ug/L			476899	421724	0
[	Ag	107	0.033	ug/L	0.004	11	181	625	8
[	Cd	111	0.161	ug/L	0.028	17	230	758	12
[	Cd	114	0.052	ug/L	0.007	12	76	486	11
[	Sb	121	0.229	ug/L	0.005	2	306	3039	2
[	Sb	123	0.240	ug/L	0.006	2	216	2364	2
[	Ba	135	5.322	ug/L	0.044	0	75	13448	1
[	Ba	137	5.276	ug/L	0.036	0	134	22768	0
[>	Tb	159		ug/L			437353	378621	1
[	Tl	205	0.019	ug/L	0.001	7	340	805	3
[	Pb	208	1.311	ug/L	0.013	0	909	49356	1
[	Bi	209		ug/L			362800	321510	1
[	Th	232	0.277	ug/L	0.004	1	304	12717	0
[	U	238	0.134	ug/L	0.003	2	193	6785	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 14:57:08
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	279788	0
Be	9	0.014	ug/L	0.010	69	6	10	37
C	13		mg/L			9248	8532	2
Cl	37		mg/L			3694160	3876694	0
Sc	45		ug/L			341955	380032	1
V-1	51	5.244	ug/L	0.073	1	2779	95318	0
V	51	5.390	ug/L	0.056	1	3697	100798	0
Cr	52	1.128	ug/L	0.014	1	8350	26849	0
Cr	53	1.822	ug/L	0.046	2	1237	4786	2
Mn	55	220.974	ug/L	1.304	0	1384	5910877	0
Co	59	0.148	ug/L	0.003	1	187	3257	2
Ge	72		ug/L			454122	389563	0
Ni	60	0.612	ug/L	0.014	2	92	2136	2
Ni	62	0.647	ug/L	0.039	5	75	390	4
Cu	63	0.957	ug/L	0.005	0	383	7657	0
Cu	65	0.294	ug/L	0.014	4	187	1230	4
Zn	66	0.918	ug/L	0.026	2	2618	4527	1
Zn	67	1.794	ug/L	0.039	2	483	1163	1
Zn	68	2.084	ug/L	0.021	0	8781	11196	0
As-1	75	5.944	ug/L	0.056	0	246	13176	1
As	75	6.293	ug/L	0.050	0	10545	22726	0
Se	82	0.703	ug/L	0.026	3	-19	133	4
Se	78	2.324	ug/L	0.217	9	10704	10427	0
Mo	98	1.325	ug/L	0.024	1	1302	10719	1
Y	89		ug/L			367089	335238	0
Kr	83		ug/L			194	225	5
In	115		ug/L			476899	401838	0
Ag	107	u 0.001	ug/L	0.001	64	181	171	7
Cd	111	u 0.034	ug/L	0.013	37	230	304	13
Cd	114	0.004	ug/L	0.001	23	76	91	6
Sb	121	0.013	ug/L	0.004	28	306	405	10
Sb	123	0.012	ug/L	0.002	15	216	288	6
Ba	135	13.954	ug/L	0.051	0	75	33498	0
Ba	137	13.742	ug/L	0.057	0	134	56325	0
Tb	159		ug/L			437353	366256	0
Tl	205	0.017	ug/L	0.001	5	340	728	3
Pb	208	0.035	ug/L	0.001	3	909	2000	1
Bi	209		ug/L			362800	295027	0
Th	232	0.021	ug/L	0.003	12	304	1188	9
U	238	0.004	ug/L	0.000	2	193	373	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 15:03:54
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	324422	1
[	Be	9	0.093	ug/L	0.008	8	6	50	8
	C	13		mg/L			9248	9842	0
	Cl	37		mg/L			3694160	4464834	0
[>	Sc	45		ug/L			341955	429588	2
[	V-1	51	8.602	ug/L	0.051	0	2779	174524	2
[	V	51	8.790	ug/L	0.051	0	3697	182896	2
[	Cr	52	1.976	ug/L	0.020	1	8350	45275	2
[	Cr	53	2.949	ug/L	0.099	3	1237	7793	1
[	Mn	55	266.176	ug/L	0.531	0	1384	8048135	2
[	Co	59	0.265	ug/L	0.006	2	187	6421	3
[>	Ge	72		ug/L			454122	418175	2
[	Ni	60	0.619	ug/L	0.021	3	92	2317	5
[	Ni	62	0.988	ug/L	0.083	8	75	603	9
[	Cu	63	2.061	ug/L	0.022	1	383	17298	2
[	Cu	65	0.685	ug/L	0.020	2	187	2845	4
[	Zn	66	3.534	ug/L	0.027	0	2618	11836	1
[	Zn	67	4.060	ug/L	0.050	1	483	2263	2
[	Zn	68	4.138	ug/L	0.156	3	8781	15890	1
[	As-1	75	0.506	ug/L	0.006	1	246	1411	2
[	As	75	0.399	ug/L	0.105	26	10545	10637	0
[	Se	82	0.933	ug/L	0.053	5	-19	195	8
[	Se	78	0.756	ug/L	0.403	53	10704	10288	1
[	Mo	98	0.219	ug/L	0.005	2	1302	2900	2
	Y	89		ug/L			367089	403013	1
	Kr	83		ug/L			194	235	4
[>	In	115		ug/L			476899	427554	1
[	Ag	107	U 0.010	ug/L	0.002	25	181	303	11
[	Cd	111	0.020	ug/L	0.019	98	230	274	24
[	Cd	114	U 0.017	ug/L	0.001	7	76	208	3
[	Sb	121	0.009	ug/L	0.002	24	306	382	5
[	Sb	123	0.007	ug/L	0.001	9	216	262	3
[	Ba	135	6.805	ug/L	0.097	1	75	17416	2
[	Ba	137	6.703	ug/L	0.095	1	134	29293	1
[>	Tb	159		ug/L			437353	396286	1
[	Tl	205	0.006	ug/L	0.001	19	340	487	7
[	Pb	208	0.315	ug/L	0.005	1	909	13025	2
[	Bi	209		ug/L			362800	315585	2
[	Th	232	0.070	ug/L	0.004	5	304	3556	5
[	U	238	0.019	ug/L	0.000	0	193	1146	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 15:10:41
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

w Cr54

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	317150	1
[	Be	9	0.064	ug/L	0.004	6	6	35	4
	C	13		mg/L			9248	10447	1
	Cl	37		mg/L			3694160	4432219	0
[>	Sc	45		ug/L			341955	426579	2
[	V-1	51	8.523	ug/L	0.072	0	2779	171731	1
[	V	51	8.735	ug/L	0.062	0	3697	180503	1
[	Cr	52	2.037	ug/L	0.012	0	8350	46015	1
[	Cr	53	3.075	ug/L	0.066	2	1237	8005	1
[	Mn	55	273.502	ug/L	3.024	1	1384	8212073	2
[	Co	59	0.242	ug/L	0.007	2	187	5844	4
[>	Ge	72		ug/L			454122	422478	1
[	Ni	60	0.550	ug/L	0.017	3	92	2090	4
[	Ni	62	0.987	ug/L	0.035	3	75	608	3
[	Cu	63	1.881	ug/L	0.039	2	383	15981	3
[	Cu	65	0.508	ug/L	0.006	1	187	2177	2
[	Zn	66	1.483	ug/L	0.036	2	2618	6433	2
[	Zn	67	2.313	ug/L	0.130	5	483	1496	4
[	Zn	68	2.238	ug/L	0.159	7	8781	12433	1
[	As-1	75	0.398	ug/L	0.017	4	246	1171	4
[	As	75	0.302	ug/L	0.049	16	10545	10521	0
[	Se	82	0.762	ug/L	0.076	10	-19	158	12
[	Se	78	0.570	ug/L	0.190	33	10704	10288	0
[	Mo	98	0.211	ug/L	0.009	4	1302	2869	2
	Y	89		ug/L			367089	398095	2
	Kr	83		ug/L			194	224	1
[>	In	115		ug/L			476899	434310	1
[	Ag	107	U 0.007	ug/L	0.001	13	181	270	6
[	Cd	111	U 0.006	ug/L	0.030	513	230	229	45
[	Cd	114	0.002	ug/L	0.002	93	76	85	18
[	Sb	121	0.006	ug/L	0.001	24	306	355	6
[	Sb	123	0.004	ug/L	0.001	14	216	233	2
[	Ba	135	6.184	ug/L	0.043	0	75	16084	2
[	Ba	137	6.118	ug/L	0.048	0	134	27171	2
[>	Tb	159		ug/L			437353	399702	2
[	Tl	205	0.009	ug/L	0.000	4	340	554	2
[	Pb	208	0.101	ug/L	0.003	2	909	4767	0
[	Bi	209		ug/L			362800	318185	0
[	Th	232	0.059	ug/L	0.001	1	304	3073	1
[	U	238	0.015	ug/L	0.000	2	193	974	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 15:17:27
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

rr Cr 5%

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	319069	0
Be	9	0.031	ug/L	0.009	29	6	20	21
C	13		mg/L			9248	9704	0
Cl	37		mg/L			3694160	3911523	0
Sc	45		ug/L			341955	438284	1
V-1	51	5.007	ug/L	0.043	0	2779	105133	1
V	51	5.067	ug/L	0.044	0	3697	109582	1
Cr	52	1.245	ug/L	0.023	1	8350	33053	1
Cr	53	1.655	ug/L	0.051	3	1237	5157	1
Mn	55	223.018	ug/L	4.216	1	1384	6878807	1
Co	59	0.358	ug/L	0.008	2	187	8748	0
Ge	72		ug/L			454122	443096	0
Ni	60	0.691	ug/L	0.010	1	92	2732	1
Ni	62	0.791	ug/L	0.024	3	75	525	2
Cu	63	0.909	ug/L	0.013	1	383	8294	1
Cu	65	0.250	ug/L	0.007	2	187	1215	1
Zn	66	0.780	ug/L	0.055	7	2618	4759	2
Zn	67	1.489	ug/L	0.072	4	483	1178	2
Zn	68	1.402	ug/L	0.070	4	8781	11370	0
As-1	75	5.424	ug/L	0.010	0	246	13695	0
As	75	5.270	ug/L	0.014	0	10545	23321	0
Se	82	0.606	ug/L	0.050	8	-19	127	9
Se	78	0.063	ug/L	0.083	133	10704	10482	0
Mo	98	1.345	ug/L	0.018	1	1302	12354	0
Y	89		ug/L			367089	379574	0
Kr	83		ug/L			194	222	4
In	115		ug/L			476899	463318	1
Ag	107	0.002	ug/L	0.001	59	181	212	10
Cd	111	0.033	ug/L	0.010	30	230	350	11
Cd	114	0.001	ug/L	0.001	114	76	83	13
Sb	121	0.028	ug/L	0.001	2	306	667	1
Sb	123	0.028	ug/L	0.001	5	216	484	3
Ba	135	11.769	ug/L	0.103	0	75	32585	0
Ba	137	11.674	ug/L	0.189	1	134	55184	0
Tb	159		ug/L			437353	418212	0
Tl	205	0.016	ug/L	0.001	3	340	808	1
Pb	208	0.023	ug/L	0.001	2	909	1793	1
Bi	209		ug/L			362800	339546	0
Th	232	0.021	ug/L	0.002	10	304	1330	8
U	238	0.003	ug/L	0.001	19	193	357	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 15:24:14
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

rrCv 5%

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			348253	328987	1
[	Be	9	0.073		ug/L	0.016	22	6	41	19
	C	13			mg/L			9248	10368	1
	Cl	37			mg/L			3694160	4510154	0
[>	Sc	45			ug/L			341955	441073	2
[	V-1	51	7.992		ug/L	0.025	0	2779	166732	2
[	V	51	8.156		ug/L	0.018	0	3697	174606	2
[	Cr	52	1.782		ug/L	0.013	0	8350	42971	2
[	Cr	53	2.659		ug/L	0.032	1	1237	7373	2
[	Mn	55	272.457		ug/L	0.519	0	1384	8458530	2
[	Co	59	0.336		ug/L	0.003	0	187	8297	2
[>	Ge	72			ug/L			454122	432608	2
[	Ni	60	U	0.431	ug/L	0.019	4	92	1694	4
[	Ni	62		0.845	ug/L	0.045	5	75	543	6
[	Cu	63		1.696	ug/L	0.038	2	383	14794	3
[	Cu	65		0.303	ug/L	0.010	3	187	1402	4
[	Zn	66		0.911	ug/L	0.058	6	2618	5009	5
[	Zn	67		1.675	ug/L	0.087	5	483	1237	4
[	Zn	68		1.532	ug/L	0.075	4	8781	11353	1
[	As-1	75		0.439	ug/L	0.010	2	246	1299	3
[	As	75		0.138	ug/L	0.036	26	10545	10377	1
[	Se	82		1.059	ug/L	0.034	3	-19	232	5
[	Se	78		0.020	ug/L	0.187	920	10704	10207	1
[	Mo	98		0.204	ug/L	0.006	3	1302	2885	3
	Y	89			ug/L			367089	404375	2
	Kr	83			ug/L			194	225	1
[>	In	115			ug/L			476899	444005	3
[	Ag	107	U	0.008	ug/L	0.002	23	181	289	12
[	Cd	111	U	0.024	ug/L	0.036	148	230	300	42
[	Cd	114		-0.000	ug/L	0.002	2294	76	69	20
[	Sb	121		0.013	ug/L	0.002	18	306	456	3
[	Sb	123		0.014	ug/L	0.000	2	216	336	2
[	Ba	135		5.433	ug/L	0.091	1	75	14458	4
[	Ba	137		5.425	ug/L	0.105	1	134	24649	4
[>	Tb	159			ug/L			437353	408906	2
[	Tl	205		0.007	ug/L	0.001	16	340	535	5
[	Pb	208		0.028	ug/L	0.001	3	909	1985	2
[	Bi	209			ug/L			362800	325609	1
[	Th	232		0.040	ug/L	0.002	3	304	2215	3
[	U	238		0.011	ug/L	0.000	1	193	765	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 K REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 15:31:02
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	318563	1
Be	9	0.070	ug/L	0.013	18	6	38	14
C	13		mg/L			9248	10517	2
Cl	37		mg/L			3694160	4402583	1
Sc	45		ug/L			341955	426016	2
V-1	51	8.334	ug/L	0.097	1	2779	167762	1
V	51	8.489	ug/L	0.108	1	3697	175299	1
Cr	52	1.910	ug/L	0.012	0	8350	43735	1
Cr	53	2.769	ug/L	0.054	1	1237	7352	1
Mn	55	282.175	ug/L	2.033	0	1384	8460042	1
Co	59	0.310	ug/L	0.004	1	187	7397	3
Ge	72		ug/L			454122	411392	2
Ni	60	U 0.421	ug/L	0.011	2	92	1577	4
Ni	62	1.012	ug/L	0.004	0	75	605	1
Cu	63	1.776	ug/L	0.025	1	383	14709	0
Cu	65	0.297	ug/L	0.008	2	187	1309	0
Zn	66	0.669	ug/L	0.038	5	2618	4128	4
Zn	67	1.536	ug/L	0.086	5	483	1115	5
Zn	68	1.361	ug/L	0.050	3	8781	10479	1
As-1	75	0.381	ug/L	0.012	3	246	1100	4
As	75	0.372	ug/L	0.076	20	10545	10403	0
Se	82	0.705	ug/L	0.054	7	-19	141	9
Se	78	0.951	ug/L	0.381	40	10704	10232	0
Mo	98	0.238	ug/L	0.019	8	1302	2997	4
Y	89		ug/L			367089	389947	2
Kr	83		ug/L			194	237	3
In	115		ug/L			476899	427718	1
Ag	107	U 0.006	ug/L	0.001	15	181	255	7
Cd	111	U 0.016	ug/L	0.014	85	230	262	19
Cd	114	U 0.001	ug/L	0.002	263	76	73	17
Sb	121	0.015	ug/L	0.004	24	306	459	10
Sb	123	0.013	ug/L	0.003	22	216	309	8
Ba	135	5.619	ug/L	0.055	0	75	14400	2
Ba	137	5.560	ug/L	0.083	1	134	24325	0
Tb	159		ug/L			437353	393852	0
Tl	205	0.006	ug/L	0.000	7	340	482	2
Pb	208	0.023	ug/L	0.001	2	909	1709	1
Bi	209		ug/L			362800	314883	1
Th	232	0.043	ug/L	0.003	6	304	2301	5
U	238	0.011	ug/L	0.000	0	193	753	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 REF1 SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 15:37:50
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	309912	0
[	Be	9	94.775	ug/L	2.262	2	6	43318	3
	C	13		mg/L			9248	9651	5
	Cl	37		mg/L			3694160	3708094	1
[>	Sc	45		ug/L			341955	378791	0
[	V-1	51	73.682	ug/L	1.242	1	2779	1294801	1
[	V	51	73.513	ug/L	1.232	1	3697	1318670	1
[	Cr	52	66.918	ug/L	1.482	2	8350	1047815	1
[	Cr	53	66.807	ug/L	1.646	2	1237	126036	2
[	Mn	55	425.595	ug/L	9.395	2	1384	11345781	2
[	Co	59	69.280	ug/L	1.807	2	187	1425019	2
[>	Ge	72		ug/L			454122	457433	0
[	Ni	60	57.290	ug/L	1.025	1	92	226055	1
[	Ni	62	59.100	ug/L	1.654	2	75	34936	2
[	Cu	63	68.397	ug/L	1.503	2	383	615376	1
[	Cu	65	69.016	ug/L	2.147	3	187	294597	2
[	Zn	66	176.999	ug/L	3.647	2	2618	519040	1
[	Zn	67	171.610	ug/L	3.930	2	483	84533	1
[	Zn	68	178.188	ug/L	4.614	2	8781	376535	1
[	As-1	75	126.550	ug/L	2.960	2	246	324298	1
[	As	75	126.323	ug/L	2.763	2	10545	333071	1
[	Se	82	164.053	ug/L	4.835	2	-19	41124	2
[	Se	78	163.977	ug/L	4.093	2	10704	113931	1
[	Mo	98	42.968	ug/L	1.179	2	1302	366944	1
	Y	89		ug/L			367089	783558	0
	Kr	83		ug/L			194	293	3
[>	In	115		ug/L			476899	480519	0
[	Ag	107	94.782	ug/L	3.228	3	181	1539974	2
[	Cd	111	71.231	ug/L	1.230	1	230	279615	1
[	Cd	114	70.986	ug/L	2.900	4	76	653999	3
[	Sb	121	19.778	ug/L	0.611	3	306	272149	2
[	Sb	123	19.974	ug/L	0.562	2	216	206012	2
[	Ba	135	319.838	ug/L	7.067	2	75	916386	1
[	Ba	137	320.567	ug/L	9.952	3	134	1568021	2
[>	Tb	159		ug/L			437353	444196	0
[	Tl	205	140.272	ug/L	1.937	1	340	4444331	1
[	Pb	208	132.543	ug/L	2.962	2	909	5763069	2
[	Bi	209		ug/L			362800	367102	0
[	Th	232	11.696	ug/L	0.381	3	304	616737	3
[	U	238	1.455	ug/L	0.045	3	193	84371	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 15:44:39
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	295629	0
Be	9	51.650	ug/L	0.072	0	6	22519	0
C	13		mg/L			9248	6113	2
Cl	37		mg/L			3694160	3797323	0
Sc	45		ug/L			341955	323769	0
V-1	51	49.244	ug/L	0.209	0	2779	740564	0
V	51	49.074	ug/L	0.224	0	3697	753603	0
Cr	52	50.161	ug/L	0.246	0	8350	673362	0
Cr	53	49.585	ug/L	0.296	0	1237	80259	0
Mn	55	49.268	ug/L	0.362	0	1384	1123838	1
Co	59	49.465	ug/L	0.406	0	187	869678	0
Ge	72		ug/L			454122	435737	0
Ni	60	48.874	ug/L	0.900	1	92	183718	1
Ni	62	49.548	ug/L	0.170	0	75	27914	0
Cu	63	49.433	ug/L	0.280	0	383	423801	0
Cu	65	49.360	ug/L	0.534	1	187	200772	0
Zn	66	48.107	ug/L	0.285	0	2618	136218	0
Zn	67	47.572	ug/L	0.600	1	483	22660	1
Zn	68	47.955	ug/L	0.324	0	8781	102697	0
As-1	75	48.814	ug/L	0.363	0	246	119313	0
As	75	48.866	ug/L	0.370	0	10545	128944	0
Se	82	48.571	ug/L	0.290	0	-19	11586	0
Se	78	49.014	ug/L	0.536	1	10704	39643	0
Mo	98	48.855	ug/L	0.203	0	1302	397314	0
Y	89		ug/L			367089	338562	0
Kr	83		ug/L			194	244	3
In	115		ug/L			476899	454149	0
Ag	107	49.803	ug/L	0.236	0	181	764954	0
Cd	111	49.667	ug/L	0.175	0	230	184341	0
Cd	114	49.816	ug/L	0.276	0	76	433857	0
Sb	121	49.490	ug/L	0.488	0	306	643260	0
Sb	123	49.782	ug/L	0.588	1	216	485010	1
Ba	135	49.123	ug/L	0.720	1	75	133090	1
Ba	137	48.670	ug/L	0.214	0	134	225136	0
Tb	159		ug/L			437353	401374	0
Tl	205	49.973	ug/L	0.342	0	340	1430901	0
Pb	208	49.986	ug/L	0.202	0	909	1964358	0
Bi	209		ug/L			362800	334129	0
Th	232	50.680	ug/L	0.233	0	304	2413756	0
U	238	51.085	ug/L	0.055	0	193	2669905	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 15:52:06
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
> Li	6		ug/L			348253	295205	1
Be	9	0.001	ug/L	0.009	688	6	5	65
C	13		mg/L			9248	6643	2
Cl	37		mg/L			3694160	3701306	0
> Sc	45		ug/L			341955	305257	1
V-1	51	-0.014	ug/L	0.007	50	2779	2278	6
V	51	0.086	ug/L	0.010	11	3697	4546	2
Cr	52	0.008	ug/L	0.005	69	8350	7552	2
Cr	53	0.316	ug/L	0.042	13	1237	1578	2
Mn	55	0.015	ug/L	0.005	31	1384	1563	8
Co	59	0.003	ug/L	0.002	72	187	214	17
> Ge	72		ug/L			454122	407782	1
Ni	60	0.007	ug/L	0.002	24	92	107	5
Ni	62	0.194	ug/L	0.009	4	75	170	2
Cu	63	0.007	ug/L	0.001	18	383	400	2
Cu	65	-0.004	ug/L	0.003	58	187	151	7
Zn	66	-0.688	ug/L	0.004	0	2618	561	3
Zn	67	-0.507	ug/L	0.016	3	483	213	5
Zn	68	-0.353	ug/L	0.086	24	8781	7235	1
As-1	75	0.071	ug/L	0.005	7	246	383	5
As	75	0.349	ug/L	0.036	10	10545	10262	1
Se	82	0.017	ug/L	0.080	459	-19	-13	128
Se	78	1.407	ug/L	0.166	11	10704	10399	1
Mo	98	-0.126	ug/L	0.007	5	1302	212	24
Y	89		ug/L			367089	323397	1
Kr	83		ug/L			194	233	5
> In	115		ug/L			476899	432477	1
Ag	107	0.011	ug/L	0.006	52	181	328	27
Cd	111	0.013	ug/L	0.005	38	230	253	5
Cd	114	0.014	ug/L	0.002	13	76	181	6
Sb	121	0.017	ug/L	0.007	42	306	486	19
Sb	123	0.018	ug/L	0.008	44	216	367	22
Ba	135	-0.001	ug/L	0.004	301	75	65	14
Ba	137	0.003	ug/L	0.004	139	134	135	15
> Tb	159		ug/L			437353	384859	0
Tl	205	0.018	ug/L	0.001	5	340	784	4
Pb	208	0.005	ug/L	0.002	43	909	998	9
Bi	209		ug/L			362800	322470	1
Th	232	0.064	ug/L	0.006	9	304	3204	9
U	238	0.004	ug/L	0.002	66	193	355	35

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO76 A REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 16:13:55
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	324582	0
[	Be	9	-0.007	ug/L	0.003	37	6	2	50
	C	13		mg/L			9248	6214	2
	Cl	37		mg/L			3694160	3766991	0
[>	Sc	45		ug/L			341955	337937	2
[	V-1	51	12.189	ug/L	0.094	0	2779	193368	1
[	V	51	12.151	ug/L	0.107	0	3697	197481	1
[	Cr	52	0.205	ug/L	0.010	4	8350	11088	1
[	Cr	53	0.809	ug/L	0.057	6	1237	2568	1
[	Mn	55	0.395	ug/L	0.009	2	1384	10763	1
[	Co	59	0.048	ug/L	0.001	2	187	1064	1
[>	Ge	72		ug/L			454122	407111	1
[	Ni	60	1.173	ug/L	0.013	1	92	4202	2
[	Ni	62	0.946	ug/L	0.066	6	75	564	6
[	Cu	63	0.371	ug/L	0.020	5	383	3312	4
[	Cu	65	0.355	ug/L	0.014	3	187	1517	3
[	Zn	66	0.504	ug/L	0.049	9	2618	3657	4
[	Zn	67	2.438	ug/L	0.086	3	483	1496	1
[	Zn	68	1.667	ug/L	0.128	7	8781	10933	1
[	As-1	75	0.832	ug/L	0.035	4	246	2117	4
[	As	75	0.926	ug/L	0.084	9	10545	11555	0
[	Se	82	1.231	ug/L	0.118	9	-19	257	11
[	Se	78	1.803	ug/L	0.326	18	10704	10604	0
[	Mo	98	0.259	ug/L	0.007	2	1302	3126	1
	Y	89		ug/L			367089	327615	0
	Kr	83		ug/L			194	215	7
[>	In	115		ug/L			476899	422200	0
[	Ag	107	-0.000	ug/L	0.002	541	181	155	17
[	Cd	111	0.007	ug/L	0.005	72	230	226	7
[	Cd	114	0.006	ug/L	0.002	25	76	119	11
[	Sb	121	0.059	ug/L	0.003	5	306	985	3
[	Sb	123	0.065	ug/L	0.003	4	216	782	3
[	Ba	135	46.275	ug/L	0.169	0	75	116561	0
[	Ba	137	46.165	ug/L	0.121	0	134	198534	0
[>	Tb	159		ug/L			437353	391962	0
[	Tl	205	0.003	ug/L	0.001	20	340	385	3
[	Pb	208	0.377	ug/L	0.009	2	909	15288	1
[	Bi	209		ug/L			362800	322626	0
[	Th	232	0.004	ug/L	0.000	8	304	475	3
[	U	238	0.456	ug/L	0.005	1	193	23432	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO76 B REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 16:20:44
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	329137	0
Be	9	-0.002	ug/L	0.003	137	6	5	25
C	13		mg/L			9248	6238	0
Cl	37		mg/L			3694160	3605608	0
Sc	45		ug/L			341955	332139	0
V-1	51	11.152	ug/L	0.069	0	2779	174137	0
V	51	11.105	ug/L	0.062	0	3697	177719	0
Cr	52	0.454	ug/L	0.010	2	8350	14285	0
Cr	53	0.952	ug/L	0.022	2	1237	2759	1
Mn	55	1.817	ug/L	0.031	1	1384	43812	1
Co	59	0.098	ug/L	0.006	6	187	1952	5
Ge	72		ug/L			454122	394461	0
Ni	60	4.864	ug/L	0.080	1	92	16622	1
Ni	62	4.872	ug/L	0.130	2	75	2543	1
Cu	63	0.554	ug/L	0.017	2	383	4625	2
Cu	65	0.511	ug/L	0.020	3	187	2041	2
Zn	66	1.378	ug/L	0.040	2	2618	5743	2
Zn	67	4.074	ug/L	0.073	1	483	2141	2
Zn	68	3.336	ug/L	0.152	4	8781	13563	1
As-1	75	0.798	ug/L	0.028	3	246	1976	3
As	75	0.985	ug/L	0.063	6	10545	11327	0
Se	82	0.930	ug/L	0.079	8	-19	184	9
Se	78	1.925	ug/L	0.345	17	10704	10341	1
Mo	98	0.233	ug/L	0.008	3	1302	2843	1
Y	89		ug/L			367089	320396	0
Kr	83		ug/L			194	219	4
In	115		ug/L			476899	408141	0
Ag	107	-0.001	ug/L	0.001	52	181	137	5
Cd	111	0.013	ug/L	0.007	50	230	241	8
Cd	114	0.016	ug/L	0.001	5	76	189	4
Sb	121	0.100	ug/L	0.002	1	306	1431	2
Sb	123	0.099	ug/L	0.004	4	216	1053	2
Ba	135	84.790	ug/L	1.211	1	75	206398	1
Ba	137	83.782	ug/L	0.843	1	134	348199	0
Tb	159		ug/L			437353	384197	0
Tl	205	0.002	ug/L	0.001	28	340	364	4
Pb	208	0.632	ug/L	0.008	1	909	24565	1
Bi	209		ug/L			362800	319116	0
Th	232	0.010	ug/L	0.001	8	304	712	4
U	238	0.362	ug/L	0.004	1	193	18262	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 C REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 16:27:34
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	326851	1
Be	9	0.008	ug/L	0.001	15	6	9	7
C	13		mg/L			9248	6796	0
Cl	37		mg/L			3694160	3508952	0
Sc	45		ug/L			341955	318661	0
V-1	51	6.545	ug/L	0.053	0	2779	99123	0
V	51	6.589	ug/L	0.051	0	3697	102572	0
Cr	52	1.017	ug/L	0.013	1	8350	21065	0
Cr	53	1.485	ug/L	0.008	0	1237	3483	0
Mn	55	225.805	ug/L	2.748	1	1384	5064679	0
Co	59	1.916	ug/L	0.024	1	187	33322	0
Ge	72		ug/L			454122	381552	1
Ni	60	1.683	ug/L	0.044	2	92	5612	1
Ni	62	1.655	ug/L	0.092	5	75	878	6
Cu	63	1.692	ug/L	0.011	0	383	13010	0
Cu	65	1.545	ug/L	0.026	1	187	5655	0
Zn	66	1.699	ug/L	0.042	2	2618	6334	2
Zn	67	1.878	ug/L	0.132	7	483	1174	5
Zn	68	1.982	ug/L	0.038	1	8781	10789	1
As-1	75	2.056	ug/L	0.028	1	246	4599	0
As	75	2.283	ug/L	0.093	4	10545	13718	0
Se	82	0.518	ug/L	0.043	8	-19	91	10
Se	78	1.613	ug/L	0.280	17	10704	9838	0
Mo	98	2.180	ug/L	0.010	0	1302	16566	1
Y	89		ug/L			367089	318329	1
Kr	83		ug/L			194	204	3
In	115		ug/L			476899	390081	2
Ag	107	-0.003	ug/L	0.000	9	181	105	3
Cd	111	0.030	ug/L	0.008	27	230	283	7
Cd	114	0.024	ug/L	0.003	13	76	240	7
Sb	121	0.028	ug/L	0.002	5	306	558	4
Sb	123	0.031	ug/L	0.001	3	216	434	4
Ba	135	3.061	ug/L	0.024	0	75	7179	2
Ba	137	3.058	ug/L	0.038	1	134	12252	2
Tb	159		ug/L			437353	371954	2
Tl	205	0.018	ug/L	0.003	18	340	754	9
Pb	208	0.009	ug/L	0.001	15	909	1114	2
Bi	209		ug/L			362800	303651	1
Th	232	0.008	ug/L	0.000	2	304	610	3
U	238	0.015	ug/L	0.000	3	193	887	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 F REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 16:34:24
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	327973	0
Be	9	0.035	ug/L	0.010	28	6	22	20
C	13		mg/L			9248	8204	1
Cl	37		mg/L			3694160	3609739	0
Sc	45		ug/L			341955	307297	0
V-1	51	76.008	ug/L	0.746	0	2779	1083475	0
V	51	74.878	ug/L	0.730	0	3697	1089550	0
Cr	52	6.180	ug/L	0.043	0	8350	85312	0
Cr	53	6.917	ug/L	0.115	1	1237	11582	1
Mn	55	95.705	ug/L	0.653	0	1384	2070732	0
Co	59	5.045	ug/L	0.023	0	187	84330	0
Ge	72		ug/L			454122	365703	0
Ni	60	6.754	ug/L	0.106	1	92	21374	1
Ni	62	7.079	ug/L	0.104	1	75	3399	1
Cu	63	2.504	ug/L	0.041	1	383	18309	1
Cu	65	2.162	ug/L	0.032	1	187	7525	1
Zn	66	1.731	ug/L	0.038	2	2618	6145	1
Zn	67	6.407	ug/L	0.173	2	483	2898	2
Zn	68	1.972	ug/L	0.014	0	8781	10325	0
As-1	75	5.287	ug/L	0.044	0	246	11022	0
As	75	5.595	ug/L	0.044	0	10545	19910	0
Se	82	0.485	ug/L	0.075	15	-19	81	18
Se	78	2.028	ug/L	0.097	4	10704	9640	0
Mo	98	9.497	ug/L	0.130	1	1302	65665	1
Y	89		ug/L			367089	386786	0
Kr	83		ug/L			194	227	3
In	115		ug/L			476899	370414	1
Ag	107	0.010	ug/L	0.001	14	181	262	8
Cd	111	0.081	ug/L	0.003	4	230	423	3
Cd	114	0.019	ug/L	0.002	10	76	193	6
Sb	121	0.136	ug/L	0.001	0	306	1684	2
Sb	123	0.140	ug/L	0.006	4	216	1282	3
Ba	135	2.741	ug/L	0.011	0	75	6111	2
Ba	137	2.779	ug/L	0.075	2	134	10581	0
Tb	159		ug/L			437353	360985	1
Tl	205	0.022	ug/L	0.001	3	340	850	2
Pb	208	0.219	ug/L	0.003	1	909	8481	0
Bi	209		ug/L			362800	297720	0
Th	232	0.092	ug/L	0.000	0	304	4179	0
U	238	0.066	ug/L	0.003	4	193	3265	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 I REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 16:41:14
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
						348253	338628	0
> Li	6		ug/L			6	25	12
Be	9	0.040	ug/L	0.007	16	9248	8166	1
C	13		mg/L			3694160	3532777	0
Cl	37		mg/L			341955	313852	0
> Sc	45		ug/L			2779	1450709	1
V-1	51	99.692	ug/L	1.086	1	3697	1457214	1
V	51	98.117	ug/L	1.072	1	8350	121315	0
Cr	52	8.838	ug/L	0.025	0	1237	15789	1
Cr	53	9.477	ug/L	0.058	0	1384	2126144	0
Mn	55	96.212	ug/L	0.801	0	187	91650	0
Co	59	5.368	ug/L	0.003	0	454122	366572	0
> Ge	72		ug/L			92	24213	1
Ni	60	7.636	ug/L	0.021	0	75	4018	0
Ni	62	8.373	ug/L	0.124	1	383	97746	1
Cu	63	13.521	ug/L	0.112	0	187	45466	0
Cu	65	13.255	ug/L	0.094	0	2618	24411	0
Zn	66	9.537	ug/L	0.092	0	483	6312	0
Zn	67	15.087	ug/L	0.072	0	8781	22974	0
Zn	68	9.606	ug/L	0.188	1	246	13102	0
As-1	75	6.287	ug/L	0.042	0	10545	21871	0
As	75	6.530	ug/L	0.061	0	-19	111	10
Se	82	0.635	ug/L	0.058	9	10704	9611	0
Se	78	1.927	ug/L	0.187	9	1302	79351	1
Mo	98	11.480	ug/L	0.141	1	367089	419002	0
Y	89		ug/L			194	232	2
Kr	83		ug/L			476899	369240	0
> In	115		ug/L			181	536	5
Ag	107	0.032	ug/L	0.002	5	230	684	13
Cd	111	0.168	ug/L	0.028	16	76	426	12
Cd	114	0.052	ug/L	0.007	13	306	2627	3
Sb	121	0.226	ug/L	0.009	3	216	2020	2
Sb	123	0.234	ug/L	0.007	2	75	11803	0
Ba	135	5.335	ug/L	0.061	1	134	20319	0
Ba	137	5.379	ug/L	0.090	1	437353	370774	0
> Tb	159		ug/L			340	955	4
Tl	205	0.025	ug/L	0.002	7	909	46717	0
Pb	208	1.266	ug/L	0.010	0	362800	311353	0
Bi	209		ug/L			304	10157	0
Th	232	0.225	ug/L	0.002	0	193	6611	2
U	238	0.134	ug/L	0.003	2			

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 J REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 16:48:05
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	350458	1
Be	9	0.012	ug/L	0.007	60	6	12	30
C	13		mg/L			9248	7759	0
Cl	37		mg/L			3694160	3387977	0
Sc	45		ug/L			341955	315728	0
V-1	51	6.925	ug/L	0.044	0	2779	103754	0
V	51	6.939	ug/L	0.029	0	3697	106842	0
Cr	52	1.031	ug/L	0.024	2	8350	21043	1
Cr	53	1.429	ug/L	0.056	3	1237	3365	3
Mn	55	210.100	ug/L	1.616	0	1384	4669136	0
Co	59	1.846	ug/L	0.036	1	187	31822	1
Ge	72		ug/L			454122	377694	0
Ni	60	1.562	ug/L	0.030	1	92	5164	2
Ni	62	1.606	ug/L	0.134	8	75	845	8
Cu	63	1.601	ug/L	0.034	2	383	12209	2
Cu	65	1.481	ug/L	0.016	1	187	5371	0
Zn	66	1.668	ug/L	0.035	2	2618	6195	2
Zn	67	2.065	ug/L	0.062	2	483	1237	2
Zn	68	1.774	ug/L	0.058	3	8781	10326	1
As-1	75	2.084	ug/L	0.011	0	246	4611	1
As	75	2.242	ug/L	0.015	0	10545	13495	0
Se	82	0.426	ug/L	0.020	4	-19	71	6
Se	78	1.293	ug/L	0.054	4	10704	9574	0
Mo	98	2.143	ug/L	0.019	0	1302	16142	0
Y	89		ug/L			367089	316876	0
Kr	83		ug/L			194	212	3
In	115		ug/L			476899	386095	0
Ag	107	-0.005	ug/L	0.001	24	181	79	21
Cd	111	0.023	ug/L	0.013	56	230	259	15
Cd	114	0.022	ug/L	0.001	3	76	221	2
Sb	121	0.026	ug/L	0.001	2	306	536	1
Sb	123	0.027	ug/L	0.002	7	216	399	4
Ba	135	2.938	ug/L	0.054	1	75	6824	1
Ba	137	2.931	ug/L	0.038	1	134	11628	1
Tb	159		ug/L			437353	376149	1
Tl	205	0.020	ug/L	0.002	10	340	832	6
Pb	208	0.029	ug/L	0.001	2	909	1844	2
Bi	209		ug/L			362800	308169	0
Th	232	0.007	ug/L	0.000	6	304	572	2
U	238	0.015	ug/L	0.001	4	193	896	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 E REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 16:54:57
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	335574	0
Be	9	0.030	ug/L	0.011	38	6	20	27
C	13		mg/L			9248	6337	1
Cl	37		mg/L			3694160	3497722	0
Sc	45		ug/L			341955	296169	1
V-1	51	4.215	ug/L	0.036	0	2779	60187	0
V	51	4.373	ug/L	0.041	0	3697	64347	0
Cr	52	0.973	ug/L	0.018	1	8350	19036	1
Cr	53	1.652	ug/L	0.049	2	1237	3481	2
Mn	55	131.993	ug/L	0.903	0	1384	2752160	1
Co	59	0.116	ug/L	0.003	2	187	2022	2
Ge	72		ug/L			454122	349174	1
Ni	60	U 0.251	ug/L	0.012	4	92	826	5
Ni	62	0.444	ug/L	0.053	11	75	258	9
Cu	63	0.862	ug/L	0.006	0	383	6209	2
Cu	65	0.296	ug/L	0.011	3	187	1106	1
Zn	66	1.358	ug/L	0.040	2	2618	5039	3
Zn	67	1.487	ug/L	0.053	3	483	928	3
Zn	68	1.710	ug/L	0.183	10	8781	9442	1
As-1	75	0.245	ug/L	0.003	1	246	668	0
As	75	0.583	ug/L	0.060	10	10545	9243	0
Se	82	0.324	ug/L	0.036	10	-19	47	15
Se	78	2.025	ug/L	0.240	11	10704	9201	0
Mo	98	0.006	ug/L	0.012	197	1302	1038	6
Y	89		ug/L			367089	308437	0
Kr	83		ug/L			194	211	2
In	115		ug/L			476899	352122	0
Ag	107	U -0.002	ug/L	0.001	52	181	112	10
Cd	111	U 0.010	ug/L	0.013	126	230	198	18
Cd	114	U 0.010	ug/L	0.001	10	76	123	6
Sb	121	-0.007	ug/L	0.001	11	306	159	4
Sb	123	-0.005	ug/L	0.001	26	216	120	8
Ba	135	2.872	ug/L	0.033	1	75	6086	1
Ba	137	2.954	ug/L	0.022	0	134	10688	0
Tb	159		ug/L			437353	350633	1
Tl	205	0.019	ug/L	0.002	8	340	749	7
Pb	208	0.154	ug/L	0.003	2	909	6010	1
Bi	209		ug/L			362800	281498	1
Th	232	0.024	ug/L	0.001	3	304	1237	1
U	238	0.006	ug/L	0.001	12	193	428	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 F REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:01:49
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			348253	334555	1
[	Be	9	0.031		ug/L	0.006	20	6	21	15
	C	13			mg/L			9248	7446	1
	Cl	37			mg/L			3694160	3328597	0
[>	Sc	45			ug/L			341955	285140	1
[	V-1	51	4.050		ug/L	0.055	1	2779	55767	1
[	V	51	4.198		ug/L	0.058	1	3697	59591	1
[	Cr	52	0.966		ug/L	0.007	0	8350	18245	1
[	Cr	53	1.604		ug/L	0.073	4	1237	3284	1
[	Mn	55	130.215		ug/L	0.286	0	1384	2613916	1
[	Co	59	0.093		ug/L	0.006	6	187	1600	5
[>	Ge	72			ug/L			454122	338180	2
[	Ni	60	0.211	u	ug/L	0.009	4	92	683	3
[	Ni	62	0.367		ug/L	0.066	17	75	216	14
[	Cu	63	0.757		ug/L	0.024	3	383	5317	2
[	Cu	65	0.191		ug/L	0.017	8	187	741	7
[	Zn	66	0.329		ug/L	0.039	11	2618	2659	2
[	Zn	67	0.593		ug/L	0.092	15	483	574	4
[	Zn	68	0.749		ug/L	0.127	17	8781	7679	0
[	As-1	75	0.218		ug/L	0.031	13	246	596	8
[	As	75	0.645		ug/L	0.097	14	10545	9068	0
[	Se	82	0.250		ug/L	0.048	19	-19	31	26
[	Se	78	2.324		ug/L	0.349	15	10704	9049	0
[	Mo	98	-0.012		ug/L	0.003	24	1302	896	3
	Y	89			ug/L			367089	297273	1
	Kr	83			ug/L			194	208	2
[>	In	115			ug/L			476899	341925	1
[	Ag	107	-0.002	u	ug/L	0.002	96	181	111	14
[	Cd	111	0.004		ug/L	0.013	300	230	176	19
[	Cd	114	0.000	u	ug/L	0.001	1392	76	55	15
[	Sb	121	-0.010		ug/L	0.002	18	306	125	14
[	Sb	123	-0.010		ug/L	0.001	10	216	84	8
[	Ba	135	2.586		ug/L	0.076	2	75	5324	2
[	Ba	137	2.626		ug/L	0.040	1	134	9233	0
[>	Tb	159			ug/L			437353	341361	1
[	Tl	205	0.019		ug/L	0.001	3	340	723	1
[	Pb	208	0.061		ug/L	0.001	2	909	2740	1
[	Bi	209			ug/L			362800	276711	1
[	Th	232	0.022		ug/L	0.002	7	304	1129	6
[	U	238	0.005		ug/L	0.000	9	193	367	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 G REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:08:38
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	336389	0
Be	9	0.005	ug/L	0.005	111	6	8	31
C	13		mg/L			9248	6875	0
Cl	37		mg/L			3694160	3162356	0
Sc	45		ug/L			341955	283006	1
V-1	51	2.305	ug/L	0.021	0	2779	32494	1
V	51	2.378	ug/L	0.015	0	3697	34832	1
Cr	52	0.555	ug/L	0.022	4	8350	13348	2
Cr	53	0.884	ug/L	0.042	4	1237	2255	2
Mn	55	104.987	ug/L	1.721	1	1384	2092037	2
Co	59	0.155	ug/L	0.005	3	187	2540	4
Ge	72		ug/L			454122	345704	0
Ni	60	U 0.245	ug/L	0.010	4	92	800	4
Ni	62	0.324	ug/L	0.013	4	75	202	3
Cu	63	0.338	ug/L	0.010	3	383	2588	3
Cu	65	0.086	ug/L	0.014	16	187	419	11
Zn	66	-0.038	ug/L	0.025	65	2618	1908	2
Zn	67	0.183	ug/L	0.101	54	483	435	7
Zn	68	0.307	ug/L	0.116	37	8781	7165	3
As-1	75	2.219	ug/L	0.039	1	246	4482	2
As	75	2.528	ug/L	0.029	1	10545	12905	0
Se	82	0.188	ug/L	0.084	44	-19	20	77
Se	78	1.722	ug/L	0.191	11	10704	8967	0
Mo	98	0.437	ug/L	0.008	1	1302	3801	1
Y	89		ug/L			367089	290316	0
Kr	83		ug/L			194	205	1
In	115		ug/L			476899	344918	0
Ag	107	U -0.004	ug/L	0.001	16	181	82	10
Cd	111	0.009	ug/L	0.005	57	230	191	6
Cd	114	U -0.000	ug/L	0.001	778	76	54	13
Sb	121	-0.002	ug/L	0.004	237	306	206	18
Sb	123	-0.002	ug/L	0.001	56	216	138	7
Ba	135	4.944	ug/L	0.023	0	75	10223	1
Ba	137	4.874	ug/L	0.034	0	134	17210	0
Tb	159		ug/L			437353	345760	1
Tl	205	0.015	ug/L	0.001	5	340	642	2
Pb	208	0.011	ug/L	0.000	4	909	1081	2
Bi	209		ug/L			362800	282802	1
Th	232	0.004	ug/L	0.000	10	304	417	5
U	238	-0.001	ug/L	0.000	27	193	128	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QO98 B REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:15:25
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
> Li	6		ug/L			348253	334977	0
Be	9	0.037	ug/L	0.001	3	6	24	2
C	13		mg/L			9248	7300	1
Cl	37		mg/L			3694160	3342657	0
> Sc	45		ug/L			341955	282155	0
V-1	51	81.961	ug/L	0.779	0	2779	1072602	0
V	51	80.669	ug/L	0.773	0	3697	1077580	0
Cr	52	6.908	ug/L	0.014	0	8350	86749	0
Cr	53	7.463	ug/L	0.031	0	1237	11394	0
Mn	55	95.298	ug/L	0.381	0	1384	1893305	0
Co	59	5.109	ug/L	0.021	0	187	78414	0
> Ge	72		ug/L			454122	336819	0
Ni	60	6.860	ug/L	0.069	1	92	19991	0
Ni	62	7.352	ug/L	0.101	1	75	3249	1
Cu	63	4.666	ug/L	0.035	0	383	31179	0
Cu	65	4.424	ug/L	0.061	1	187	14036	0
Zn	66	3.223	ug/L	0.038	1	2618	8866	1
Zn	67	7.885	ug/L	0.079	0	483	3202	1
Zn	68	3.545	ug/L	0.064	1	8781	11900	0
As-1	75	5.494	ug/L	0.060	1	246	10542	0
As	75	5.881	ug/L	0.066	1	10545	18875	0
Se	82	0.540	ug/L	0.032	5	-19	85	6
Se	78	2.390	ug/L	0.078	3	10704	9046	0
Mo	98	9.993	ug/L	0.098	0	1302	63589	0
Y	89		ug/L			367089	367328	0
Kr	83		ug/L			194	208	1
> In	115		ug/L			476899	339667	0
Ag	107	0.011	ug/L	0.001	7	181	259	3
Cd	111	0.113	ug/L	0.010	8	230	475	5
Cd	114	0.022	ug/L	0.002	7	76	197	5
Sb	121	0.155	ug/L	0.004	2	306	1725	2
Sb	123	0.161	ug/L	0.006	3	216	1326	3
Ba	135	3.577	ug/L	0.033	0	75	7299	1
Ba	137	3.624	ug/L	0.045	1	134	12627	1
> Tb	159		ug/L			437353	340054	0
Tl	205	0.022	ug/L	0.001	5	340	799	3
Pb	208	0.417	ug/L	0.002	0	909	14593	0
Bi	209		ug/L			362800	285181	0
Th	232	0.121	ug/L	0.003	2	304	5128	2
U	238	0.082	ug/L	0.001	1	193	3769	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:22:53
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	350357	0
Be	9	46.744	ug/L	0.690	1	6	24152	1
C	13		mg/L			9248	6861	2
Cl	37		mg/L			3694160	3176559	1
Sc	45		ug/L			341955	270237	2
V-1	51	49.167	ug/L	0.364	0	2779	617105	1
V	51	49.029	ug/L	0.512	1	3697	628351	1
Cr	52	49.601	ug/L	0.417	0	8350	555779	1
Cr	53	49.152	ug/L	0.882	1	1237	66399	0
Mn	55	49.044	ug/L	0.323	0	1384	933668	1
Co	59	48.355	ug/L	1.199	2	187	709484	2
Ge	72		ug/L			454122	359688	0
Ni	60	47.882	ug/L	0.289	0	92	148593	1
Ni	62	48.098	ug/L	0.670	1	75	22367	0
Cu	63	48.499	ug/L	0.079	0	383	343239	1
Cu	65	48.353	ug/L	0.147	0	187	162360	1
Zn	66	46.773	ug/L	0.495	1	2618	109382	1
Zn	67	45.817	ug/L	0.712	1	483	18029	1
Zn	68	46.003	ug/L	0.500	1	8781	81602	0
As-1	75	49.268	ug/L	0.273	0	246	99407	1
As	75	49.307	ug/L	0.225	0	10545	107330	1
Se	82	50.755	ug/L	0.523	1	-19	9994	1
Se	78	51.311	ug/L	0.437	0	10704	33859	0
Mo	98	49.619	ug/L	0.293	0	1302	333077	0
Y	89		ug/L			367089	294977	0
Kr	83		ug/L			194	229	3
In	115		ug/L			476899	367294	0
Ag	107	49.846	ug/L	0.136	0	181	619192	0
Cd	111	49.733	ug/L	0.644	1	230	149288	1
Cd	114	49.777	ug/L	0.348	0	76	350615	0
Sb	121	50.191	ug/L	0.197	0	306	527599	0
Sb	123	50.107	ug/L	0.773	1	216	394822	1
Ba	135	50.529	ug/L	0.403	0	75	110721	1
Ba	137	50.505	ug/L	0.842	1	134	188945	1
Tb	159		ug/L			437353	362537	1
Tl	205	49.293	ug/L	0.576	1	340	1274794	0
Pb	208	49.981	ug/L	0.446	0	909	1774042	0
Bi	209		ug/L			362800	299462	0
Th	232	50.674	ug/L	0.389	0	304	2179841	0
U	238	50.605	ug/L	0.465	0	193	2388790	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:30:20
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	348518	0
Be	9	-0.002	ug/L	0.000	2	6	5	0
C	13		mg/L			9248	7509	1
Cl	37		mg/L			3694160	3241912	0
Sc	45		ug/L			341955	268570	0
V-1	51	-0.008	ug/L	0.003	34	2779	2080	1
V	51	0.035	ug/L	0.004	10	3697	3347	1
Cr	52	0.002	ug/L	0.007	399	8350	6577	0
Cr	53	0.134	ug/L	0.008	6	1237	1148	0
Mn	55	-0.013	ug/L	0.001	9	1384	845	2
Co	59	-0.000	ug/L	0.001	222	187	141	9
Ge	72		ug/L			454122	358178	0
Ni	60	0.001	ug/L	0.004	426	92	75	16
Ni	62	0.100	ug/L	0.016	16	75	105	6
Cu	63	-0.010	ug/L	0.002	16	383	234	4
Cu	65	-0.013	ug/L	0.004	29	187	104	11
Zn	66	-0.792	ug/L	0.008	0	2618	256	6
Zn	67	-0.720	ug/L	0.010	1	483	105	3
Zn	68	-0.660	ug/L	0.041	6	8781	5858	0
As-1	75	0.080	ug/L	0.005	6	246	354	2
As	75	0.413	ug/L	0.063	15	10545	9141	0
Se	82	0.109	ug/L	0.086	78	-19	5	287
Se	78	1.688	ug/L	0.236	13	10704	9274	0
Mo	98	-0.128	ug/L	0.004	3	1302	176	16
Y	89		ug/L			367089	296816	0
Kr	83		ug/L			194	198	3
In	115		ug/L			476899	369457	0
Ag	107	0.006	ug/L	0.003	53	181	210	18
Cd	111	0.007	ug/L	0.004	55	230	199	5
Cd	114	0.011	ug/L	0.001	12	76	138	7
Sb	121	0.009	ug/L	0.004	42	306	335	12
Sb	123	0.011	ug/L	0.006	51	216	257	17
Ba	135	-0.010	ug/L	0.002	18	75	35	12
Ba	137	-0.013	ug/L	0.004	34	134	56	28
Tb	159		ug/L			437353	361481	0
Tl	205	0.010	ug/L	0.001	6	340	543	3
Pb	208	-0.002	ug/L	0.001	47	909	680	4
Bi	209		ug/L			362800	304344	1
Th	232	0.055	ug/L	0.004	6	304	2611	5
U	238	0.004	ug/L	0.002	53	193	360	29

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP82 MB1 SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:37:46
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	357610	1
[	Be	9	-0.003	ug/L	0.001	37	6	4	15
	C	13		mg/L			9248	6506	0
	Cl	37		mg/L			3694160	3268189	0
[>	Sc	45		ug/L			341955	277600	0
[	V-1	51	-0.025	ug/L	0.006	21	2779	1928	2
[	V	51	0.021	ug/L	0.004	17	3697	3281	2
[	Cr	52	-0.023	ug/L	0.006	27	8350	6522	0
[	Cr	53	0.121	ug/L	0.018	14	1237	1169	2
[	Mn	55	-0.011	ug/L	0.002	14	1384	905	3
[	Co	59	-0.001	ug/L	0.001	94	187	135	11
[>	Ge	72		ug/L			454122	371949	1
[	Ni	60	-0.004	ug/L	0.001	14	92	61	4
[	Ni	62	0.061	ug/L	0.021	35	75	91	12
[	Cu	63	-0.003	ug/L	0.002	62	383	290	4
[	Cu	65	0.001	ug/L	0.002	217	187	156	4
[	Zn	66	-0.618	ug/L	0.024	3	2618	678	7
[	Zn	67	-0.527	ug/L	0.024	4	483	186	5
[	Zn	68	-0.587	ug/L	0.024	4	8781	6208	1
[	As-1	75	U 0.053	ug/L	0.011	21	246	312	7
[	As	75	0.276	ug/L	0.046	16	10545	9209	0
[	Se	82	NR 4/14/10 0.009	ug/L	0.074	850	-19	-14	104
[	Se	78	1.155	ug/L	0.173	14	10704	9357	0
[	Mo	98	-0.144	ug/L	0.002	1	1302	66	16
	Y	89		ug/L			367089	306990	0
	Kr	83		ug/L			194	208	2
[>	In	115		ug/L			476899	380949	1
[	Ag	107	-0.003	ug/L	0.001	47	181	107	18
[	Cd	111	-0.003	ug/L	0.004	146	230	174	6
[	Cd	114	0.003	ug/L	0.001	35	76	83	8
[	Sb	121	-0.010	ug/L	0.001	6	306	131	4
[	Sb	123	-0.010	ug/L	0.000	2	216	92	3
[	Ba	135	-0.007	ug/L	0.005	68	75	43	28
[	Ba	137	-0.005	ug/L	0.002	33	134	87	6
[>	Tb	159		ug/L			437353	373145	0
[	Tl	205	NR 4/14/10 -0.004	ug/L	0.001	15	340	174	10
[	Pb	208	-0.004	ug/L	0.000	6	909	643	1
[	Bi	209		ug/L			362800	314667	1
[	Th	232	0.017	ug/L	0.004	20	304	1011	15
[	U	238	-0.001	ug/L	0.000	17	193	93	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP82 MB1SPK SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:44:32
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	363643	0
Be	9	23.234	ug/L	0.237	1	6	12464	0
C	13		mg/L			9248	7152	1
Cl	37		mg/L			3694160	3221677	0
Sc	45		ug/L			341955	280150	2
V-1	51	24.785	ug/L	0.322	1	2779	323589	1
V	51	24.623	ug/L	0.341	1	3697	328628	1
Cr	52	25.429	ug/L	0.327	1	8350	298690	1
Cr	53	24.894	ug/L	0.346	1	1237	35363	0
Mn	55	24.893	ug/L	0.365	1	1384	491789	1
Co	59	25.047	ug/L	0.663	2	187	380982	0
Ge	72		ug/L			454122	370372	0
Ni	60	24.840	ug/L	0.257	1	92	79409	0
Ni	62	24.783	ug/L	0.104	0	75	11898	0
Cu	63	25.273	ug/L	0.126	0	383	184324	0
Cu	65	25.492	ug/L	0.482	1	187	88211	1
Zn	66	75.582	ug/L	0.369	0	2618	180692	0
Zn	67	68.631	ug/L	1.966	2	483	27611	2
Zn	68	73.398	ug/L	0.476	0	8781	129807	0
As-1	75	25.542	ug/L	0.142	0	246	53162	0
As	75	25.324	ug/L	0.076	0	10545	60943	0
Se	82	80.039	ug/L	0.759	0	-19	16239	0
Se	78	80.216	ug/L	0.046	0	10704	49589	0
Mo	98	-0.136	ug/L	0.004	3	1302	125	23
Y	89		ug/L			367089	308155	0
Kr	83		ug/L			194	233	0
In	115		ug/L			476899	381947	0
Ag	107	24.603	ug/L	0.243	0	181	317875	0
Cd	111	25.176	ug/L	0.330	1	230	78672	0
Cd	114	24.948	ug/L	0.246	0	76	182763	0
Sb	121	-0.005	ug/L	0.001	21	306	192	5
Sb	123	-0.003	ug/L	0.002	50	216	144	9
Ba	135	25.378	ug/L	0.095	0	75	57856	1
Ba	137	25.494	ug/L	0.110	0	134	99231	0
Tb	159		ug/L			437353	373691	0
Tl	205	25.292	ug/L	0.102	0	340	674388	0
Pb	208	25.772	ug/L	0.028	0	909	943341	0
Bi	209		ug/L			362800	315402	0
Th	232	25.031	ug/L	0.156	0	304	1110057	0
U	238	25.080	ug/L	0.156	0	193	1220470	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 BDUP SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:51:19
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	367457	0
Be	9	0.222	ug/L	0.007	3	6	126	2
C	13		mg/L			9248	6868	1
Cl	37		mg/L			3694160	3208444	0
Sc	45		ug/L			341955	337440	0
V-1	51	33.295	ug/L	0.200	0	2779	522720	0
V	51	32.899	ug/L	0.197	0	3697	527729	0
Cr	52	16.022	ug/L	0.088	0	8350	229775	0
Cr	53	15.848	ug/L	0.058	0	1237	27566	0
Mn	55	132.762	ug/L	1.508	1	1384	3153790	0
Co	59	4.805	ug/L	0.028	0	187	88212	0
Ge	72		ug/L			454122	385434	1
Ni	60	16.696	ug/L	0.360	2	92	55562	1
Ni	62	20.935	ug/L	0.072	0	75	10469	1
Cu	63	25.599	ug/L	0.409	1	383	194276	1
Cu	65	25.972	ug/L	0.368	1	187	93514	0
Zn	66	45.523	ug/L	0.441	0	2618	114142	1
Zn	67	43.848	ug/L	0.459	1	483	18508	2
Zn	68	44.460	ug/L	0.788	1	8781	84756	1
As-1	75	4.017	ug/L	0.014	0	246	8877	1
As	75	4.073	ug/L	0.107	2	10545	17708	0
Se	82	0.262	ug/L	0.093	35	-19	38	51
Se	78	0.790	ug/L	0.342	43	10704	9502	0
Mo	98	0.397	ug/L	0.011	2	1302	3950	1
Y	89		ug/L			367089	499422	0
Kr	83		ug/L			194	238	2
In	115		ug/L			476899	390134	0
Ag	107	0.127	ug/L	0.005	3	181	1819	3
Cd	111	0.551	ug/L	0.005	0	230	1942	1
Cd	114	0.260	ug/L	0.001	0	76	2005	0
Sb	121	-0.005	ug/L	0.002	42	306	195	12
Sb	123	-0.002	ug/L	0.000	19	216	156	2
Ba	135	42.210	ug/L	0.442	1	75	98248	0
Ba	137	42.195	ug/L	0.245	0	134	167685	0
Tb	159		ug/L			437353	388916	0
Tl	205	0.106	ug/L	0.001	1	340	3237	1
Pb	208	16.479	ug/L	0.114	0	909	628038	0
Bi	209		ug/L			362800	322769	0
Th	232	1.201	ug/L	0.020	1	304	55707	1
U	238	0.543	ug/L	0.006	1	193	27665	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 B SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 17:58:07
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	369223	0
Be	9	0.234	ug/L	0.036	15	6	134	14
C	13		mg/L			9248	8918	2
Cl	37		mg/L			3694160	3231786	1
Sc	45		ug/L			341955	339845	0
V-1	51	34.339	ug/L	1.396	4	2779	542928	4
V	51	33.905	ug/L	1.356	3	3697	547687	4
Cr	52	15.981	ug/L	0.577	3	8350	230846	3
Cr	53	15.754	ug/L	0.505	3	1237	27607	3
Mn	55	132.475	ug/L	4.509	3	1384	3169669	3
Co	59	4.806	ug/L	0.148	3	187	88868	3
Ge	72		ug/L			454122	385815	1
Ni	60	16.064	ug/L	0.288	1	92	53527	2
Ni	62	20.575	ug/L	0.260	1	75	10301	2
Cu	63	24.208	ug/L	0.642	2	383	183953	3
Cu	65	24.672	ug/L	0.649	2	187	88951	3
Zn	66	39.828	ug/L	1.250	3	2618	100257	3
Zn	67	38.823	ug/L	0.975	2	483	16451	3
Zn	68	38.660	ug/L	0.985	2	8781	74762	3
As-1	75	4.046	ug/L	0.116	2	246	8950	3
As	75	4.158	ug/L	0.061	1	10545	17913	1
Se	82	U 0.183	ug/L	0.035	19	-19	22	33
Se	78	0.930	ug/L	0.283	30	10704	9586	0
Mo	98	0.395	ug/L	0.018	4	1302	3942	4
Y	89		ug/L			367089	504247	1
Kr	83		ug/L			194	236	1
In	115		ug/L			476899	393226	1
Ag	107	0.130	ug/L	0.008	5	181	1879	6
Cd	111	0.541	ug/L	0.036	6	230	1927	6
Cd	114	0.217	ug/L	0.009	4	76	1701	3
Sb	121	-0.006	ug/L	0.001	9	306	185	2
Sb	123	-0.004	ug/L	0.001	32	216	148	5
Ba	135	42.626	ug/L	1.456	3	75	100029	4
Ba	137	42.662	ug/L	0.959	2	134	170914	3
Tb	159		ug/L			437353	391598	1
Tl	205	U 0.100	ug/L	0.002	1	340	3084	2
Pb	208	11.567	ug/L	0.363	3	909	444142	3
Bi	209		ug/L			362800	323357	0
Th	232	1.200	ug/L	0.042	3	304	56016	3
U	238	0.538	ug/L	0.016	2	193	27626	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 BSPK SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 18:04:55
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	375203	0
Be	9	24.091	ug/L	0.284	1	6	13334	1
C	13		mg/L			9248	8811	4
Cl	37		mg/L			3694160	3238403	0
Sc	45		ug/L			341955	338412	1
V-1	51	53.956	ug/L	1.419	2	2779	847721	1
V	51	53.442	ug/L	1.560	2	3697	857309	2
Cr	52	37.119	ug/L	0.703	1	8350	522910	1
Cr	53	36.557	ug/L	1.233	3	1237	62155	2
Mn	55	152.106	ug/L	4.154	2	1384	3622882	1
Co	59	25.528	ug/L	0.851	3	187	469123	2
Ge	72		ug/L			454122	386053	0
Ni	60	39.161	ug/L	1.123	2	92	130434	2
Ni	62	43.740	ug/L	0.747	1	75	21838	1
Cu	63	46.848	ug/L	1.018	2	383	355835	1
Cu	65	47.023	ug/L	1.097	2	187	169457	1
Zn	66	112.869	ug/L	2.408	2	2618	280143	1
Zn	67	104.634	ug/L	2.182	2	483	43660	1
Zn	68	109.532	ug/L	1.643	1	8781	198230	1
As-1	75	28.431	ug/L	0.784	2	246	61651	2
As	75	28.010	ug/L	0.609	2	10545	69306	1
Se	82	79.660	ug/L	2.399	3	-19	16844	2
Se	78	78.949	ug/L	1.730	2	10704	51013	1
Mo	98	0.405	ug/L	0.014	3	1302	4017	1
Y	89		ug/L			367089	502050	0
Kr	83		ug/L			194	238	2
In	115		ug/L			476899	395314	0
Ag	107	20.258	ug/L	0.466	2	181	270913	1
Cd	111	25.744	ug/L	0.612	2	230	83256	1
Cd	114	25.170	ug/L	0.481	1	76	190828	1
Sb	121	-0.005	ug/L	0.003	54	306	198	14
Sb	123	-0.003	ug/L	0.002	60	216	150	11
Ba	135	66.532	ug/L	1.966	2	75	156858	2
Ba	137	67.094	ug/L	1.829	2	134	270070	1
Tb	159		ug/L			437353	392254	0
Tl	205	23.718	ug/L	0.580	2	340	663828	2
Pb	208	36.848	ug/L	0.956	2	909	1415292	2
Bi	209		ug/L			362800	326828	0
Th	232	25.612	ug/L	0.709	2	304	1192198	2
U	238	25.335	ug/L	0.621	2	193	1294034	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 C SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 18:11:43
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	372179	0
Be	9	0.243	ug/L	0.003	1	6	140	1
C	13		mg/L			9248	8016	4
Cl	37		mg/L			3694160	3262971	0
Sc	45		ug/L			341955	346868	0
V-1	51	35.497	ug/L	0.506	1	2779	572663	0
V	51	35.226	ug/L	0.499	1	3697	580555	0
Cr	52	24.734	ug/L	0.306	1	8350	360004	1
Cr	53	24.549	ug/L	0.356	1	1237	43204	1
Mn	55	189.629	ug/L	2.182	1	1384	4630212	1
Co	59	6.223	ug/L	0.073	1	187	117374	0
Ge	72		ug/L			454122	385687	0
Ni	60	29.293	ug/L	0.472	1	92	97498	1
Ni	62	34.628	ug/L	0.867	2	75	17285	2
Cu	63	41.306	ug/L	0.722	1	383	313493	1
Cu	65	42.088	ug/L	0.784	1	187	151548	1
Zn	66	89.817	ug/L	1.443	1	2618	223177	1
Zn	67	85.119	ug/L	1.707	2	483	35561	1
Zn	68	88.462	ug/L	1.215	1	8781	161382	0
As-1	75	4.926	ug/L	0.111	2	246	10845	1
As	75	5.031	ug/L	0.128	2	10545	19783	1
Se	82	U 0.320	ug/L	0.020	6	-19	50	8
Se	78	1.006	ug/L	0.123	12	10704	9624	0
Mo	98	1.209	ug/L	0.025	2	1302	9783	1
Y	89		ug/L			367089	499823	0
Kr	83		ug/L			194	232	1
In	115		ug/L			476899	391533	0
Ag	107	0.348	ug/L	0.010	2	181	4758	2
Cd	111	1.058	ug/L	0.043	4	230	3571	3
Cd	114	0.736	ug/L	0.009	1	76	5587	1
Sb	121	0.033	ug/L	0.001	4	306	622	2
Sb	123	0.032	ug/L	0.002	6	216	445	3
Ba	135	106.190	ug/L	1.892	1	75	247974	1
Ba	137	107.060	ug/L	1.033	0	134	426826	1
Tb	159		ug/L			437353	389708	0
Tl	205	U 0.131	ug/L	0.003	2	340	3937	1
Pb	208	886.737	ug/L	17.039	1	909	33821583	2
Bi	209		ug/L			362800	349183	0
Th	232	1.311	ug/L	0.034	2	304	60900	2
U	238	0.724	ug/L	0.015	2	193	36887	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 D SWC
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 18:18:32
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	372735	0
Be	9	0.164	ug/L	0.014	8	6	96	7
C	13		mg/L			9248	9189	1
Cl	37		mg/L			3694160	3279117	0
Sc	45		ug/L			341955	322416	0
V-1	51	29.693	ug/L	0.341	1	2779	445693	0
V	51	29.320	ug/L	0.395	1	3697	449738	0
Cr	52	12.395	ug/L	0.126	1	8350	171622	1
Cr	53	12.291	ug/L	0.185	1	1237	20686	0
Mn	55	108.482	ug/L	0.971	0	1384	2462461	0
Co	59	3.880	ug/L	0.073	1	187	68096	0
Ge	72		ug/L			454122	377595	0
Ni	60	11.229	ug/L	0.106	0	92	36636	0
Ni	62	15.619	ug/L	0.266	1	75	7667	1
Cu	63	15.617	ug/L	0.137	0	383	116242	1
Cu	65	15.892	ug/L	0.165	1	187	56126	1
Zn	66	28.114	ug/L	0.189	0	2618	69892	1
Zn	67	27.803	ug/L	0.259	0	483	11643	1
Zn	68	27.018	ug/L	0.295	1	8781	53328	1
As-1	75	2.818	ug/L	0.049	1	246	6161	1
As	75	2.948	ug/L	0.070	2	10545	14980	1
Se	82	μ 0.177	ug/L	0.017	9	-19	20	18
Se	78	0.988	ug/L	0.129	13	10704	9412	0
Mo	98	0.268	ug/L	0.010	3	1302	2967	3
Y	89		ug/L			367089	470384	0
Kr	83		ug/L			194	226	1
In	115		ug/L			476899	387520	0
Ag	107	0.067	ug/L	0.001	1	181	1025	0
Cd	111	0.368	ug/L	0.005	1	230	1351	2
Cd	114	0.097	ug/L	0.003	3	76	779	3
Sb	121	-0.012	ug/L	0.001	10	306	112	11
Sb	123	-0.010	ug/L	0.001	8	216	94	6
Ba	135	25.088	ug/L	0.198	0	75	58027	0
Ba	137	25.419	ug/L	0.289	1	134	100376	0
Tb	159		ug/L			437353	385655	0
Tl	205	μ 0.050	ug/L	0.002	4	340	1668	3
Pb	208	5.350	ug/L	0.041	0	909	202730	1
Bi	209		ug/L			362800	319601	0
Th	232	0.932	ug/L	0.005	0	304	42909	0
U	238	0.400	ug/L	0.005	1	193	20265	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP28 E SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 18:25:21
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	371959	1
Be	9	0.248	ug/L	0.020	8	6	142	8
C	13		mg/L			9248	8254	4
Cl	37		mg/L			3694160	3286254	0
Sc	45		ug/L			341955	343667	0
V-1	51	36.324	ug/L	1.106	3	2779	580477	2
V	51	35.886	ug/L	1.053	2	3697	585846	2
Cr	52	17.631	ug/L	0.595	3	8350	256614	2
Cr	53	17.410	ug/L	0.516	2	1237	30714	1
Mn	55	193.349	ug/L	4.319	2	1384	4676745	1
Co	59	4.968	ug/L	0.204	4	187	92875	3
Ge	72		ug/L			454122	378082	1
Ni	60	15.949	ug/L	0.632	3	92	52052	2
Ni	62	20.954	ug/L	1.018	4	75	10274	3
Cu	63	22.942	ug/L	0.855	3	383	170771	2
Cu	65	23.496	ug/L	0.690	2	187	82983	1
Zn	66	51.847	ug/L	1.089	2	2618	127188	0
Zn	67	49.711	ug/L	1.385	2	483	20522	1
Zn	68	50.244	ug/L	2.086	4	8781	92983	2
As-1	75	3.427	ug/L	0.137	3	246	7455	2
As	75	3.556	ug/L	0.189	5	10545	16279	0
Se	82	U 0.164	ug/L	0.086	52	-19	17	101
Se	78	0.984	ug/L	0.274	27	10704	9422	0
Mo	98	0.403	ug/L	0.039	9	1302	3920	5
Y	89		ug/L			367089	507181	1
Kr	83		ug/L			194	231	7
In	115		ug/L			476899	385001	0
Ag	107	0.113	ug/L	0.004	3	181	1615	2
Cd	111	0.518	ug/L	0.014	2	230	1812	2
Cd	114	0.214	ug/L	0.003	1	76	1642	1
Sb	121	-0.007	ug/L	0.001	15	306	170	6
Sb	123	-0.005	ug/L	0.002	34	216	137	9
Ba	135	44.630	ug/L	1.595	3	75	102525	4
Ba	137	45.218	ug/L	1.080	2	134	177340	2
Tb	159		ug/L			437353	384780	0
Tl	205	U 0.057	ug/L	0.001	2	340	1863	1
Pb	208	11.212	ug/L	0.361	3	909	422962	2
Bi	209		ug/L			362800	319421	0
Th	232	1.061	ug/L	0.034	3	304	48710	2
U	238	0.381	ug/L	0.021	5	193	19256	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP39 A SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 18:32:11
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	378246	0
Be	9	0.221	ug/L	0.035	15	6	130	14
C	13		mg/L			9248	13677	5
Cl	37		mg/L			3694160	3325570	0
Sc	45		ug/L			341955	340745	0
V-1	51	33.900	ug/L	2.145	6	2779	537417	6
V	51	33.911	ug/L	2.173	6	3697	549198	6
Cr	52	38.485	ug/L	2.074	5	8350	545661	5
Cr	53	38.241	ug/L	2.181	5	1237	65427	5
Mn	55	127.198	ug/L	8.263	6	1384	3051436	6
Co	59	4.665	ug/L	0.269	5	187	86499	5
Ge	72		ug/L			454122	385716	1
Ni	60	20.297	ug/L	1.637	8	92	67549	7
Ni	62	24.929	ug/L	1.114	4	75	12460	3
Cu	63	78.735	ug/L	5.968	7	383	596995	6
Cu	65	78.187	ug/L	5.538	7	187	281281	5
Zn	66	460.969	ug/L	31.510	6	2618	1135773	5
Zn	67	414.325	ug/L	23.127	5	483	171465	4
Zn	68	452.849	ug/L	27.365	6	8781	795165	4
As-1	75	7.690	ug/L	0.497	6	246	16808	5
As	75	7.769	ug/L	0.578	7	10545	25670	3
Se	82	0.479	ug/L	0.061	12	-19	84	15
Se	78	0.994	ug/L	0.377	37	10704	9617	0
Mo	98	3.527	ug/L	0.233	6	1302	26406	5
Y	89		ug/L			367089	487988	2
Kr	83		ug/L			194	225	2
In	115		ug/L			476899	395282	0
Ag	107	2.076	ug/L	0.104	5	181	27900	4
Cd	111	4.171	ug/L	0.241	5	230	13648	5
Cd	114	3.777	ug/L	0.184	4	76	28686	4
Sb	121	0.084	ug/L	0.008	9	306	1209	7
Sb	123	0.088	ug/L	0.009	10	216	927	8
Ba	135	69.588	ug/L	4.324	6	75	164061	6
Ba	137	70.266	ug/L	4.426	6	134	282831	6
Tb	159		ug/L			437353	391711	0
Tl	205	0.142	ug/L	0.008	5	340	4271	4
Pb	208	152.382	ug/L	9.345	6	909	5841221	5
Bi	209		ug/L			362800	350708	0
Th	232	0.968	ug/L	0.051	5	304	45255	4
U	238	1.140	ug/L	0.077	6	193	58308	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP39 C SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 18:39:01
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			348253	376065	0
⌊	Be	9	0.180	ug/L	0.001	0	6	106	1
	C	13		mg/L			9248	10683	3
	Cl	37		mg/L			3694160	3272744	0
⌈>	Sc	45		ug/L			341955	332067	0
|	V-1	51	33.290	ug/L	0.455	1	2779	514344	1
|	V	51	32.874	ug/L	0.411	1	3697	518957	1
|	Cr	52	18.867	ug/L	0.222	1	8350	264819	1
|	Cr	53	18.460	ug/L	0.093	0	1237	31399	0
|	Mn	55	194.738	ug/L	1.482	0	1384	4551912	0
⌊	Co	59	8.388	ug/L	0.044	0	187	151418	0
⌈>	Ge	72		ug/L			454122	386403	0
|	Ni	60	23.480	ug/L	0.204	0	92	78310	0
|	Ni	62	28.424	ug/L	0.343	1	75	14227	1
|	Cu	63	97.104	ug/L	0.321	0	383	737911	0
|	Cu	65	96.822	ug/L	0.696	0	187	349095	1
|	Zn	66	351.714	ug/L	3.206	0	2618	869056	0
|	Zn	67	319.060	ug/L	3.617	1	483	132423	1
|	Zn	68	346.009	ug/L	4.849	1	8781	610620	0
|	As-1	75	8.167	ug/L	0.046	0	246	17876	0
|	As	75	8.296	ug/L	0.098	1	10545	26861	0
|	Se	82	u 0.388	ug/L	0.076	19	-19	65	24
|	Se	78	1.073	ug/L	0.280	26	10704	9677	0
⌊	Mo	98	2.185	ug/L	0.023	1	1302	16813	0
	Y	89		ug/L			367089	466514	1
	Kr	83		ug/L			194	220	1
⌈>	In	115		ug/L			476899	385778	0
|	Ag	107	0.379	ug/L	0.007	1	181	5092	2
|	Cd	111	2.261	ug/L	0.059	2	230	7306	2
|	Cd	114	1.858	ug/L	0.027	1	76	13805	0
|	Sb	121	0.075	ug/L	0.005	6	306	1075	5
|	Sb	123	0.075	ug/L	0.003	3	216	796	2
|	Ba	135	70.192	ug/L	1.701	2	75	161508	1
⌊	Ba	137	70.617	ug/L	1.827	2	134	277406	2
⌈>	Tb	159		ug/L			437353	385107	0
|	Tl	205	u 0.107	ug/L	0.004	3	340	3230	2
|	Pb	208	268.144	ug/L	6.535	2	909	10105743	1
|	Bi	209		ug/L			362800	336449	1
|	Th	232	0.926	ug/L	0.031	3	304	42587	2
⌊	U	238	0.791	ug/L	0.011	1	193	39824	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 18:46:31
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	363942	0
Be	9	46.503	ug/L	0.204	0	6	24960	0
C	13		mg/L			9248	6579	1
Cl	37		mg/L			3694160	3317178	0
Sc	45		ug/L			341955	268956	0
V-1	51	49.608	ug/L	0.444	0	2779	619708	0
V	51	49.401	ug/L	0.170	0	3697	630172	0
Cr	52	49.672	ug/L	0.456	0	8350	553974	1
Cr	53	49.034	ug/L	0.514	1	1237	65945	1
Mn	55	49.036	ug/L	0.150	0	1384	929161	0
Co	59	48.401	ug/L	0.534	1	187	706931	1
Ge	72		ug/L			454122	359590	0
Ni	60	47.453	ug/L	0.650	1	92	147212	0
Ni	62	47.489	ug/L	1.086	2	75	22079	1
Cu	63	47.676	ug/L	0.478	1	383	337317	0
Cu	65	47.642	ug/L	0.315	0	187	159929	0
Zn	66	46.704	ug/L	0.124	0	2618	109198	0
Zn	67	46.066	ug/L	0.217	0	483	18120	0
Zn	68	46.371	ug/L	0.276	0	8781	82181	0
As-1	75	49.288	ug/L	0.181	0	246	99417	0
As	75	49.374	ug/L	0.226	0	10545	107430	0
Se	82	51.185	ug/L	0.323	0	-19	10077	0
Se	78	51.821	ug/L	0.469	0	10704	34103	0
Mo	98	50.094	ug/L	0.323	0	1302	336176	0
Y	89		ug/L			367089	299282	0
Kr	83		ug/L			194	207	3
In	115		ug/L			476899	364697	0
Ag	107	49.828	ug/L	0.297	0	181	614576	0
Cd	111	50.479	ug/L	0.394	0	230	150449	0
Cd	114	49.606	ug/L	0.307	0	76	346937	0
Sb	121	49.637	ug/L	0.282	0	306	518086	0
Sb	123	50.005	ug/L	0.262	0	216	391224	0
Ba	135	50.152	ug/L	0.151	0	75	109114	0
Ba	137	50.122	ug/L	0.682	1	134	186178	0
Tb	159		ug/L			437353	363996	0
Tl	205	49.221	ug/L	0.212	0	340	1278090	0
Pb	208	49.805	ug/L	0.208	0	909	1774986	0
Bi	209		ug/L			362800	299979	0
Th	232	50.555	ug/L	0.341	0	304	2183555	0
U	238	50.724	ug/L	0.668	1	193	2404086	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 18:53:59
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	357536	0
Be	9	0.003	ug/L	0.004	126	6	7	24
C	13		mg/L			9248	7147	1
Cl	37		mg/L			3694160	3343467	0
Sc	45		ug/L			341955	264890	0
V-1	51	-0.006	ug/L	0.007	122	2779	2082	3
V	51	0.003	ug/L	0.006	184	3697	2903	1
Cr	52	-0.009	ug/L	0.006	63	8350	6368	0
Cr	53	0.018	ug/L	0.006	30	1237	982	0
Mn	55	-0.019	ug/L	0.003	15	1384	711	7
Co	59	-0.001	ug/L	0.001	79	187	131	8
Ge	72		ug/L			454122	353296	0
Ni	60	-0.001	ug/L	0.001	78	92	69	2
Ni	62	0.018	ug/L	0.010	57	75	67	7
Cu	63	-0.006	ug/L	0.004	57	383	253	10
Cu	65	-0.009	ug/L	0.002	28	187	117	6
Zn	66	-0.782	ug/L	0.005	0	2618	274	3
Zn	67	-0.711	ug/L	0.045	6	483	107	15
Zn	68	-0.688	ug/L	0.032	4	8781	5735	0
As-1	75	0.080	ug/L	0.011	13	246	351	6
As	75	0.461	ug/L	0.006	1	10545	9112	0
Se	82	0.081	ug/L	0.039	48	-19	0	2540
Se	78	1.902	ug/L	0.091	4	10704	9251	0
Mo	98	-0.129	ug/L	0.005	3	1302	166	20
Y	89		ug/L			367089	296063	0
Kr	83		ug/L			194	205	3
In	115		ug/L			476899	364142	1
Ag	107	0.005	ug/L	0.002	46	181	198	13
Cd	111	0.007	ug/L	0.007	91	230	197	9
Cd	114	0.007	ug/L	0.000	5	76	105	1
Sb	121	0.010	ug/L	0.004	43	306	340	13
Sb	123	0.009	ug/L	0.003	35	216	233	10
Ba	135	-0.005	ug/L	0.002	44	75	46	10
Ba	137	-0.011	ug/L	0.003	27	134	60	18
Tb	159		ug/L			437353	360733	0
Tl	205	0.004	ug/L	0.001	13	340	384	3
Pb	208	0.004	ug/L	0.001	13	909	895	1
Bi	209		ug/L			362800	304986	0
Th	232	0.050	ug/L	0.002	3	304	2406	2
U	238	0.004	ug/L	0.001	30	193	349	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:01:23
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			348253	376462	0
[	Be	9	-0.004		ug/L	0.003	66	6	4	31
	C	13			mg/L			9248	7423	2
	Cl	37			mg/L			3694160	3344790	0
[>	Sc	45			ug/L			341955	279709	0
[	V-1	51	-0.004		ug/L	0.012	290	2779	2219	6
[	V	51	-0.005		ug/L	0.007	144	3697	2956	3
[	Cr	52	-0.017		ug/L	0.013	77	8350	6631	1
[	Cr	53	-0.020		ug/L	0.002	10	1237	985	1
[	Mn	55	0.041		ug/L	0.001	3	1384	1943	2
[	Co	59	-0.004		ug/L	0.000	11	187	98	6
[>	Ge	72			ug/L			454122	369616	0
[	Ni	60	0.002		ug/L	0.004	249	92	80	15
[	Ni	62	0.017		ug/L	0.014	83	75	69	9
[	Cu	63	0.029		ug/L	0.001	3	383	526	1
[	Cu	65	0.033		ug/L	0.006	18	187	265	7
[	Zn	66	-0.263		ug/L	0.009	3	2618	1512	1
[	Zn	67	-0.264		ug/L	0.028	10	483	289	3
[	Zn	68	-0.301		ug/L	0.047	15	8781	6646	1
[	As-1	75	0.069	U	ug/L	0.014	20	246	343	8
[	As	75	0.265		ug/L	0.047	17	10545	9129	0
[	Se	82	0.093		ug/L	0.050	53	-19	2	363
[	Se	78	1.123		ug/L	0.207	18	10704	9282	0
[	Mo	98	-0.135		ug/L	0.003	2	1302	131	17
	Y	89			ug/L			367089	310975	0
	Kr	83			ug/L			194	205	1
[>	In	115			ug/L			476899	379150	0
[	Ag	107	-0.002		ug/L	0.001	63	181	120	12
[	Cd	111	-0.001		ug/L	0.001	240	230	181	2
[	Cd	114	-0.002		ug/L	0.002	113	76	46	35
[	Sb	121	-0.010		ug/L	0.001	9	306	135	7
[	Sb	123	-0.009		ug/L	0.001	12	216	95	10
[	Ba	135	0.012		ug/L	0.006	46	75	87	14
[	Ba	137	0.013		ug/L	0.003	23	134	155	7
[>	Tb	159			ug/L			437353	375802	0
[	Tl	205	-0.007		ug/L	0.000	2	340	97	5
[	Pb	208	0.021		ug/L	0.001	3	909	1539	1
[	Bi	209			ug/L			362800	316492	0
[	Th	232	0.017		ug/L	0.001	5	304	1029	4
[	U	238	-0.001		ug/L	0.000	20	193	98	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:08:14
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	374752	1
[	Be	9	22.885	ug/L	0.448	1	6	12649	1
	C	13		mg/L			9248	7595	2
	Cl	37		mg/L			3694160	3329810	0
[>	Sc	45		ug/L			341955	273809	0
[	V-1	51	24.814	ug/L	0.052	0	2779	316696	0
[	V	51	24.793	ug/L	0.063	0	3697	323448	0
[	Cr	52	25.213	ug/L	0.499	1	8350	289549	1
[	Cr	53	25.123	ug/L	0.431	1	1237	34878	1
[	Mn	55	24.879	ug/L	0.363	1	1384	480451	1
[	Co	59	24.853	ug/L	0.263	1	187	369605	0
[>	Ge	72		ug/L			454122	367095	0
[	Ni	60	24.644	ug/L	0.272	1	92	78086	1
[	Ni	62	24.263	ug/L	0.292	1	75	11546	1
[	Cu	63	25.160	ug/L	0.258	1	383	181875	0
[	Cu	65	25.266	ug/L	0.209	0	187	86658	0
[	Zn	66	74.633	ug/L	0.252	0	2618	176872	0
[	Zn	67	67.810	ug/L	0.525	0	483	27045	0
[	Zn	68	72.389	ug/L	0.585	0	8781	126988	0
[	As-1	75	25.120	ug/L	0.294	1	246	51825	1
[	As	75	24.767	ug/L	0.199	0	10545	59264	0
[	Se	82	79.026	ug/L	0.646	0	-19	15891	0
[	Se	78	78.549	ug/L	0.430	0	10704	48309	0
[	Mo	98	-0.126	ug/L	0.007	5	1302	191	23
	Y	89		ug/L			367089	308347	1
	Kr	83		ug/L			194	211	6
[>	In	115		ug/L			476899	377400	0
[	Ag	107	24.310	ug/L	0.397	1	181	310356	1
[	Cd	111	25.069	ug/L	0.141	0	230	77413	0
[	Cd	114	24.551	ug/L	0.448	1	76	177713	1
[	Sb	121	-0.006	ug/L	0.001	24	306	178	8
[	Sb	123	-0.003	ug/L	0.003	92	216	149	14
[	Ba	135	25.330	ug/L	0.105	0	75	57058	0
[	Ba	137	25.449	ug/L	0.228	0	134	97877	0
[>	Tb	159		ug/L			437353	373473	0
[	Tl	205	25.067	ug/L	0.340	1	340	667953	0
[	Pb	208	25.628	ug/L	0.298	1	909	937490	1
[	Bi	209		ug/L			362800	315301	1
[	Th	232	24.824	ug/L	0.306	1	304	1100211	0
[	U	238	25.154	ug/L	0.390	1	193	1223269	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP39 B SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:15:05
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
> Li	6		ug/L			348253	375944	0
Be	9	0.203	ug/L	0.014	6	6	119	6
C	13		mg/L			9248	12418	8
Cl	37		mg/L			3694160	3290037	0
> Sc	45		ug/L			341955	319266	0
V-1	51	32.573	ug/L	0.182	0	2779	483911	0
V	51	32.863	ug/L	0.324	0	3697	498769	0
Cr	52	65.239	ug/L	1.323	2	8350	861231	2
Cr	53	64.163	ug/L	1.639	2	1237	102070	2
Mn	55	137.701	ug/L	2.476	1	1384	3094902	1
Co	59	4.699	ug/L	0.110	2	187	81625	2
> Ge	72		ug/L			454122	372069	0
Ni	60	24.831	ug/L	0.783	3	92	79732	2
Ni	62	29.511	ug/L	0.592	2	75	14220	1
Cu	63	161.265	ug/L	3.873	2	383	1179719	1
Cu	65	162.533	ug/L	4.191	2	187	564113	1
Zn	66	3825.056	ug/L	81.825	2	2618	9079151	1
Zn	67	3338.125	ug/L	60.614	1	483	1330182	1
Zn	68	3727.383	ug/L	105.516	2	8781	6263357	2
As-1	75	9.579	ug/L	0.368	3	246	20151	3
As	75	9.688	ug/L	0.421	4	10545	28753	2
Se	82	0.870	ug/L	0.056	6	-19	161	6
Se	78	1.563	ug/L	0.273	17	10704	9569	0
Mo	98	5.244	ug/L	0.161	3	1302	37363	2
Y	89		ug/L			367089	445167	1
Kr	83		ug/L			194	232	1
> In	115		ug/L			476899	381906	0
Ag	107	3.892	ug/L	0.106	2	181	50399	2
Cd	111	24.171	ug/L	0.767	3	230	75538	3
Cd	114	23.431	ug/L	0.740	3	76	171647	3
Sb	121	0.242	ug/L	0.007	3	306	2893	2
Sb	123	0.249	ug/L	0.007	2	216	2212	2
Ba	135	101.915	ug/L	1.758	1	75	232141	1
Ba	137	102.644	ug/L	2.654	2	134	399174	2
> Tb	159		ug/L			437353	380420	1
Tl	205	0.161	ug/L	0.005	3	340	4666	2
Pb	208	342.044	ug/L	12.786	3	909	12731455	2
Bi	209		ug/L			362800	366204	0
Th	232	0.884	ug/L	0.033	3	304	40167	2
U	238	1.096	ug/L	0.044	4	193	54433	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP82 A SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:21:54
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	372666	0
[	Be	9	0.178	ug/L	0.014	8	6	104	7
	C	13		mg/L			9248	15304	13
	Cl	37		mg/L			3694160	3303370	0
[>	Sc	45		ug/L			341955	315901	0
|	V-1	51	40.880	ug/L	1.740	4	2779	600216	3
|	V	51	40.649	ug/L	1.922	4	3697	609577	4
|	Cr	52	35.896	ug/L	1.007	2	8350	472327	2
|	Cr	53	35.487	ug/L	1.630	4	1237	56366	4
|	Mn	55	309.500	ug/L	12.290	3	1384	6880843	3
[	Co	59	7.462	ug/L	0.326	4	187	128141	4
[>	Ge	72		ug/L			454122	371882	0
|	Ni	60	32.642	ug/L	1.416	4	92	104740	3
|	Ni	62	37.340	ug/L	1.242	3	75	17967	2
|	Cu	63	120.006	ug/L	5.359	4	383	877525	4
|	Cu	65	120.335	ug/L	5.503	4	187	417485	4
|	Zn	66	461.173	ug/L	17.626	3	2618	1096006	3
|	Zn	67	417.803	ug/L	19.341	4	483	166743	4
|	Zn	68	449.980	ug/L	18.183	4	8781	762071	3
|	As-1	75	5.231	ug/L	0.232	4	246	11091	3
|	As	75	5.341	ug/L	0.254	4	10545	19718	2
|	Se	82	0.238	ug/L	0.064	26	-19	32	40
|	Se	78	0.979	ug/L	0.147	14	10704	9266	0
[	Mo	98	3.594	ug/L	0.132	3	1302	25927	2
	Y	89		ug/L			367089	454776	1
	Kr	83		ug/L			194	231	7
[>	In	115		ug/L			476899	380914	2
|	Ag	107	0.376	ug/L	0.023	6	181	4984	4
|	Cd	111	3.287	ug/L	0.164	4	230	10396	3
|	Cd	114	2.905	ug/L	0.150	5	76	21265	3
|	Sb	121	0.286	ug/L	0.023	8	306	3357	5
|	Sb	123	0.283	ug/L	0.013	4	216	2484	3
|	Ba	135	97.319	ug/L	5.052	5	75	220953	3
[	Ba	137	97.479	ug/L	6.438	6	134	377794	4
[>	Tb	159		ug/L			437353	377427	0
|	Tl	205	0.058	ug/L	0.001	1	340	1860	2
|	Pb	208	116.858	ug/L	4.848	4	909	4316677	3
|	Bi	209		ug/L			362800	326241	0
|	Th	232	1.120	ug/L	0.047	4	304	50395	3
[	U	238	0.426	ug/L	0.020	4	193	21113	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QP82 B SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:28:38
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	362531	0
Be	9	0.074	ug/L	0.015	20	6	45	17
C	13		mg/L			9248	11103	6
Cl	37		mg/L			3694160	3379106	0
Sc	45		ug/L			341955	287652	1
V-1	51	12.280	ug/L	0.243	1	2779	165805	1
V	51	12.278	ug/L	0.272	2	3697	169823	1
Cr	52	13.030	ug/L	0.244	1	8350	160581	0
Cr	53	12.980	ug/L	0.363	2	1237	19430	1
Mn	55	90.930	ug/L	1.490	1	1384	1841563	0
Co	59	2.808	ug/L	0.061	2	187	44001	0
Ge	72		ug/L			454122	367194	0
Ni	60	9.295	ug/L	0.133	1	92	29506	1
Ni	62	11.113	ug/L	0.152	1	75	5323	0
Cu	63	29.145	ug/L	0.488	1	383	210680	1
Cu	65	29.660	ug/L	0.694	2	187	101722	1
Zn	66	215.845	ug/L	2.692	1	2618	507640	0
Zn	67	194.951	ug/L	4.094	2	483	77035	1
Zn	68	211.089	ug/L	4.963	2	8781	356767	1
As-1	75	1.729	ug/L	0.055	3	246	3754	2
As	75	1.974	ug/L	0.066	3	10545	12571	0
Se	82	0.173	ug/L	0.076	44	-19	18	80
Se	78	1.392	ug/L	0.152	10	10704	9358	0
Mo	98	0.914	ug/L	0.009	1	1302	7297	0
Y	89		ug/L			367089	357193	1
Kr	83		ug/L			194	206	1
In	115		ug/L			476899	378025	1
Ag	107	0.060	ug/L	0.003	5	181	910	4
Cd	111	0.489	ug/L	0.003	0	230	1690	1
Cd	114	0.336	ug/L	0.012	3	76	2493	2
Sb	121	0.386	ug/L	0.009	2	306	4413	1
Sb	123	0.400	ug/L	0.006	1	216	3414	0
Ba	135	51.906	ug/L	1.037	1	75	117035	0
Ba	137	51.898	ug/L	1.522	2	134	199762	1
Tb	159		ug/L			437353	373142	0
Tl	205	0.016	ug/L	0.002	11	340	714	7
Pb	208	26.084	ug/L	0.571	2	909	953236	1
Bi	209		ug/L			362800	317029	1
Th	232	0.328	ug/L	0.006	1	304	14779	1
U	238	0.156	ug/L	0.004	2	193	7760	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:35:24
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	369338	0
Be	9	0.020	ug/L	0.006	30	6	17	18
C	13		mg/L			9248	10078	3
Cl	37		mg/L			3694160	3310389	0
Sc	45		ug/L			341955	286930	0
V-1	51	3.598	ug/L	0.018	0	2779	50113	0
V	51	3.573	ug/L	0.013	0	3697	51501	0
Cr	52	4.541	ug/L	0.034	0	8350	60390	0
Cr	53	4.407	ug/L	0.068	1	1237	7267	0
Mn	55	50.432	ug/L	0.236	0	1384	1019457	0
Co	59	0.777	ug/L	0.007	0	187	12261	0
Ge	72		ug/L			454122	366041	0
Ni	60	3.469	ug/L	0.049	1	92	11023	1
Ni	62	3.895	ug/L	0.062	1	75	1899	2
Cu	63	20.710	ug/L	0.066	0	383	149327	0
Cu	65	20.914	ug/L	0.054	0	187	71550	0
Zn	66	105.229	ug/L	1.161	1	2618	247782	0
Zn	67	94.290	ug/L	0.724	0	483	37344	0
Zn	68	102.605	ug/L	0.758	0	8781	176515	0
As-1	75	1.109	ug/L	0.026	2	246	2472	3
As	75	1.296	ug/L	0.034	2	10545	11146	0
Se	82	0.135	ug/L	0.034	25	-19	11	60
Se	78	1.120	ug/L	0.193	17	10704	9191	0
Mo	98	1.454	ug/L	0.018	1	1302	10953	0
Y	89		ug/L			367089	321421	0
Kr	83		ug/L			194	204	5
In	115		ug/L			476899	374117	0
Ag	107	0.013	ug/L	0.001	10	181	310	5
Cd	111	0.166	ug/L	0.011	6	230	687	5
Cd	114	0.122	ug/L	0.008	6	76	938	5
Sb	121	2.722	ug/L	0.012	0	306	29367	0
Sb	123	2.733	ug/L	0.010	0	216	22091	0
Ba	135	30.323	ug/L	0.150	0	75	67702	0
Ba	137	30.588	ug/L	0.371	1	134	116595	1
Tb	159		ug/L			437353	373716	1
Tl	205	0.006	ug/L	0.001	16	340	440	4
Pb	208	13.450	ug/L	0.099	0	909	492658	1
Bi	209		ug/L			362800	316899	1
Th	232	0.091	ug/L	0.003	3	304	4303	2
U	238	0.026	ug/L	0.001	4	193	1438	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:42:09
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	375433	1
Be	9	0.019	ug/L	0.011	58	6	17	35
C	13		mg/L			9248	8896	1
Cl	37		mg/L			3694160	3256501	0
Sc	45		ug/L			341955	285457	0
V-1	51	3.530	ug/L	0.053	1	2779	48957	1
V	51	3.522	ug/L	0.036	1	3697	50552	1
Cr	52	4.480	ug/L	0.051	1	8350	59364	0
Cr	53	4.398	ug/L	0.028	0	1237	7218	0
Mn	55	49.186	ug/L	0.559	1	1384	989171	1
Co	59	0.762	ug/L	0.018	2	187	11958	1
Ge	72		ug/L			454122	361918	0
Ni	60	3.407	ug/L	0.059	1	92	10707	2
Ni	62	3.924	ug/L	0.017	0	75	1891	0
Cu	63	20.514	ug/L	0.124	0	383	146255	0
Cu	65	20.484	ug/L	0.236	1	187	69290	0
Zn	66	103.115	ug/L	1.184	1	2618	240133	1
Zn	67	91.995	ug/L	0.440	0	483	36036	0
Zn	68	100.944	ug/L	1.786	1	8781	171813	1
As-1	75	1.072	ug/L	0.008	0	246	2369	0
As	75	1.302	ug/L	0.011	0	10545	11033	0
Se	82	0.083	ug/L	0.017	20	-19	0	462
Se	78	1.255	ug/L	0.056	4	10704	9155	0
Mo	98	1.468	ug/L	0.040	2	1302	10924	2
Y	89		ug/L			367089	318354	0
Kr	83		ug/L			194	204	1
In	115		ug/L			476899	374513	0
Ag	107	0.016	ug/L	0.000	0	181	348	0
Cd	111	0.164	ug/L	0.009	5	230	681	3
Cd	114	0.123	ug/L	0.003	2	76	946	2
Sb	121	2.554	ug/L	0.008	0	306	27603	0
Sb	123	2.562	ug/L	0.026	1	216	20748	1
Ba	135	29.804	ug/L	0.244	0	75	66614	1
Ba	137	30.035	ug/L	0.098	0	134	114613	0
Tb	159		ug/L			437353	374002	1
Tl	205	0.005	ug/L	0.000	8	340	432	2
Pb	208	13.235	ug/L	0.052	0	909	485222	1
Bi	209		ug/L			362800	314826	0
Th	232	0.085	ug/L	0.002	2	304	4026	1
U	238	0.026	ug/L	0.000	0	193	1450	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:48:56
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	376610	0
Be	9	22.928	ug/L	0.194	0	6	12738	0
C	13		mg/L			9248	7836	1
Cl	37		mg/L			3694160	3214057	0
Sc	45		ug/L			341955	280251	1
V-1	51	27.090	ug/L	0.301	1	2779	353685	2
V	51	26.997	ug/L	0.166	0	3697	360235	1
Cr	52	28.414	ug/L	0.307	1	8350	333121	1
Cr	53	28.050	ug/L	0.358	1	1237	39737	0
Mn	55	70.744	ug/L	0.518	0	1384	1396326	1
Co	59	24.502	ug/L	0.328	1	187	372955	1
Ge	72		ug/L			454122	357103	0
Ni	60	27.467	ug/L	0.245	0	92	84651	0
Ni	62	27.773	ug/L	0.334	1	75	12848	0
Cu	63	44.709	ug/L	0.715	1	383	314149	1
Cu	65	45.067	ug/L	0.597	1	187	150248	1
Zn	66	175.482	ug/L	1.452	0	2618	401766	0
Zn	67	159.504	ug/L	2.835	1	483	61367	1
Zn	68	171.721	ug/L	2.186	1	8781	283561	1
As-1	75	26.148	ug/L	0.225	0	246	52468	0
As	75	25.683	ug/L	0.104	0	10545	59476	0
Se	82	79.105	ug/L	0.762	0	-19	15474	0
Se	78	78.164	ug/L	0.284	0	10704	46805	0
Mo	98	1.393	ug/L	0.008	0	1302	10280	0
Y	89		ug/L			367089	315608	0
Kr	83		ug/L			194	205	0
In	115		ug/L			476899	365699	0
Ag	107	23.758	ug/L	0.095	0	181	293918	0
Cd	111	25.333	ug/L	0.141	0	230	75798	0
Cd	114	25.076	ug/L	0.160	0	76	175892	0
Sb	121	2.538	ug/L	0.037	1	306	26785	1
Sb	123	2.536	ug/L	0.016	0	216	20049	0
Ba	135	54.563	ug/L	0.320	0	75	119034	0
Ba	137	55.233	ug/L	0.554	1	134	205714	0
Tb	159		ug/L			437353	369936	0
Tl	205	25.180	ug/L	0.377	1	340	664649	1
Pb	208	38.696	ug/L	0.110	0	909	1401744	0
Bi	209		ug/L			362800	315425	0
Th	232	22.417	ug/L	0.022	0	304	984169	0
U	238	25.511	ug/L	0.310	1	193	1228950	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 19:55:42
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	374512	0
Be	9	0.010	ug/L	0.002	21	6	12	10
C	13		mg/L			9248	7647	0
Cl	37		mg/L			3694160	3205447	0
Sc	45		ug/L			341955	279443	1
V-1	51	2.564	ug/L	0.032	1	2779	35430	0
V	51	2.562	ug/L	0.035	1	3697	36817	0
Cr	52	3.183	ug/L	0.050	1	8350	43265	1
Cr	53	3.139	ug/L	0.023	0	1237	5332	0
Mn	55	37.188	ug/L	0.230	0	1384	732397	0
Co	59	0.521	ug/L	0.008	1	187	8061	0
Ge	72		ug/L			454122	356092	0
Ni	60	2.543	ug/L	0.024	0	92	7880	0
Ni	62	2.864	ug/L	0.084	2	75	1374	2
Cu	63	15.256	ug/L	0.160	1	383	107097	1
Cu	65	15.372	ug/L	0.069	0	187	51201	0
Zn	66	91.691	ug/L	0.481	0	2618	210313	0
Zn	67	82.519	ug/L	0.529	0	483	31842	0
Zn	68	90.034	ug/L	0.451	0	8781	151528	0
As-1	75	0.869	ug/L	0.011	1	246	1925	1
As	75	1.091	ug/L	0.016	1	10545	10436	0
Se	82	0.103	ug/L	0.087	84	-19	4	356
Se	78	1.205	ug/L	0.153	12	10704	8983	1
Mo	98	1.034	ug/L	0.033	3	1302	7871	2
Y	89		ug/L			367089	307905	0
Kr	83		ug/L			194	193	4
In	115		ug/L			476899	367303	0
Ag	107	0.014	ug/L	0.002	17	181	317	9
Cd	111	0.128	ug/L	0.015	11	230	562	7
Cd	114	0.097	ug/L	0.002	2	76	741	1
Sb	121	1.946	ug/L	0.015	0	306	20688	0
Sb	123	1.923	ug/L	0.026	1	216	15311	0
Ba	135	22.659	ug/L	0.240	1	75	49681	0
Ba	137	22.964	ug/L	0.352	1	134	85964	1
Tb	159		ug/L			437353	370596	0
Tl	205	0.009	ug/L	0.001	12	340	531	5
Pb	208	9.206	ug/L	0.058	0	909	334675	0
Bi	209		ug/L			362800	311445	0
Th	232	0.095	ug/L	0.003	3	304	4451	3
U	238	0.023	ug/L	0.001	2	193	1279	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:02:29
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	381174	0
Be	9	-0.001	ug/L	0.002	213	6	6	20
C	13		mg/L			9248	8522	1
Cl	37		mg/L			3694160	3197823	0
Sc	45		ug/L			341955	274506	0
V-1	51	0.730	ug/L	0.023	3	2779	11506	2
V	51	0.710	ug/L	0.025	3	3697	12168	2
Cr	52	0.878	ug/L	0.027	3	8350	16574	1
Cr	53	0.807	ug/L	0.031	3	1237	2084	1
Mn	55	15.617	ug/L	0.197	1	1384	302768	0
Co	59	0.159	ug/L	0.006	3	187	2519	3
Ge	72		ug/L			454122	359969	0
Ni	60	0.559	ug/L	0.005	0	92	1809	0
Ni	62	0.605	ug/L	0.074	12	75	340	9
Cu	63	5.393	ug/L	0.093	1	383	38466	1
Cu	65	5.509	ug/L	0.088	1	187	18644	1
Zn	66	11.984	ug/L	0.070	0	2618	29592	0
Zn	67	10.920	ug/L	0.139	1	483	4592	1
Zn	68	11.813	ug/L	0.157	1	8781	26145	0
As-1	75	0.652	ug/L	0.009	1	246	1508	1
As	75	0.875	ug/L	0.017	1	10545	10116	0
Se	82	0.101	ug/L	0.055	54	-19	4	254
Se	78	1.241	ug/L	0.034	2	10704	9099	0
Mo	98	0.397	ug/L	0.009	2	1302	3691	1
Y	89		ug/L			367089	306089	0
Kr	83		ug/L			194	201	5
In	115		ug/L			476899	369370	1
Ag	107	0.001	ug/L	0.001	168	181	149	10
Cd	111	0.039	ug/L	0.004	9	230	295	4
Cd	114	0.028	ug/L	0.003	10	76	256	9
Sb	121	0.221	ug/L	0.003	1	306	2571	0
Sb	123	0.221	ug/L	0.012	5	216	1916	3
Ba	135	3.732	ug/L	0.031	0	75	8278	0
Ba	137	3.719	ug/L	0.079	2	134	14087	0
Tb	159		ug/L			437353	376905	1
Tl	205	-0.006	ug/L	0.000	6	340	141	6
Pb	208	1.041	ug/L	0.012	1	909	39177	0
Bi	209		ug/L			362800	315873	1
Th	232	0.035	ug/L	0.001	3	304	1814	1
U	238	0.005	ug/L	0.001	14	193	433	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV7
Sample Dil Factor: 1
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:09:58
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	355771	1
Be	9	45.991	ug/L	0.856	1	6	24128	0
C	13		mg/L			9248	6277	0
Cl	37		mg/L			3694160	3222189	1
Sc	45		ug/L			341955	257004	0
V-1	51	49.052	ug/L	0.141	0	2779	585563	1
V	51	48.972	ug/L	0.178	0	3697	596949	0
Cr	52	49.393	ug/L	0.628	1	8350	526442	1
Cr	53	49.128	ug/L	0.360	0	1237	63129	0
Mn	55	48.403	ug/L	0.275	0	1384	876444	1
Co	59	47.832	ug/L	0.271	0	187	667579	1
Ge	72		ug/L			454122	343144	1
Ni	60	47.393	ug/L	0.758	1	92	140291	0
Ni	62	47.660	ug/L	1.098	2	75	21146	2
Cu	63	47.768	ug/L	0.397	0	383	322513	1
Cu	65	47.916	ug/L	0.280	0	187	153499	1
Zn	66	46.228	ug/L	0.371	0	2618	103159	1
Zn	67	46.176	ug/L	0.349	0	483	17330	0
Zn	68	46.255	ug/L	0.144	0	8781	78244	1
As-1	75	49.649	ug/L	0.178	0	246	95562	0
As	75	49.711	ug/L	0.358	0	10545	103159	0
Se	82	51.394	ug/L	0.609	1	-19	9655	1
Se	78	51.943	ug/L	0.854	1	10704	32599	0
Mo	98	50.251	ug/L	0.343	0	1302	321787	0
Y	89		ug/L			367089	288690	0
Kr	83		ug/L			194	200	4
In	115		ug/L			476899	353710	0
Ag	107	49.711	ug/L	0.182	0	181	594679	0
Cd	111	50.168	ug/L	0.395	0	230	145019	0
Cd	114	49.718	ug/L	0.515	1	76	337242	0
Sb	121	49.932	ug/L	0.108	0	306	505470	0
Sb	123	49.979	ug/L	0.221	0	216	379243	0
Ba	135	50.289	ug/L	0.366	0	75	106118	0
Ba	137	50.921	ug/L	0.353	0	134	183451	0
Tb	159		ug/L			437353	356927	0
Tl	205	49.071	ug/L	0.452	0	340	1249400	0
Pb	208	49.689	ug/L	0.135	0	909	1736463	0
Bi	209		ug/L			362800	290944	0
Th	232	50.510	ug/L	1.094	2	304	2139014	1
U	238	50.776	ug/L	0.610	1	193	2359719	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:17:26
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	354536	0
Be	9	0.002	ug/L	0.006	290	6	7	44
C	13		mg/L			9248	6626	2
Cl	37		mg/L			3694160	3233659	0
Sc	45		ug/L			341955	255067	1
V-1	51	0.012	ug/L	0.015	119	2779	2218	9
V	51	-0.013	ug/L	0.005	38	3697	2598	3
Cr	52	0.005	ug/L	0.003	65	8350	6283	2
Cr	53	-0.073	ug/L	0.026	35	1237	831	2
Mn	55	-0.013	ug/L	0.001	5	1384	800	1
Co	59	0.001	ug/L	0.002	244	187	151	17
Ge	72		ug/L			454122	339836	0
Ni	60	-0.003	ug/L	0.003	121	92	61	16
Ni	62	0.002	ug/L	0.024	1438	75	57	18
Cu	63	-0.012	ug/L	0.002	17	383	210	6
Cu	65	-0.011	ug/L	0.001	10	187	103	3
Zn	66	-0.782	ug/L	0.010	1	2618	263	8
Zn	67	-0.734	ug/L	0.012	1	483	95	4
Zn	68	-0.700	ug/L	0.088	12	8781	5497	2
As-1	75	0.079	ug/L	0.009	12	246	334	5
As	75	0.500	ug/L	0.028	5	10545	8840	0
Se	82	0.073	ug/L	0.042	57	-19	-1	721
Se	78	2.064	ug/L	0.083	4	10704	8975	0
Mo	98	-0.130	ug/L	0.002	1	1302	150	9
Y	89		ug/L			367089	286927	0
Kr	83		ug/L			194	198	3
In	115		ug/L			476899	353330	0
Ag	107	0.008	ug/L	0.004	55	181	226	22
Cd	111	0.000	ug/L	0.001	731	230	171	2
Cd	114	0.001	ug/L	0.002	278	76	60	18
Sb	121	0.011	ug/L	0.003	28	306	342	9
Sb	123	0.012	ug/L	0.005	42	216	254	15
Ba	135	-0.006	ug/L	0.002	28	75	42	8
Ba	137	-0.012	ug/L	0.001	7	134	56	5
Tb	159		ug/L			437353	353610	1
Tl	205	-0.000	ug/L	0.002	3177	340	273	16
Pb	208	-0.003	ug/L	0.001	31	909	621	6
Bi	209		ug/L			362800	297112	0
Th	232	0.066	ug/L	0.009	12	304	3032	10
U	238	0.004	ug/L	0.001	23	193	363	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:24:53
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	373312	0
[	Be	9	-0.006	ug/L	0.005	77	6	3	78
	C	13		mg/L			9248	7116	4
	Cl	37		mg/L			3694160	3210829	0
[>	Sc	45		ug/L			341955	269048	2
|	V-1	51	-0.010	ug/L	0.008	78	2779	2058	6
|	V	51	-0.022	ug/L	0.004	19	3697	2631	0
|	Cr	52	0.001	ug/L	0.002	162	8350	6584	1
|	Cr	53	-0.034	ug/L	0.038	110	1237	927	3
|	Mn	55	0.140	ug/L	0.005	3	1384	3733	0
[	Co	59	-0.004	ug/L	0.001	22	187	90	13
[>	Ge	72		ug/L			454122	355221	0
|	Ni	60	0.010	ug/L	0.001	10	92	102	3
|	Ni	62	0.004	ug/L	0.030	717	75	61	22
|	Cu	63	0.025	ug/L	0.006	22	383	477	8
|	Cu	65	0.021	ug/L	0.008	38	187	216	13
|	Zn	66	-0.108	ug/L	0.029	27	2618	1804	3
|	Zn	67	-0.150	ug/L	0.041	27	483	321	4
|	Zn	68	-0.197	ug/L	0.114	58	8781	6553	2
|	As-1	75	0.063	ug/L	0.009	13	246	318	5
|	As	75	0.329	ug/L	0.050	15	10545	8900	0
|	Se	82	0.029	ug/L	0.033	113	-19	-9	66
|	Se	78	1.372	ug/L	0.220	16	10704	9042	0
[	Mo	98	-0.134	ug/L	0.003	2	1302	133	14
	Y	89		ug/L			367089	299867	1
	Kr	83		ug/L			194	203	4
[>	In	115		ug/L			476899	367168	0
|	Ag	107	0.000	ug/L	0.001	2073	181	140	8
|	Cd	111	-0.003	ug/L	0.004	142	230	168	6
|	Cd	114	-0.003	ug/L	0.000	11	76	38	5
|	Sb	121	-0.011	ug/L	0.001	12	306	123	12
|	Sb	123	-0.010	ug/L	0.000	3	216	84	4
|	Ba	135	0.030	ug/L	0.003	11	75	122	5
[	Ba	137	0.037	ug/L	0.005	14	134	241	8
[>	Tb	159		ug/L			437353	368707	0
|	Tl	205	-0.006	ug/L	0.000	4	340	117	6
|	Pb	208	0.001	ug/L	0.000	27	909	809	1
|	Bi	209		ug/L			362800	311310	0
|	Th	232	0.035	ug/L	0.002	6	304	1795	4
[	U	238	-0.001	ug/L	0.000	34	193	115	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:31:41
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	372031	0
[	Be	9	22.682	ug/L	0.199	0	6	12448	0
	C	13		mg/L			9248	7357	3
	Cl	37		mg/L			3694160	3207579	0
[>	Sc	45		ug/L			341955	267394	1
[	V-1	51	25.059	ug/L	0.231	0	2779	312283	0
[	V	51	25.052	ug/L	0.266	1	3697	319119	0
[	Cr	52	25.533	ug/L	0.213	0	8350	286257	0
[	Cr	53	25.482	ug/L	0.307	1	1237	34532	0
[	Mn	55	26.048	ug/L	0.315	1	1384	491189	0
[	Co	59	25.135	ug/L	0.270	1	187	365061	1
[>	Ge	72		ug/L			454122	352251	0
[	Ni	60	24.985	ug/L	0.207	0	92	75964	0
[	Ni	62	25.009	ug/L	0.786	3	75	11418	3
[	Cu	63	27.516	ug/L	0.390	1	383	190833	1
[	Cu	65	27.514	ug/L	0.307	1	187	90535	0
[	Zn	66	74.934	ug/L	1.117	1	2618	170386	0
[	Zn	67	68.262	ug/L	0.508	0	483	26121	0
[	Zn	68	72.700	ug/L	0.280	0	8781	122346	0
[	As-1	75	25.421	ug/L	0.282	1	246	50322	1
[	As	75	25.043	ug/L	0.181	0	10545	57408	0
[	Se	82	78.285	ug/L	1.075	1	-19	15105	1
[	Se	78	77.760	ug/L	0.723	0	10704	45973	0
[	Mo	98	-0.132	ug/L	0.001	0	1302	142	4
	Y	89		ug/L			367089	298241	1
	Kr	83		ug/L			194	216	2
[>	In	115		ug/L			476899	364974	0
[	Ag	107	24.725	ug/L	0.214	0	181	305260	0
[	Cd	111	25.130	ug/L	0.211	0	230	75044	0
[	Cd	114	24.885	ug/L	0.074	0	76	174206	0
[	Sb	121	-0.004	ug/L	0.002	55	306	190	12
[	Sb	123	-0.002	ug/L	0.001	35	216	146	4
[	Ba	135	26.004	ug/L	0.267	1	75	56648	1
[	Ba	137	26.083	ug/L	0.306	1	134	97011	1
[>	Tb	159		ug/L			437353	366684	0
[	Tl	205	25.452	ug/L	0.095	0	340	665926	0
[	Pb	208	26.290	ug/L	0.159	0	909	944222	0
[	Bi	209		ug/L			362800	310537	0
[	Th	232	25.578	ug/L	0.090	0	304	1113053	0
[	U	238	25.778	ug/L	0.093	0	193	1230918	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 EDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:38:29
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			348253	370203	1
⌊	Be	9	0.002	ug/L	0.002	137	6	7	16
	C	13		mg/L			9248	8127	1
	Cl	37		mg/L			3694160	3236010	0
⌈>	Sc	45		ug/L			341955	271924	0
|	V-1	51	0.414	ug/L	0.013	3	2779	7422	2
|	V	51	0.403	ug/L	0.004	0	3697	8109	0
|	Cr	52	0.849	ug/L	0.029	3	8350	16099	1
|	Cr	53	0.788	ug/L	0.042	5	1237	2038	2
|	Mn	55	15.222	ug/L	0.113	0	1384	292385	1
⌊	Co	59	0.106	ug/L	0.002	2	187	1712	1
⌈>	Ge	72		ug/L			454122	357913	0
|	Ni	60	1.233	ug/L	0.029	2	92	3879	2
|	Ni	62	1.218	ug/L	0.055	4	75	621	4
|	Cu	63	8.591	ug/L	0.062	0	383	60750	1
|	Cu	65	8.614	ug/L	0.084	0	187	28904	1
|	Zn	66	58.155	ug/L	0.405	0	2618	134831	0
|	Zn	67	52.485	ug/L	0.799	1	483	20495	1
|	Zn	68	57.316	ug/L	0.564	0	8781	99472	0
|	As-1	75	0.565	ug/L	0.013	2	246	1326	1
|	As	75	0.808	ug/L	0.044	5	10545	9925	0
|	Se	82	0.082	ug/L	0.028	33	-19	0	1041
|	Se	78	1.320	ug/L	0.191	14	10704	9086	0
⌊	Mo	98	0.982	ug/L	0.007	0	1302	7567	0
	Y	89		ug/L			367089	298538	0
	Kr	83		ug/L			194	203	3
⌈>	In	115		ug/L			476899	366585	1
|	Ag	107	0.007	ug/L	0.003	44	181	228	17
|	Cd	111	0.064	ug/L	0.011	17	230	369	9
|	Cd	114	0.058	ug/L	0.001	2	76	465	2
|	Sb	121	1.324	ug/L	0.019	1	306	14113	0
|	Sb	123	1.332	ug/L	0.033	2	216	10631	1
|	Ba	135	14.132	ug/L	0.101	0	75	30948	1
⌊	Ba	137	14.279	ug/L	0.125	0	134	53386	0
⌈>	Tb	159		ug/L			437353	368220	1
|	Tl	205	-0.000	ug/L	0.001	678	340	281	11
|	Pb	208	0.633	ug/L	0.008	1	909	23587	0
|	Bi	209		ug/L			362800	312351	0
|	Th	232	0.060	ug/L	0.005	8	304	2876	6
⌊	U	238	0.006	ug/L	0.001	17	193	439	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:45:18
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			348253	371703	0
Be	9	-0.000	ug/L	0.003	19112	6	6	21
C	13		mg/L			9248	8614	0
Cl	37		mg/L			3694160	3218776	0
Sc	45		ug/L			341955	271968	1
V-1	51	0.415	ug/L	0.005	1	2779	7432	2
V	51	0.414	ug/L	0.006	1	3697	8249	0
Cr	52	0.839	ug/L	0.009	1	8350	15992	0
Cr	53	0.810	ug/L	0.041	5	1237	2068	1
Mn	55	15.347	ug/L	0.259	1	1384	294781	1
Co	59	0.104	ug/L	0.004	4	187	1683	3
Ge	72		ug/L			454122	358024	0
Ni	60	1.208	ug/L	0.021	1	92	3801	1
Ni	62	1.173	ug/L	0.054	4	75	601	4
Cu	63	8.649	ug/L	0.074	0	383	61178	0
Cu	65	8.797	ug/L	0.083	0	187	29522	0
Zn	66	58.916	ug/L	0.496	0	2618	136609	0
Zn	67	53.019	ug/L	1.092	2	483	20706	2
Zn	68	57.262	ug/L	0.873	1	8781	99413	1
As-1	75	0.566	ug/L	0.003	0	246	1329	0
As	75	0.847	ug/L	0.013	1	10545	10006	0
Se	82	0.141	ug/L	0.069	48	-19	12	111
Se	78	1.458	ug/L	0.049	3	10704	9156	0
Mo	98	1.007	ug/L	0.003	0	1302	7734	0
Y	89		ug/L			367089	302405	0
Kr	83		ug/L			194	189	7
In	115		ug/L			476899	364644	0
Ag	107	-0.001	ug/L	0.000	54	181	132	2
Cd	111	0.050	ug/L	0.006	12	230	324	5
Cd	114	0.056	ug/L	0.005	8	76	447	7
Sb	121	1.341	ug/L	0.023	1	306	14221	1
Sb	123	1.343	ug/L	0.030	2	216	10664	2
Ba	135	14.455	ug/L	0.128	0	75	31487	0
Ba	137	14.556	ug/L	0.079	0	134	54134	0
Tb	159		ug/L			437353	370638	0
Tl	205	-0.004	ug/L	0.001	22	340	174	14
Pb	208	0.537	ug/L	0.002	0	909	20245	0
Bi	209		ug/L			362800	310279	0
Th	232	0.026	ug/L	0.001	3	304	1400	2
U	238	0.002	ug/L	0.001	33	193	262	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 ESPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:52:08
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	368295	1
[	Be	9	23.478	ug/L	0.315	1	6	12754	0
	C	13		mg/L			9248	7730	1
	Cl	37		mg/L			3694160	3216690	0
[>	Sc	45		ug/L			341955	269655	0
[	V-1	51	25.443	ug/L	0.287	1	2779	319733	1
[	V	51	25.337	ug/L	0.093	0	3697	325470	0
[	Cr	52	26.551	ug/L	0.208	0	8350	299934	0
[	Cr	53	26.160	ug/L	0.571	2	1237	35727	2
[	Mn	55	41.971	ug/L	0.272	0	1384	797507	0
[	Co	59	25.093	ug/L	0.262	1	187	367523	0
[>	Ge	72		ug/L			454122	356639	0
[	Ni	60	26.157	ug/L	0.050	0	92	80515	0
[	Ni	62	25.715	ug/L	0.326	1	75	11887	2
[	Cu	63	33.823	ug/L	0.085	0	383	237432	0
[	Cu	65	34.035	ug/L	0.526	1	187	113350	1
[	Zn	66	133.636	ug/L	0.393	0	2618	306060	0
[	Zn	67	121.147	ug/L	1.055	0	483	46645	1
[	Zn	68	128.621	ug/L	0.891	0	8781	213841	0
[	As-1	75	26.080	ug/L	0.259	0	246	52267	1
[	As	75	25.728	ug/L	0.294	1	10545	59490	1
[	Se	82	78.200	ug/L	0.453	0	-19	15277	1
[	Se	78	77.670	ug/L	1.233	1	10704	46502	1
[	Mo	98	1.038	ug/L	0.028	2	1302	7908	1
	Y	89		ug/L			367089	298098	0
	Kr	83		ug/L			194	199	2
[>	In	115		ug/L			476899	365718	0
[	Ag	107	24.498	ug/L	0.170	0	181	303079	0
[	Cd	111	25.422	ug/L	0.189	0	230	76070	1
[	Cd	114	25.006	ug/L	0.325	1	76	175397	0
[	Sb	121	1.342	ug/L	0.009	0	306	14274	0
[	Sb	123	1.361	ug/L	0.022	1	216	10836	1
[	Ba	135	39.888	ug/L	0.396	0	75	87037	0
[	Ba	137	40.954	ug/L	0.387	0	134	152572	0
[>	Tb	159		ug/L			437353	370536	1
[	Tl	205	25.210	ug/L	0.381	1	340	666444	0
[	Pb	208	26.322	ug/L	0.170	0	909	955283	0
[	Bi	209		ug/L			362800	310336	0
[	Th	232	25.047	ug/L	0.242	0	304	1101325	0
[	U	238	25.650	ug/L	0.285	1	193	1237603	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 20:58:53
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	369319	0
[	Be	9	0.010	ug/L	0.007	72	6	12	33
	C	13		mg/L			9248	9458	1
	Cl	37		mg/L			3694160	3175400	0
[>	Sc	45		ug/L			341955	271478	0
[	V-1	51	2.410	ug/L	0.020	0	2779	32488	0
[	V	51	2.389	ug/L	0.011	0	3697	33552	0
[	Cr	52	3.068	ug/L	0.053	1	8350	40757	1
[	Cr	53	2.964	ug/L	0.042	1	1237	4945	0
[	Mn	55	35.619	ug/L	0.463	1	1384	681553	1
[	Co	59	0.480	ug/L	0.008	1	187	7223	2
[>	Ge	72		ug/L			454122	350892	0
[	Ni	60	2.403	ug/L	0.024	0	92	7342	0
[	Ni	62	2.675	ug/L	0.035	1	75	1268	1
[	Cu	63	14.524	ug/L	0.095	0	383	100484	0
[	Cu	65	14.539	ug/L	0.063	0	187	47727	0
[	Zn	66	83.771	ug/L	0.718	0	2618	189520	1
[	Zn	67	75.931	ug/L	0.789	1	483	28903	1
[	Zn	68	83.102	ug/L	0.388	0	8781	138342	0
[	As-1	75	0.848	ug/L	0.014	1	246	1856	1
[	As	75	1.196	ug/L	0.038	3	10545	10490	0
[	Se	82	0.111	ug/L	0.092	83	-19	6	290
[	Se	78	1.731	ug/L	0.189	10	10704	9105	0
[	Mo	98	1.038	ug/L	0.032	3	1302	7785	2
	Y	89		ug/L			367089	303981	0
	Kr	83		ug/L			194	192	5
[>	In	115		ug/L			476899	365355	0
[	Ag	107	0.015	ug/L	0.001	9	181	321	5
[	Cd	111	0.113	ug/L	0.013	11	230	514	7
[	Cd	114	0.088	ug/L	0.004	4	76	672	4
[	Sb	121	1.830	ug/L	0.010	0	306	19364	0
[	Sb	123	1.850	ug/L	0.032	1	216	14662	1
[	Ba	135	21.519	ug/L	0.089	0	75	46936	0
[	Ba	137	21.826	ug/L	0.066	0	134	81280	0
[>	Tb	159		ug/L			437353	364922	1
[	Tl	205	0.006	ug/L	0.002	25	340	442	10
[	Pb	208	7.832	ug/L	0.121	1	909	280431	0
[	Bi	209		ug/L			362800	307469	0
[	Th	232	0.108	ug/L	0.004	4	304	4913	3
[	U	238	0.020	ug/L	0.002	9	193	1112	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 21:05:44
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			348253	374802	0
⌊	Be	9	0.002	ug/L	0.005	218	6	7	32
	C	13		mg/L			9248	9672	3
	Cl	37		mg/L			3694160	3144648	0
⌈>	Sc	45		ug/L			341955	272502	1
|	V-1	51	0.291	ug/L	0.008	2	2779	5888	2
|	V	51	0.283	ug/L	0.003	0	3697	6590	1
|	Cr	52	0.791	ug/L	0.002	0	8350	15487	1
|	Cr	53	0.737	ug/L	0.023	3	1237	1974	1
|	Mn	55	10.707	ug/L	0.203	1	1384	206380	0
⌊	Co	59	0.062	ug/L	0.001	0	187	1065	1
⌈>	Ge	72		ug/L			454122	355919	0
|	Ni	60	1.234	ug/L	0.041	3	92	3858	2
|	Ni	62	1.183	ug/L	0.077	6	75	602	5
|	Cu	63	6.821	ug/L	0.080	1	383	48022	0
|	Cu	65	6.815	ug/L	0.065	0	187	22768	0
|	Zn	66	52.534	ug/L	0.129	0	2618	121316	0
|	Zn	67	47.282	ug/L	0.818	1	483	18397	1
|	Zn	68	51.315	ug/L	0.403	0	8781	89279	0
|	As-1	75	0.510	ug/L	0.035	6	246	1209	5
|	As	75	0.840	ug/L	0.067	8	10545	9932	0
|	Se	82	0.133	ug/L	0.047	35	-19	10	86
|	Se	78	1.699	ug/L	0.198	11	10704	9220	0
⌊	Mo	98	0.715	ug/L	0.003	0	1302	5755	0
	Y	89		ug/L			367089	302903	0
	Kr	83		ug/L			194	198	1
⌈>	In	115		ug/L			476899	366153	0
|	Ag	107	-0.002	ug/L	0.001	83	181	119	15
|	Cd	111	0.044	ug/L	0.005	11	230	308	4
|	Cd	114	0.041	ug/L	0.003	8	76	348	7
|	Sb	121	0.951	ug/L	0.002	0	306	10200	0
|	Sb	123	0.990	ug/L	0.009	0	216	7937	1
|	Ba	135	11.903	ug/L	0.264	2	75	26043	1
⌊	Ba	137	12.018	ug/L	0.196	1	134	44895	0
⌈>	Tb	159		ug/L			437353	370209	0
|	Tl	205	-0.004	ug/L	0.000	0	340	189	0
|	Pb	208	0.209	ug/L	0.003	1	909	8354	1
|	Bi	209		ug/L			362800	311715	0
|	Th	232	0.050	ug/L	0.005	9	304	2473	8
⌊	U	238	0.002	ug/L	0.000	12	193	252	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 21:12:35
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			348253	370548	0
[	**Be**	**9**	**-0.008**	ug/L	0.001	15	6	2	34
	C	**13**		mg/L			9248	10266	2
	Cl	**37**		mg/L			3694160	3150895	0
[>	**Sc**	**45**		ug/L			341955	269288	0
|	**V-1**	**51**	**0.407**	ug/L	0.018	4	2779	7266	2
|	**V**	**51**	**0.380**	ug/L	0.012	3	3697	7742	1
|	**Cr**	**52**	**0.505**	ug/L	0.018	3	8350	12147	2
|	**Cr**	**53**	**0.415**	ug/L	0.045	10	1237	1524	4
|	**Mn**	**55**	**5.731**	ug/L	0.027	0	1384	109695	0
[	**Co**	**59**	**0.026**	ug/L	0.001	3	187	525	2
[>	**Ge**	**72**		ug/L			454122	353805	1
|	**Ni**	**60**	**0.600**	ug/L	0.016	2	92	1902	2
|	**Ni**	**62**	**0.607**	ug/L	0.011	1	75	335	2
|	**Cu**	**63**	**3.193**	ug/L	0.047	1	383	22503	0
|	**Cu**	**65**	**3.173**	ug/L	0.057	1	187	10616	0
|	**Zn**	**66**	**9.592**	ug/L	0.182	1	2618	23683	1
|	**Zn**	**67**	**8.508**	ug/L	0.153	1	483	3599	0
|	**Zn**	**68**	**9.447**	ug/L	0.324	3	8781	21917	0
|	**As-1**	**75**	**0.551**	ug/L	0.010	1	246	1283	0
|	**As**	**75**	**0.948**	ug/L	0.072	7	10545	10086	0
|	**Se**	**82**	**0.117**	ug/L	0.062	53	-19	7	162
|	**Se**	**78**	**1.941**	ug/L	0.237	12	10704	9283	0
[	**Mo**	**98**	**0.049**	ug/L	0.008	17	1302	1335	3
	Y	**89**		ug/L			367089	299723	0
	Kr	**83**		ug/L			194	194	4
[>	**In**	**115**		ug/L			476899	364352	0
|	**Ag**	**107**	**-0.003**	ug/L	0.001	36	181	97	16
|	**Cd**	**111**	**0.013**	ug/L	0.004	28	230	214	4
|	**Cd**	**114**	**0.013**	ug/L	0.003	19	76	150	11
|	**Sb**	**121**	**0.188**	ug/L	0.003	1	306	2192	2
|	**Sb**	**123**	**0.190**	ug/L	0.003	1	216	1647	0
|	**Ba**	**135**	**2.605**	ug/L	0.020	0	75	5717	0
[	**Ba**	**137**	**2.639**	ug/L	0.043	1	134	9890	1
[>	**Tb**	**159**		ug/L			437353	370924	1
|	**Tl**	**205**	**-0.007**	ug/L	0.000	2	340	92	7
|	**Pb**	**208**	**0.081**	ug/L	0.002	2	909	3725	0
|	**Bi**	**209**		ug/L			362800	306571	0
|	**Th**	**232**	**0.020**	ug/L	0.001	5	304	1156	3
[	**U**	**238**	**0.001**	ug/L	0.000	23	193	195	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QQ20 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 14, 2010 21:19:26
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			348253	371831	0
⌊	Be	9	0.001	ug/L	0.007	933	6	7	53
	C	13		mg/L			9248	9980	3
	Cl	37		mg/L			3694160	3142637	0
⌈>	Sc	45		ug/L			341955	273656	1
|	V-1	51	0.310	ug/L	0.013	4	2779	6156	2
|	V	51	0.297	ug/L	0.016	5	3697	6788	1
|	Cr	52	0.854	ug/L	0.021	2	8350	16255	0
|	Cr	53	0.778	ug/L	0.051	6	1237	2039	2
|	Mn	55	8.912	ug/L	0.086	0	1384	172718	0
⌊	Co	59	0.061	ug/L	0.002	2	187	1063	3
⌈>	Ge	72		ug/L			454122	357783	0
|	Ni	60	1.406	ug/L	0.018	1	92	4409	1
|	Ni	62	1.387	ug/L	0.026	1	75	699	1
|	Cu	63	7.024	ug/L	0.093	1	383	49704	1
|	Cu	65	6.980	ug/L	0.079	1	187	23438	0
|	Zn	66	50.264	ug/L	0.007	0	2618	116773	0
|	Zn	67	45.353	ug/L	0.651	1	483	17755	1
|	Zn	68	48.927	ug/L	0.371	0	8781	85896	0
|	As-1	75	0.466	ug/L	0.005	1	246	1126	0
|	As	75	0.790	ug/L	0.052	6	10545	9885	1
|	Se	82	0.136	ug/L	0.035	25	-19	11	61
|	Se	78	1.643	ug/L	0.226	13	10704	9241	1
⌊	Mo	98	0.738	ug/L	0.004	0	1302	5935	0
	Y	89		ug/L			367089	300967	0
	Kr	83		ug/L			194	191	1
⌈>	In	115		ug/L			476899	373744	1
|	Ag	107	-0.004	ug/L	0.001	18	181	97	7
|	Cd	111	0.038	ug/L	0.004	9	230	297	3
|	Cd	114	0.042	ug/L	0.002	5	76	360	4
|	Sb	121	0.959	ug/L	0.004	0	306	10496	1
|	Sb	123	0.988	ug/L	0.009	0	216	8084	1
|	Ba	135	11.725	ug/L	0.034	0	75	26188	1
⌊	Ba	137	11.783	ug/L	0.121	1	134	44932	0
⌈>	Tb	159		ug/L			437353	376335	0
|	Tl	205	-0.005	ug/L	0.000	4	340	146	4
|	Pb	208	0.210	ug/L	0.002	0	909	8517	0
|	Bi	209		ug/L			362800	310381	1
|	Th	232	0.015	ug/L	0.001	4	304	913	3
⌊	U	238	0.001	ug/L	0.000	17	193	221	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QN20 J REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, April 14, 2010 21:26:14
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			348253	358987	1
⌊	**Be**	**9**	**0.022**	ug/L	0.011	52	6	17	34
	C	**13**		mg/L			9248	6483	1
	Cl	**37**		mg/L			3694160	3383052	0
⌈>	**Sc**	**45**		ug/L			341955	286818	1
⌈	**V-1**	**51**	**3.769**	ug/L	0.046	1	2779	52357	0
⌊	**V**	**51**	**3.845**	ug/L	0.058	1	3697	55158	0
⌈	**Cr**	**52**	**0.824**	ug/L	0.009	1	8350	16684	1
⌊	**Cr**	**53**	**1.234**	ug/L	0.046	3	1237	2781	1
⌈	**Mn**	**55**	**128.982**	ug/L	1.093	0	1384	2604334	1
⌊	**Co**	**59**	**0.136**	ug/L	0.003	2	187	2274	0
⌈>	**Ge**	**72**		ug/L			454122	342490	0
⌈	**Ni**	**60**	**0.169**	ug/L	0.001	0	92	570	0
⌊	**Ni**	**62**	**0.175**	ug/L	0.038	21	75	134	12
⌈	**Cu**	**63**	**0.654**	ug/L	0.013	1	383	4691	1
⌊	**Cu**	**65**	**0.109**	ug/L	0.007	6	187	490	3
⌈	**Zn**	**66**	**0.026**	ug/L	0.037	143	2618	2030	3
⌈	**Zn**	**67**	**0.305**	ug/L	0.024	7	483	476	1
⌊	**Zn**	**68**	**0.261**	ug/L	0.060	23	8781	7026	1
⌈	**As-1**	**75**	**0.237**	ug/L	0.024	9	246	640	6
⌊	**As**	**75**	**0.462**	ug/L	0.065	14	10545	8835	0
⌈	**Se**	**82**	**0.381**	ug/L	0.066	17	-19	56	21
⌊	**Se**	**78**	**1.634**	ug/L	0.280	17	10704	8842	0
⌊	**Mo**	**98**	**-0.008**	ug/L	0.013	150	1302	928	8
	Y	**89**		ug/L			367089	305552	0
	Kr	**83**		ug/L			194	210	6
⌈>	**In**	**115**		ug/L			476899	346753	0
⌈	**Ag**	**107**	**-0.003**	ug/L	0.001	53	181	102	15
⌈	**Cd**	**111**	**-0.003**	ug/L	0.014	500	230	159	25
⌊	**Cd**	**114**	**-0.004**	ug/L	0.001	32	76	30	25
⌈	**Sb**	**121**	**-0.006**	ug/L	0.001	18	306	165	6
⌊	**Sb**	**123**	**-0.005**	ug/L	0.003	48	216	118	15
⌈	**Ba**	**135**	**2.356**	ug/L	0.015	0	75	4925	0
⌊	**Ba**	**137**	**2.315**	ug/L	0.021	0	134	8268	0
⌈>	**Tb**	**159**		ug/L			437353	353621	1
⌈	**Tl**	**205**	**0.006**	ug/L	0.002	24	340	432	7
⌊	**Pb**	**208**	**0.019**	ug/L	0.004	19	909	1388	8
⌈	**Bi**	**209**		ug/L			362800	288108	1
⌊	**Th**	**232**	**0.012**	ug/L	0.000	3	304	756	2
⌊	**U**	**238**	**0.002**	ug/L	0.000	16	193	261	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 14, 2010 21:33:41
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			348253	360955	1
[	Be	9	45.864	ug/L	0.870	1	6	24411	0
	C	13		mg/L			9248	6091	1
	Cl	37		mg/L			3694160	3130593	1
[>	Sc	45		ug/L			341955	255177	1
[	V-1	51	49.695	ug/L	1.218	2	2779	588838	0
[	V	51	49.463	ug/L	1.005	2	3697	598492	0
[	Cr	52	49.927	ug/L	0.578	1	8350	528186	0
[	Cr	53	49.200	ug/L	0.384	0	1237	62772	1
[	Mn	55	48.830	ug/L	0.322	0	1384	877814	1
[	Co	59	48.089	ug/L	0.280	0	187	666334	1
[>	Ge	72		ug/L			454122	340974	0
[	Ni	60	47.495	ug/L	0.399	0	92	139722	1
[	Ni	62	47.535	ug/L	0.219	0	75	20958	0
[	Cu	63	47.749	ug/L	0.506	1	383	320355	1
[	Cu	65	47.868	ug/L	0.464	0	187	152373	1
[	Zn	66	46.717	ug/L	0.114	0	2618	103573	0
[	Zn	67	45.731	ug/L	0.288	0	483	17059	0
[	Zn	68	45.946	ug/L	0.631	1	8781	77276	1
[	As-1	75	49.242	ug/L	0.061	0	246	94184	0
[	As	75	49.480	ug/L	0.052	0	10545	102072	0
[	Se	82	51.167	ug/L	0.422	0	-19	9552	1
[	Se	78	52.444	ug/L	0.373	0	10704	32631	0
[	Mo	98	49.932	ug/L	0.371	0	1302	317751	1
	Y	89		ug/L			367089	286375	1
	Kr	83		ug/L			194	201	1
[>	In	115		ug/L			476899	348814	1
[	Ag	107	49.461	ug/L	0.520	1	181	583451	0
[	Cd	111	50.233	ug/L	0.730	1	230	143183	0
[	Cd	114	49.431	ug/L	0.825	1	76	330620	0
[	Sb	121	49.846	ug/L	0.487	0	306	497572	0
[	Sb	123	50.202	ug/L	0.434	0	216	375649	1
[	Ba	135	50.410	ug/L	0.470	0	75	104895	0
[	Ba	137	51.279	ug/L	0.434	0	134	182175	0
[>	Tb	159		ug/L			437353	353650	0
[	Tl	205	49.484	ug/L	0.473	0	340	1248388	0
[	Pb	208	50.524	ug/L	0.500	0	909	1749388	0
[	Bi	209		ug/L			362800	291994	0
[	Th	232	50.809	ug/L	0.315	0	304	2132162	0
[	U	238	51.050	ug/L	0.358	0	193	2350790	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB8
Sample Dil Factor:
Comments:
***Sample Date/Time:* Wednesday, April 14, 2010 21:41:09**
Number of Replicates: 3
Method File: c:\elandata\Method\2008LoNoMinNoRh.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\041410.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			348253	362887	1
⌊	Be	9	-0.002	ug/L	0.001	68	6	5	13
	C	13		mg/L			9248	6405	3
	Cl	37		mg/L			3694160	3174686	0
⌈>	Sc	45		ug/L			341955	256271	1
|	V-1	51	-0.015	ug/L	0.017	115	2779	1902	9
|	V	51	-0.030	ug/L	0.004	12	3697	2407	0
|	Cr	52	-0.027	ug/L	0.005	18	8350	5970	1
|	Cr	53	-0.072	ug/L	0.052	72	1237	835	8
|	Mn	55	-0.011	ug/L	0.003	24	1384	845	7
⌊	Co	59	-0.001	ug/L	0.002	358	187	132	18
⌈>	Ge	72		ug/L			454122	342258	0
|	Ni	60	-0.001	ug/L	0.002	155	92	65	9
|	Ni	62	0.008	ug/L	0.013	155	75	60	9
|	Cu	63	-0.013	ug/L	0.002	15	383	200	6
|	Cu	65	-0.014	ug/L	0.005	33	187	95	16
|	Zn	66	-0.797	ug/L	0.006	0	2618	232	5
|	Zn	67	-0.739	ug/L	0.044	5	483	93	17
|	Zn	68	-0.714	ug/L	0.023	3	8781	5516	0
|	As-1	75	0.051	ug/L	0.002	4	246	284	1
|	As	75	0.505	ug/L	0.007	1	10545	8912	0
|	Se	82	-0.038	ug/L	0.064	169	-19	-21	54
|	Se	78	2.087	ug/L	0.020	0	10704	9049	0
⌊	Mo	98	-0.130	ug/L	0.004	3	1302	153	16
	Y	89		ug/L			367089	289230	0
	Kr	83		ug/L			194	200	3
⌈>	In	115		ug/L			476899	352870	0
|	Ag	107	0.006	ug/L	0.002	26	181	209	10
|	Cd	111	-0.001	ug/L	0.005	525	230	167	8
|	Cd	114	0.002	ug/L	0.002	77	76	72	18
|	Sb	121	0.009	ug/L	0.004	46	306	317	13
|	Sb	123	0.012	ug/L	0.005	44	216	253	16
|	Ba	135	-0.010	ug/L	0.001	13	75	35	7
⌊	Ba	137	-0.012	ug/L	0.001	5	134	55	4
⌈>	Tb	159		ug/L			437353	354943	0
|	Tl	205	-0.001	ug/L	0.003	249	340	248	27
|	Pb	208	-0.004	ug/L	0.002	43	909	591	10
|	Bi	209		ug/L			362800	296450	0
|	Th	232	0.066	ug/L	0.008	11	304	3019	10
⌊	U	238	0.004	ug/L	0.003	60	193	349	33

Metals Analysis
Prep Logs

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: DM

Date: 3·31·10

Final Volume 25

Final Volume (Hg):

Sample ID QQ20 ASPK. MB1SPK ESPK. MB2 SPK

		ICP Routine	ICP No GFA	GFA
Prepcode:				
Spike Solution:		ICP Routine	ICP No GFA	GFA
Standard No.:				
Vol Added (mL):				
STOCK	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
CONCENTRATION	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	REN		
	2680·14		
	0.05		
Ag	25		
Al			500
As	25 ✓		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

QQ20 : 00748

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: DM Date: 3·31·10

Matrix: Water Block Temp: 93°C

ARI Sample ID	Btl #	pH<2	Prep Code: REN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: REN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
QQ20 A	10	✓	50.0	25.0			
" ADUP	10	✓					
" ASPK	10	✓					
" B	5	✓					
" C	5	✓					
" D	5	✓					
" MB1	—	✓					
" MB1SPK	—	✓					
" E	1	—					Filtered in Lab
" EDUP	1	—					" "
" ESPK	1	—					" "
" F	1	—					" "
" G	1	—					" "
" H	1	—					" "
" MB2	—	—					" "
" MB2SPK	—	—					" "
QQ37 A	6	✓					
" ADUP	6	✓					
" ASPK	6	✓					
" B	6	✓					
" MB1	—	✓					
" MB1SPK	—	✓	50.0	25.0			
				3.31-10 DM			

Chemical/Reagent ID:

HNO_3: MP1853 HCl: — H_2O_2: IS367 Tube Lot #: A9Q9LS162

General Chemistry Analysis
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

LAB CONTROL RESULTS-CONVENTIONALS
QQ20-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/30/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
Total Suspended Solids	03/29/10 13:45	mg/L	49.5	50.0	99.0%

METHOD BLANK RESULTS-CONVENTIONALS
QQ20-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/30/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Total Suspended Solids	03/29/10 13:45	mg/L	< 1.0 U

REPLICATE RESULTS-CONVENTIONALS
QQ20-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/30/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 03/25/10
Date Received: 03/26/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: QQ20A Client ID: CB31A032510COMP					
Total Suspended Solids	03/29/10	mg/L	40.2	44.0	9.0%

General Chemistry Analysis
Sample Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
Total Suspended Solids by Method EPA 160.2

Data Release Authorized:
Reported: 03/30/10
Date Received: 03/26/10
Page 1 of 1

QC Report No: QQ20-Floyd-Snider
Project: Lora Lake Apartments
POS-LLA

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
CB31A032510COMP QQ20A 10-8030	03/25/10	Water	03/29/10 13:45 032910#1	2.0	40.2
CB4857032510COMP QQ20B 10-8031	03/25/10	Water	03/29/10 13:45 032910#1	2.2	35.9
CB1032510COMP QQ20C 10-8032	03/25/10	Water	03/29/10 13:45 032910#1	2.1	9.5
CB101032510COMP QQ20D 10-8033	03/25/10	Water	03/29/10 13:45 032910#1	2.8	26.7

Reported in mg/L

RL-Analytical reporting limit
U-Undetected at reported detection limit

General Chemistry Analysis
Instrument Raw Data

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

3-30-10

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 3/29/2010
ANALYST: CDE 13:45

Instrumentation ***Drying Ovens:*** 12 ***Analytical Balance:*** 1123230597
Muffle Furnace: N/A

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# **6399J*** 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time				3/29/10 15:38	3/29/10 17:50										
Cal Wt (g) 10.0000				10.0000	10.0000										
record weights to 4 places				*Cal OK!*	*Cal OK!*										
BLANK		1000	0.1098	0.1098	0.1098	STOP		0.0	**< 1**						
LCS # 549-3		1000	0.1106	0.1602	0.1601	STOP		49.5	**49.5**	99.0%	% Recovery				
QP70 A2		400	0.1071	0.1140	0.1138	STOP		6.7	**16.8**						
QP83 A2		940	0.1106	0.1122	0.1122	STOP		1.6	**1.7**						
QP84 A5		405	0.1074	0.1114	0.1113	STOP		3.9	**9.6**						
QP87 A6		540	0.1087	0.1150	0.1149	STOP		6.2	**11.5**						
QP87 B6		350	0.1102	0.1280	0.1278	STOP		17.6	**50.3**						
QP87 B6 dup		350	0.1081	0.1259	0.1258	STOP		17.7	**50.6**						
								RPD =	*0.6%*					*RPD =*	*NA*
QP87 C6		950	0.1092	0.1337	0.1336	STOP		24.4	**25.7**						
QP87 D6		925	0.1095	0.1125	0.1125	STOP		3.0	**3.2**						
QP87 E6		930	0.1084	0.1155	0.1155	STOP		7.1	**7.6**						
QP87 F6		930	0.1101	0.1111	0.1110	STOP		0.9	**< 1.1**						
QP95 A4		380	0.1089	0.1225	0.1224	STOP		13.5	**35.5**						
QP95 B4		250	0.1104	0.1219	0.1218	STOP		11.4	**45.6**						
QP95 C4		250	0.1076	0.1261	0.1261	STOP		18.5	**74.0**						
QQ09 C1		1000	0.1084	0.1111	0.1111	STOP		2.7	**2.7**						
QQ19 A3		240	0.1055	0.1225	0.1224	STOP		16.9	**70.4**						
QQ19 B3		200	0.1089	0.1222	0.1221	STOP		13.2	**66.0**						

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 3/29/2010
ANALYST: CDE 13:45

Instrumentation

Drying Ovens: 12
Muffle Furnace: N/A
Analytical Balance: 1123230597

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# **6399J*** | 0.05 | grams to | 1000 | mL = | **50** | ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
QQ20 A1-2		500	0.1099	0.1300	0.1300	STOP		20.1	**40.2**						
QQ20 A1-2 dup		500	0.1097	0.1318	0.1317	STOP		22.0	**44.0**						
								RPD =	*9.0%*					*RPD =*	*NA*
QQ20 B1		460	0.1080	0.1246	0.1245	STOP		16.5	**35.9**						
QQ20 C1		485	0.1090	0.1136	0.1136	STOP		4.6	**9.5**						
QQ20 D1		360	0.1059	0.1156	0.1155	STOP		9.6	**26.7**						
QQ27 A2		620	0.1073	0.1184	0.1184	STOP		11.1	**17.9**						

QQ20 : 00758

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 3/29/10 13:45

ANALYST: CDC

Instrumentation

Drying Ovens: 12

Analytical Balance: 112323057

Muffle Furnace: N/A

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# 6399J* | 0.0500 | grams to | 1000 | mL = | **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time				3/29/10 cdc	3/29/10 cdc										
Cal Wt (g) 10.0000				10.0000 15:38	10.0000 17:50										
record weights to 4 places															
BLANK	P1391	1000	0.1098	0.1098	0.1098										
LCS # 549-3	P1392	↓	0.1106	0.1602	0.1601					% Recovery					
QP70 A2	P1393	400	0.1071	0.1140	0.1138										
QP83 A2	P1394	940	0.1106	0.1122	0.1122										
QP84 A5	P1995	405	0.1074	0.1114	0.1113										
QP87 A6	P1996	540	0.1087	0.1150	0.1149										
B6	P1401	350	0.1102	0.1280	0.1278										
dr B6	P1402	↓	0.1081	0.1259	0.1258										
C6	P1403	950	0.1092	0.1337	0.1336										
D6	P1404	925	0.1095	0.1125	0.1125										
E6	P1405	930	0.1084	0.1155	0.1155										
↓ F6	P1406	~~3800~~	0.1101	0.1111	0.1110										
QP95 A4	P1407	380	0.1089	0.1225	0.1224										
↓ B4	P1408	250	0.1104	0.1219	0.1218										

0930 3/29/10 cdc

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 3/29/10
ANALYST: CVS

Instrumentation **Drying Ovens:** Conv **Muffle Furnace:** **Analytical Balance:** Conv

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# 6399J* 0.0500 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time															
Cal Wt (g) 10.0000				Conv.											
record weights to 4 places															
~~BLANK~~ QP45 C5	P1409	250	0.1076	0.1261	0.1261										
~~LCS #~~ QQ09 C'	P1400	1000	0.1084	0.1111	0.1111										
QQ19 A3	P1410	240	0.1055	0.1225	0.1224					% Recovery					
↓ B3	P1411	200	0.1099	0.1222	0.1221										
QQ20 A'-2	P1412	500	0.1099	0.1300	0.1300										
dp A'-2	P1413	↓	0.1097	0.1318	0.1317										
B'	P1414	460	0.1080	0.1246	0.1245										
C'	P1415	485	0.1090	0.1136	0.1136										
↓ d'	P1293	360	0.1059	0.1156	~~0.1150~~	0.1155	3/29/10 CVS								
QQ27 A2	P1284	620	0.1073	0.1184	0.1184										
				3/29/10 CVS											

6054 TSS-VSS1

Subcontracted Results
Dioxin/Furans 1613(Sub) Analyzed by Frontier Analytical Laboratory

prepared
for

Floyd/Snider

Project: Lora Lakes Apartments

ARI JOB NO: QQ20, QQ22

prepared
by

Analytical Resources, Inc.

FRONTIER
ANALYTICAL LABORATORY

April 12, 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 **6069**. This corresponds to your **Lora Lake Apartments** project under ARI project number **QQ20**. Four aqueous samples were received on 3/30/2010 in good condition. These samples were extracted and analyzed by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and furans. The 2005 World Health Organizations toxic equivalency factors were used to calculate the toxic equivalency (TEQs) on your report. Analytical Resources Incorporated requested a Level IV report and a turnaround time of fifteen business days for project **6069**.

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 original chain of custody, our sample login form and a 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. The Level I summary and the Electronic Data Deliverables (EDDs) have been sent to you via email. A hardcopy of the Level IV data package has been sent to you via OnTrac overnight delivery. The enclosed 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 **6069**, please contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Daniel P. Vickers

Daniel P. Vickers
Vice President

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

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **6069**

Received on: **03/30/2010** Project Due: **04/21/2010** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
6069-001-SA	0	QQ20	CB31A032510COMP	EPA 1613 D/F	Aqueous	03/25/2010	09:47 pm	03/25/2011
6069-002-SA	0	QQ20	CB4857032510COMP	EPA 1613 D/F	Aqueous	03/25/2010	10:20 pm	03/25/2011
6069-003-SA	0	QQ20	CB1032510COMP	EPA 1613 D/F	Aqueous	03/25/2010	10:19 pm	03/25/2011
6069-004-SA	0	QQ20	CB101032510COMP	EPA 1613 D/F	Aqueous	03/25/2010	11:20 pm	03/25/2011

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-001-MB
Client ID: Method Blank
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-06-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.516		-	0.212				
1,2,3,7,8-PeCDD	ND	0.724		-	0.302				
1,2,3,4,7,8-HxCDD	ND	0.803		-	0.328				
1,2,3,6,7,8-HxCDD	ND	0.928		-	0.381	Total TCDD	ND	0.516	
1,2,3,7,8,9-HxCDD	ND	0.857		-	0.351	Total PeCDD	ND	0.724	
1,2,3,4,6,7,8-HpCDD	ND	0.952		-	0.495	Total HxCDD	ND	0.928	
OCDD	ND	3.12		-	1.02	Total HpCDD	ND	0.952	
2,3,7,8-TCDF	ND	0.400		-	0.112				
1,2,3,7,8-PeCDF	ND	0.699		-	0.219				
2,3,4,7,8-PeCDF	ND	0.702		-	0.232				
1,2,3,4,7,8-HxCDF	ND	0.613		-	0.162				
1,2,3,6,7,8-HxCDF	ND	0.641		-	0.167				
2,3,4,6,7,8-HxCDF	ND	0.652		-	0.167				
1,2,3,7,8,9-HxCDF	ND	0.790		-	0.185	Total TCDF	ND	0.400	
1,2,3,4,6,7,8-HpCDF	ND	0.613		-	0.251	Total PeCDF	ND	0.702	
1,2,3,4,7,8,9-HpCDF	ND	0.692		-	0.280	Total HxCDF	ND	0.790	
OCDF	ND	1.73		-	0.451	Total HpCDF	ND	0.692	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	78.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	61.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	69.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	67.3	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	64.0	23.0 - 140	
13C-OCDD	62.3	17.0 - 157	
13C-2,3,7,8-TCDF	79.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	59.2	24.0 - 185	
13C-2,3,4,7,8-PeCDF	59.0	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	65.5	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	62.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	62.4	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	61.3	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	56.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	56.3	26.0 - 138	
13C-OCDF	55.5	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	96.1	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-001-OPR
Client ID: OPR
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: ng/ml

Acquired: 04-06-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	8.85	6.70 - 15.8	
1,2,3,7,8-PeCDD	47.6	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	44.8	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	46.1	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	44.8	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	45.3	35.0 - 70.0	
OCDD	92.7	78.0 - 144	
2,3,7,8-TCDF	8.74	7.50 - 15.8	
1,2,3,7,8-PeCDF	47.4	40.0 - 67.0	
2,3,4,7,8-PeCDF	46.9	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	47.5	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	48.1	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	47.5	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	46.9	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	48.1	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	48.0	39.0 - 69.0	
OCDF	93.3	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	81.7	20.0 - 175	
13C-1,2,3,7,8-PeCDD	60.8	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	77.1	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	74.5	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	66.7	26.0 - 166	
13C-OCDD	60.8	13.0 - 198	
13C-2,3,7,8-TCDF	83.6	22.0 - 152	
13C-1,2,3,7,8-PeCDF	58.9	21.0 - 192	
13C-2,3,4,7,8-PeCDF	58.7	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	74.8	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	71.4	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	70.1	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	66.0	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	61.3	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	57.9	20.0 - 186	
13C-OCDF	53.8	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	100	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-001-SA
Client ID: CB31A032510COMP
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: 03-30-2010
Amount: 1.043 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-06-2010
2005 WHO TEQ: 22.3

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.507		-	0.212				
1,2,3,7,8-PeCDD	3.33	-	J	3.33	0.302				
1,2,3,4,7,8-HxCDD	6.14	-	J	0.614	0.328				
1,2,3,6,7,8-HxCDD	17.7	-	J	1.77	0.381	Total TCDD	ND	0.507	
1,2,3,7,8,9-HxCDD	11.7	-	J	1.17	0.351	Total PeCDD	12.4	-	J
1,2,3,4,6,7,8-HpCDD	619	-		6.19	0.495	Total HxCDD	91.1	-	*
OCDD	7770	-		2.33	1.02	Total HpCDD	1030	-	
2,3,7,8-TCDF	ND	0.422		-	0.112				
1,2,3,7,8-PeCDF	ND	1.35		-	0.219				
2,3,4,7,8-PeCDF	ND	1.45		-	0.232				
1,2,3,4,7,8-HxCDF	25.0	-		2.50	0.162				
1,2,3,6,7,8-HxCDF	15.0	-	J	1.50	0.167				
2,3,4,6,7,8-HxCDF	8.30	-	J	0.830	0.167				
1,2,3,7,8,9-HxCDF	2.42	-	J	0.242	0.185	Total TCDF	26.2	-	D,M
1,2,3,4,6,7,8-HpCDF	154	-		1.54	0.251	Total PeCDF	90.6	-	D,M
1,2,3,4,7,8,9-HpCDF	14.7	-	J	0.147	0.280	Total HxCDF	386	-	D,M
OCDF	430	-		0.129	0.451	Total HpCDF	494	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	96.9	25.0 - 164	
13C-1,2,3,7,8-PeCDD	83.6	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	90.7	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	85.5	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	88.7	23.0 - 140	
13C-OCDD	83.8	17.0 - 157	
13C-2,3,7,8-TCDF	94.4	24.0 - 169	
13C-1,2,3,7,8-PeCDF	81.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	78.8	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	81.1	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	75.9	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	77.7	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	80.2	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	75.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	77.6	26.0 - 138	
13C-OCDF	70.5	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	109	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-002-SA
Client ID: CB4857032510COMP
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: 03-30-2010
Amount: 1.044 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-07-2010
2005 WHO TEQ: 13.2

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.404		-	0.212				
1,2,3,7,8-PeCDD	2.00	-	J	2.00	0.302				
1,2,3,4,7,8-HxCDD	4.03	-	J	0.403	0.328				
1,2,3,6,7,8-HxCDD	11.3	-	J	1.13	0.381	Total TCDD	ND	0.404	
1,2,3,7,8,9-HxCDD	7.19	-	J	0.719	0.351	Total PeCDD	5.71	-	J
1,2,3,4,6,7,8-HpCDD	381	-		3.81	0.495	Total HxCDD	59.1	-	
OCDD	4200	-		1.26	1.02	Total HpCDD	634	-	
2,3,7,8-TCDF	ND	0.406		-	0.112				
1,2,3,7,8-PeCDF	ND	0.882		-	0.219				
2,3,4,7,8-PeCDF	ND	0.955		-	0.232				
1,2,3,4,7,8-HxCDF	15.1	-	J	1.51	0.162				
1,2,3,6,7,8-HxCDF	6.34	-	J	0.634	0.167				
2,3,4,6,7,8-HxCDF	5.30	-	J	0.530	0.167				
1,2,3,7,8,9-HxCDF	1.70	-	J	0.170	0.185	Total TCDF	12.7	-	D,M
1,2,3,4,6,7,8-HpCDF	82.2	-		0.822	0.251	Total PeCDF	38.0	-	D,M
1,2,3,4,7,8,9-HpCDF	8.95	-	J	0.0895	0.280	Total HxCDF	176	-	D,M
OCDF	255	-		0.0765	0.451	Total HpCDF	280	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	90.3	25.0 - 164	
13C-1,2,3,7,8-PeCDD	77.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	85.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	79.6	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	83.3	23.0 - 140	
13C-OCDD	78.0	17.0 - 157	
13C-2,3,7,8-TCDF	91.4	24.0 - 169	
13C-1,2,3,7,8-PeCDF	79.0	24.0 - 185	
13C-2,3,4,7,8-PeCDF	75.4	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	77.0	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	74.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	74.7	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	75.7	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	72.6	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	74.4	26.0 - 138	
13C-OCDF	67.5	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	98.4	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-003-SA
Client ID: CB1032510COMP
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: 03-30-2010
Amount: 1.044 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-07-2010
2005 WHO TEQ: 0.218

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.513		-	0.212				
1,2,3,7,8-PeCDD	ND	0.780		-	0.302				
1,2,3,4,7,8-HxCDD	ND	0.797		-	0.328				
1,2,3,6,7,8-HxCDD	ND	0.962		-	0.381	Total TCDD	ND	0.513	
1,2,3,7,8,9-HxCDD	ND	0.868		-	0.351	Total PeCDD	ND	0.780	
1,2,3,4,6,7,8-HpCDD	15.3	-	J	0.153	0.495	Total HxCDD	5.65	-	J
OCDD	90.7	-		0.0272	1.02	Total HpCDD	31.8	-	
2,3,7,8-TCDF	ND	0.500		-	0.112				
1,2,3,7,8-PeCDF	ND	0.908		-	0.219				
2,3,4,7,8-PeCDF	ND	1.02		-	0.232				
1,2,3,4,7,8-HxCDF	ND	0.475		-	0.162				
1,2,3,6,7,8-HxCDF	ND	0.496		-	0.167				
2,3,4,6,7,8-HxCDF	ND	0.616		-	0.167				
1,2,3,7,8,9-HxCDF	ND	0.669		-	0.185	Total TCDF	ND	0.500	
1,2,3,4,6,7,8-HpCDF	3.56	-	J	0.0356	0.251	Total PeCDF	ND	1.02	
1,2,3,4,7,8,9-HpCDF	ND	0.438		-	0.280	Total HxCDF	3.67	-	J
OCDF	6.80	-	J	0.00204	0.451	Total HpCDF	7.45	-	J

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	65.8	25.0 - 164	
13C-1,2,3,7,8-PeCDD	54.3	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	66.6	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	61.4	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	63.5	23.0 - 140	
13C-OCDD	60.0	17.0 - 157	
13C-2,3,7,8-TCDF	60.7	24.0 - 169	
13C-1,2,3,7,8-PeCDF	56.2	24.0 - 185	
13C-2,3,4,7,8-PeCDF	49.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	65.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	61.0	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	53.3	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	54.2	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	58.2	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	57.8	26.0 - 138	
13C-OCDF	53.8	17.0 - 157	
Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	68.8	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6069-004-SA
Client ID: CB101032510COMP
Matrix: Aqueous
Batch No: X1980

Date Extracted: 04-05-2010
Date Received: 03-30-2010
Amount: 1.036 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 04-07-2010
2005 WHO TEQ: 14.0

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.460		-	0.212				
1,2,3,7,8-PeCDD	2.25	-	J	2.25	0.302				
1,2,3,4,7,8-HxCDD	4.09	-	J	0.409	0.328				
1,2,3,6,7,8-HxCDD	11.8	-	J	1.18	0.381	Total TCDD	ND	0.460	
1,2,3,7,8,9-HxCDD	8.04	-	J	0.804	0.351	Total PeCDD	6.39	-	J
1,2,3,4,6,7,8-HpCDD	405	-		4.05	0.495	Total HxCDD	63.4	-	
OCDD	4430	-		1.33	1.02	Total HpCDD	677	-	
2,3,7,8-TCDF	ND	0.412		-	0.112				
1,2,3,7,8-PeCDF	ND	1.27		-	0.219				
2,3,4,7,8-PeCDF	ND	1.30		-	0.232				
1,2,3,4,7,8-HxCDF	15.6	-	J	1.56	0.162				
1,2,3,6,7,8-HxCDF	6.19	-	J	0.619	0.167				
2,3,4,6,7,8-HxCDF	5.41	-	J	0.541	0.167				
1,2,3,7,8,9-HxCDF	1.61	-	J	0.161	0.185	Total TCDF	11.5	-	D,M
1,2,3,4,6,7,8-HpCDF	94.7	-		0.947	0.251	Total PeCDF	39.1	-	D,M
1,2,3,4,7,8,9-HpCDF	9.62	-	J	0.0962	0.280	Total HxCDF	172	-	D,M
OCDF	270	-		0.0810	0.451	Total HpCDF	315	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	93.7	25.0 - 164	
13C-1,2,3,7,8-PeCDD	75.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	88.5	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	84.1	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	85.3	23.0 - 140	
13C-OCDD	78.8	17.0 - 157	
13C-2,3,7,8-TCDF	93.3	24.0 - 169	
13C-1,2,3,7,8-PeCDF	76.0	24.0 - 185	
13C-2,3,4,7,8-PeCDF	75.4	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	82.0	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	75.9	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	77.7	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	78.6	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	72.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	75.0	26.0 - 138	
13C-OCDF	67.9	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	102	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 4/7/10

Reviewed By: _____
Date: 4/7/10

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SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 03/29/10

ANALYTICAL RESOURCES INCORPORATED

60069 DOC

ARI Project: QQ20

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 Apartments
ARI PM: Sue Dunnihoo
Phone: 206-695-6207
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **04/09/10**
Fax 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
10-8030-QQ20A	CB31A032510COMP	03/25/10 21:47	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-8031-QQ20B	CB4857032510COMP	03/25/10 22:20	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-8032-QQ20C	CB1032510COMP	03/25/10 22:19	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-8033-QQ20D	CB101032510COMP	03/25/10 23:20	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					

Full Level IV package and EDD

Carrier	UPS	Airbill	1Z932695015186957 8	Date	3/29/10
Relinquished by		Company	ART	Date	3/29/10	Time	1600
Received by		Company	Frontier	Date	3/30/10	Time	1020

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **6069**

Client:	Analytical Resources Inc. Sue Dunnihoo
Client Project ID:	QQ20
Date Received:	03/30/2010
Time Received:	10:20 am
Received By:	GN
Logged In By:	KZ
# of Samples Received:	4
Duplicates:	0
Storage Location:	R1

Method of Delivery:	UPS
Tracking Number:	1Z8326950151869578
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	03/25/2011
Adequate Sample Volume	Yes
Anomalies or additional comments:	

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PROJECT REQUEST SHEET

Project #:	6069	Sample #:	1 - 4	Client Manager:	BS
Client:	Analytical Resources Inc. Sue Dunnihoo			Hold Time:	03/25/2011
Matrix:	Aqueous	Extraction Batch:	1980	Due Date:	04/21/2010
Method:	EPA 1613 D/F			Storage:	R1
SOP:	SOPs: EP2A Rev.7 IP2A Rev.8				

COMMENTS/INSTRUCTIONS:

- NC -

Sample	Full Weight (g)	Empty Weight (g)
6069-001-0001-SA	1537.0	493.96
6069-002-0001-SA	1539.1	495.43
6069-003-0001-SA	1539.6	495.36
6069-004-0001-SA	1531.3	495.17

L4 a EDD

Results: 6069

Extract/s located in box: "Acid Fish Smell"

Standards: 6052

Instrument:

DB5	FAL3
DB225	____
DB1	____
Other	____

Frontier Analytical Laboratory
Percent Solids

FAL Project: 6069

	Sample ID	Chemist	Date	Wet Sample Weight (g)	Dry Sample Weight (g)	% Solids	10g Equiv
1.29	6069-001-0001-SA	GN	4/5/10	15.79	0.00	0%	—
1.29	6069-002-0001-SA	↓	↓	12.65	0.00	0%	—
1.30	6069-003-0001-SA			13.76	0.00	0%	—
1.29	6069-004-0001-SA			11.96	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

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

EXTRACTION SHEET

Project #: 6069 Extraction Date: 2010-04-05 Extraction Chemist: GN

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: 090918A Vial: 5 Chemist/Witness/Date	NS Amt: 10.0uL ID: 090918B Vial: 5 Chemist/Witness/Date	CSS Amt: 10.0uL ID: 090918C Vial: 5 Chemist/Witness/Date
1980-001-0001-MB					
1980-001-0001-OPR					
6069-001-0001-SA	1.043		GN DN 4/5/10	NA	DN GG 4/6/10
6069-002-0001-SA	1.044				
6069-003-0001-SA	1.044				
6069-004-0001-SA	1.036				

6050

AX-21 Charcoal Cleaned	083109	Acetone	49317	Acid Alumina	08623DJ	Hexane	49272
Hydrochloric Acid	B08505	Methanol	096021	Methylene Chloride (DCM)	50022	Silica Gel	TA1593034
Sodium Hydroxide	9265	Sodium Sulfate	49009905	Sulfuric Acid	094134	Tetradecane	081394
Toluene	49161	Water	49315	C-18 Empore Discs	320504	Cyclohexane	48149

Comments:

CLEANUP SHEET

Project #: 6069

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: 090918D Vial: 5 Chemist/Witness/Date
6050 1980-001-0001-MB				
6050 1980-001-0001-OPR				
6069-001-0001-SA	BN 4/6/10	N/A	N/A	BN GN 4/6/10
6069-002-0001-SA	↓	↓	↓	↓
6069-003-0001-SA	↓	↓	↓	↓
6069-004-0001-SA	↓	↓	↓	↓

Comments:

Sample Results

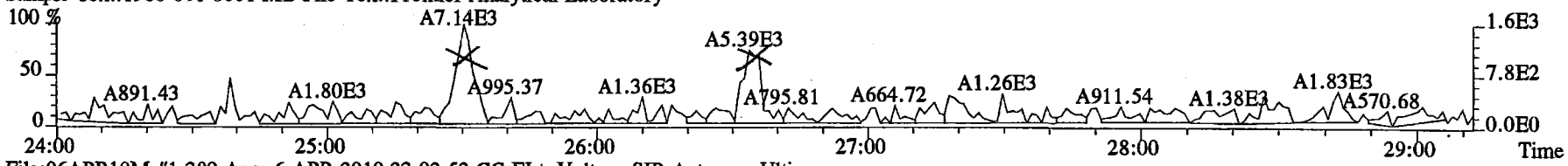
FAL ID: 1980-001-0001-MB Filename: 06APR10M Sam:16 Acquired: 6-APR-10 23:02:52 ICal: PCDDFAL3-11-18-09
Client ID: Method Blank ConCal: ST040610M2 EndCal: ST040610M3
Results: 6062-2 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 0.00
WHO 1998 Tox: 0.00 WHO 2005 Tox: 0.00

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	240	308	0.516
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.96	*		2.50	384	172	0.724
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	265	296	0.803
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.34	*		2.50	265	296	0.928
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.37	*		2.50	265	296	0.857
1,2,3,4,6,7,8-HpCDD	*	*	n	NotFnd	1.17	*		2.50	240	196	0.952
OCDD	*	*	n	NotFnd	1.21	*		2.50	423	439	3.12
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	248	648	0.400
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	232	496	0.699
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	232	496	0.702
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	1.00	*		2.50	264	242	0.613
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	264	242	0.641
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.99	*		2.50	264	242	0.652
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.09	*		2.50	264	242	0.790
1,2,3,4,6,7,8-HpCDF	*	*	n	NotFnd	1.36	*		2.50	176	180	0.613
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.61	*		2.50	176	180	0.692
OCDF	*	*	n	NotFnd	0.84	*		2.50	232	276	1.73
											Rec
13C-2,3,7,8-TCDD	2.22e+07	0.72	y	27:20	0.94	1570					78.4
13C-1,2,3,7,8-PeCDD	1.90e+07	1.69	y	33:09	1.02	1240					61.9
13C-1,2,3,4,7,8-HxCDD	1.20e+07	1.27	y	38:31	0.98	1380					69.0
13C-1,2,3,6,7,8-HxCDD	1.11e+07	1.29	y	38:41	0.94	1350					67.3
13C-1,2,3,4,6,7,8-HpCDD	1.01e+07	1.01	y	44:08	0.90	1280					64.0
13C-OCDD	1.46e+07	1.02	y	49:42	0.67	2490					62.3
13C-2,3,7,8-TCDF	3.62e+07	0.87	y	26:35	0.88	1580					79.0
13C-1,2,3,7,8-PeCDF	2.71e+07	1.65	y	31:25	0.88	1180					59.2
13C-2,3,4,7,8-PeCDF	2.61e+07	1.65	y	32:43	0.85	1180					59.0
13C-1,2,3,4,7,8-HxCDF	1.98e+07	0.48	y	37:08	1.72	1310					65.5
13C-1,2,3,6,7,8-HxCDF	2.20e+07	0.48	y	37:20	2.00	1250					62.4
13C-2,3,4,6,7,8-HxCDF	1.91e+07	0.49	y	38:16	1.74	1250					62.4
13C-1,2,3,7,8,9-HxCDF	1.63e+07	0.49	y	39:42	1.51	1230					61.3
13C-1,2,3,4,6,7,8-HpCDF	1.08e+07	0.46	y	42:14	1.10	1120					56.0
13C-1,2,3,4,7,8,9-HpCDF	8.39e+06	0.46	y	45:02	0.85	1130					56.3
13C-OCDF	2.29e+07	0.94	y	50:04	1.17	2220					55.5
37Cl-2,3,7,8-TCDD	1.13e+07			27:21	0.97	769					96.1
13C-1,2,3,4-TCDD	3.01e+07	0.73	y	26:47	-	115					
13C-1,2,3,4-TCDF	5.21e+07	0.88	y	25:30	-	113					
13C-1,2,3,7,8,9-HxCDD	1.76e+07	1.28	y	39:08	-	85.8					

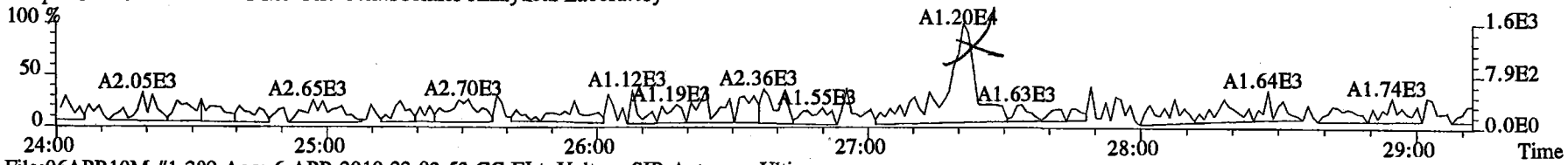
									#Hom
Total Tetra-Dioxins	*	NotFnd	1.02	*	2.50	240	308	0.516	0
Total Penta-Dioxins	*	NotFnd	0.96	*	2.50	384	172	0.724	0
Total Hexa-Dioxins	*	NotFnd	1.36	*	2.50	265	296	0.928	0
Total Hepta-Dioxins	*	NotFnd	1.17	*	2.50	240	196	0.952	0
Total Tetra-Furans	*	NotFnd	1.29	*	2.50	248	648	0.400	0
1st Fn. Tot Penta-Furans	*	NotFnd	0.90	*	2.50	232	496	0.702 PeCDF	0
Total Penta-Furans	*	NotFnd	0.90	*	2.50	232	496	0.702 0.00	0
Total Hexa-Furans	*	NotFnd	0.99	*	2.50	264	242	0.790	0
Total Hepta-Furans	*	NotFnd	1.47	*	2.50	176	180	0.692	0

Analyst: _____ Date: 4/7/10

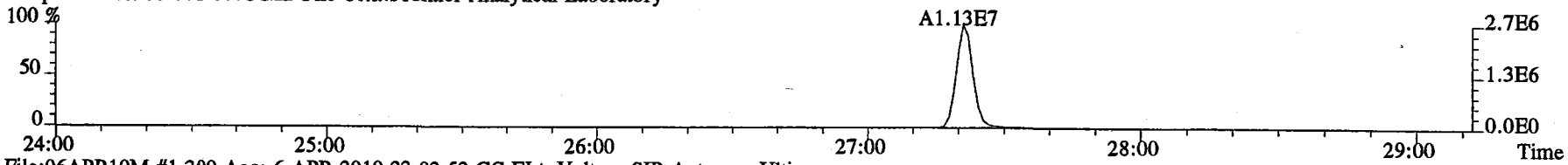
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



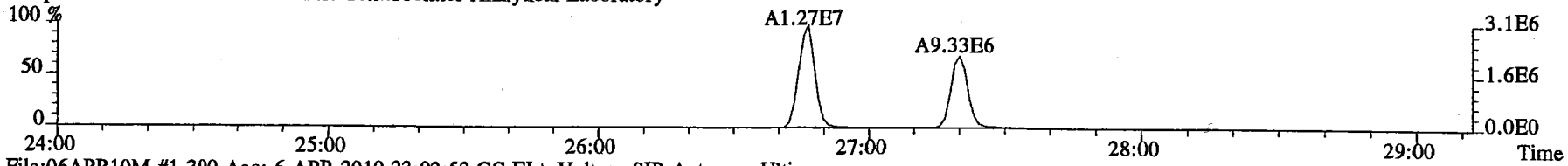
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



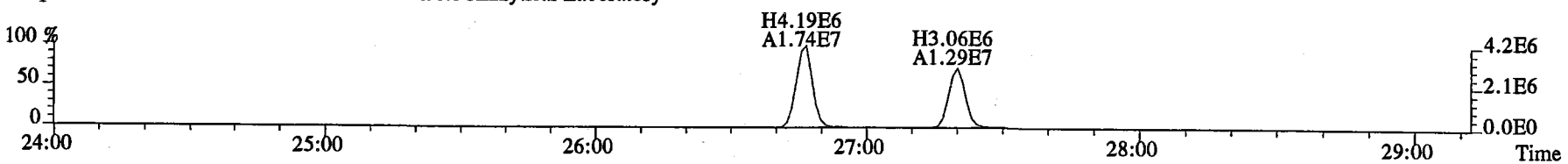
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



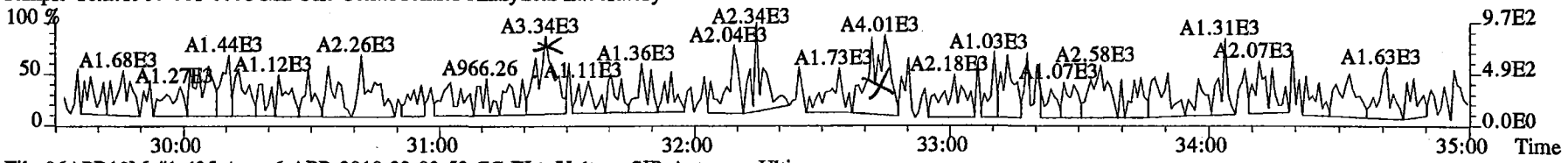
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



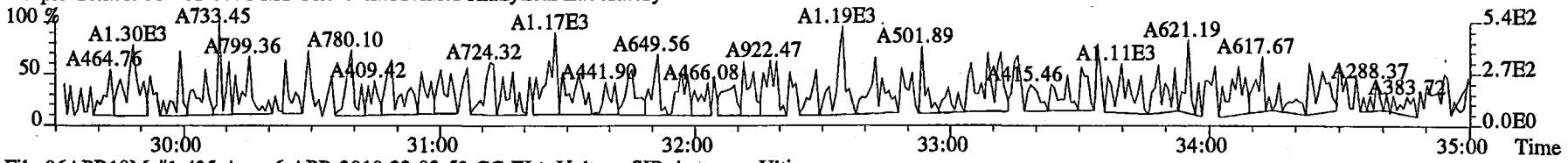
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



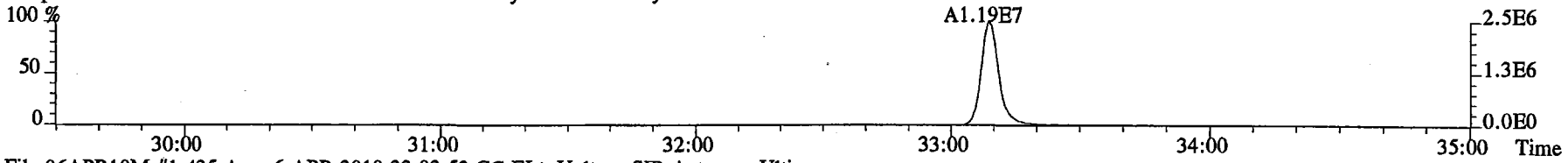
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



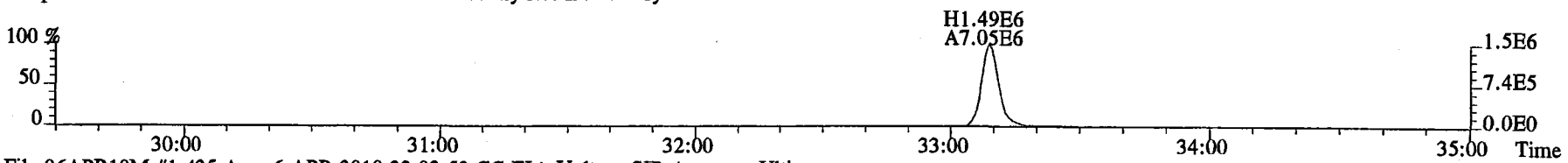
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



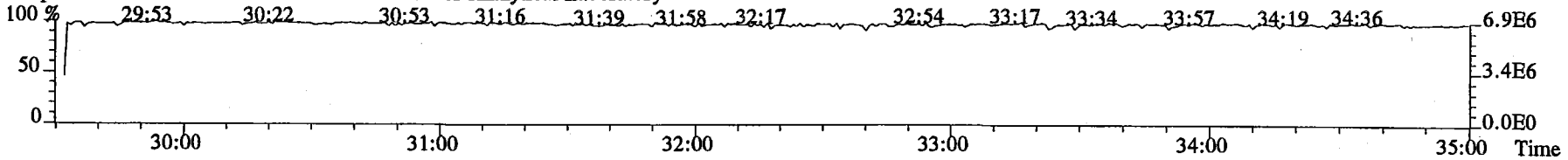
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



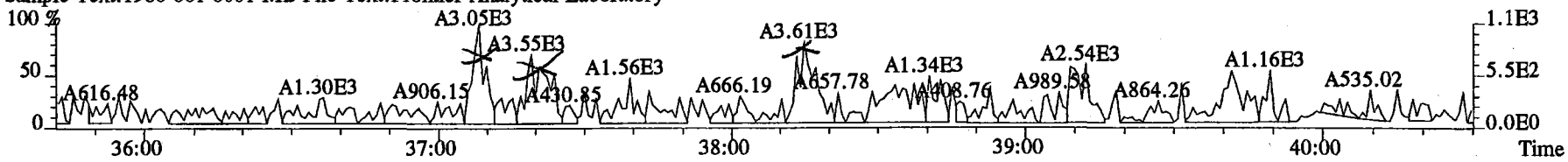
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



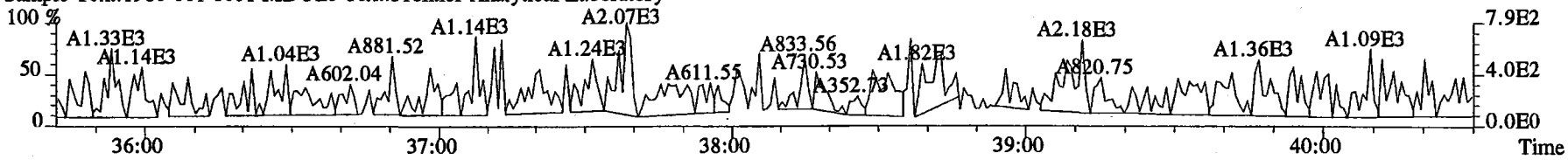
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:16 F:2 Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



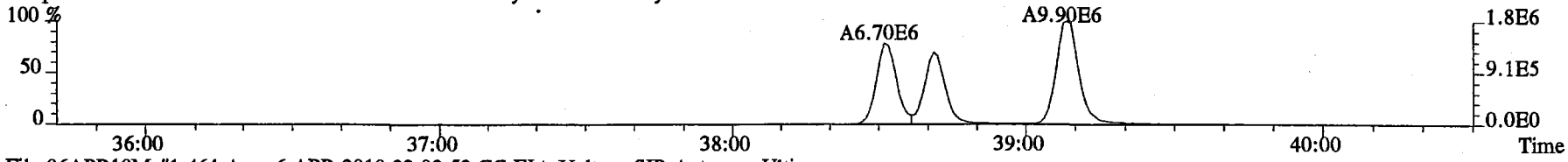
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



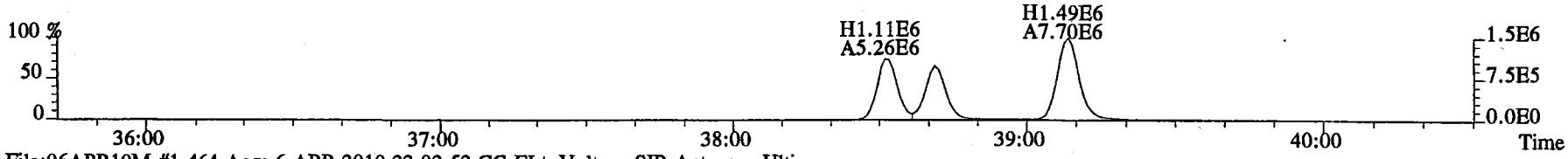
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



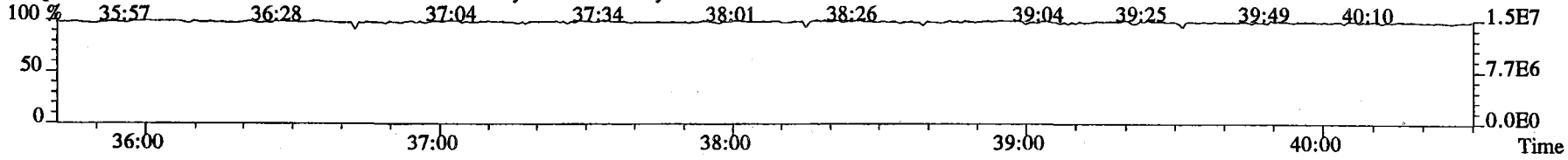
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



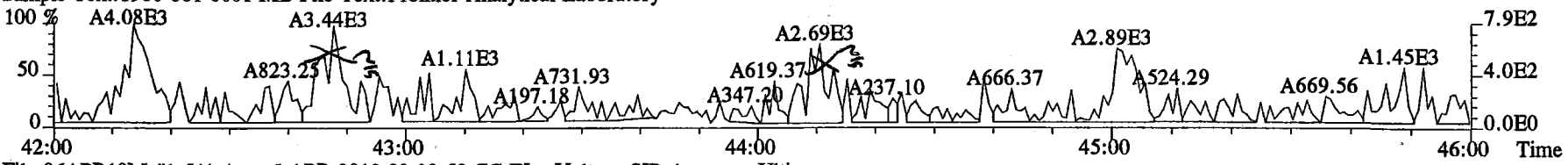
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



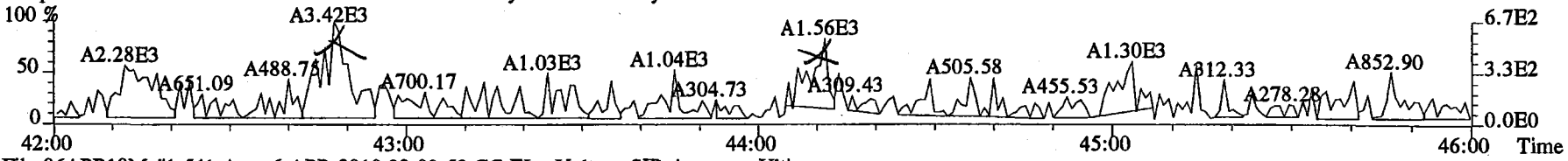
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:16 F:3 Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



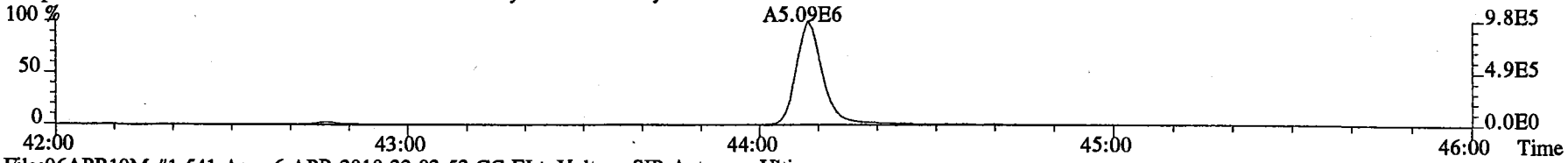
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



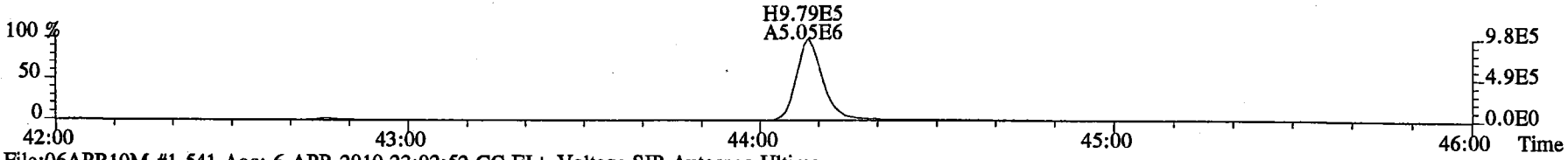
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



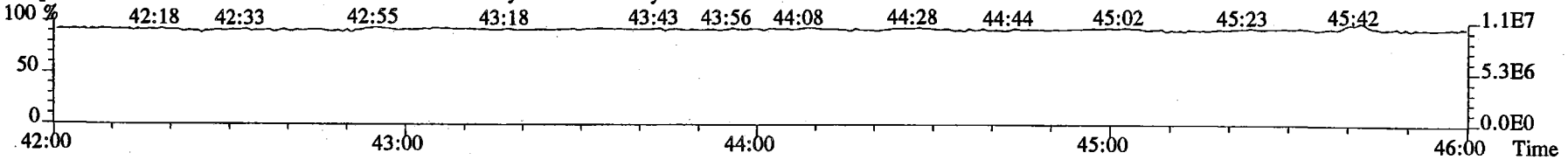
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



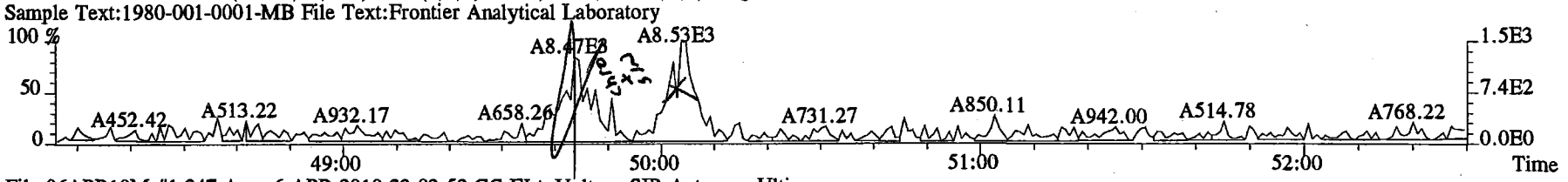
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



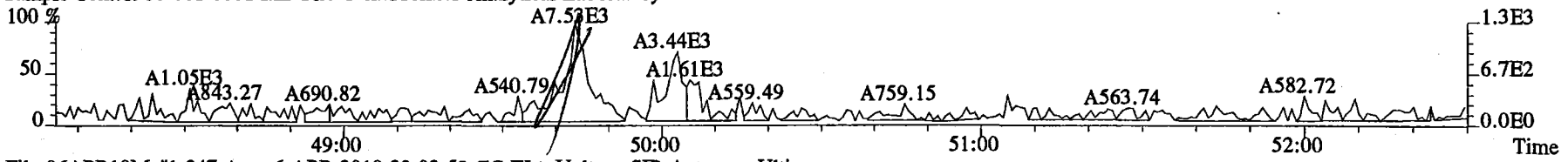
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:16 F:4 Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



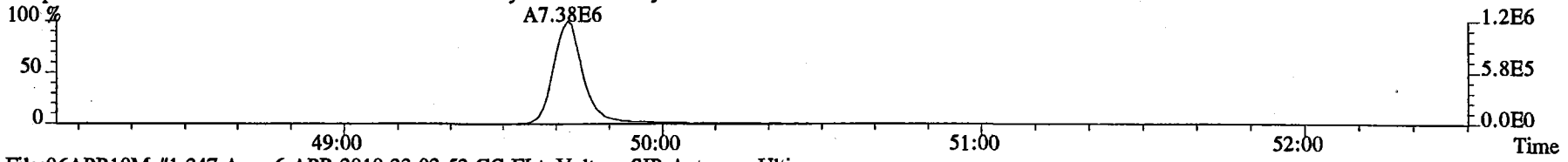
File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



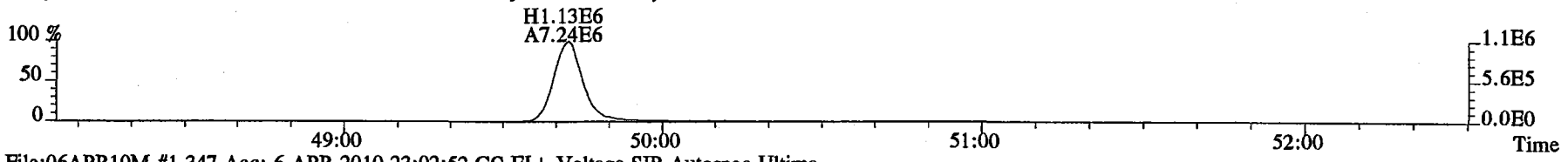
File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



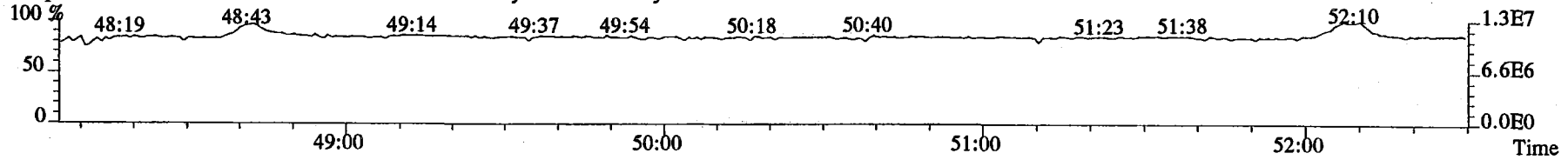
File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



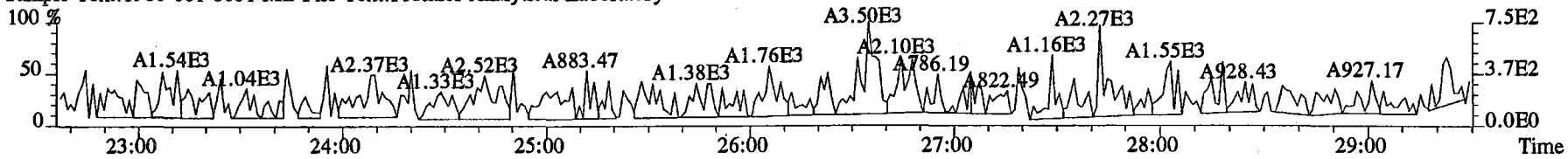
File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



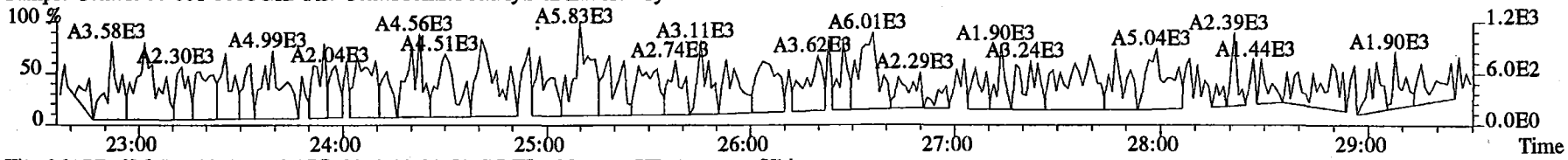
File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:16 F:5 Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



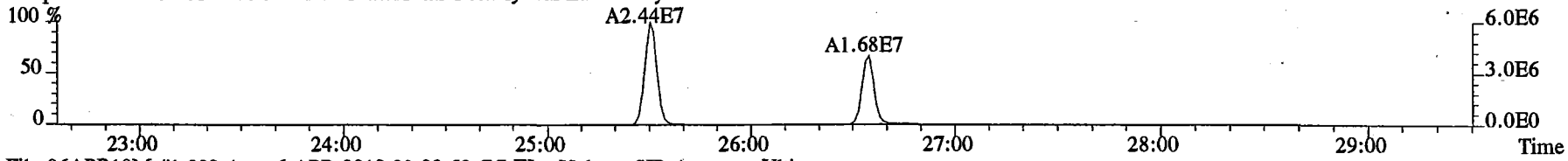
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



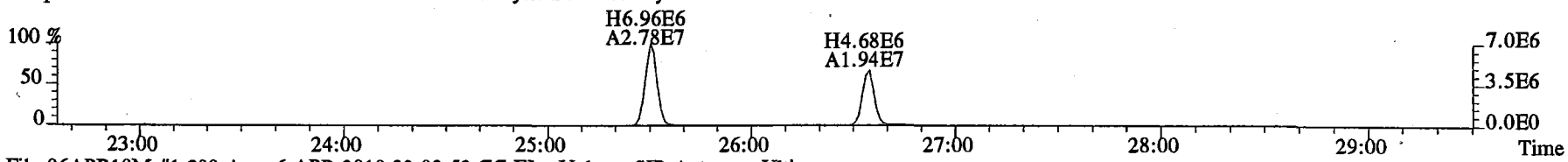
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



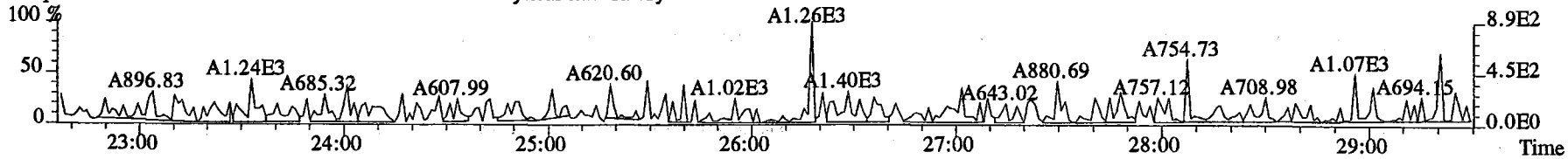
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



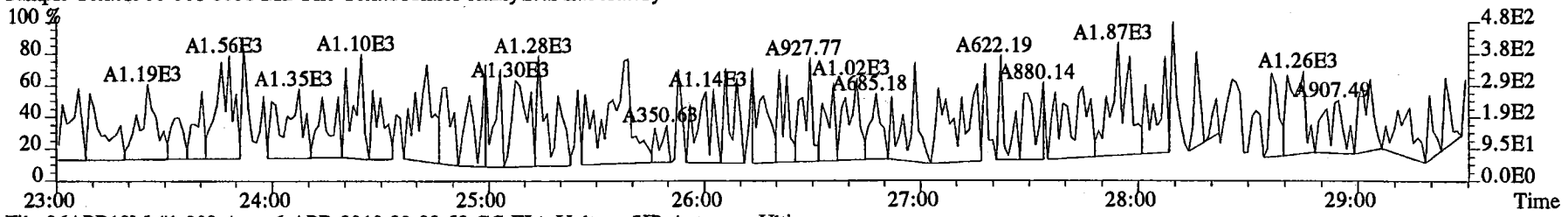
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



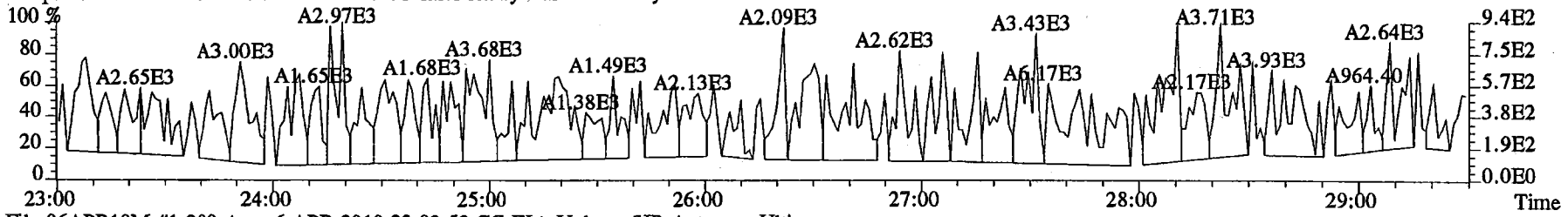
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



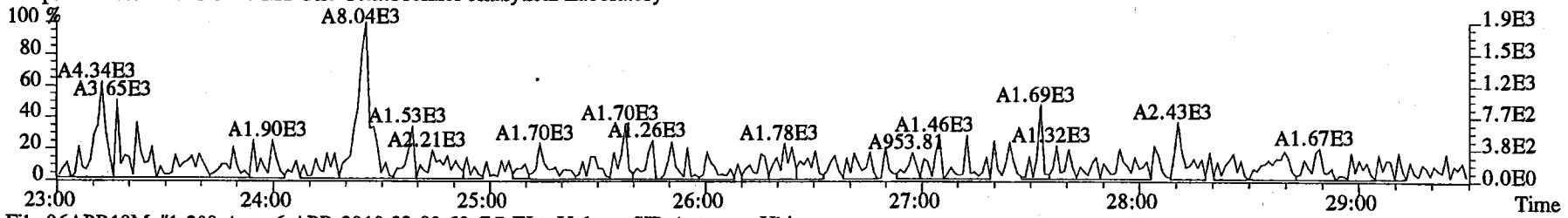
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



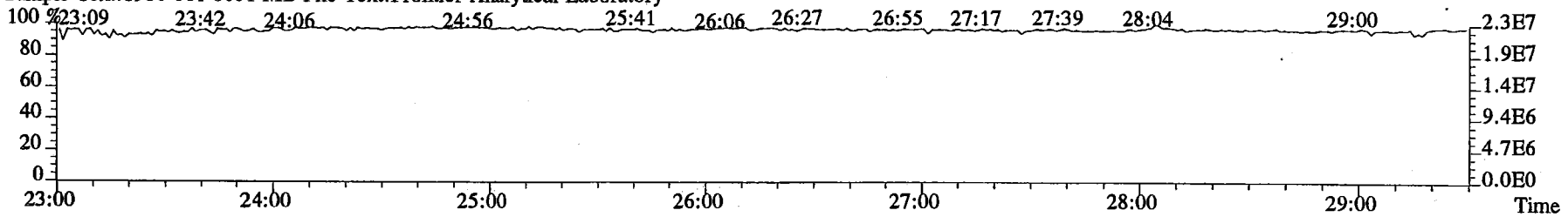
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



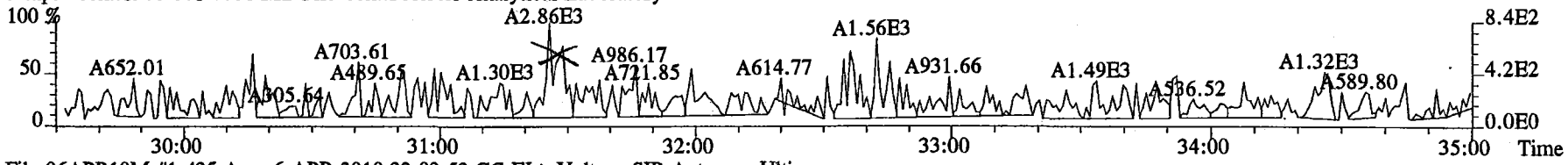
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



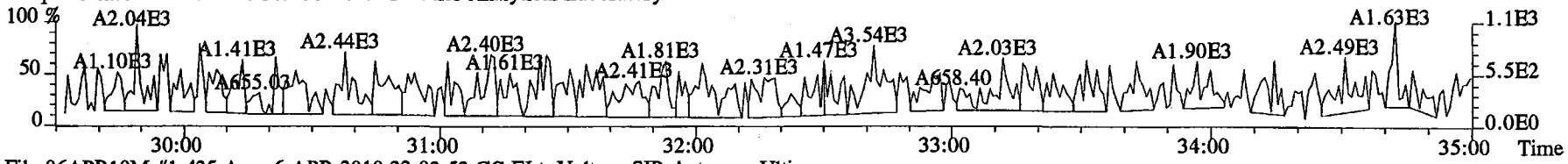
File:06APR10M #1-390 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:16 Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



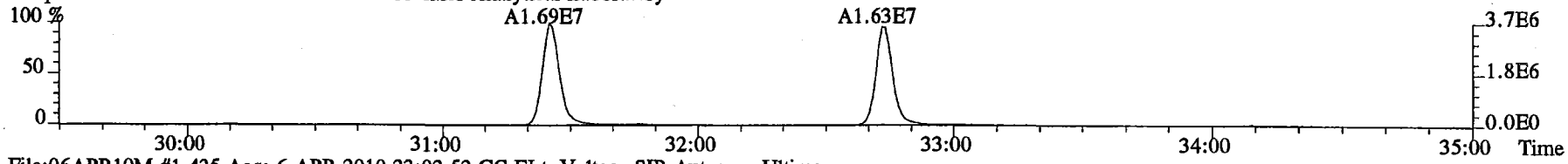
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



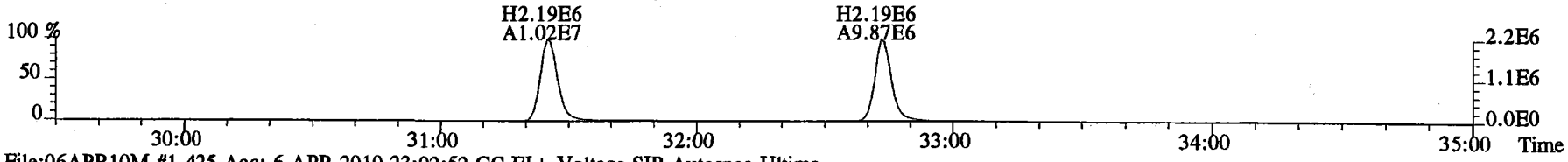
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



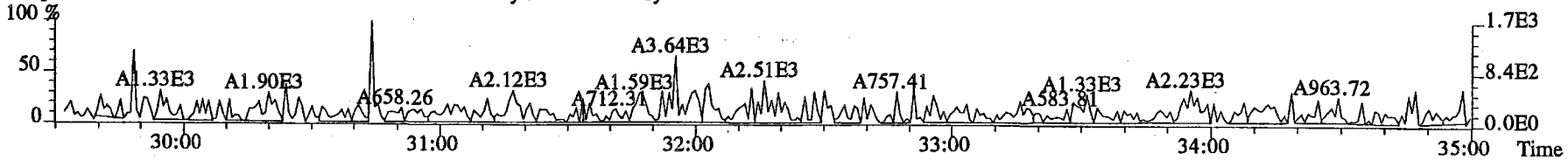
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



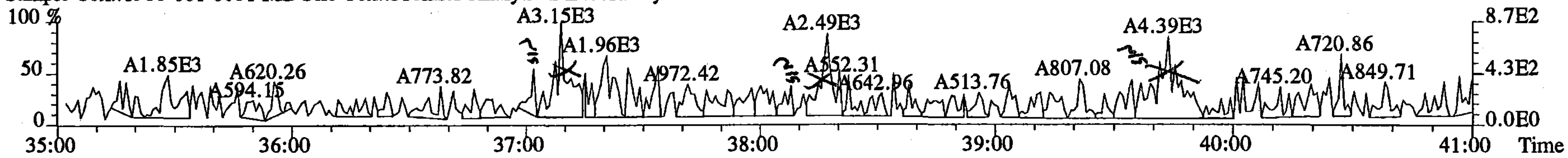
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



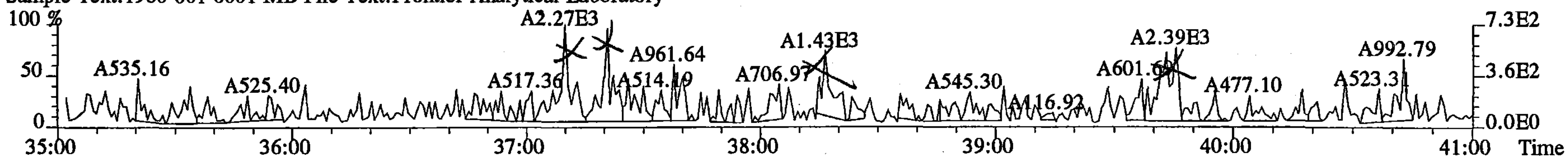
File:06APR10M #1-425 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



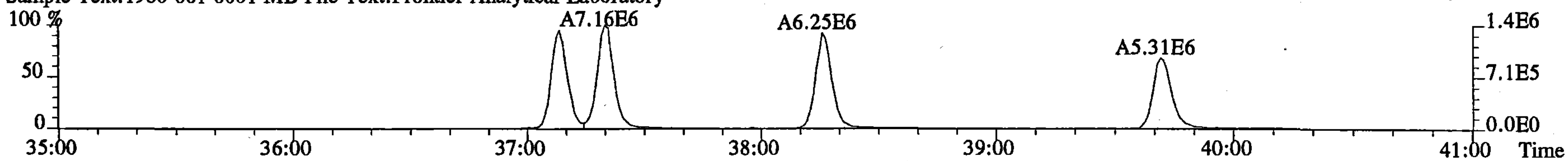
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



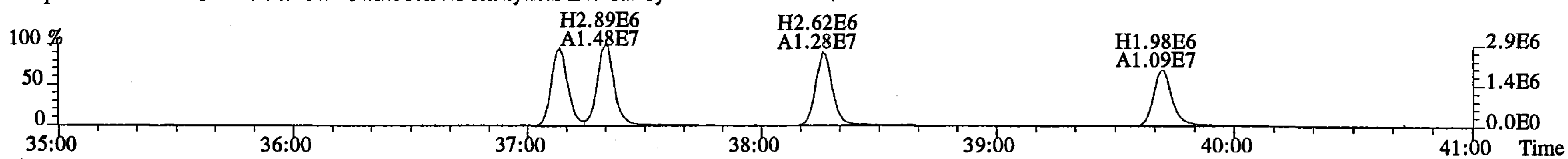
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



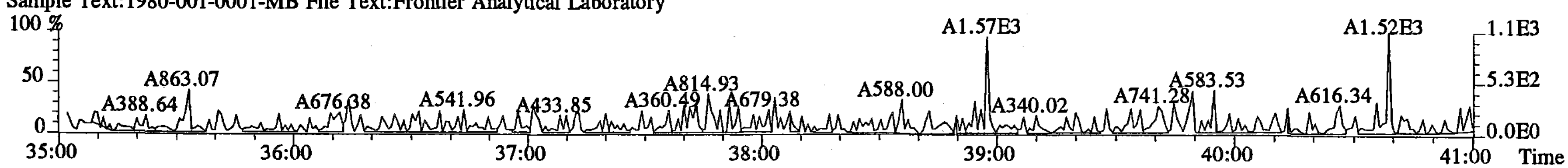
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



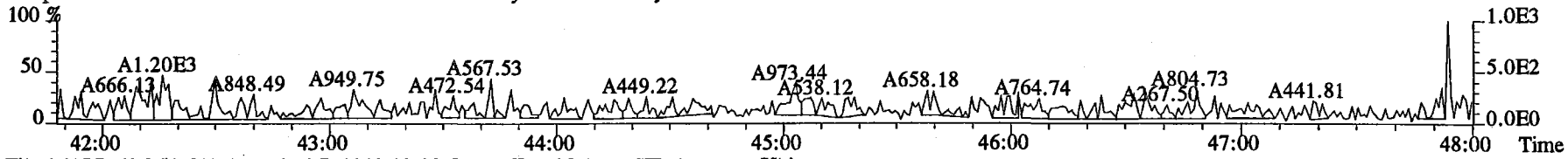
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



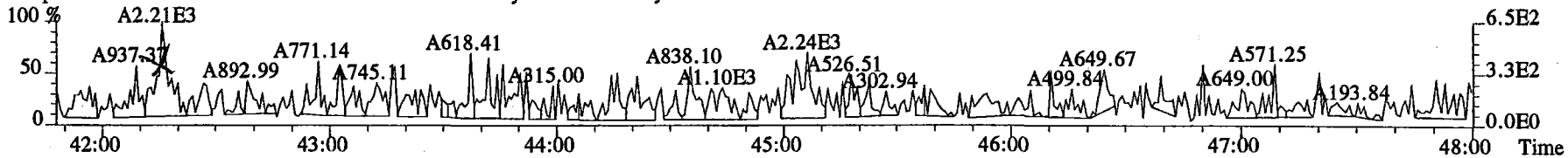
File:06APR10M #1-464 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



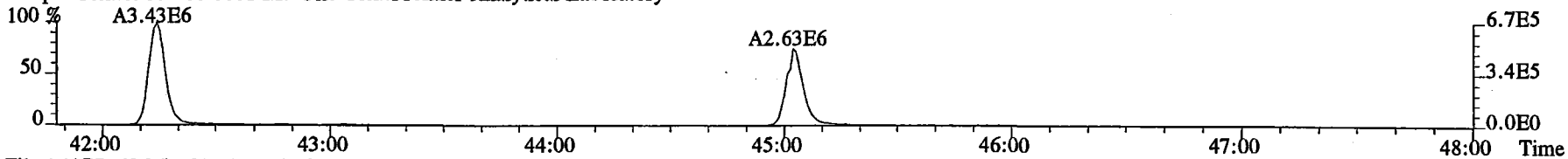
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



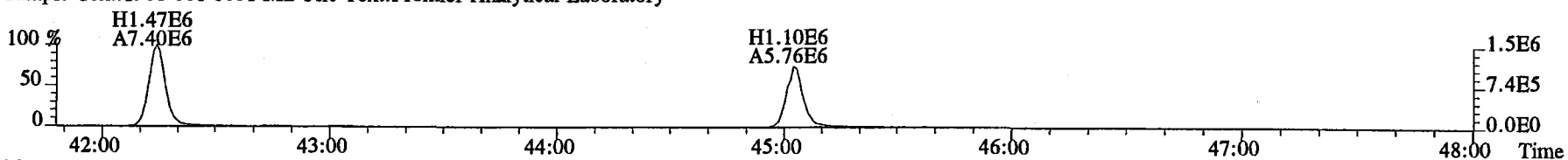
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



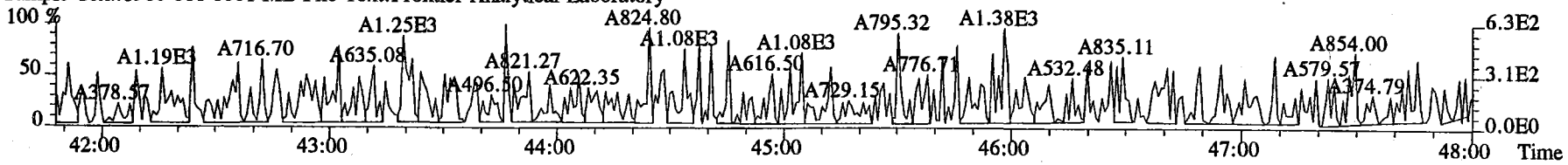
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



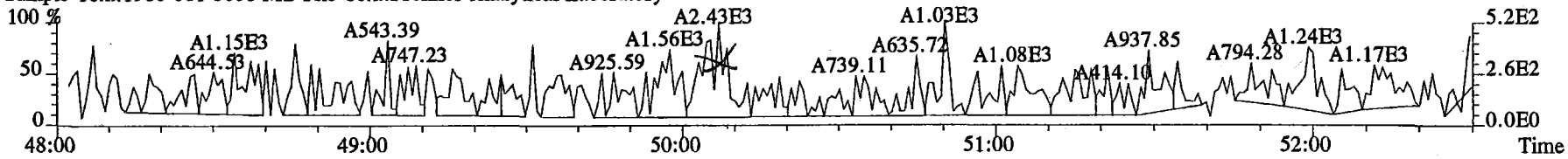
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



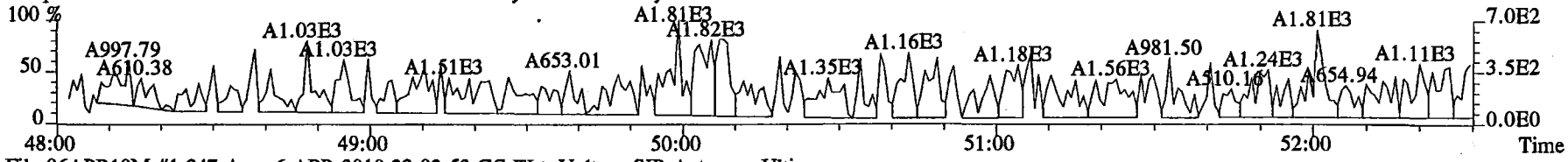
File:06APR10M #1-541 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



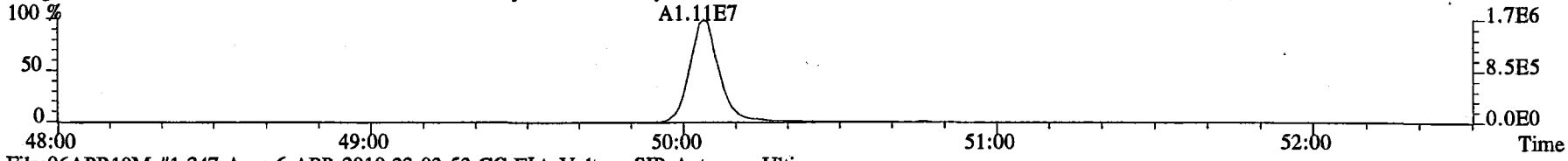
File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



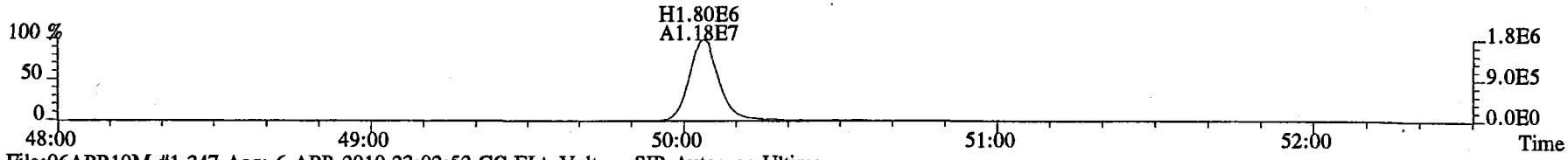
File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



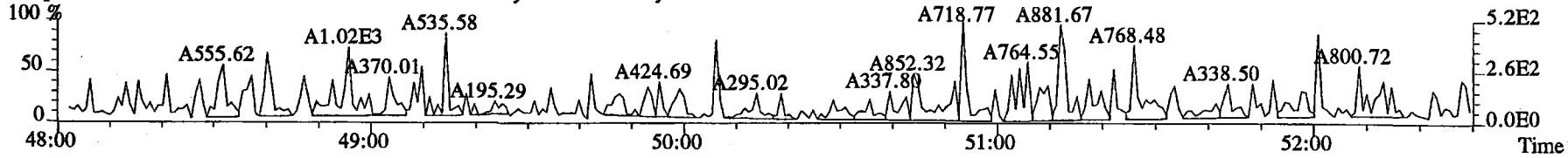
File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



File:06APR10M #1-347 Acq: 6-APR-2010 23:02:52 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-MB File Text:Frontier Analytical Laboratory



1980-001-0001-OPR

USEPA - ITD

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

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Aqueous OPR Data Filename: 06APR10M Sam:15

Ext. Date: 4/5/10 Shift: Day Analysis Date: 6-APR-10 22:07:31

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	8.85	6.70 - 15.8
1,2,3,7,8-PeCDD	50	47.6	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	44.8	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	46.1	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	44.8	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	45.3	35.0 - 70.0
OCDD	100	92.7	78.0 - 144
2,3,7,8-TCDF	10	8.74	7.50 - 15.8
1,2,3,7,8-PeCDF	50	47.4	40.0 - 67.0
2,3,4,7,8-PeCDF	50	46.9	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	47.5	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	48.1	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	47.5	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	46.9	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	48.1	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	48.0	39.0 - 69.0
OCDF	100	93.3	63.0 - 170

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

Analyst: [signature] Date: 4/7/10

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: 06APR10M Sam:15

Ext. Date: 4/5/10 Shift: Day Analysis Date: 6-APR-10 22:07:31

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	81.7	20.0 - 175
13C-1,2,3,7,8-PeCDD	100	60.8	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	100	77.1	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	100	74.5	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	100	66.7	26.0 - 166
13C-OCDD	200	122	26.0 - 397
13C-2,3,7,8-TCDF	100	83.6	22.0 - 152
13C-1,2,3,7,8-PeCDF	100	58.9	21.0 - 192
13C-2,3,4,7,8-PeCDF	100	58.7	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	100	74.8	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	71.4	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	100	70.1	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	66.0	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	100	61.3	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	100	57.9	20.0 - 186
13C-OCDF	200	108	26.0 - 397
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	40.1	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: 4/7/10

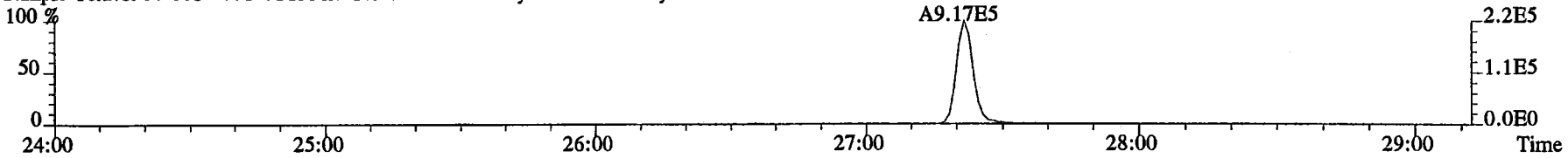
FAL ID: 1980-001-0001-OPR Filename: 06APR10M Sam:15 Acquired: 6-APR-10 22:07:31 ICal: PCDDFAL3-11-18-09
Client ID: OPR ConCal: ST040610M2 EndCal: ST040610M3
Results: 6062-2 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 93.5
WHO 1998 Tox: 117 WHO 2005 Tox: 107

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.08e+06	0.79 y	27:22	1.02	8.85		2.50	-	-	*
1,2,3,7,8-PeCDD	8.51e+06	1.56 y	33:11	0.96	47.6		2.50	-	-	*
1,2,3,4,7,8-HxCDD	6.83e+06	1.28 y	38:33	1.37	44.8		2.50	-	-	*
1,2,3,6,7,8-HxCDD	6.32e+06	1.30 y	38:43	1.34	46.1		2.50	-	-	*
1,2,3,7,8,9-HxCDD	6.52e+06	1.27 y	39:10	1.37	44.8		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	4.64e+06	0.95 y	44:09	1.17	45.3		2.50	-	-	*
OCDD	6.67e+06	0.94 y	49:44	1.21	92.7		2.50	-	-	*
2,3,7,8-TCDF	4.33e+06	0.67 y	26:36	1.29	8.74		2.50	-	-	*
1,2,3,7,8-PeCDF	1.15e+07	1.69 y	31:27	0.89	47.4		2.50	-	-	*
2,3,4,7,8-PeCDF	1.11e+07	1.66 y	32:45	0.91	46.9		2.50	-	-	*
1,2,3,4,7,8-HxCDF	8.90e+06	1.24 y	37:10	1.00	47.5		2.50	-	-	*
1,2,3,6,7,8-HxCDF	9.22e+06	1.23 y	37:21	0.92	48.1		2.50	-	-	*
2,3,4,6,7,8-HxCDF	8.33e+06	1.22 y	38:18	0.99	47.5		2.50	-	-	*
1,2,3,7,8,9-HxCDF	7.43e+06	1.25 y	39:44	1.09	46.9		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	6.44e+06	1.01 y	42:16	1.36	48.1		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	5.52e+06	1.00 y	45:04	1.61	48.0		2.50	-	-	*
OCDF	7.26e+06	0.92 y	50:06	0.84	93.3		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.31e+07	0.72 y	27:21	0.94	81.7					81.7
13C-1,2,3,7,8-PeCDD	1.86e+07	1.73 y	33:09	1.02	60.8					60.8
13C-1,2,3,4,7,8-HxCDD	1.11e+07	1.29 y	38:32	0.98	77.1					77.1
13C-1,2,3,6,7,8-HxCDD	1.02e+07	1.29 y	38:42	0.94	74.5					74.5
13C-1,2,3,4,6,7,8-HpCDD	8.77e+06	1.02 y	44:09	0.90	66.7					66.7
13C-OCDD	1.19e+07	1.00 y	49:43	0.67	122					60.8
13C-2,3,7,8-TCDF	3.86e+07	0.87 y	26:35	0.88	83.6					83.6
13C-1,2,3,7,8-PeCDF	2.72e+07	1.64 y	31:26	0.88	58.9					58.9
13C-2,3,4,7,8-PeCDF	2.62e+07	1.66 y	32:44	0.85	58.7					58.7
13C-1,2,3,4,7,8-HxCDF	1.88e+07	0.48 y	37:08	1.72	74.8					74.8
13C-1,2,3,6,7,8-HxCDF	2.09e+07	0.48 y	37:20	2.00	71.4					71.4
13C-2,3,4,6,7,8-HxCDF	1.78e+07	0.49 y	38:16	1.74	70.1					70.1
13C-1,2,3,7,8,9-HxCDF	1.45e+07	0.48 y	39:42	1.51	66.0					66.0
13C-1,2,3,4,6,7,8-HpCDF	9.85e+06	0.47 y	42:15	1.10	61.3					61.3
13C-1,2,3,4,7,8,9-HpCDF	7.16e+06	0.45 y	45:03	0.85	57.9					57.9
13C-OCDF	1.85e+07	0.93 y	50:04	1.17	108					53.8
37Cl-2,3,7,8-TCDD	1.17e+07		27:22	0.97	40.1					100
13C-1,2,3,4-TCDD	3.01e+07	0.73 y	26:46	-	115					
13C-1,2,3,4-TCDF	5.26e+07	0.88 y	25:31	-	114					
13C-1,2,3,7,8,9-HxCDD	1.46e+07	1.28 y	39:09	-	71.3					

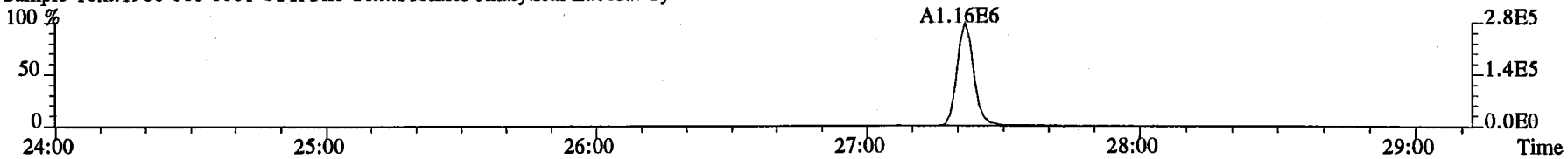
						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	2.12e+06		26:34	1.02	9.03	2.50	-	-	*		12
Total Penta-Dioxins	8.54e+06		31:40	0.96	47.7	2.50	-	-	*		3
Total Hexa-Dioxins	1.98e+07		37:27	1.36	136	2.50	-	-	*		16
Total Hepta-Dioxins	4.78e+06		42:47	1.17	46.7	2.50	-	-	*		7
Total Tetra-Furans	4.47e+06		24:10	1.29	9.01	2.50	-	-	*		15
1st Fn. Tot Penta-Furans	5.66e+04		22:49	0.90	0.236	2.50	-	-	*	PeCDF	28
Total Penta-Furans	2.31e+07		30:13	0.90	96.5	2.50	-	-	*	96.8	17
Total Hexa-Furans	3.42e+07		35:13	0.99	192	2.50	-	-	*		25
Total Hepta-Furans	1.21e+07		42:16	1.47	97.5	2.50	-	-	*		13

Analyst: _____ Date: 4/7/10

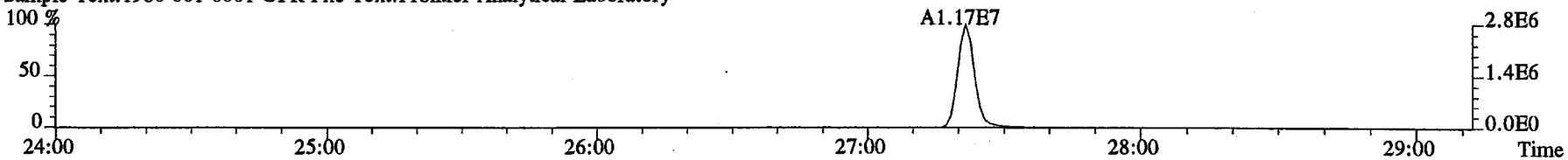
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



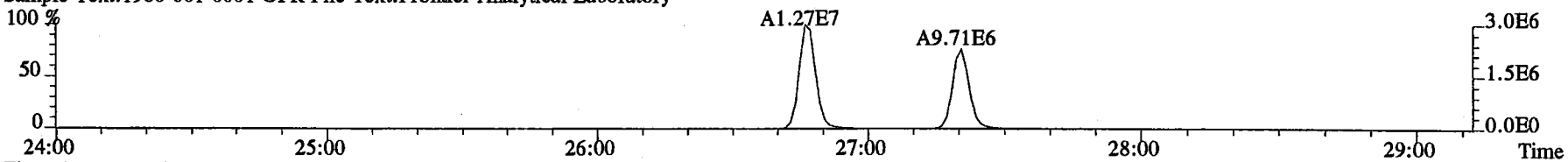
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



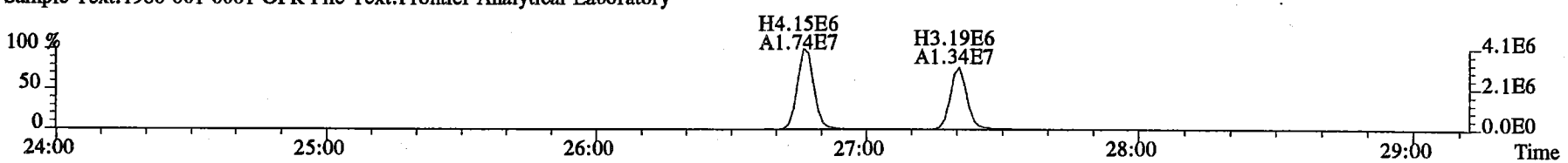
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



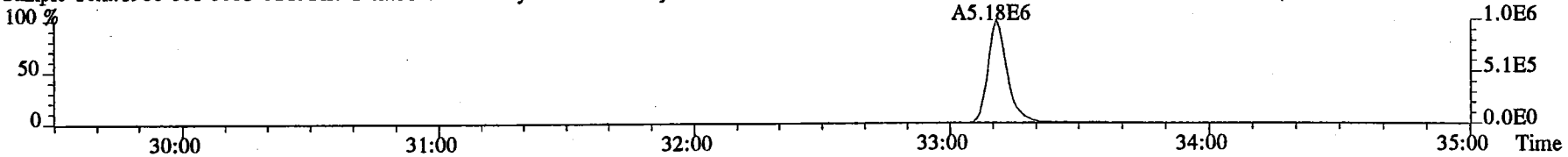
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



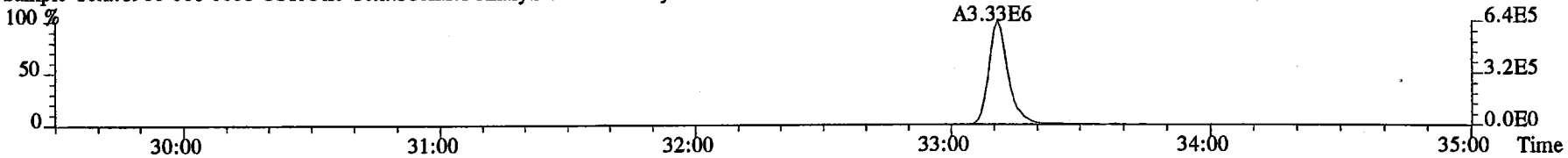
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



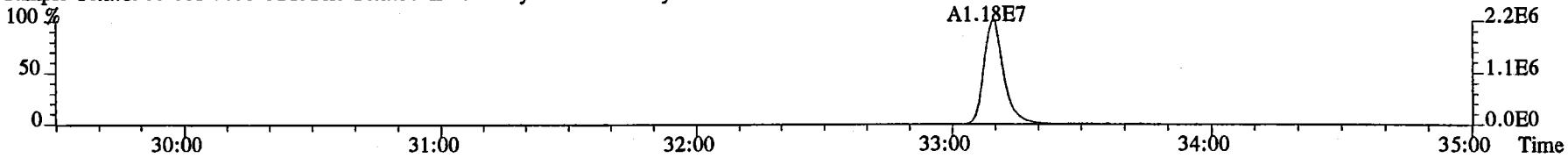
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



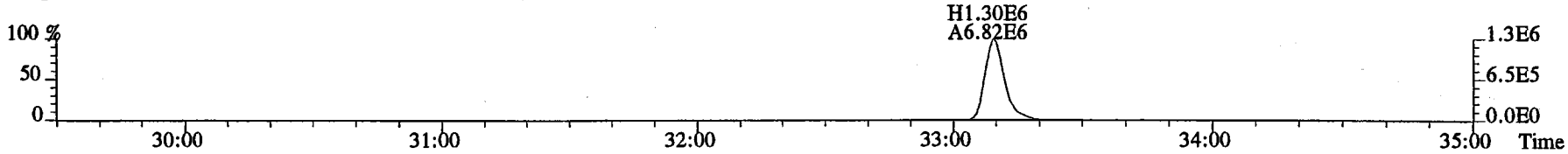
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



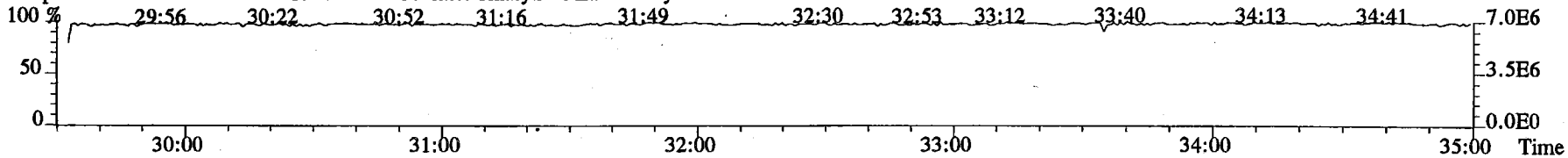
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



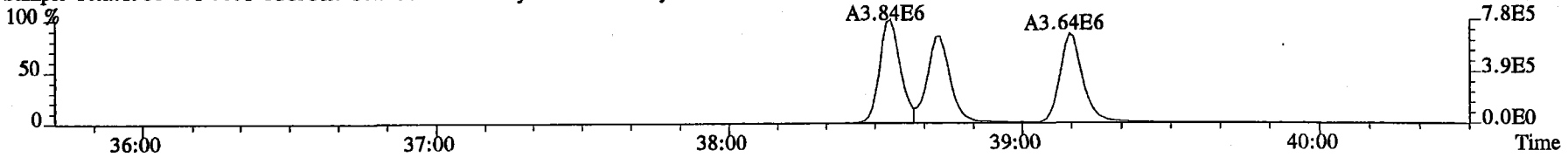
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



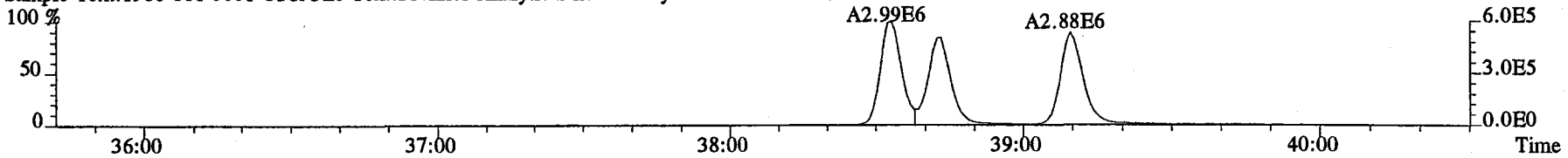
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:15 F:2 Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



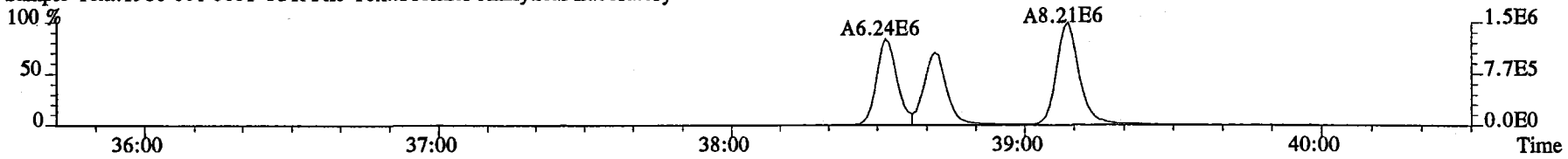
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



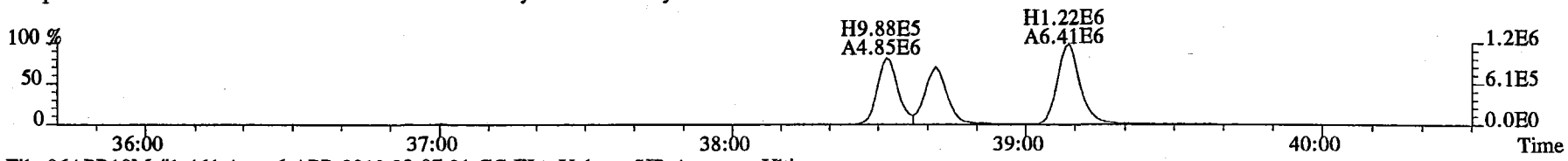
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



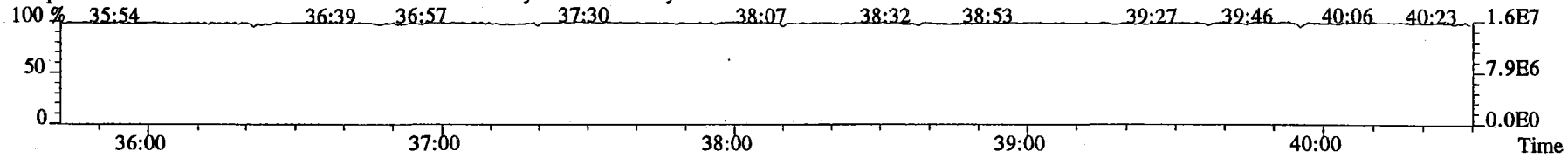
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



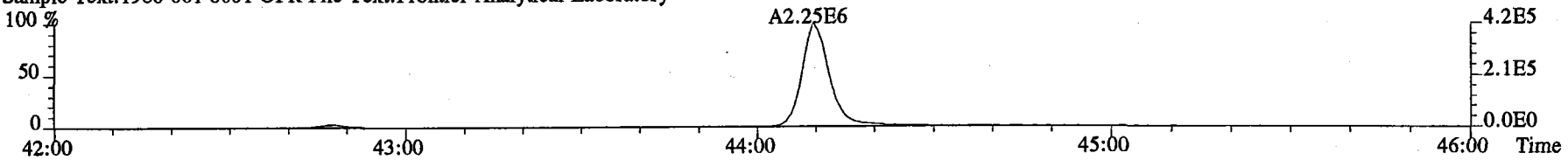
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



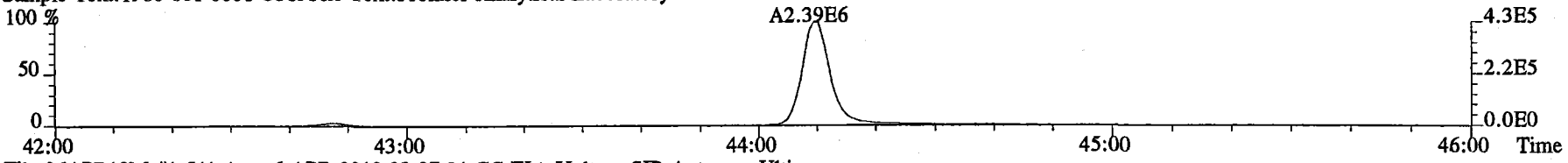
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:15 F:3 Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



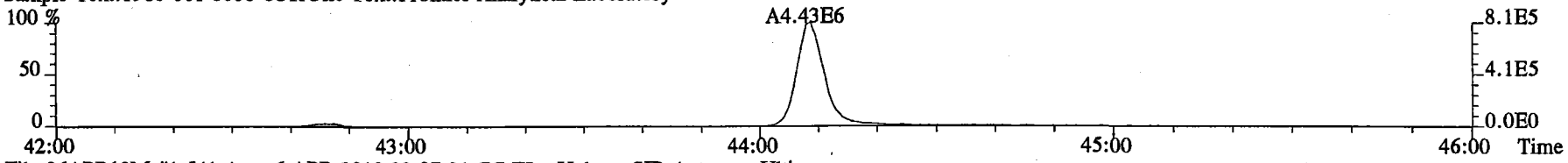
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



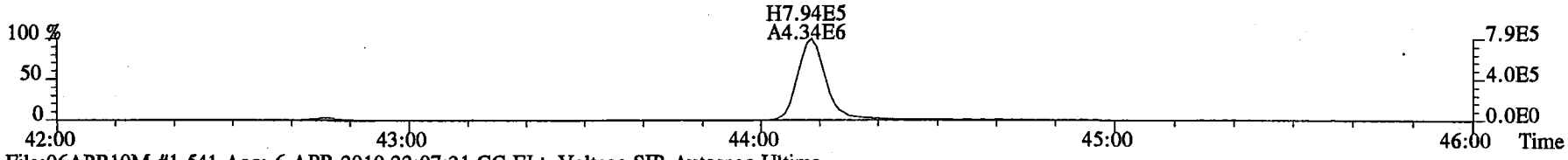
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



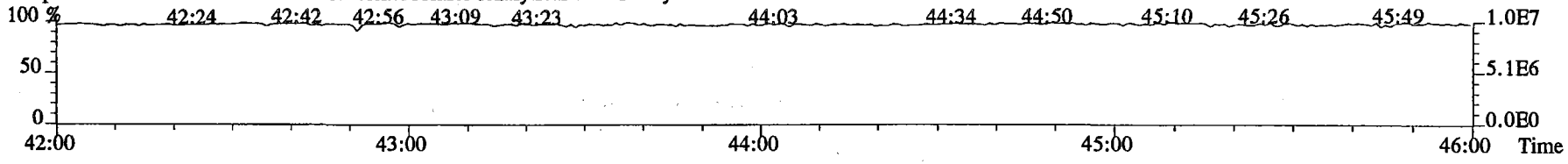
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



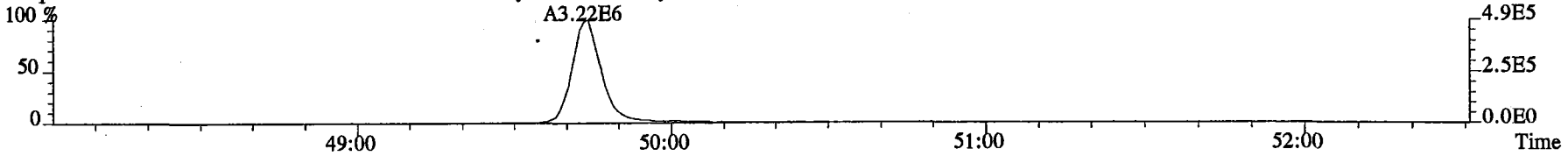
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



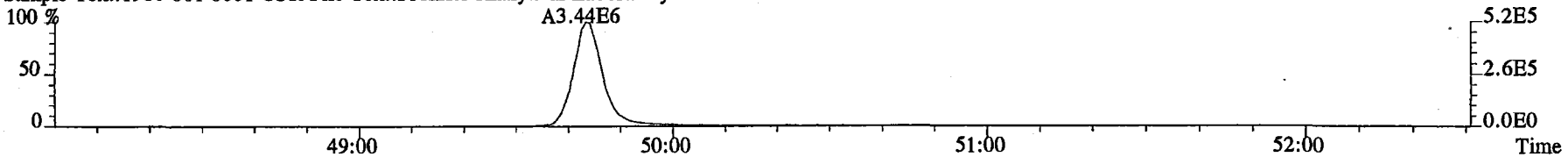
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:15 F:4 Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



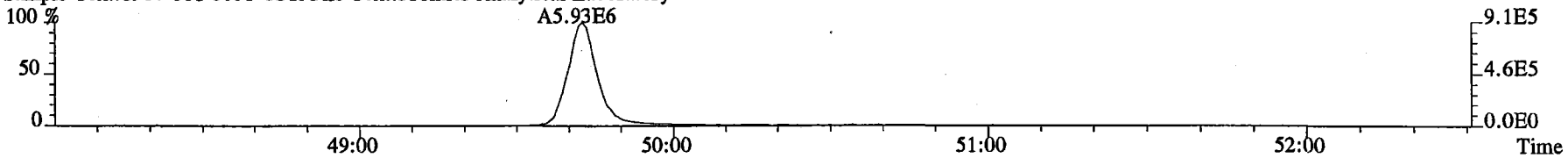
File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



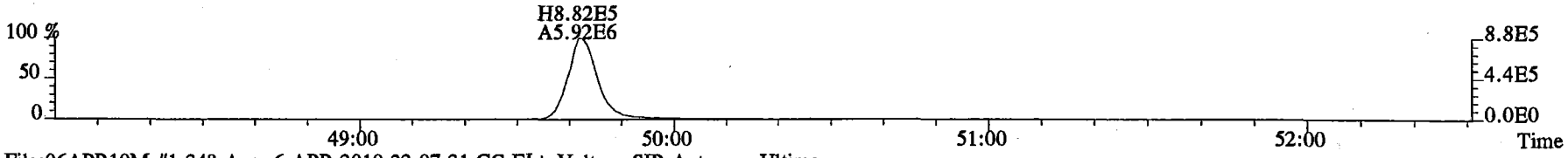
File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



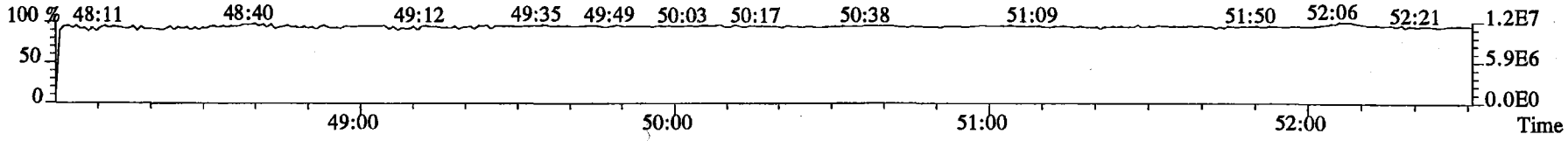
File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



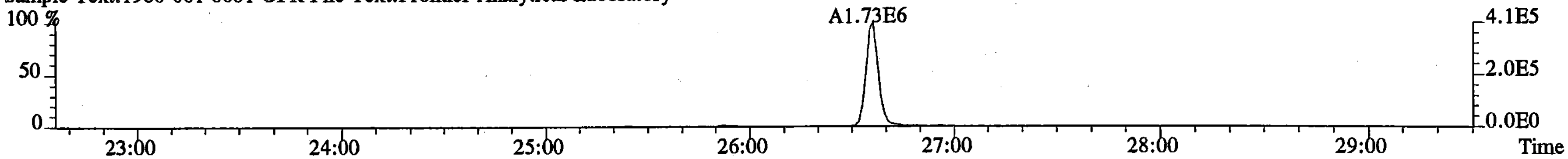
File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



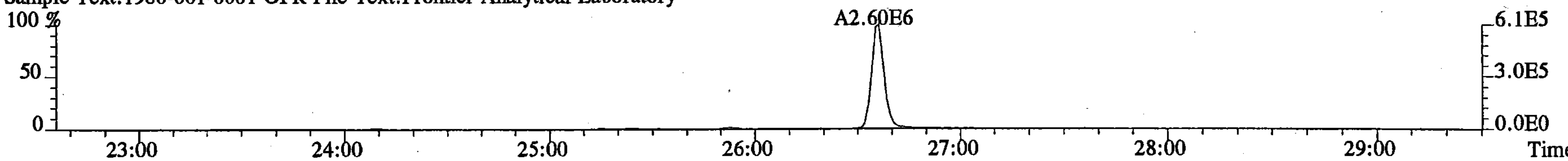
File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:15 F:5 Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



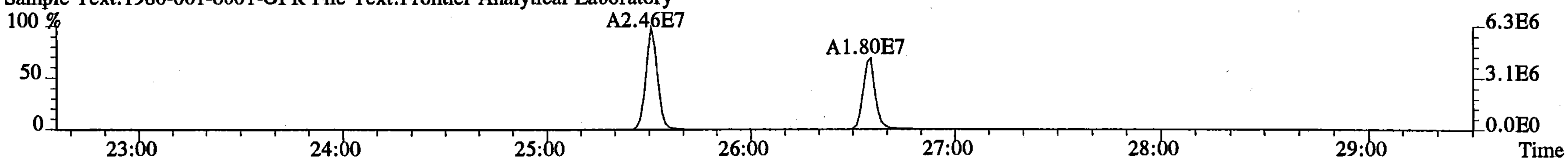
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



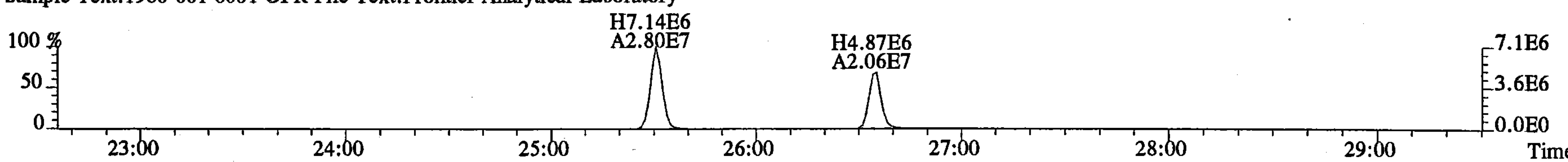
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



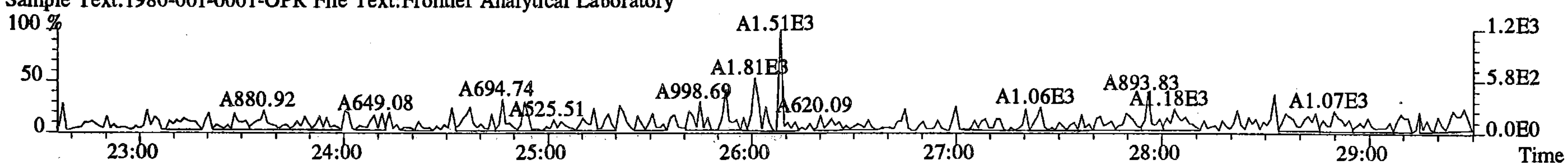
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory

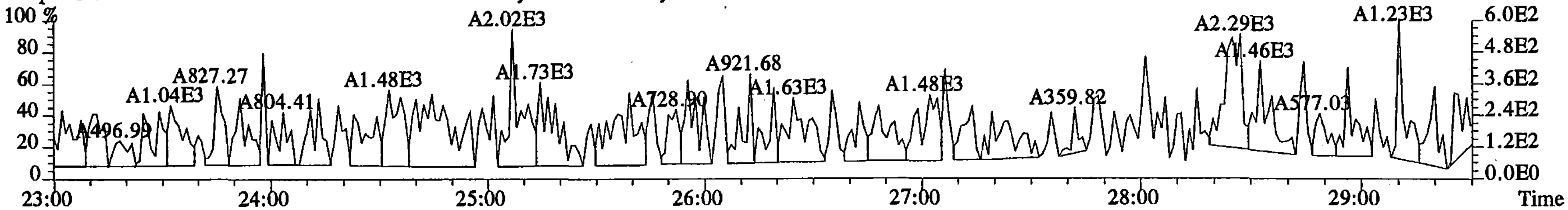


File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory

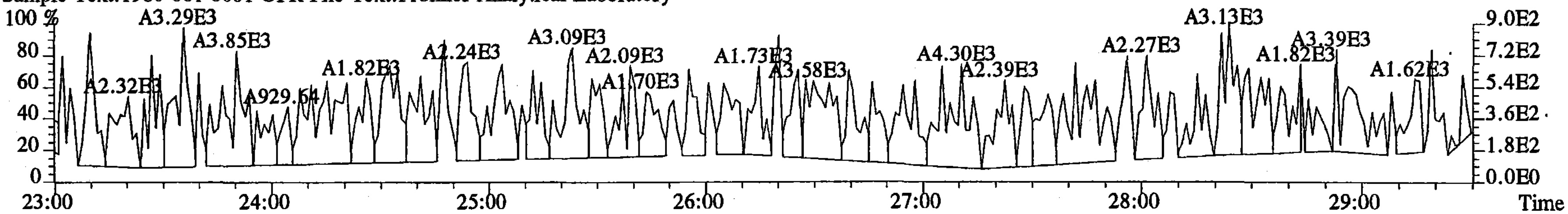


QQ20 : 00800

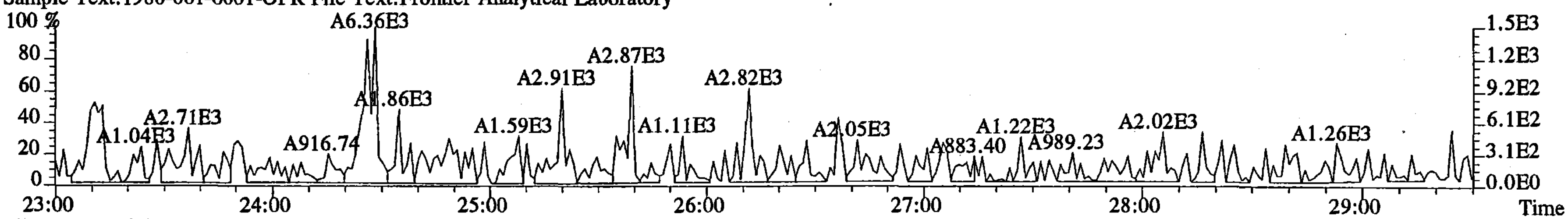
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



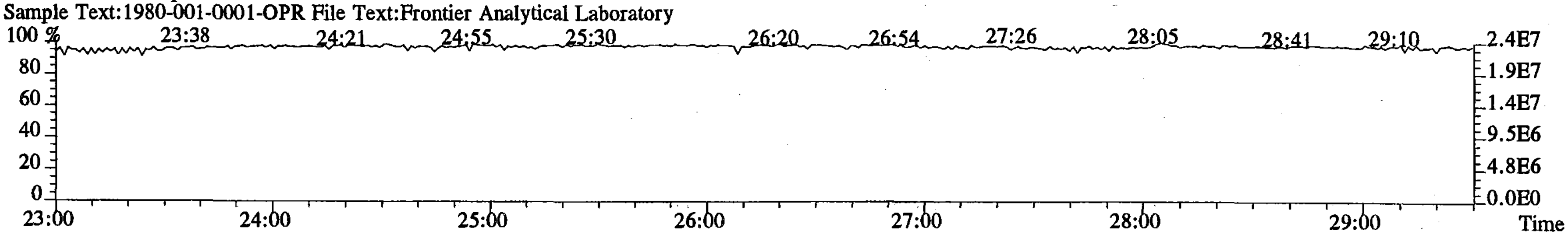
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



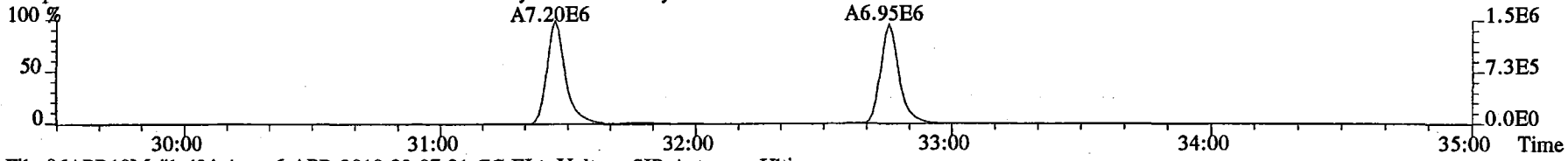
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



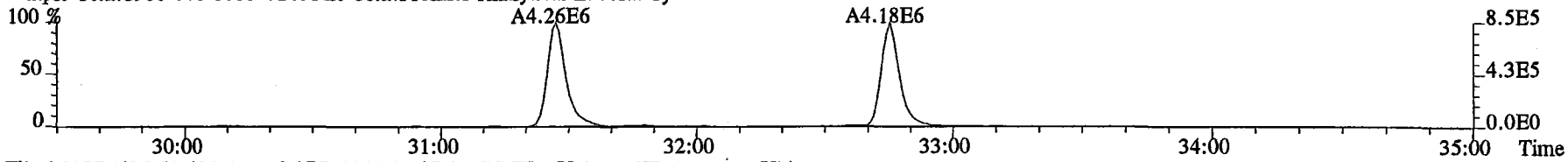
File:06APR10M #1-390 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:15 Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



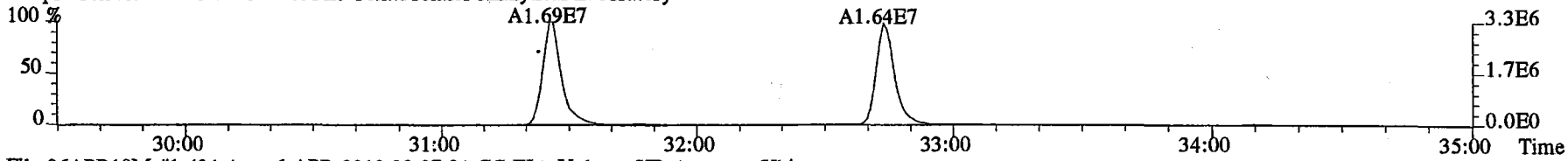
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



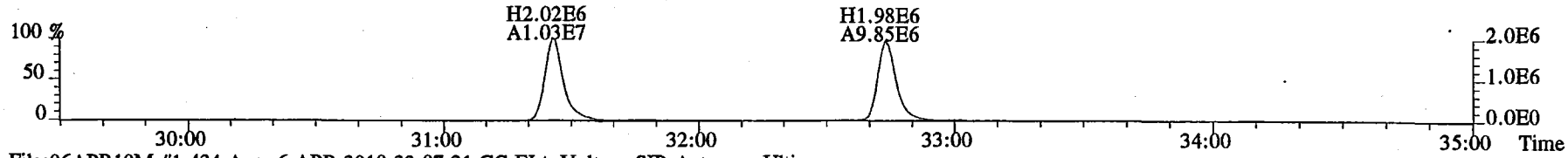
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



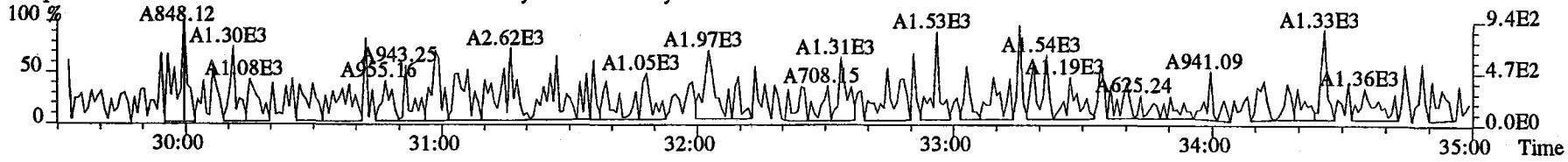
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



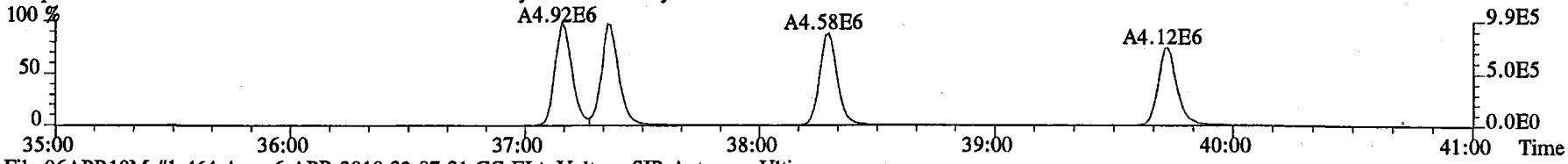
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



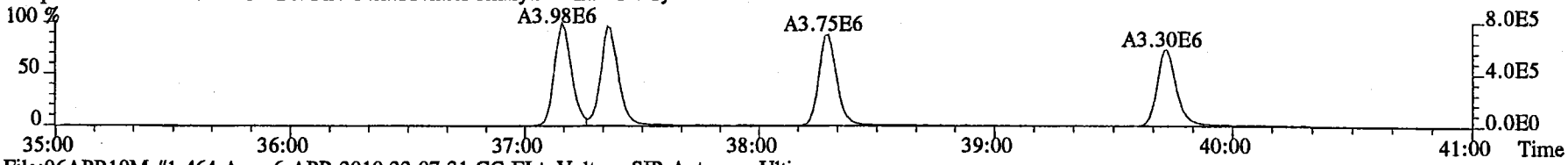
File:06APR10M #1-424 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



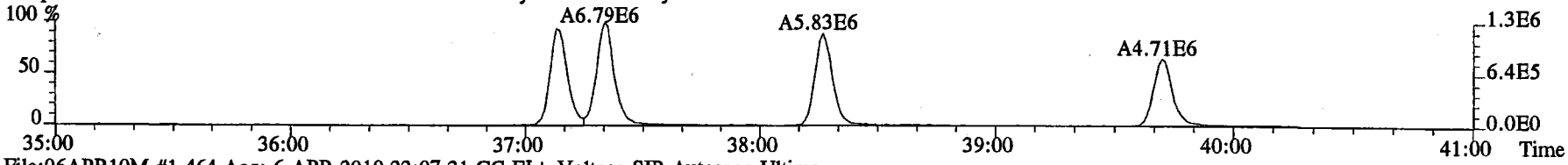
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



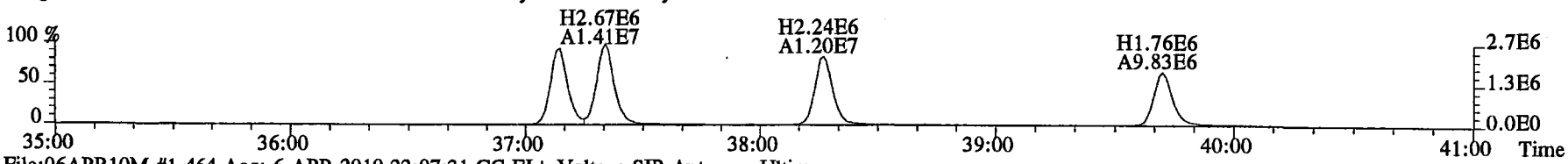
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



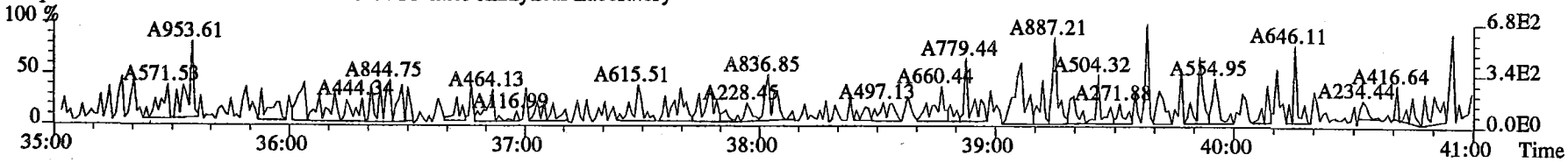
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



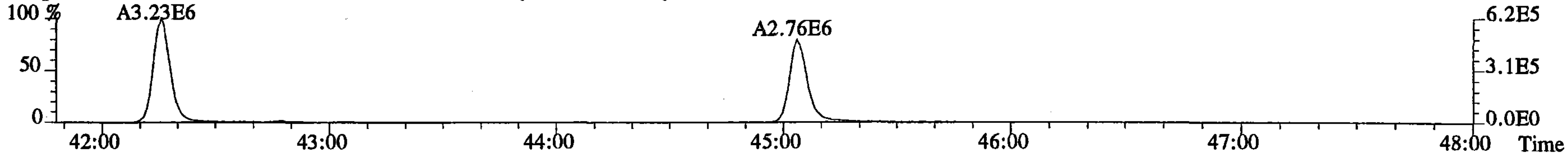
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



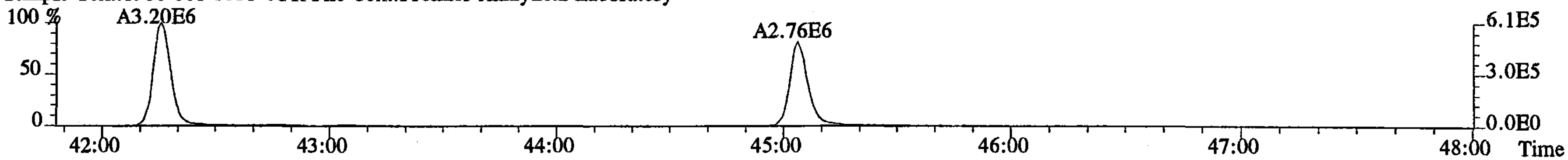
File:06APR10M #1-464 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



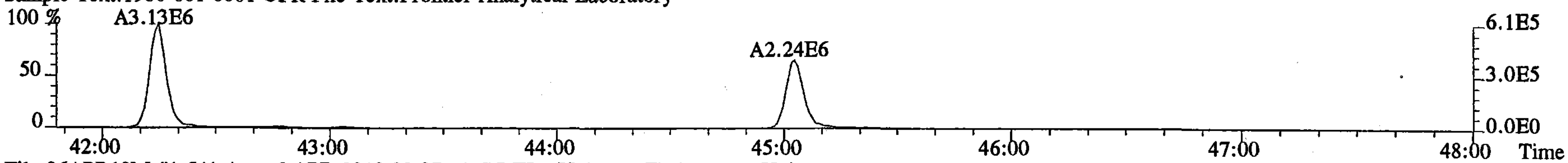
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



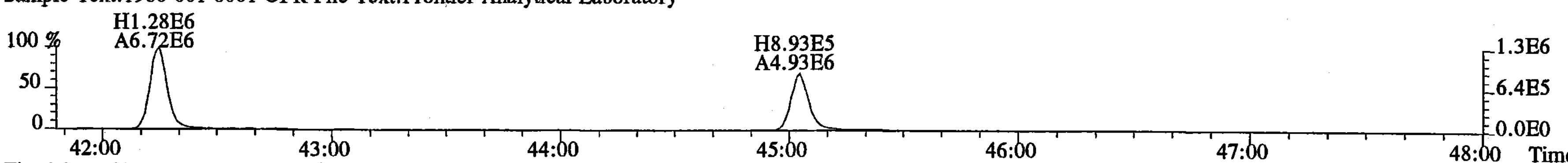
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



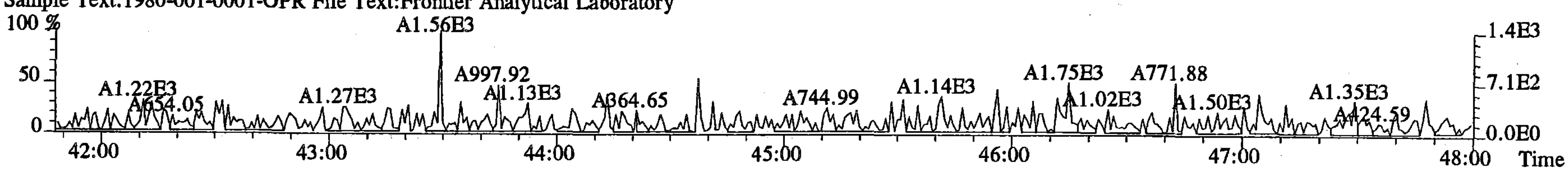
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



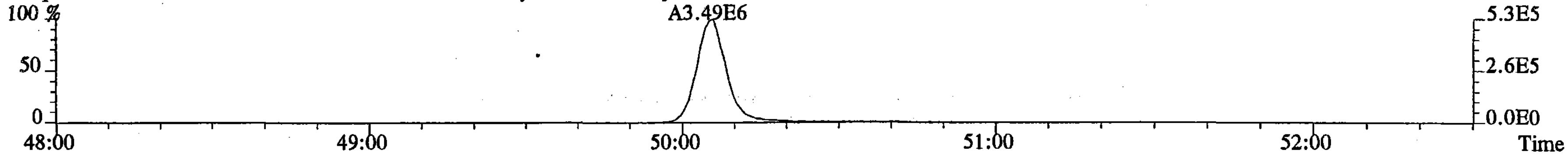
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



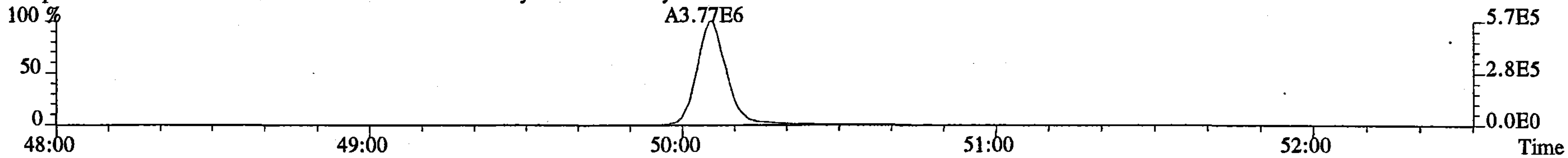
File:06APR10M #1-541 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



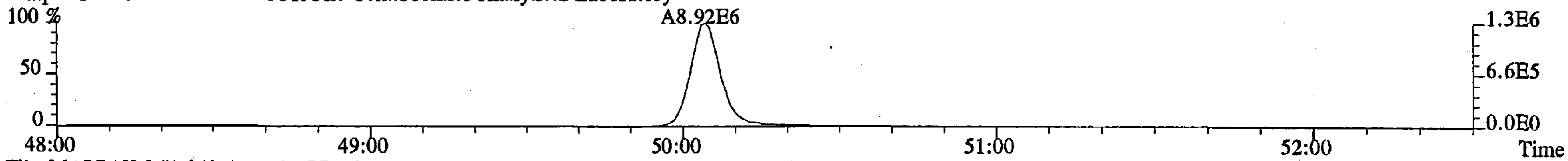
File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



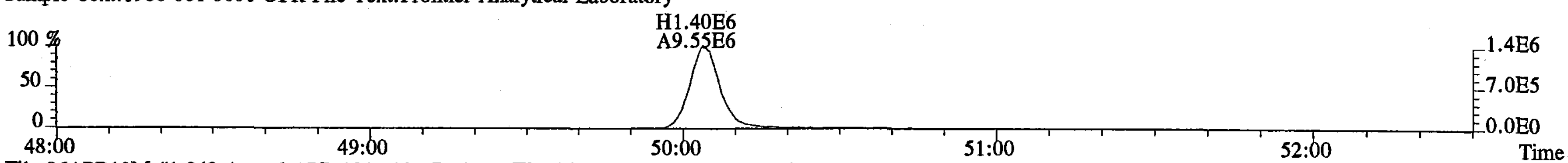
File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



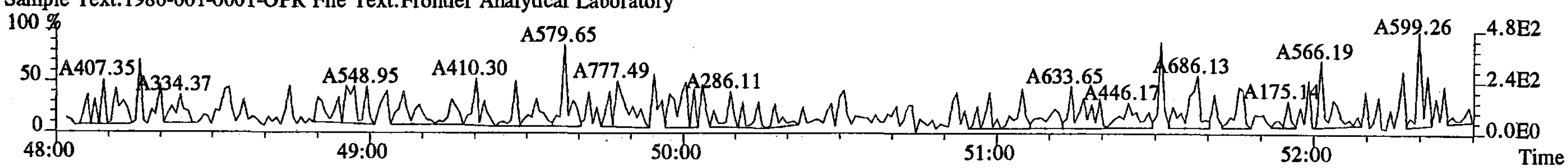
File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



File:06APR10M #1-348 Acq: 6-APR-2010 22:07:31 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1980-001-0001-OPR File Text:Frontier Analytical Laboratory



FAL ID: 6069-001-0001-SA Filename: 06APR10M Sam:17 Acquired: 6-APR-10 23:58:10 ICal: PCDDFAL3-11-18-09
Client ID: CB31A032510COMP ConCal: ST040610M2 EndCal: ST040610M3
Results: 6062-2 GC Column: DB5 Amount: 1.043 NATO 1989 Tox: 26.4
WHO 1998 Tox: 20.7 WHO 2005 Tox: 22.3

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	333	494	0.507
1,2,3,7,8-PeCDD	5.05e+04	1.67	y	33:10	0.96	3.33	J	2.50	-	-	*
1,2,3,4,7,8-HxCDD	9.60e+04	1.33	y	38:34	1.37	6.14	J	2.50	-	-	*
1,2,3,6,7,8-HxCDD	2.43e+05	1.25	y	38:44	1.34	17.7	J	2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.73e+05	1.33	y	39:10	1.37	11.7	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	7.35e+06	0.94	y	44:11	1.17	619		2.50	-	-	*
OCDD	6.72e+07	0.95	y	49:45	1.21	7770		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	472	880	0.422
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	1530	928	1.35
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	1530	928	1.45
1,2,3,4,7,8-HxCDF	4.43e+05	1.20	y	37:10	1.00	25.0		2.50	-	-	*
1,2,3,6,7,8-HxCDF	2.66e+05	1.30	y	37:20	0.92	15.0	J	2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.41e+05	1.34	y	38:18	0.99	8.30	J	2.50	-	-	*
1,2,3,7,8,9-HxCDF	4.06e+04	1.06	y	39:48	1.09	2.42	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	2.20e+06	1.00	y	42:16	1.36	154		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.98e+05	0.98	y	45:05	1.61	14.7	J	2.50	-	-	*
OCDF	3.82e+06	0.92	y	50:07	0.84	430		2.50	-	-	*
											Rec
13C-2,3,7,8-TCDD	3.24e+07	0.73	y	27:20	0.94	1860					96.9
13C-1,2,3,7,8-PeCDD	3.02e+07	1.74	y	33:09	1.02	1600					83.6
13C-1,2,3,4,7,8-HxCDD	2.18e+07	1.28	y	38:32	0.98	1740					90.7
13C-1,2,3,6,7,8-HxCDD	1.96e+07	1.29	y	38:42	0.94	1640					85.5
13C-1,2,3,4,6,7,8-HpCDD	1.95e+07	1.01	y	44:09	0.90	1700					88.7
13C-OCDD	2.73e+07	1.01	y	49:44	0.67	3210					83.8
13C-2,3,7,8-TCDF	5.02e+07	0.87	y	26:34	0.88	1810					94.4
13C-1,2,3,7,8-PeCDF	4.35e+07	1.66	y	31:25	0.88	1570					81.8
13C-2,3,4,7,8-PeCDF	4.05e+07	1.65	y	32:44	0.85	1510					78.8
13C-1,2,3,4,7,8-HxCDF	3.41e+07	0.49	y	37:09	1.72	1550					81.1
13C-1,2,3,6,7,8-HxCDF	3.72e+07	0.49	y	37:21	2.00	1450					75.9
13C-2,3,4,6,7,8-HxCDF	3.30e+07	0.49	y	38:17	1.74	1490					77.7
13C-1,2,3,7,8,9-HxCDF	2.95e+07	0.49	y	39:43	1.51	1540					80.2
13C-1,2,3,4,6,7,8-HpCDF	2.02e+07	0.46	y	42:15	1.10	1440					75.0
13C-1,2,3,4,7,8,9-HpCDF	1.61e+07	0.46	y	45:04	0.85	1490					77.6
13C-OCDF	4.05e+07	0.94	y	50:06	1.17	2710					70.5
37Cl-2,3,7,8-TCDD	1.50e+07			27:21	0.97	833					109
13C-1,2,3,4-TCDD	3.55e+07	0.72	y	26:46	-	130					
13C-1,2,3,4-TCDF	6.06e+07	0.87	y	25:31	-	126					
13C-1,2,3,7,8,9-HxCDD	2.45e+07	1.28	y	39:10	-	114					

								Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*			NotFnd	1.02	*		2.50	333	494	0.507		0
Total Penta-Dioxins	1.87e+05			30:13	0.96	12.4	J	2.50	-	-	*		6
Total Hexa-Dioxins	1.33e+06			36:07	1.36	91.1		2.50	-	-	*		6
Total Hepta-Dioxins	1.22e+07			42:48	1.17	1030		2.50	-	-	*		2
Total Tetra-Furans	8.83e+05			23:46	1.29	26.2	D,M	2.50	-	-	*		4
1st Fn. Tot Penta-Furans	2.63e+05			28:26	0.90	13.4	D,M	2.50	-	-	*	PeCDF	1
Total Penta-Furans	1.52e+06			30:12	0.90	77.2	D,M	2.50	-	-	*	90.6	4
Total Hexa-Furans	6.67e+06			35:13	0.99	386	D,M	2.50	-	-	*		10
Total Hepta-Furans	6.90e+06			42:16	1.47	494		2.50	-	-	*		4

Analyst: _____ Date: 4/7/10

Totals class: Total Penta-Dioxins Entry #: 39

Run: 22 File: 06APR10M S: 17 I: 1 F: 2
Acquired: 6-APR-10 23:58:10

Total Concentration: 12.4 Unnamed Concentration: 9.041

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
30:13	2.54e+04	1.64e+04	1.55	y	4.18e+04	2.76	
31:25	1.15e+04	8.09e+03	1.42	y	1.96e+04	1.29	
31:39	2.20e+04	1.35e+04	1.62	y	3.55e+04	2.35	
31:47	1.10e+04	7.23e+03	1.53	y	1.83e+04	1.21	
32:07	1.24e+04	9.28e+03	1.34	y	2.17e+04	1.43	
33:10	3.16e+04	1.89e+04	1.67	y	5.05e+04	3.33	1,2,3,7,8-PeCDD

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 22 File: 06APR10M S: 17 I: 1 F: 3
Acquired: 6-APR-10 23:58:10

Total Concentration: 91.1 Unnamed Concentration: 55.475

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
36:07	1.25e+05	1.03e+05	1.22	y	2.28e+05	15.5	
37:02	3.93e+04	3.41e+04	1.15	y	7.34e+04	4.99	
37:27	2.89e+05	2.25e+05	1.28	y	5.14e+05	35.0	
38:34	5.48e+04	4.12e+04	1.33	y	9.60e+04	6.14	1,2,3,4,7,8-HxCDD
38:44	1.35e+05	1.08e+05	1.25	y	2.43e+05	17.7	1,2,3,6,7,8-HxCDD
39:10	9.86e+04	7.43e+04	1.33	y	1.73e+05	11.7	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 22 File: 06APR10M S: 17 I: 1 F: 4
Acquired: 6-APR-10 23:58:10

Total Concentration: 1030 Unnamed Concentration: 411.134

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:48	2.37e+06	2.51e+06	0.95 y	4.88e+06	411	
44:11	3.56e+06	3.79e+06	0.94 y	7.35e+06	619	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 22 File: 06APR10M S: 17 I: 1 F: 1
Acquired: 6-APR-10 23:58:10

Total Concentration: 26.2 Unnamed Concentration: 26.232

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
23:46	1.67e+04	2.42e+04	0.69	y	4.09e+04	1.22	
25:46	5.83e+04	8.24e+04	0.71	y	1.41e+05	4.18	
27:49	1.77e+05	2.68e+05	0.66	y	4.45e+05	13.2	
28:02	1.03e+05	1.53e+05	0.67	y	2.56e+05	7.60	

Totals class: 1st Fn. Tot Penta-Furans Entry #: 43

Run: 22 File: 06APR10M S: 17 I: 1 F: 1
Acquired: 6-APR-10 23:58:10

Total Concentration: 13.4 Unnamed Concentration: 13.385

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
28:26	1.58e+05	1.06e+05	1.49	y	2.63e+05	13.4	

Totals class: Total Penta-Furans Entry #: 44

Run: 22 File: 06APR10M S: 17 I: 1 F: 2
Acquired: 6-APR-10 23:58:10

Total Concentration: 77.2 Unnamed Concentration: 77.179

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:12	1.18e+05	7.62e+04	1.55	y	1.94e+05	9.89	
31:43	5.35e+05	3.12e+05	1.71	y	8.47e+05	43.1	
32:02	1.96e+05	1.21e+05	1.61	y	3.17e+05	16.1	
34:04	1.01e+05	5.72e+04	1.77	y	1.58e+05	8.05	

Totals class: Total Hexa-Furans Entry #: 45

Run: 22 File: 06APR10M S: 17 I: 1 F: 3
Acquired: 6-APR-10 23:58:10

Total Concentration: 386 Unnamed Concentration: 334.873

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
35:13	1.19e+05	9.40e+04	1.27	y	2.13e+05	12.4	
35:30	5.09e+05	4.15e+05	1.23	y	9.24e+05	53.5	
36:14	2.38e+04	2.02e+04	1.17	y	4.40e+04	2.55	
36:24	8.15e+05	6.64e+05	1.23	y	1.48e+06	85.6	
36:41	1.09e+05	8.85e+04	1.23	y	1.97e+05	11.4	
37:10	2.42e+05	2.02e+05	1.20	y	4.43e+05	25.0	1,2,3,4,7,8-HxCDF
37:20	1.50e+05	1.15e+05	1.30	y	2.66e+05	15.0	1,2,3,6,7,8-HxCDF
38:04	1.62e+06	1.31e+06	1.24	y	2.93e+06	169	
38:18	8.05e+04	6.01e+04	1.34	y	1.41e+05	8.30	2,3,4,6,7,8-HxCDF
39:48	2.09e+04	1.97e+04	1.06	y	4.06e+04	2.42	1,2,3,7,8,9-HxCDF

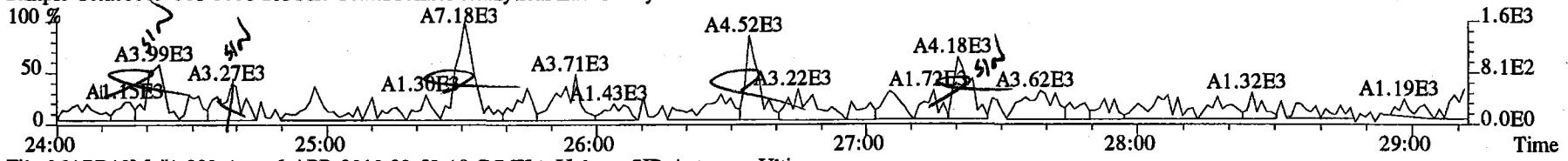
Totals class: Total Hepta-Furans Entry #: 46

Run: 22 File: 06APR10M S: 17 I: 1 F: 4
Acquired: 6-APR-10 23:58:10

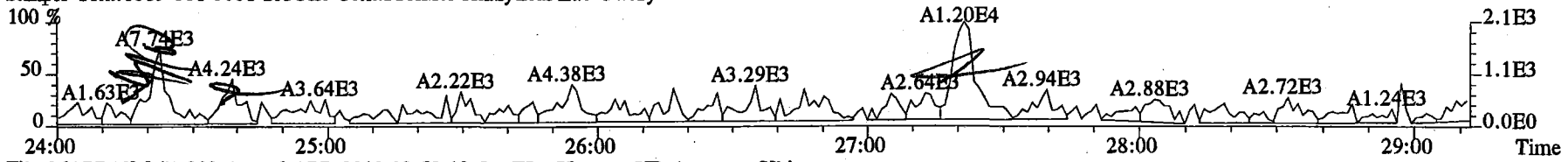
Total Concentration: 494 Unnamed Concentration: 325.337

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:16	1.10e+06	1.10e+06	1.00 y	2.20e+06	154	1,2,3,4,6,7,8-HpCDF
42:49	2.27e+04	2.08e+04	1.09 y	4.35e+04	3.14	
43:05	2.26e+06	2.21e+06	1.02 y	4.47e+06	322	
45:05	9.79e+04	1.00e+05	0.98 y	1.98e+05	14.7	1,2,3,4,7,8,9-HpCDF

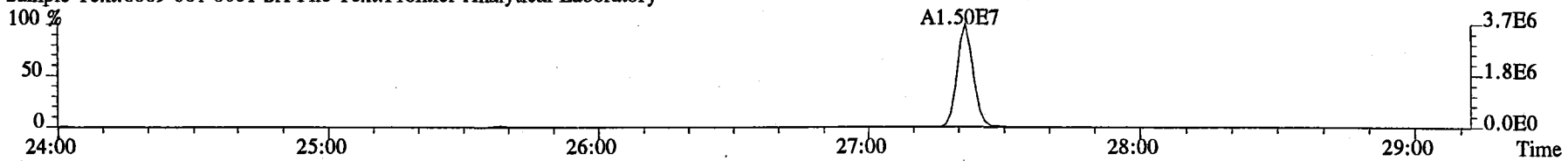
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



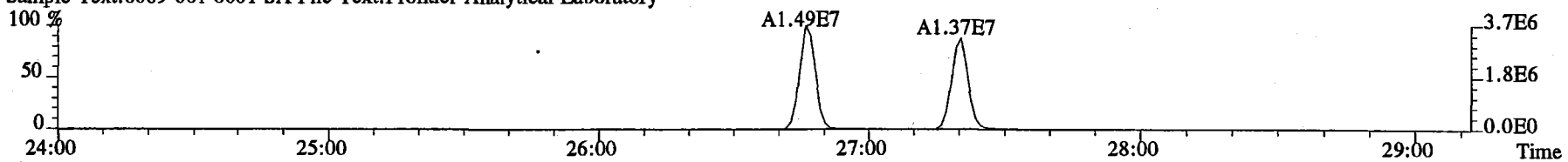
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



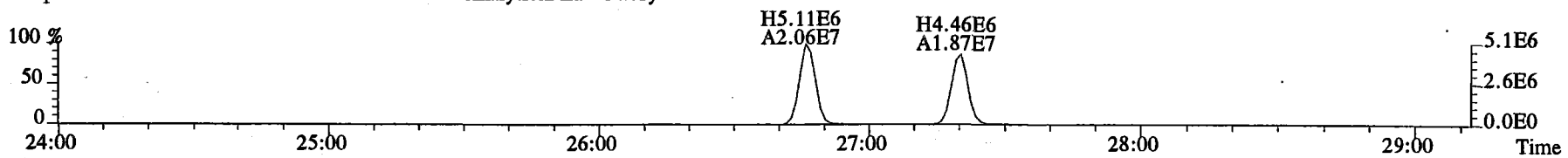
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory

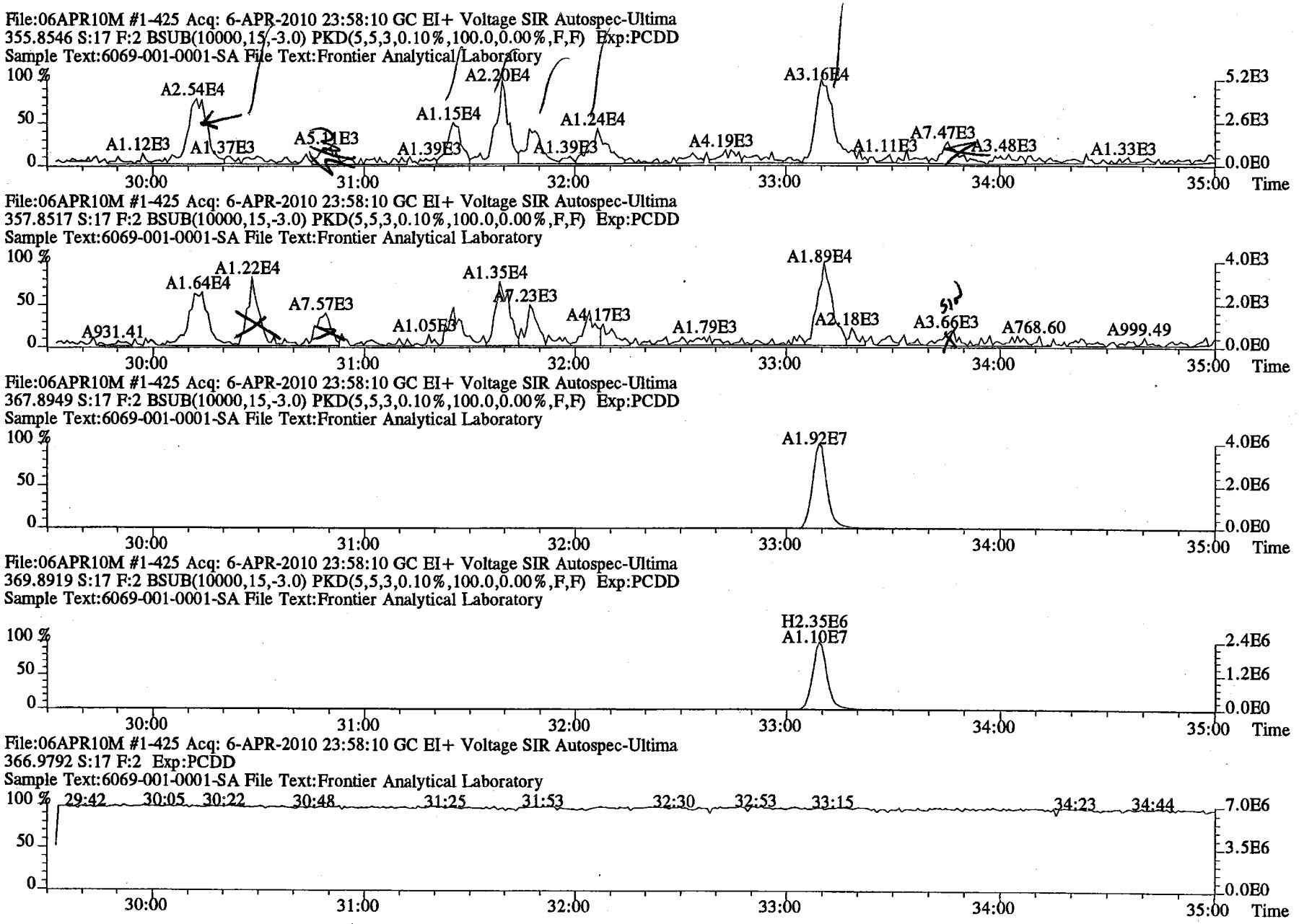


File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory

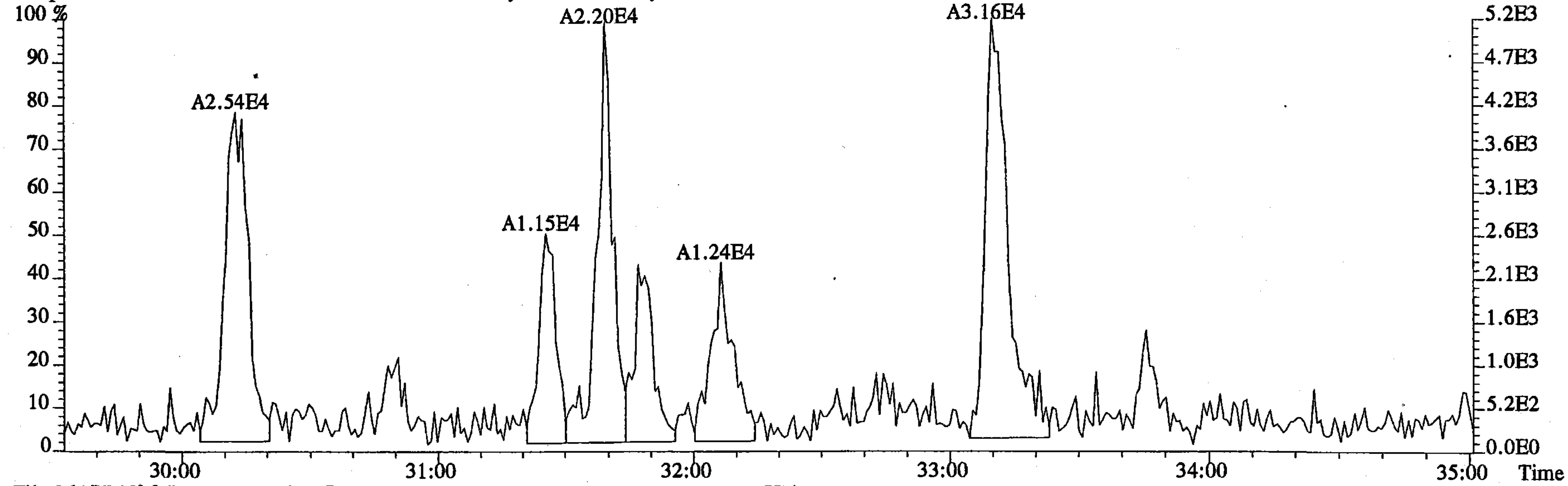


File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory

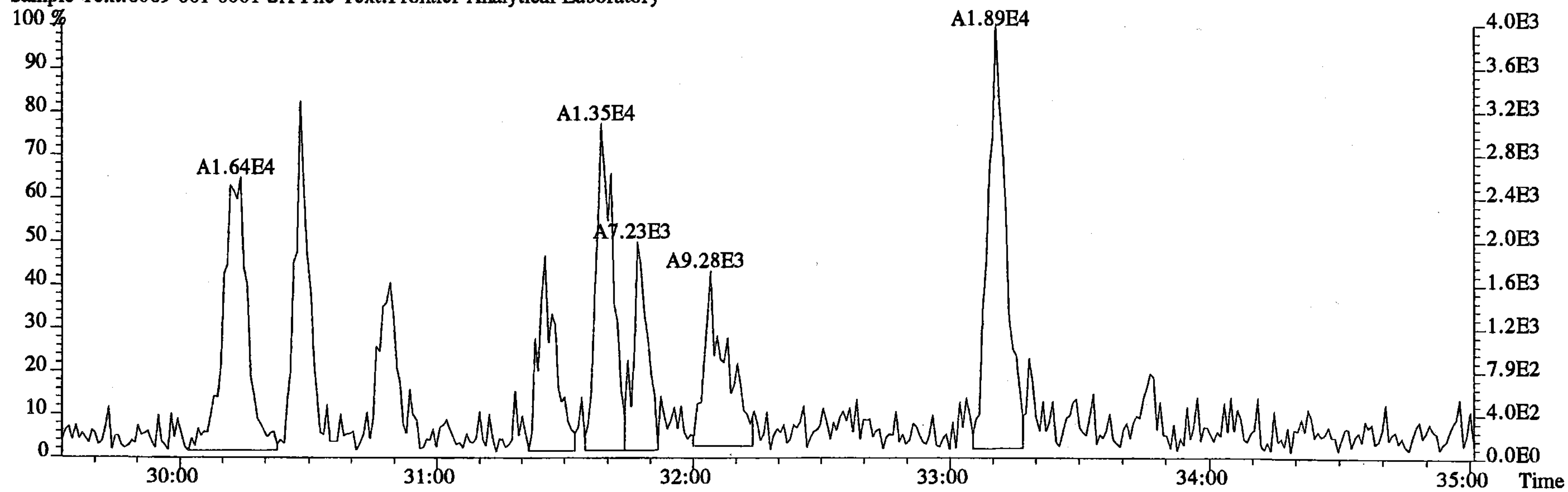



File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory
A2.54E4
A2.20E4
A3.16E4
A1.15E4
A1.24E4
A1.12E3
A1.37E3
A1.39E3
A1.39E3
A4.19E3
A1.11E3
A7.47E3
A3.48E3
A1.33E3
5.2E3
2.6E3
0.0E0
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory
A1.89E4
A1.22E4
A1.64E4
A1.35E4
A7.57E3
A7.23E3
A4.17E3
A931.41
A1.05E3
A1.79E3
A2.18E3
A3.66E3
A768.60
A999.49
4.0E3
2.0E3
0.0E0
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory
A1.92E7
4.0E6
2.0E6
0.0E0
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory
H2.35E6
A1.10E7
2.4E6
1.2E6
0.0E0
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:17 F:2 Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory
29:42
30:05
30:22
30:48
31:25
31:53
32:30
32:53
33:15
34:23
34:44
7.0E6
3.5E6
0.0E0
100 %
50
0
30:00
31:00
32:00
33:00
34:00
35:00
Time

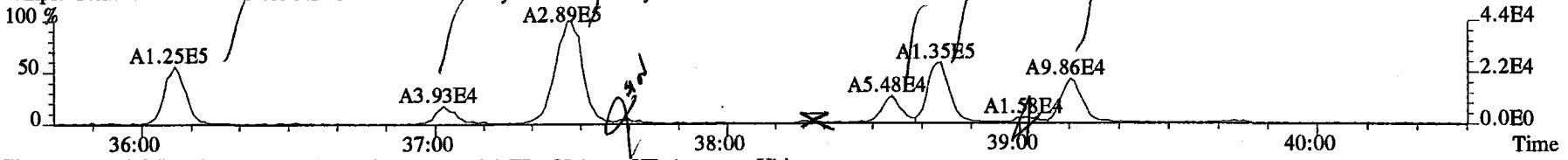
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



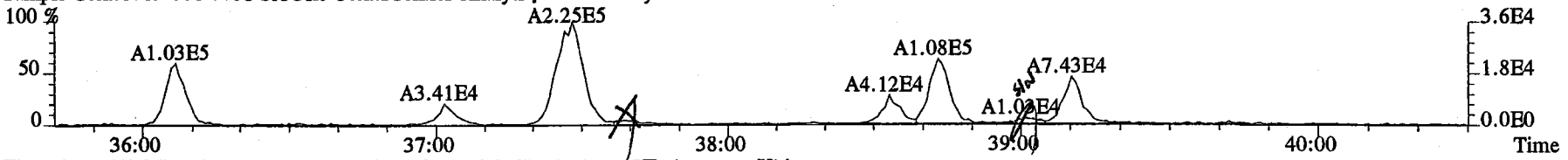
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



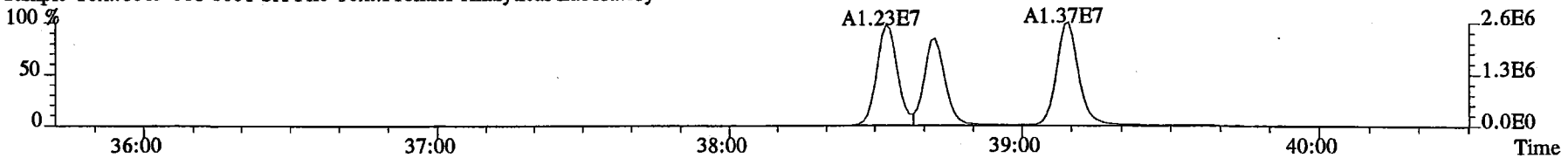
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



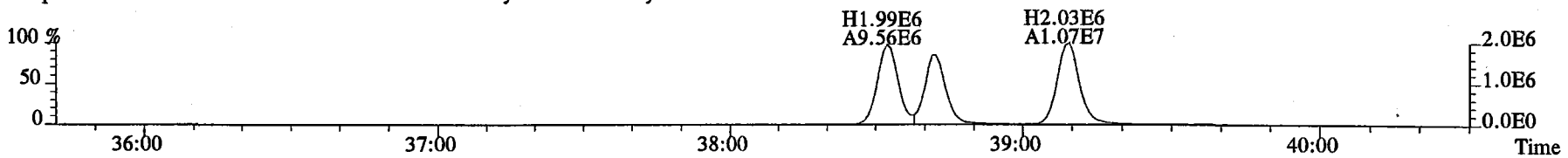
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



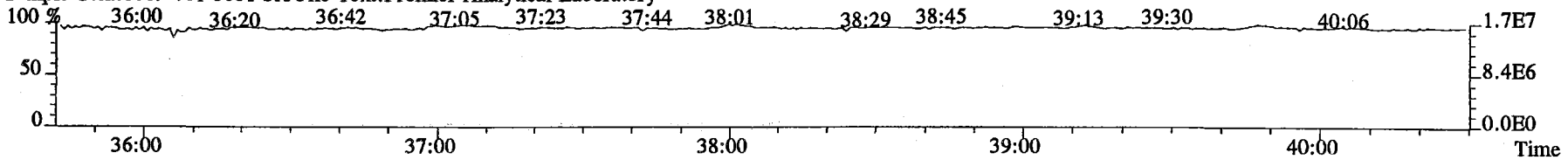
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



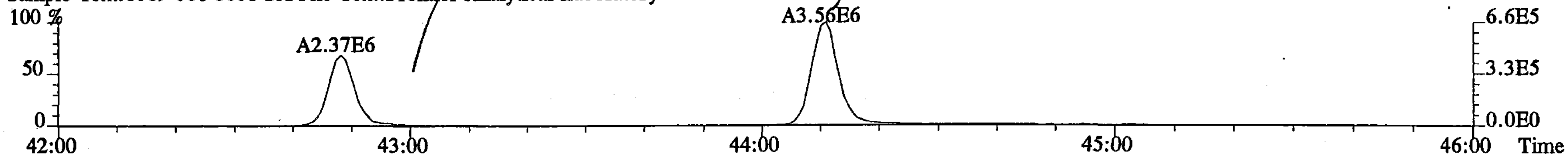
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



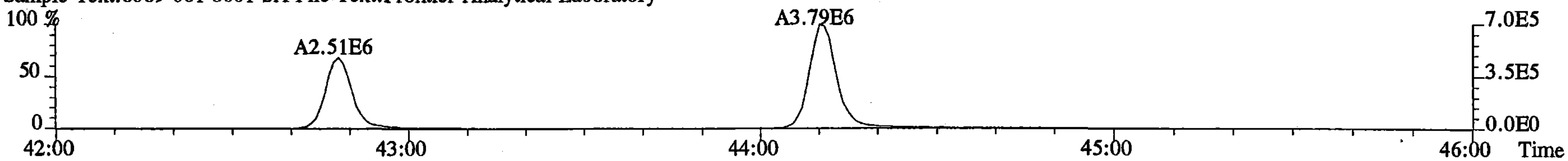
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:17 F:3 Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



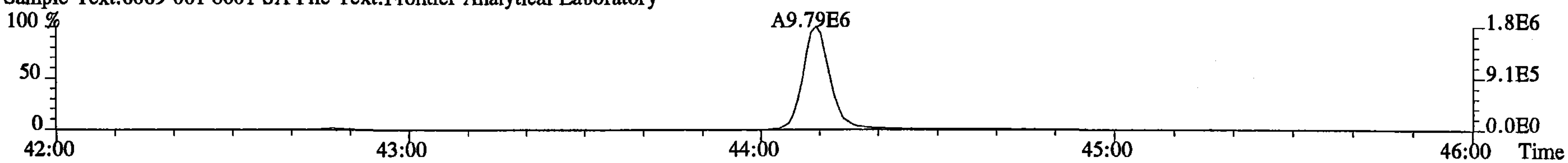
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



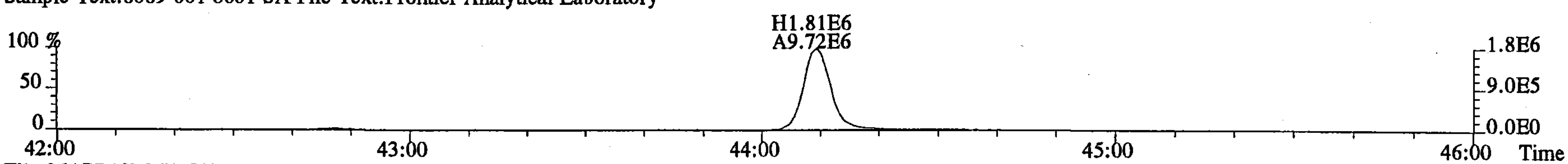
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



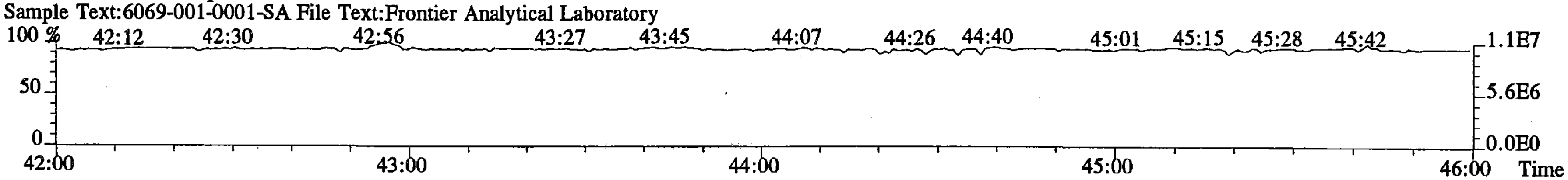
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



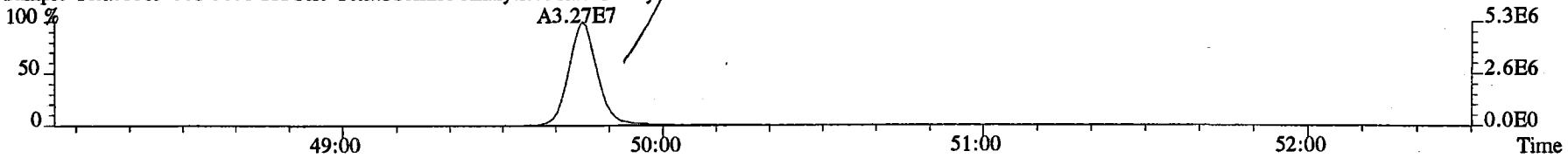
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



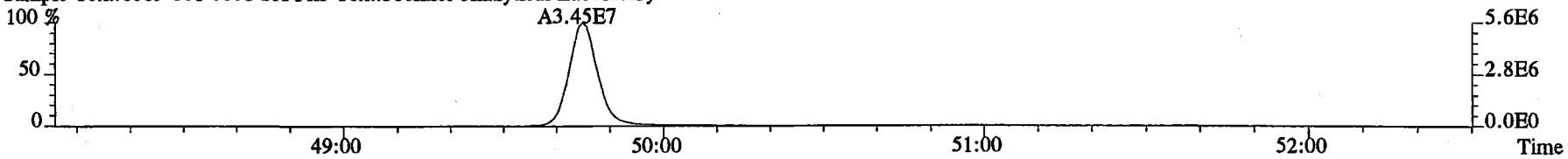
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:17 F:4 Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



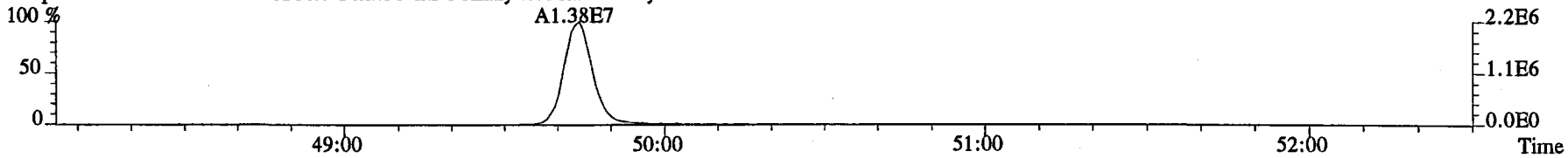
File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



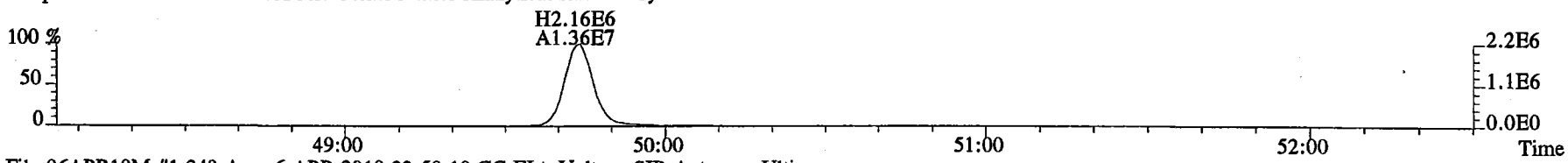
File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



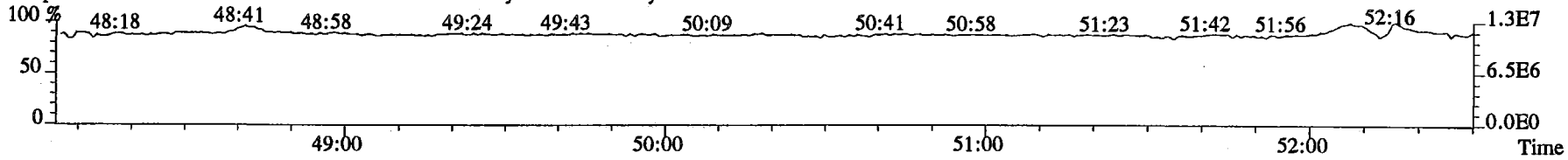
File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



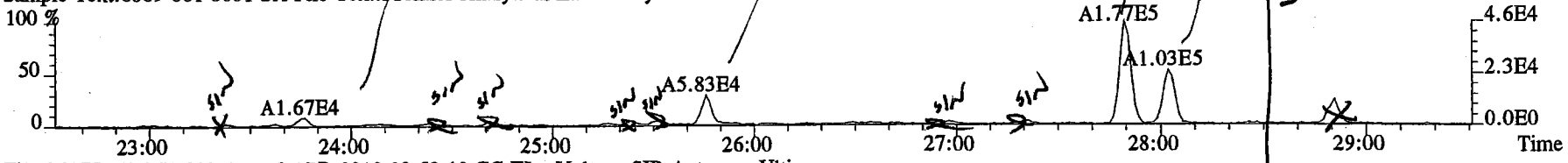
File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



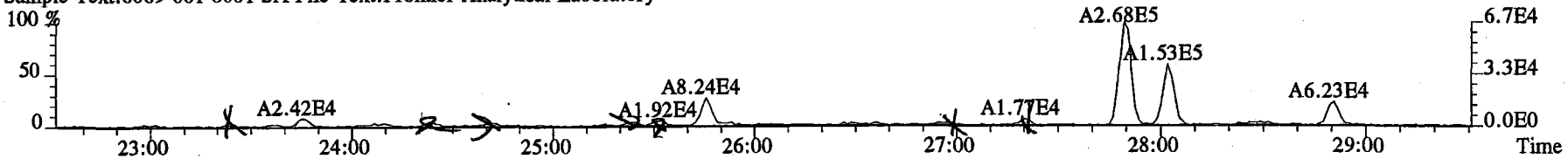
File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:17 F:5 Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



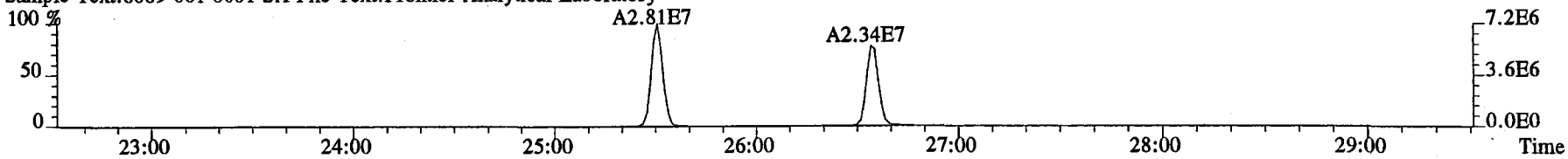
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



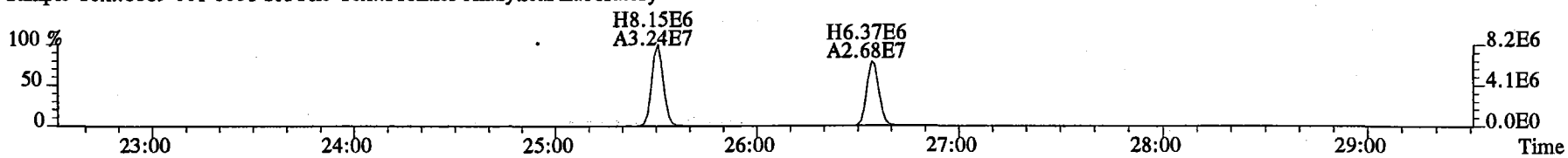
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



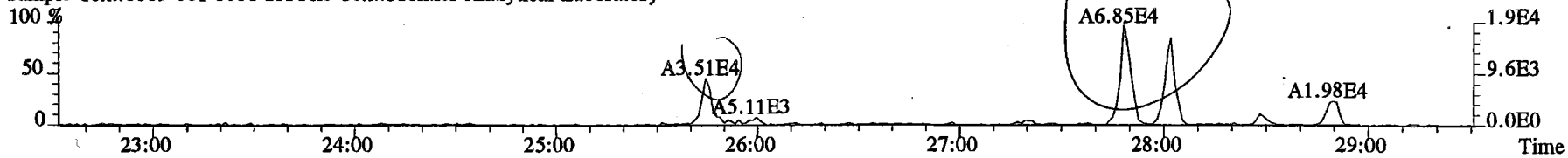
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



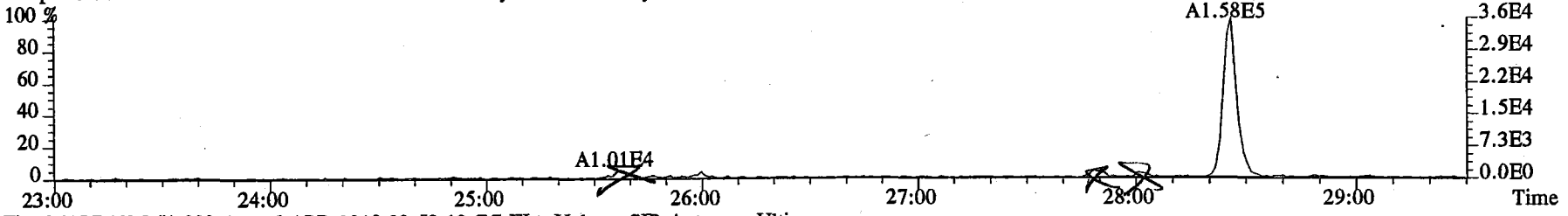
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



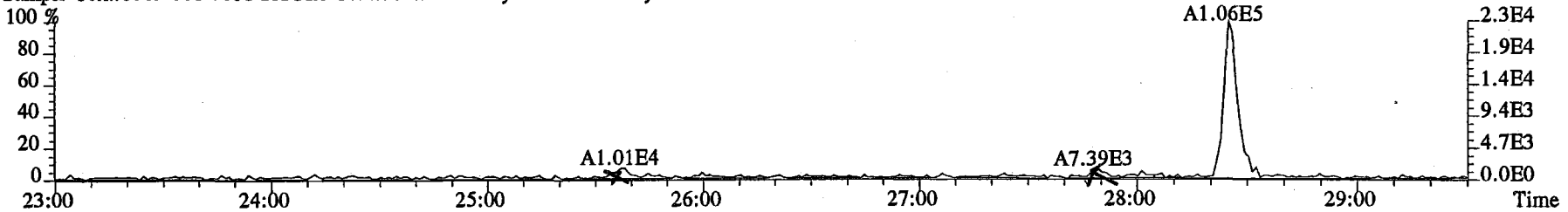
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



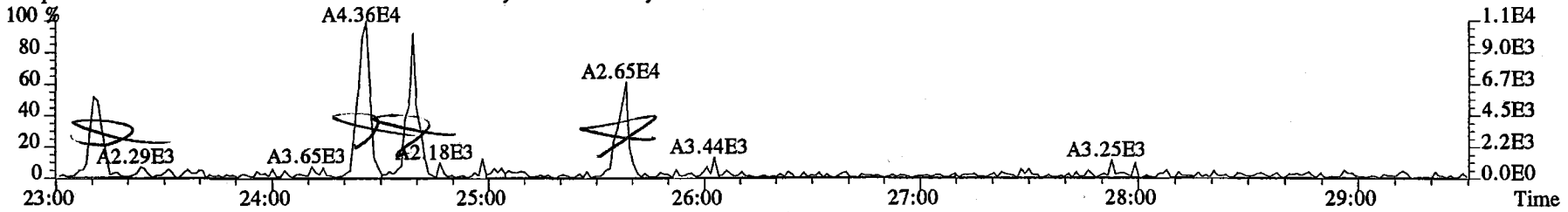
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



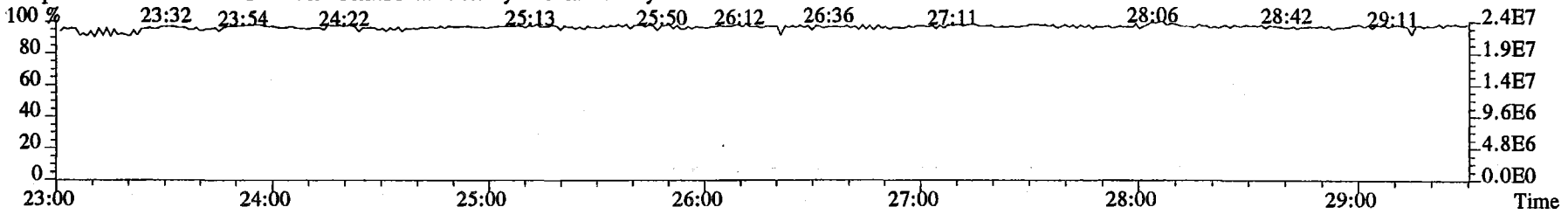
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



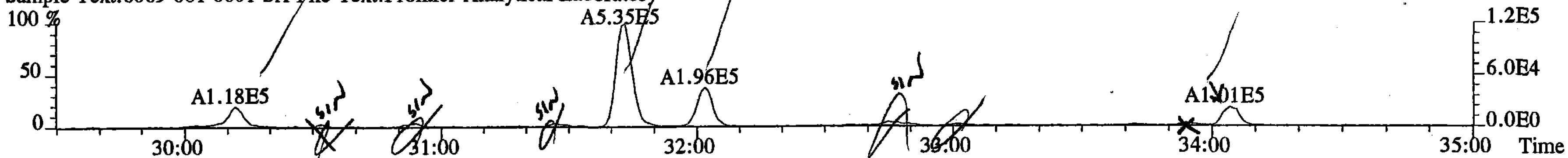
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



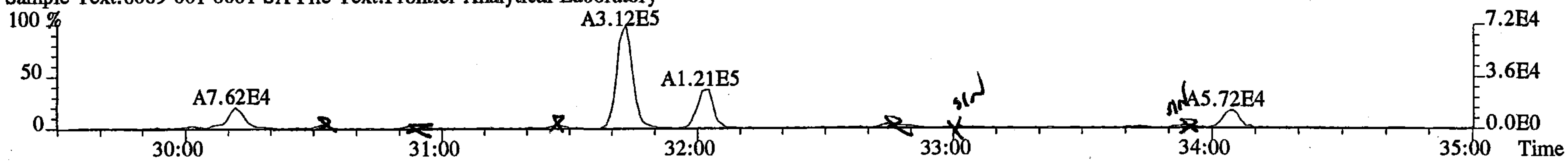
File:06APR10M #1-390 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:17 Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



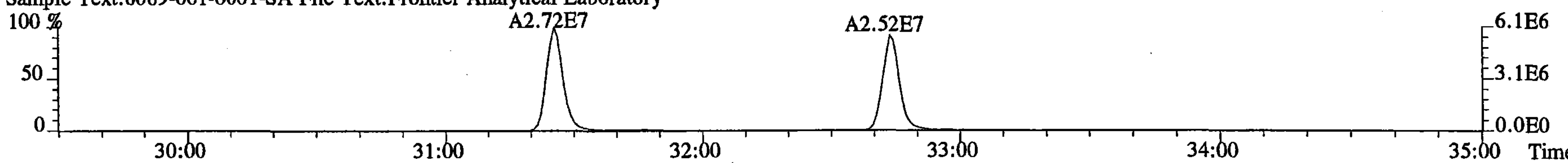
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



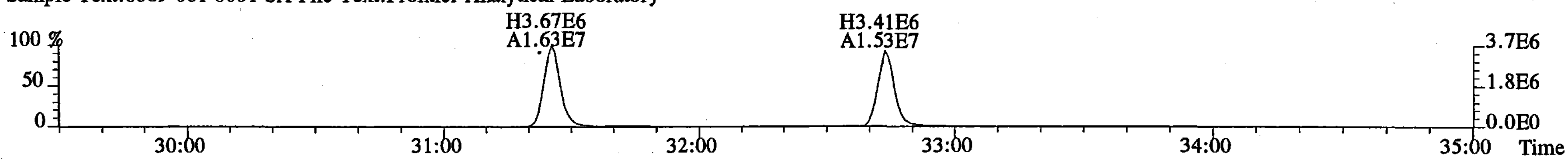
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



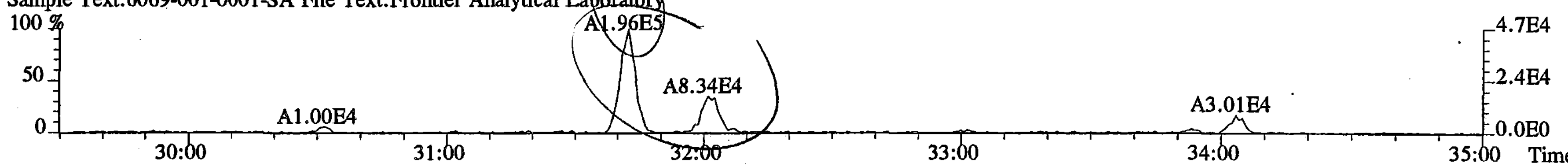
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



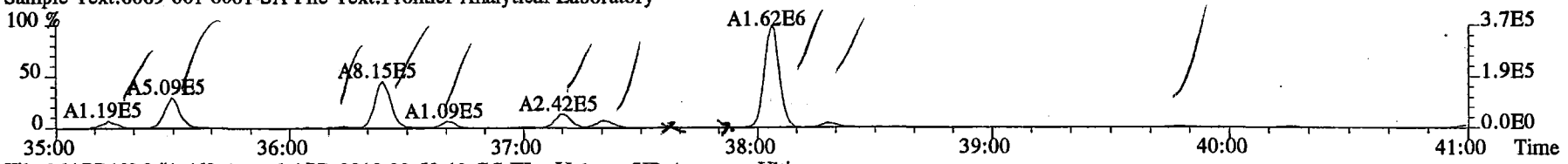
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



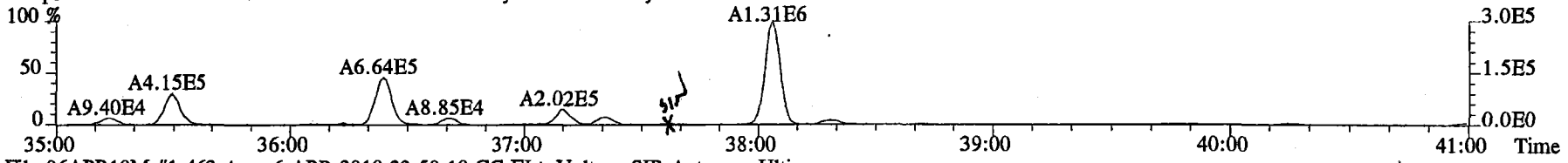
File:06APR10M #1-425 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



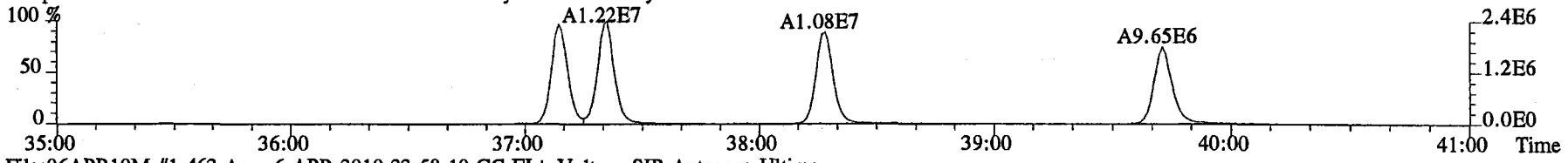
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



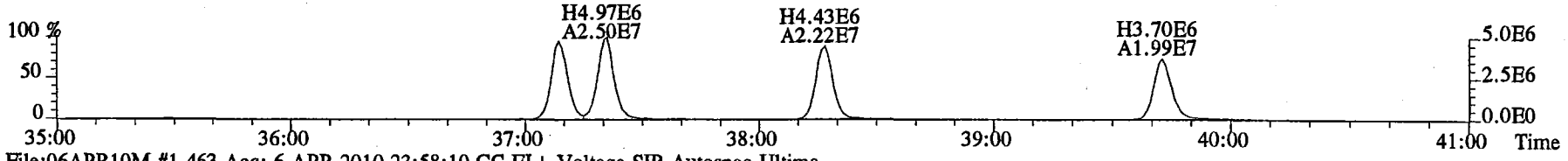
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



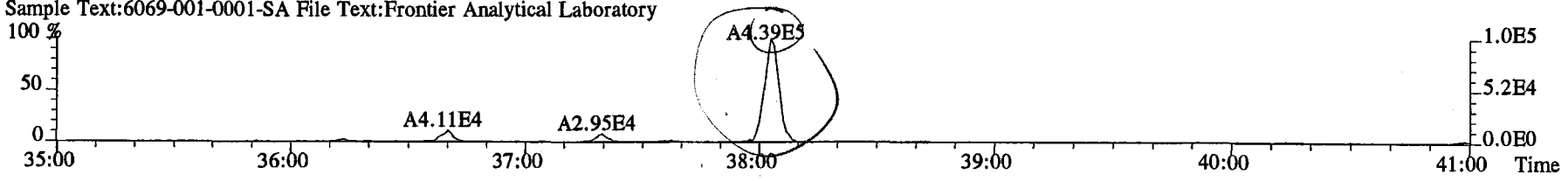
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



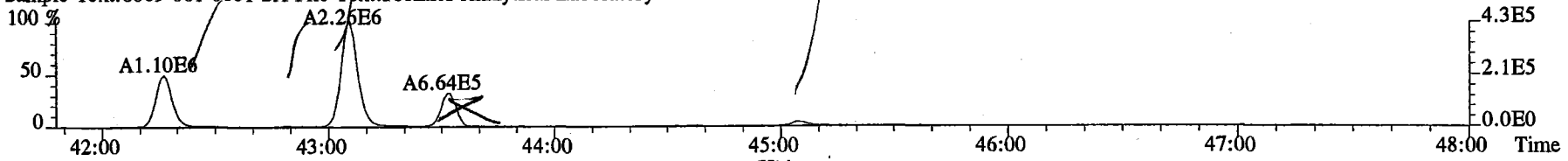
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



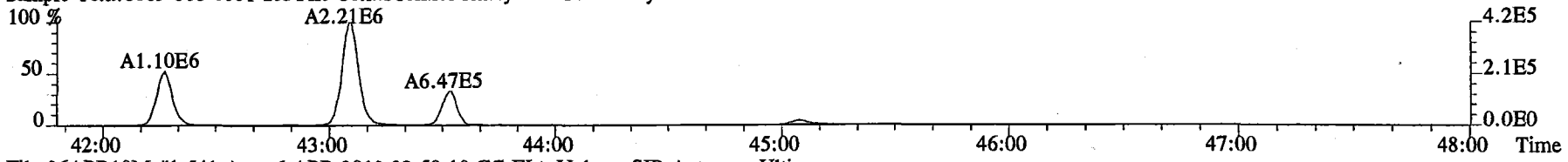
File:06APR10M #1-463 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



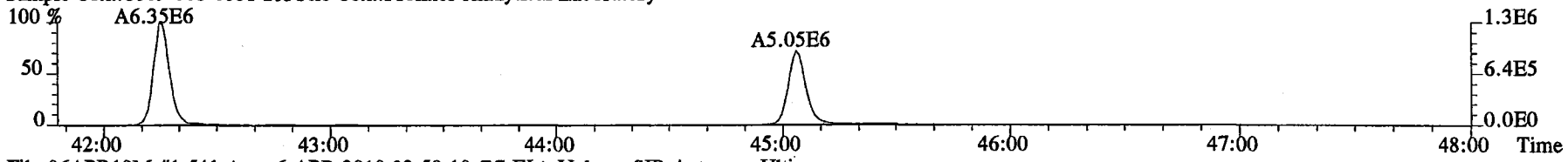
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



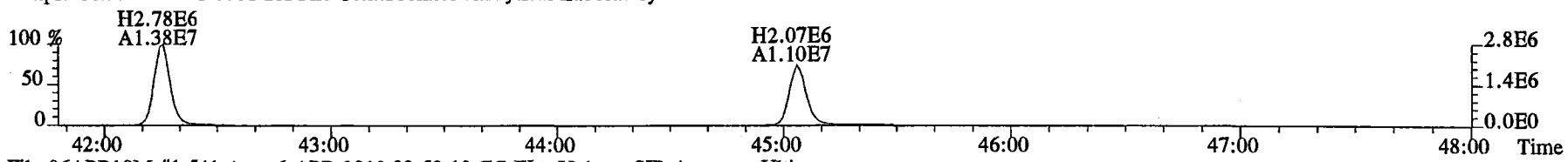
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



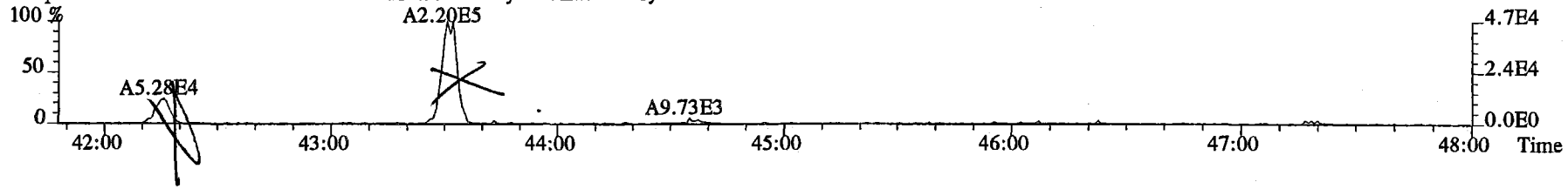
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



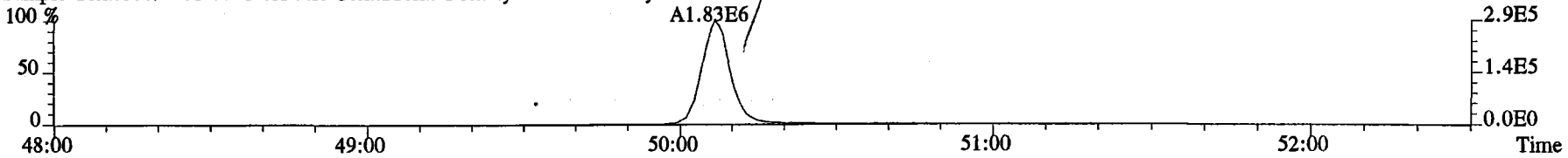
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



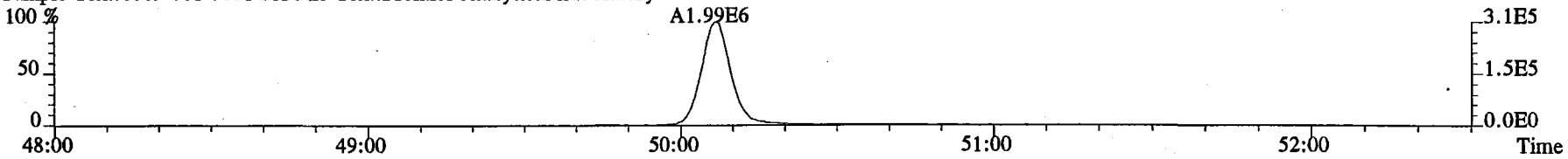
File:06APR10M #1-541 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



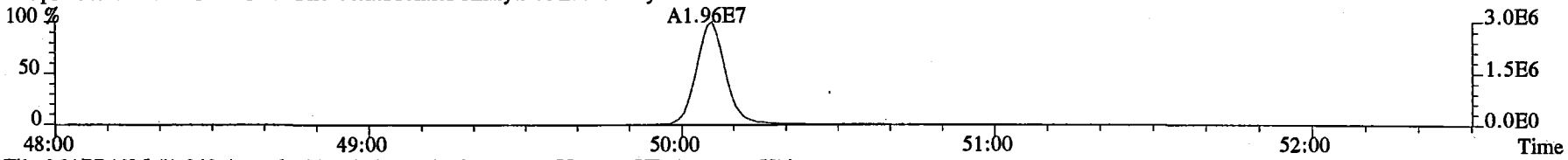
File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



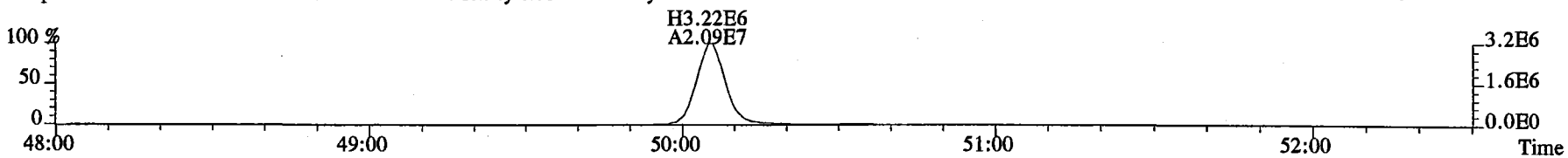
File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



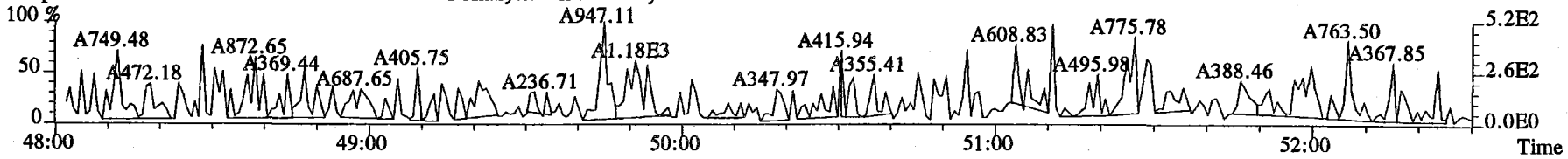
File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-348 Acq: 6-APR-2010 23:58:10 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-001-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 6069-002-0001-SA Filename: 06APR10M Sam:18 Acquired: 7-APR-10 00:53:33 ICal: PCDDFAL3-11-18-09
Client ID: CB4857032510COMP ConCal: ST040610M2 EndCal: ST040610M3
Results: 6062-2 GC Column: DB5 Amount: 1.044 NATO 1989 Tox: 15.3
WHO 1998 Tox: 12.3 WHO 2005 Tox: 13.2

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	276	376	0.404
1,2,3,7,8-PeCDD	2.92e+04	1.37	y	33:11	0.96	2.00	J	2.50	-	-	*
1,2,3,4,7,8-HxCDD	5.93e+04	1.42	y	38:33	1.37	4.03	J	2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.45e+05	1.23	y	38:43	1.34	11.3	J	2.50	-	-	*
1,2,3,7,8,9-HxCDD	9.97e+04	1.35	y	39:10	1.37	7.19	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	4.27e+06	0.91	y	44:10	1.17	381		2.50	-	-	*
OCDD	3.40e+07	0.94	y	49:45	1.21	4200		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	372	928	0.406
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	977	609	0.882
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	977	609	0.955
1,2,3,4,7,8-HxCDF	2.56e+05	1.23	y	37:10	1.00	15.1	J	2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.11e+05	1.27	y	37:20	0.92	6.34	J	2.50	-	-	*
2,3,4,6,7,8-HxCDF	8.69e+04	1.22	y	38:19	0.99	5.30	J	2.50	-	-	*
1,2,3,7,8,9-HxCDF	2.71e+04	1.21	y	39:47	1.09	1.70	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.14e+06	1.03	y	42:17	1.36	82.2		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.16e+05	1.03	y	45:05	1.61	8.95	J	2.50	-	-	*
OCDF	2.19e+06	0.93	y	50:07	0.84	255		2.50	-	-	*
											Rec
13C-2,3,7,8-TCDD	3.12e+07	0.72	y	27:20	0.94	1730					90.3
13C-1,2,3,7,8-PeCDD	2.90e+07	1.68	y	33:09	1.02	1490					77.8
13C-1,2,3,4,7,8-HxCDD	2.05e+07	1.28	y	38:32	0.98	1630					85.0
13C-1,2,3,6,7,8-HxCDD	1.83e+07	1.28	y	38:42	0.94	1530					79.6
13C-1,2,3,4,6,7,8-HpCDD	1.84e+07	0.99	y	44:10	0.90	1600					83.3
13C-OCDD	2.55e+07	1.02	y	49:44	0.67	2990					78.0
13C-2,3,7,8-TCDF	4.91e+07	0.87	y	26:35	0.88	1750					91.4
13C-1,2,3,7,8-PeCDF	4.25e+07	1.66	y	31:26	0.88	1510					79.0
13C-2,3,4,7,8-PeCDF	3.92e+07	1.65	y	32:44	0.85	1440					75.4
13C-1,2,3,4,7,8-HxCDF	3.25e+07	0.48	y	37:09	1.72	1480					77.0
13C-1,2,3,6,7,8-HxCDF	3.66e+07	0.48	y	37:20	2.00	1430					74.4
13C-2,3,4,6,7,8-HxCDF	3.19e+07	0.48	y	38:16	1.74	1430					74.7
13C-1,2,3,7,8,9-HxCDF	2.80e+07	0.48	y	39:42	1.51	1450					75.7
13C-1,2,3,4,6,7,8-HpCDF	1.96e+07	0.46	y	42:16	1.10	1390					72.6
13C-1,2,3,4,7,8,9-HpCDF	1.55e+07	0.46	y	45:04	0.85	1430					74.4
13C-OCDF	3.89e+07	0.95	y	50:05	1.17	2590					67.5
37Cl-2,3,7,8-TCDD	1.40e+07			27:21	0.97	754					98.4
13C-1,2,3,4-TCDD	3.66e+07	0.72	y	26:46	-	134					
13C-1,2,3,4-TCDF	6.12e+07	0.88	y	25:30	-	127					
13C-1,2,3,7,8,9-HxCDD	2.46e+07	1.27	y	39:09	-	115					

								Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*			NotFnd	1.02	*		2.50	276	376	0.404		0
Total Penta-Dioxins	8.31e+04			30:14	0.96	5.71	J	2.50	-	-	*		3
Total Hexa-Dioxins	8.10e+05			36:08	1.36	59.1		2.50	-	-	*		6
Total Hepta-Dioxins	7.11e+06			42:48	1.17	634		2.50	-	-	*		2
Total Tetra-Furans	4.20e+05			23:46	1.29	12.7	D,M	2.50	-	-	*		4
1st Fn. Tot Penta-Furans	1.59e+05			28:25	0.90	8.32	D,M	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.68e+05			30:12	0.90	29.7	D,M	2.50	-	-	*	38.0	4
Total Hexa-Furans	2.94e+06			35:13	0.99	176	D,M	2.50	-	-	*		9
Total Hepta-Furans	3.79e+06			42:17	1.47	280		2.50	-	-	*		3

Analyst: _____ Date: 4/7/10

Totals class: Total Penta-Dioxins Entry #: 39

Run: 23 File: 06APR10M S: 18 I: 1 F: 2
Acquired: 7-APR-10 00:53:33

Total Concentration: 5.71 Unnamed Concentration: 3.703

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:14	1.97e+04	1.39e+04	1.42	y	3.36e+04	2.31	
31:40	1.21e+04	8.20e+03	1.48	y	2.03e+04	1.39	
33:11	1.69e+04	1.23e+04	1.37	y	2.92e+04	2.00	1,2,3,7,8-PeCDD

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 23 File: 06APR10M S: 18 I: 1 F: 3
Acquired: 7-APR-10 00:53:33

Total Concentration: 59.1 Unnamed Concentration: 36.681

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
36:08	8.07e+04	6.09e+04	1.32	y	1.42e+05	10.2	
37:03	2.47e+04	1.89e+04	1.31	y	4.36e+04	3.16	
37:27	1.82e+05	1.39e+05	1.31	y	3.22e+05	23.3	
38:33	3.49e+04	2.45e+04	1.42	y	5.93e+04	4.03	1,2,3,4,7,8-HxCDD
38:43	7.98e+04	6.47e+04	1.23	y	1.45e+05	11.3	1,2,3,6,7,8-HxCDD
39:10	5.73e+04	4.24e+04	1.35	y	9.97e+04	7.19	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 23 File: 06APR10M S: 18 I: 1 F: 4
Acquired: 7-APR-10 00:53:33

Total Concentration: 634 Unnamed Concentration: 253.531

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
42:48	1.38e+06	1.46e+06	0.95	y	2.84e+06	254	
44:10	2.04e+06	2.23e+06	0.91	y	4.27e+06	381	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 23 File: 06APR10M S: 18 I: 1 F: 1
Acquired: 7-APR-10 00:53:33

Total Concentration: 12.7 Unnamed Concentration: 12.736

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
23:46	1.22e+04	1.78e+04	0.69 y	3.00e+04	0.911	
25:46	1.41e+04	2.07e+04	0.68 y	3.48e+04	1.06	
27:50	9.45e+04	1.41e+05	0.67 y	2.36e+05	7.15	
28:04	4.87e+04	7.07e+04	0.69 y	1.19e+05	3.62	

Totals class: 1st Fn. Tot Penta-Furans Entry #: 43

Run: 23 File: 06APR10M S: 18 I: 1 F: 1
Acquired: 7-APR-10 00:53:33

Total Concentration: 8.32 Unnamed Concentration: 8.322

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
28:25	9.79e+04	6.12e+04	1.60 y	1.59e+05	8.32	

Totals class: Total Penta-Furans Entry #: 44

Run: 23 File: 06APR10M S: 18 I: 1 F: 2
Acquired: 7-APR-10 00:53:33

Total Concentration: 29.7 Unnamed Concentration: 29.699

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:12	8.90e+04	5.34e+04	1.67	y	1.42e+05	7.45	
31:43	1.60e+05	1.01e+05	1.59	y	2.61e+05	13.6	
32:03	4.52e+04	3.12e+04	1.45	y	7.64e+04	3.99	
34:04	5.47e+04	3.37e+04	1.62	y	8.84e+04	4.62	

Totals class: Total Hexa-Furans Entry #: 45

Run: 23 File: 06APR10M S: 18 I: 1 F: 3
Acquired: 7-APR-10 00:53:33

Total Concentration: 176 Unnamed Concentration: 147.176

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
35:13	6.81e+04	5.61e+04	1.22	y	1.24e+05	7.44	
35:30	3.04e+05	2.48e+05	1.23	y	5.52e+05	33.1	
36:23	4.41e+05	3.59e+05	1.23	y	8.00e+05	47.9	
36:39	1.33e+04	1.05e+04	1.26	y	2.38e+04	1.43	
37:10	1.41e+05	1.15e+05	1.23	y	2.56e+05	15.1	1,2,3,4,7,8-HxCDF
37:20	6.21e+04	4.90e+04	1.27	y	1.11e+05	6.34	1,2,3,6,7,8-HxCDF
38:04	5.26e+05	4.29e+05	1.23	y	9.55e+05	57.3	
38:19	4.78e+04	3.92e+04	1.22	y	8.69e+04	5.30	2,3,4,6,7,8-HxCDF
39:47	1.48e+04	1.23e+04	1.21	y	2.71e+04	1.70	1,2,3,7,8,9-HxCDF

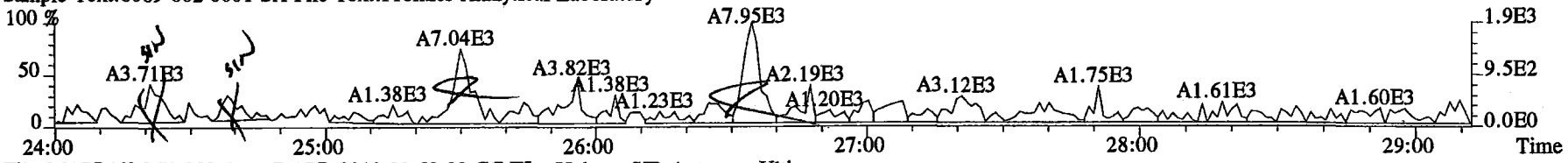
Totals class: Total Hepta-Furans Entry #: 46

Run: 23 File: 06APR10M S: 18 I: 1 F: 4
Acquired: 7-APR-10 00:53:33

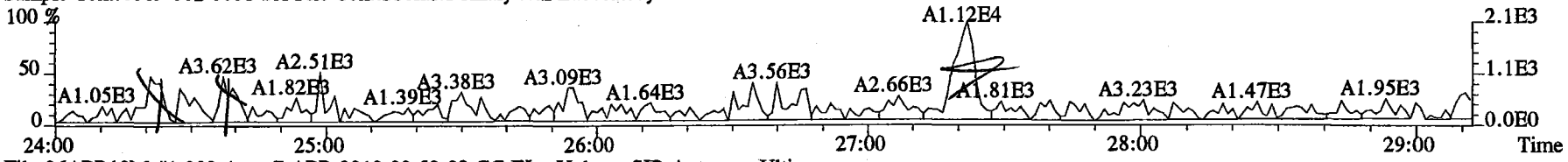
Total Concentration: 280 Unnamed Concentration: 188.503

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:17	5.78e+05	5.64e+05	1.03 y	1.14e+06	82.2	1,2,3,4,6,7,8-HpCDF
43:05	1.29e+06	1.24e+06	1.04 y	2.53e+06	189	
45:05	5.89e+04	5.73e+04	1.03 y	1.16e+05	8.95	1,2,3,4,7,8,9-HpCDF

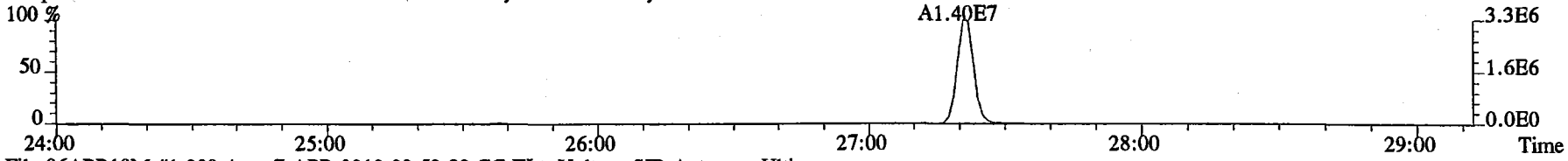
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



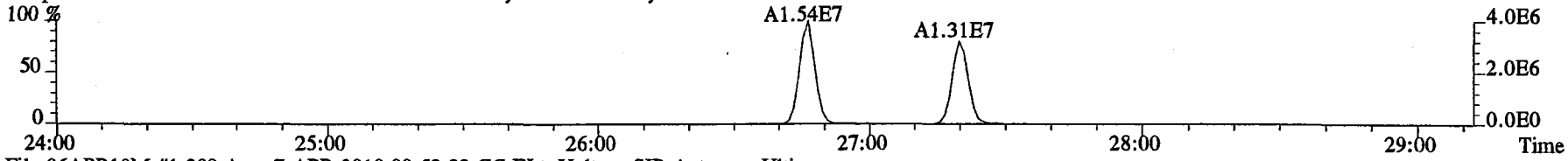
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



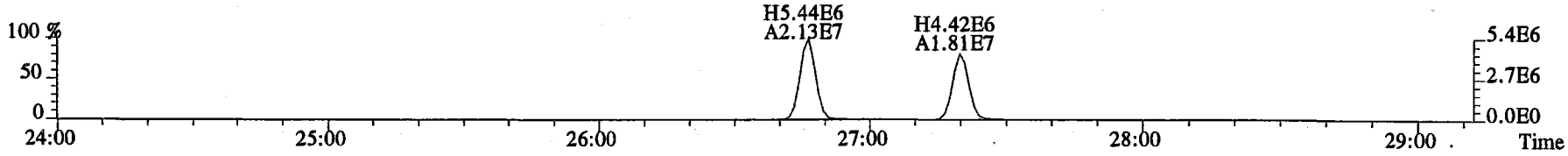
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



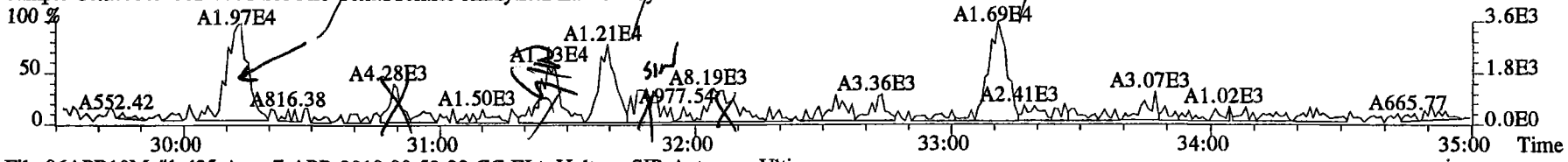
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



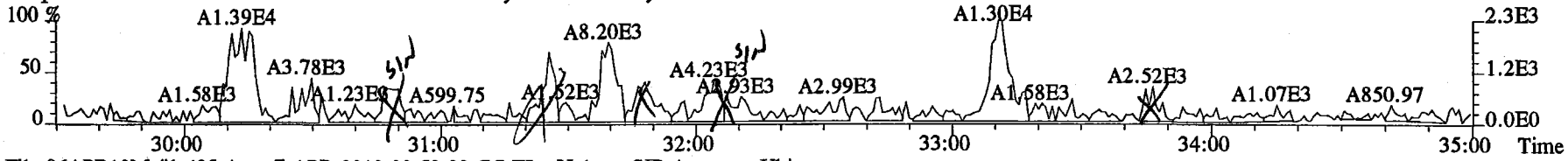
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



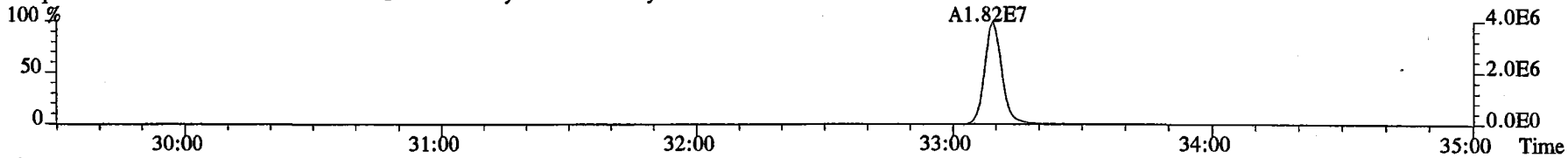
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:18 F:2 BSUB(10000,15,-3,0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



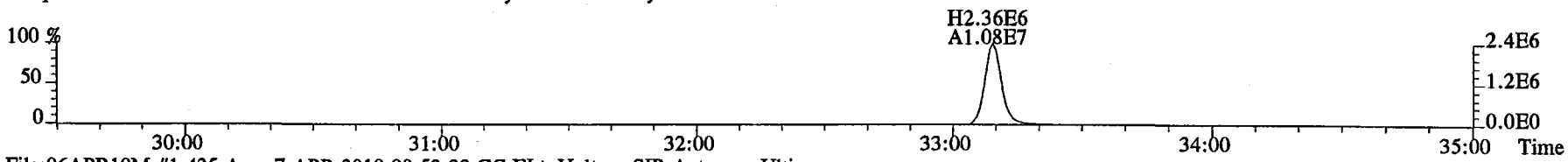
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



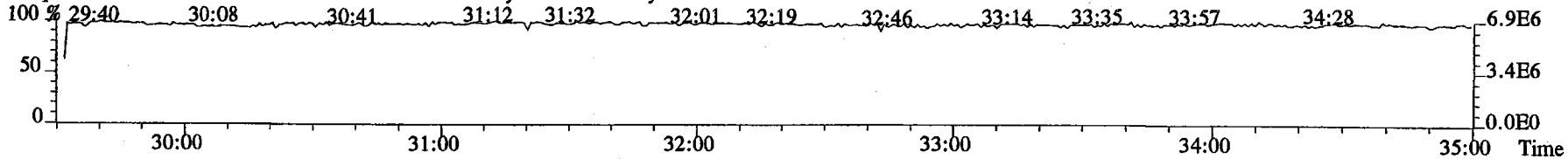
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



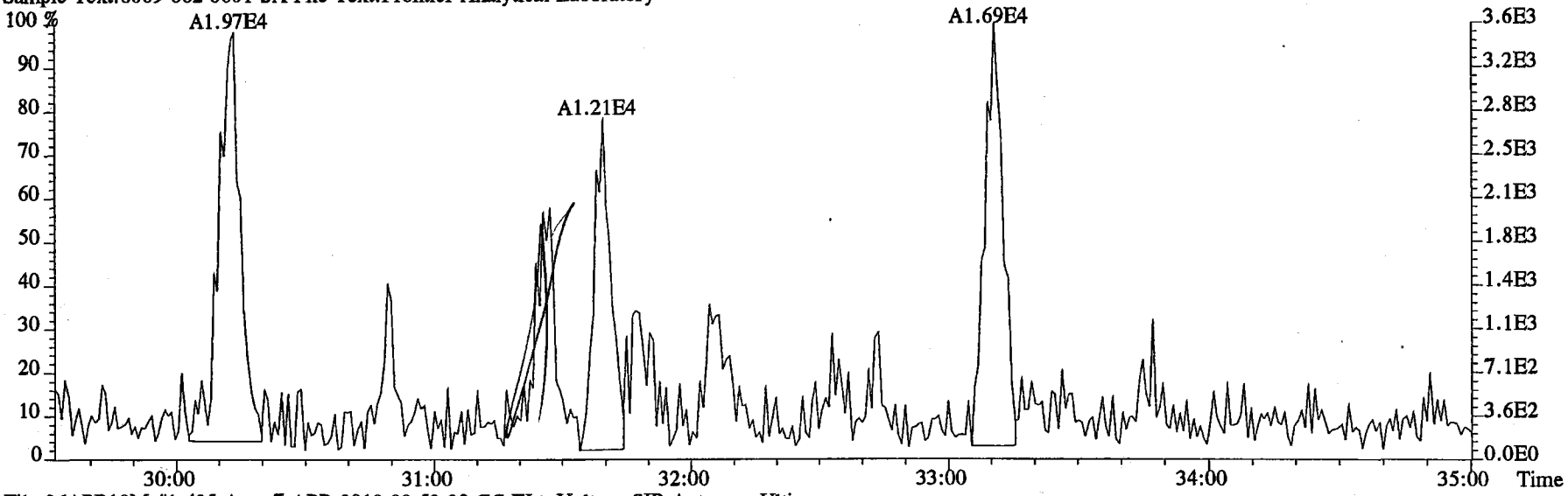
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



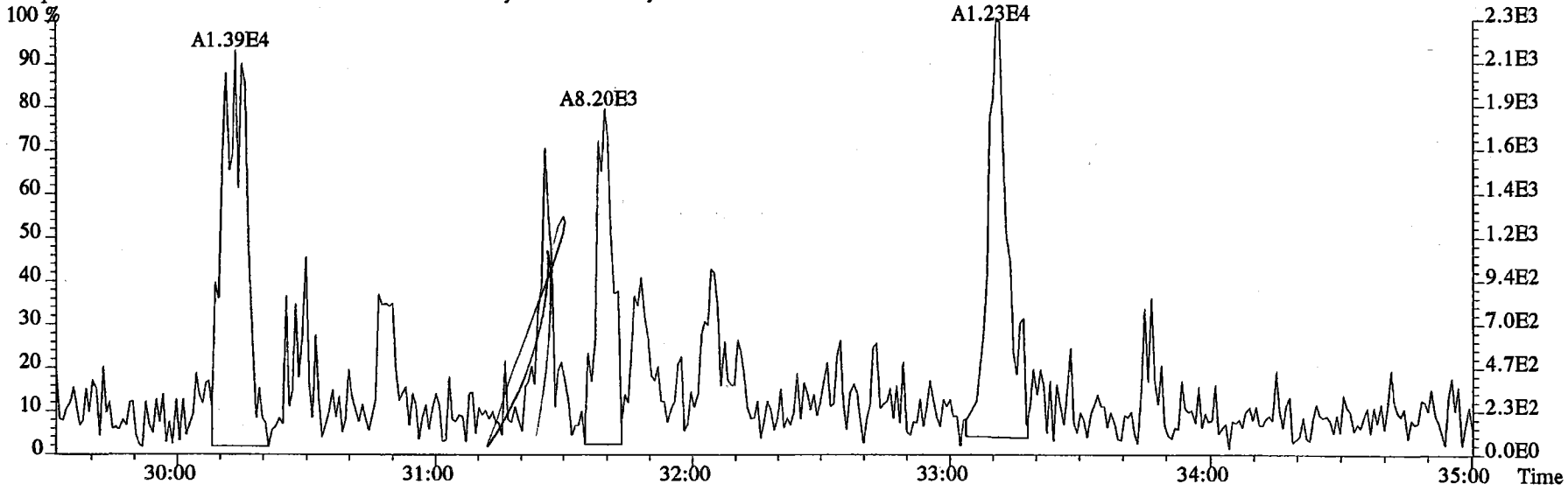
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:18 F:2 Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



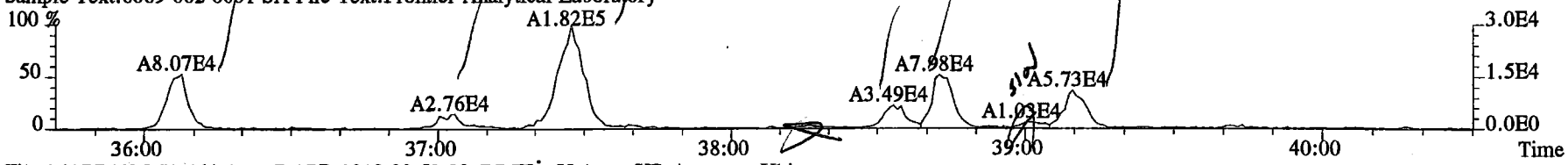
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



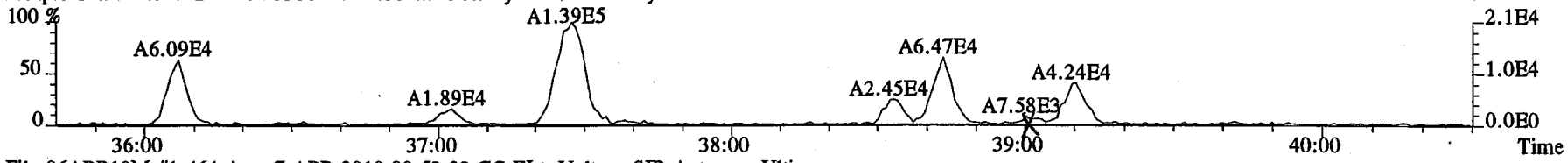
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



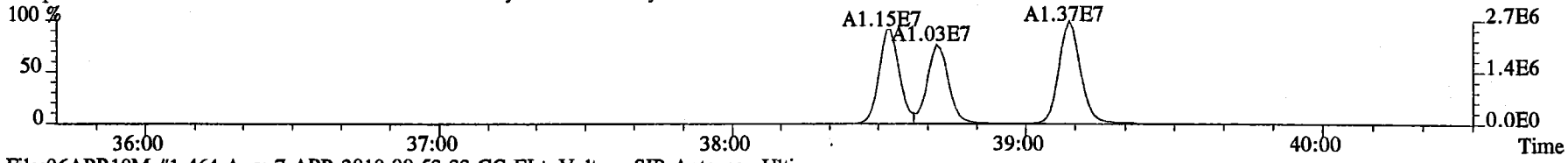
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



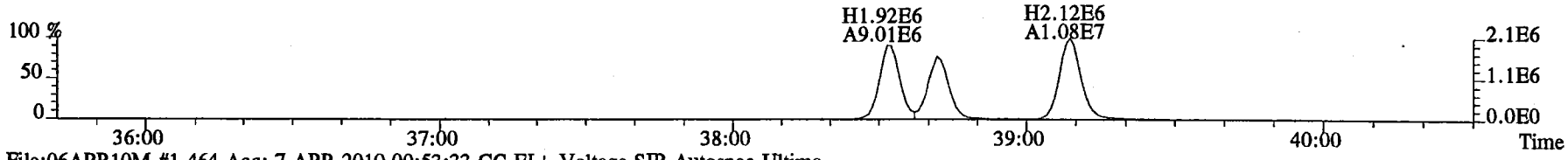
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



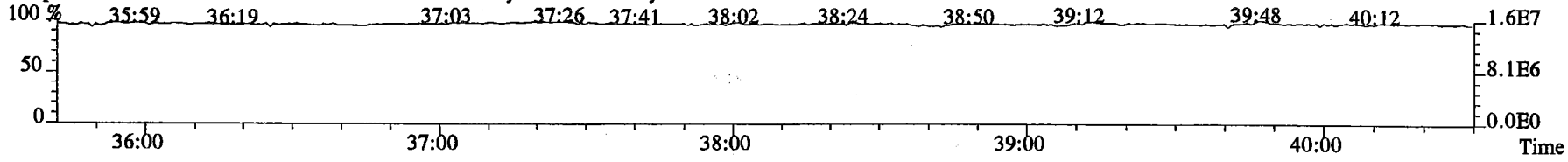
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



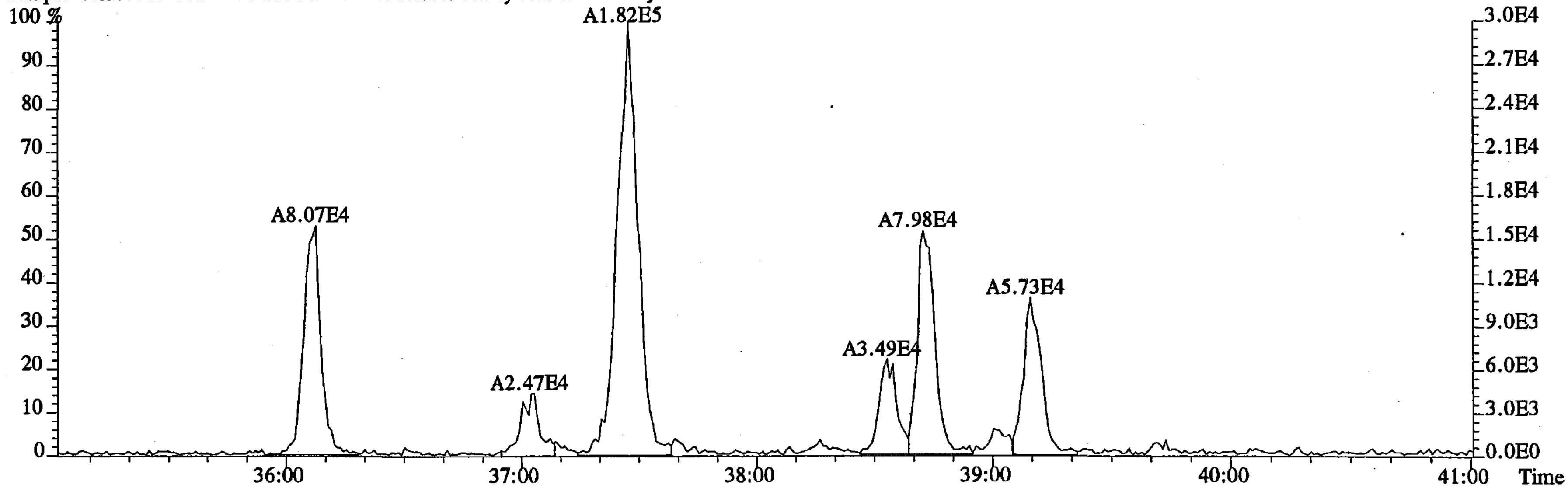
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



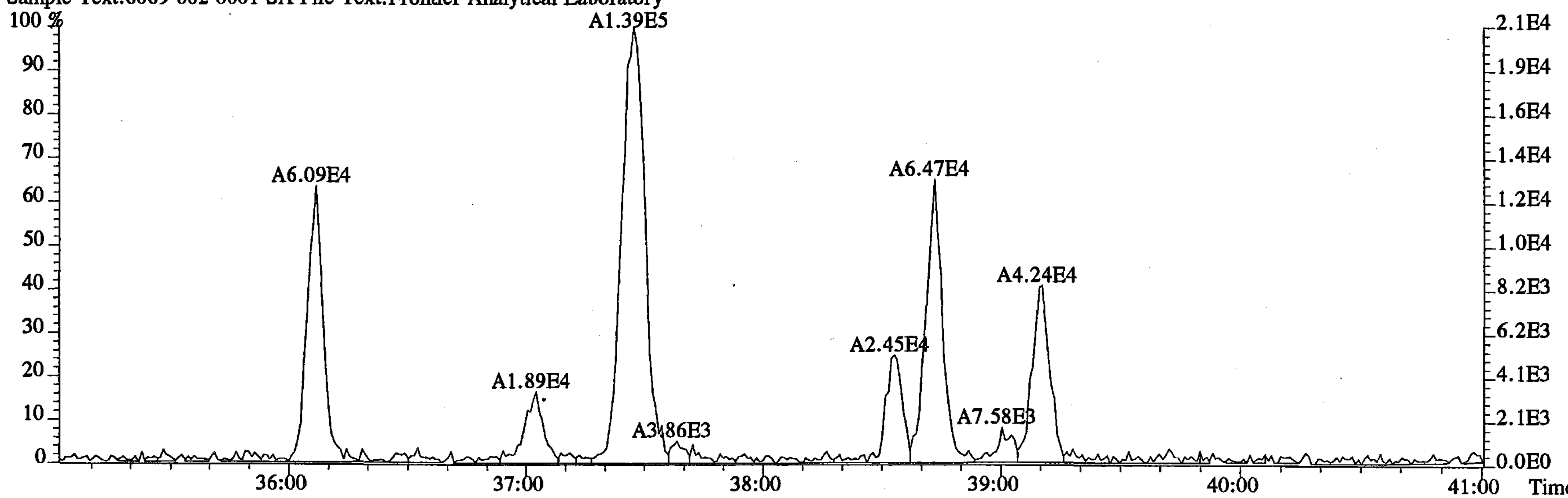
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:18 F:3 Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



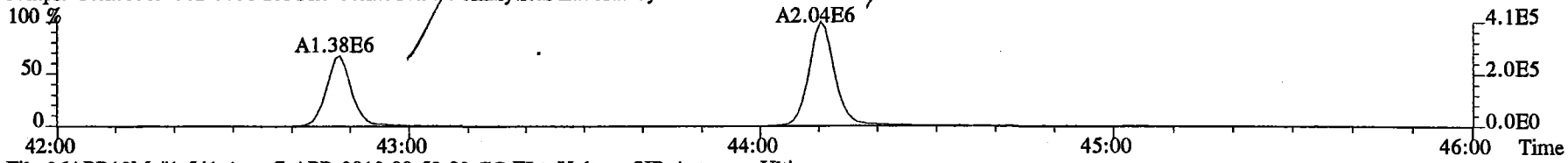
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



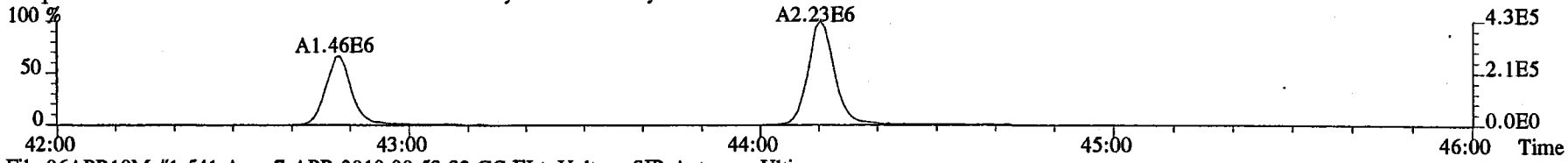
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



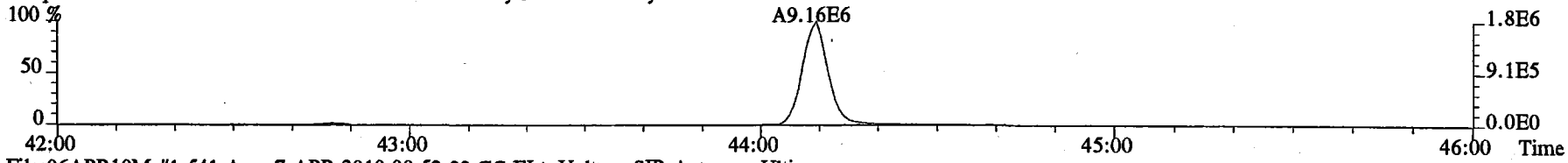
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



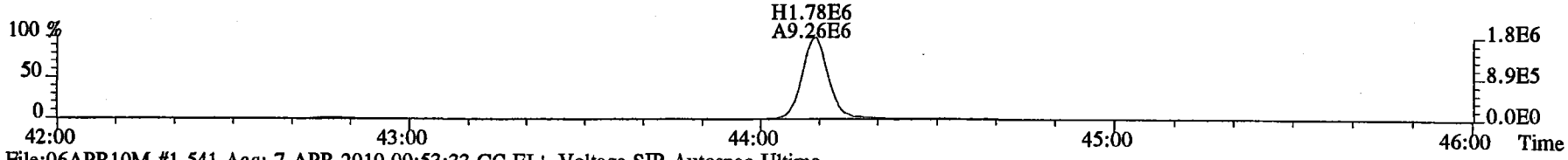
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



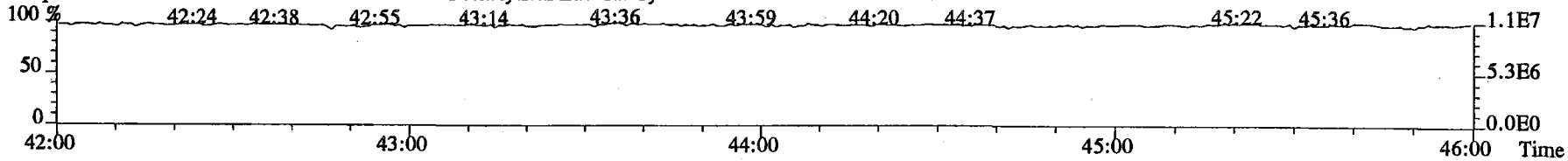
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



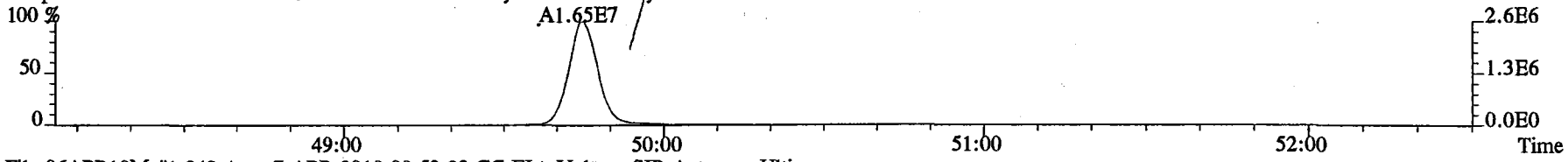
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



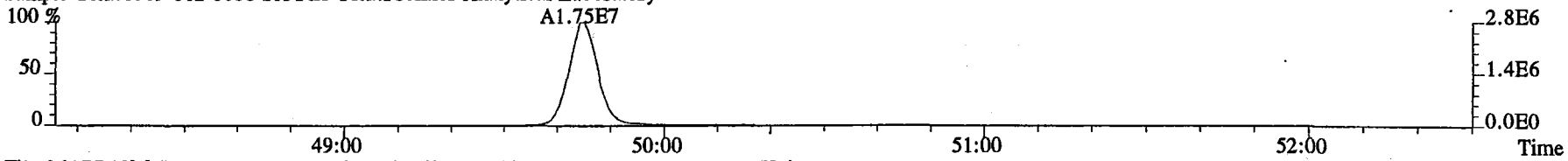
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:18 F:4 Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



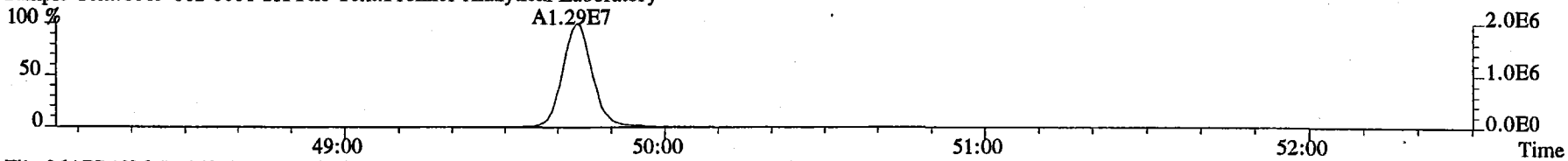
File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



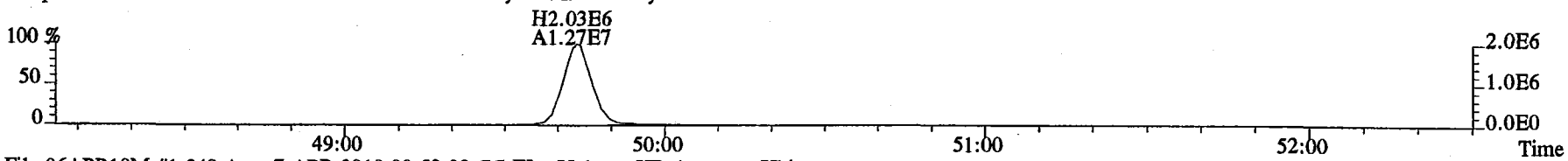
File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



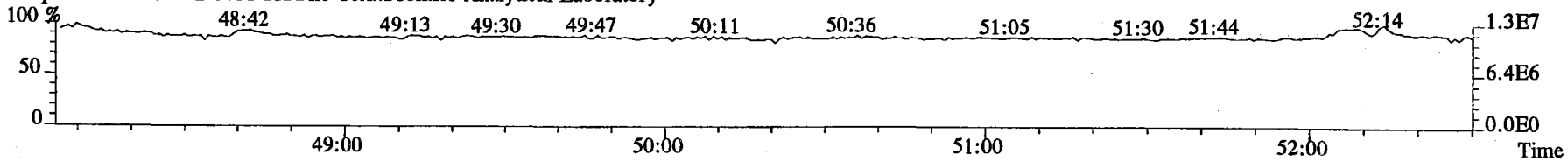
File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



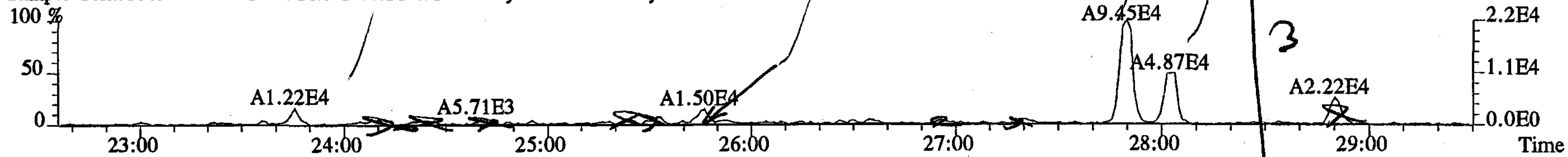
File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



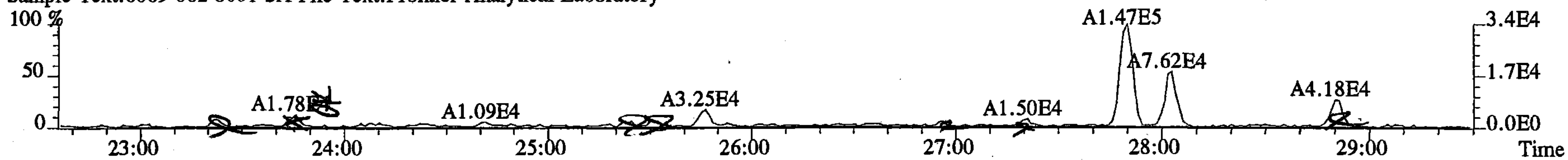
File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:18 F:5 Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



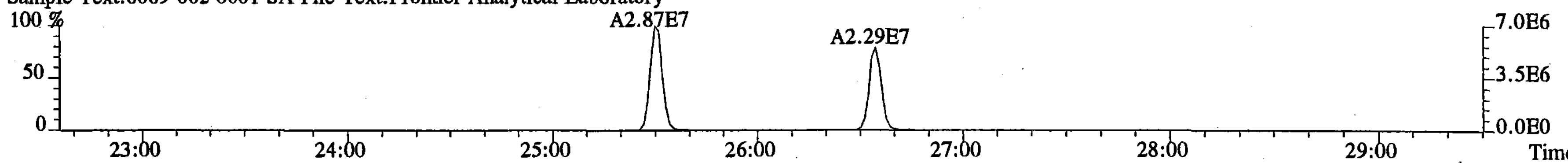
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



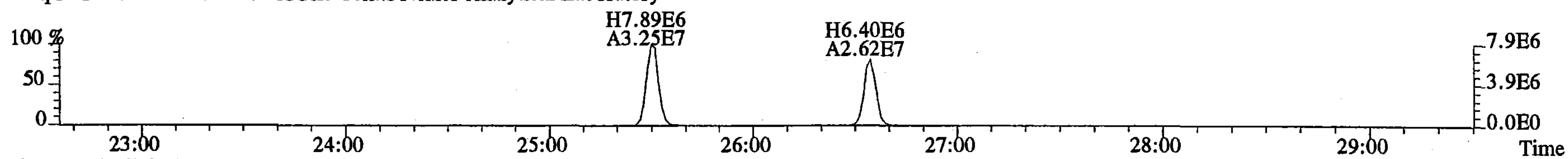
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



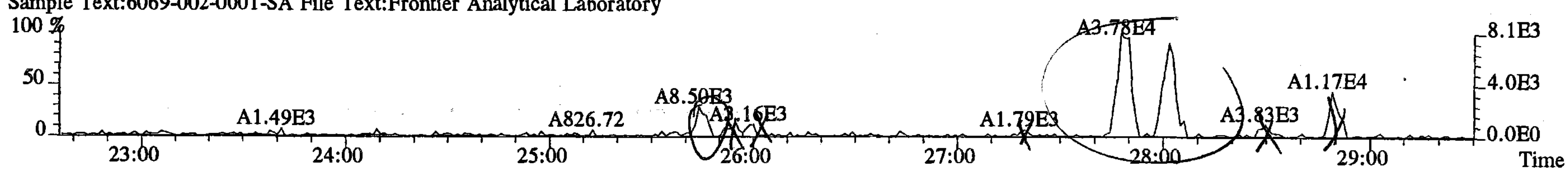
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



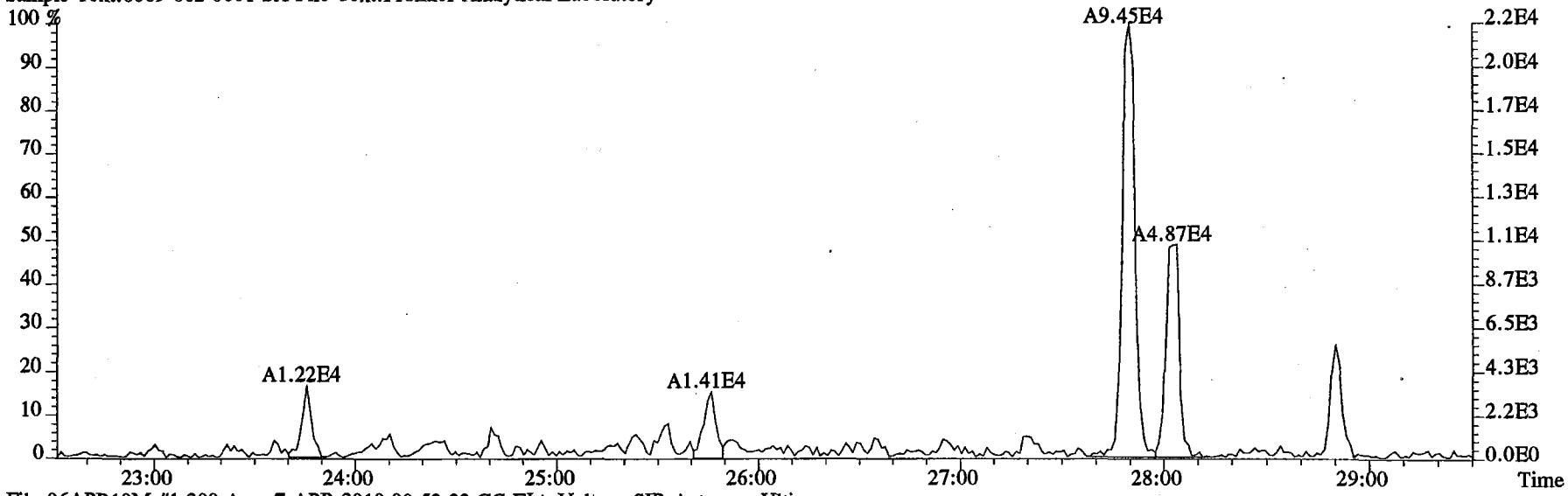
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



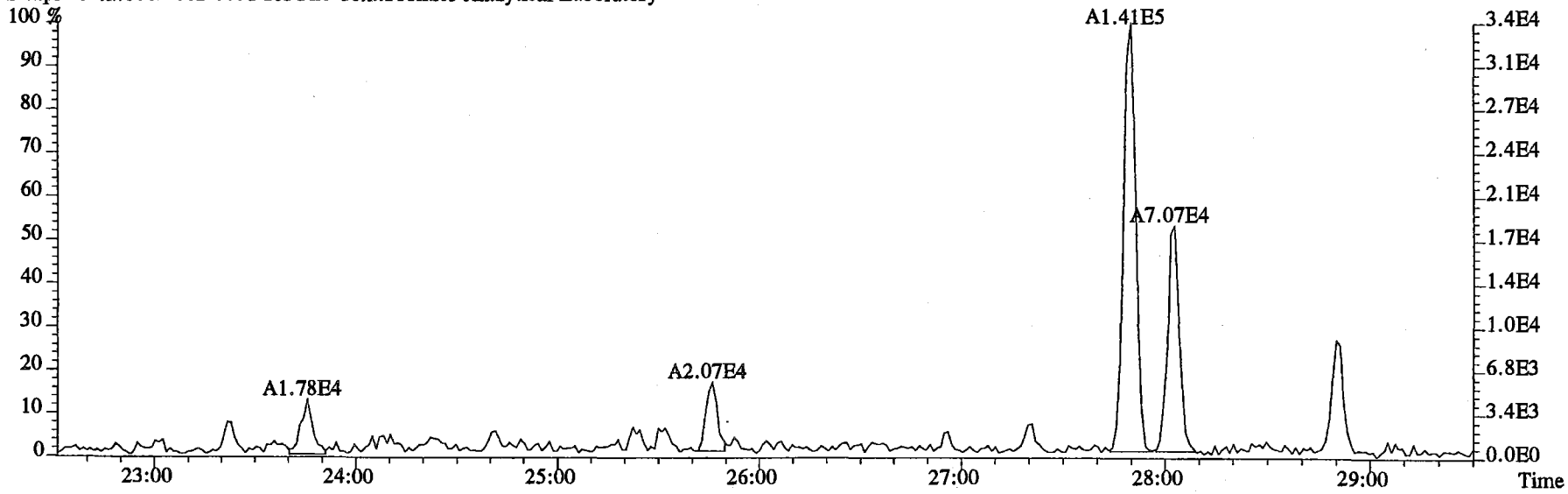
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



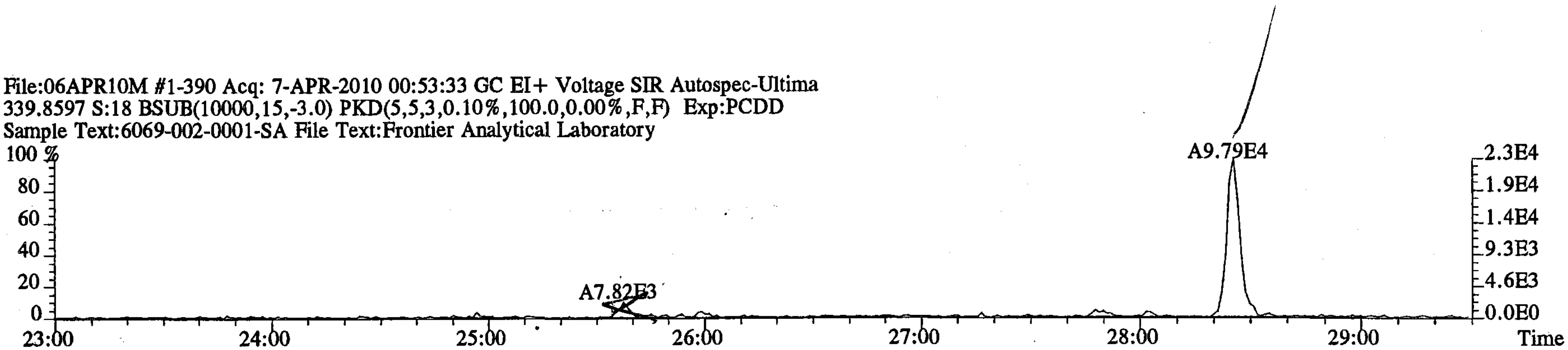
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



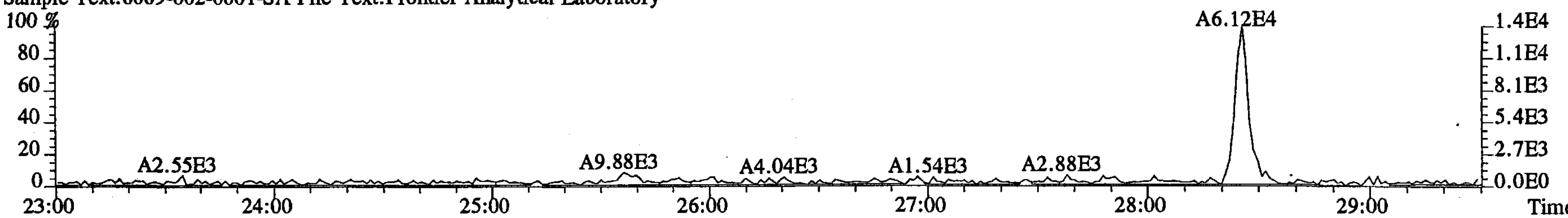
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



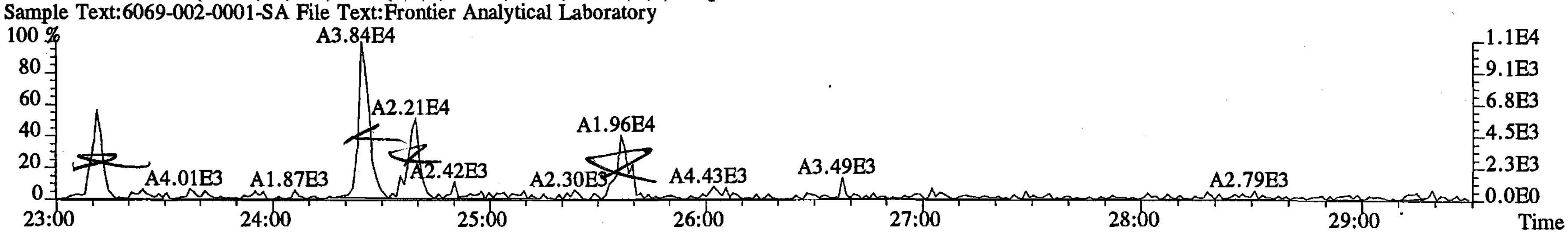
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



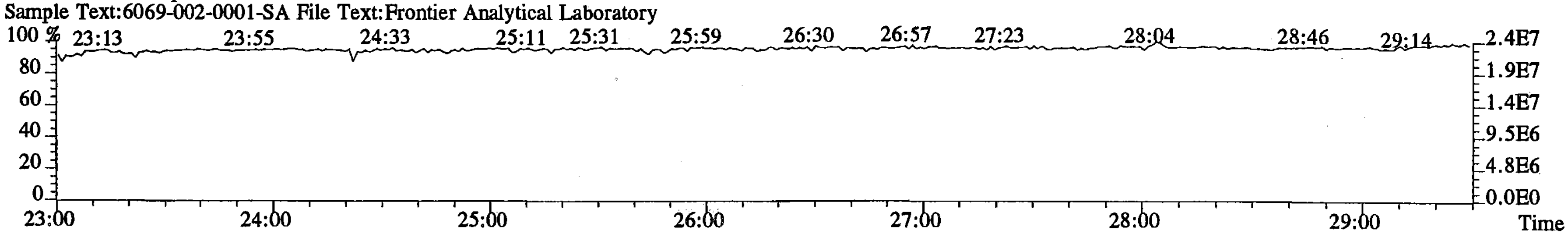
File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory

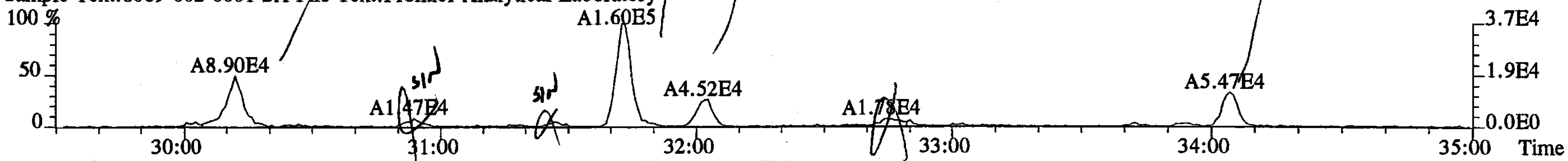


File:06APR10M #1-390 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:18 Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory

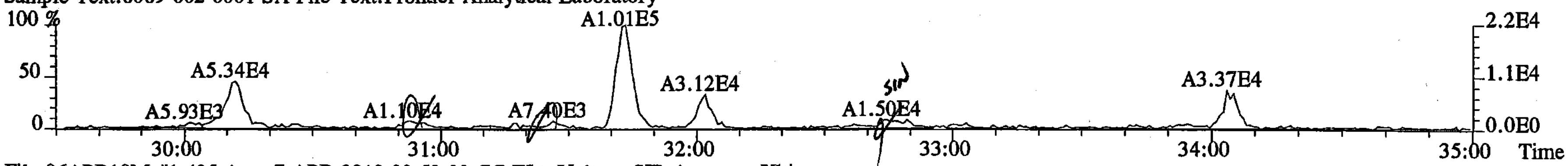


QQ20 : 00845

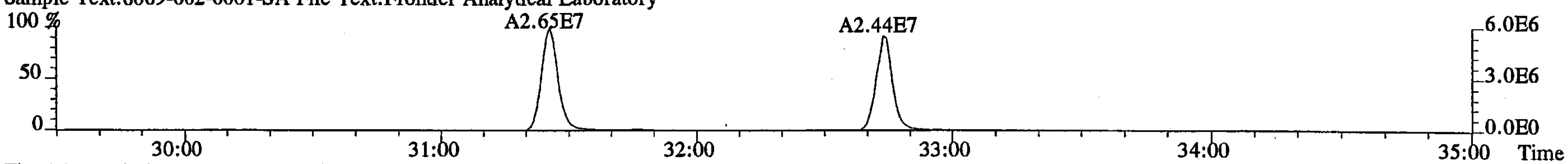
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



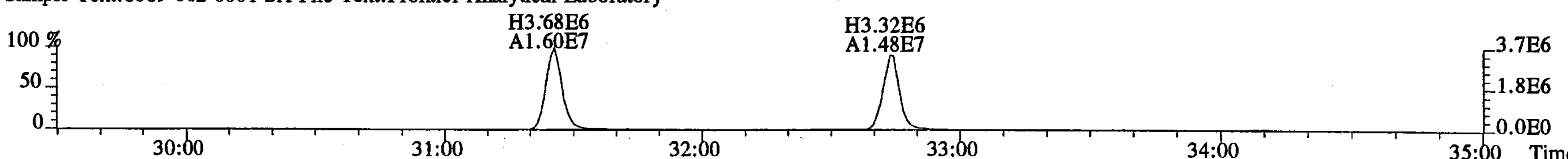
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



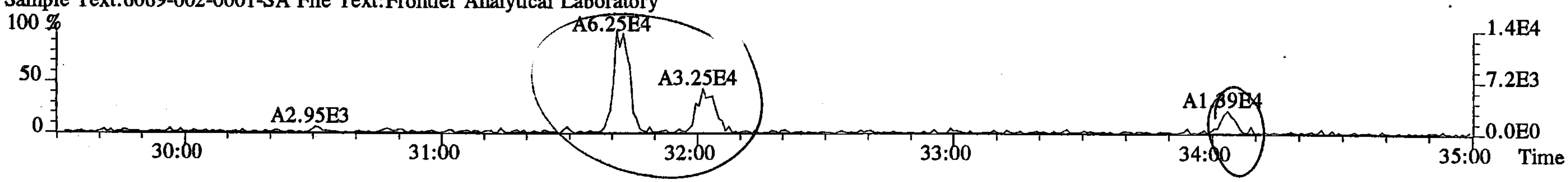
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



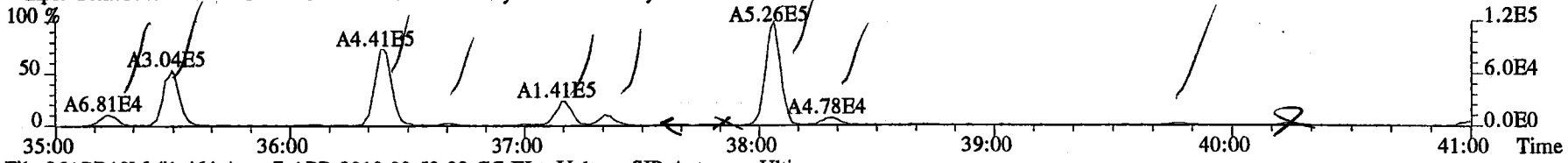
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



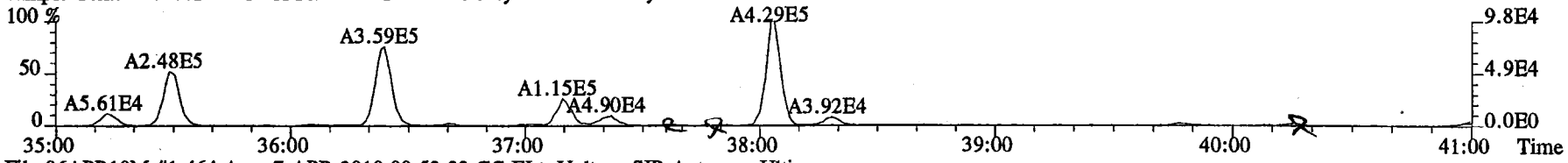
File:06APR10M #1-425 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



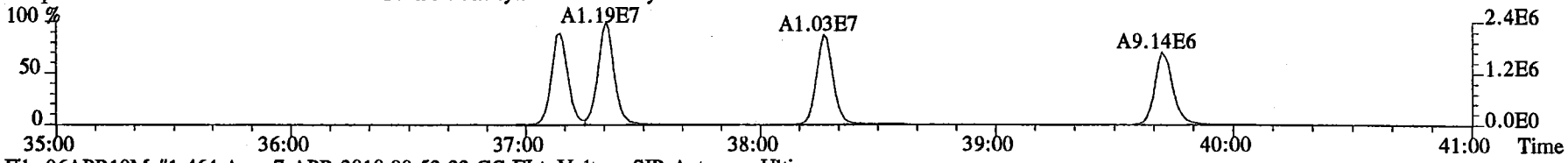
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



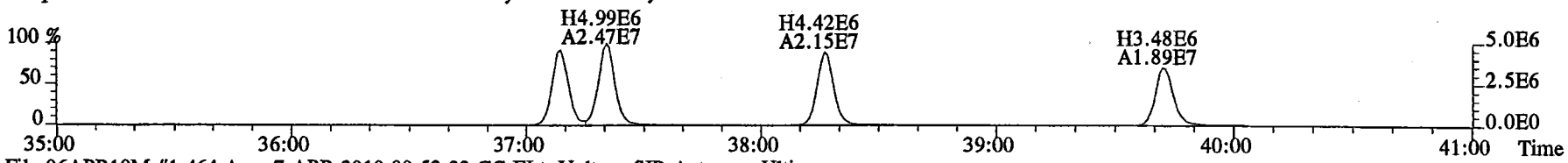
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



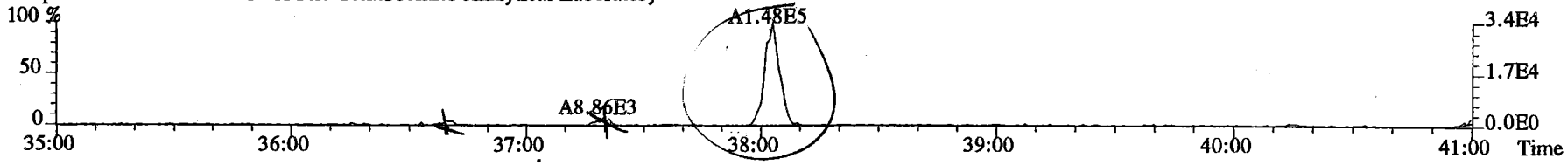
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



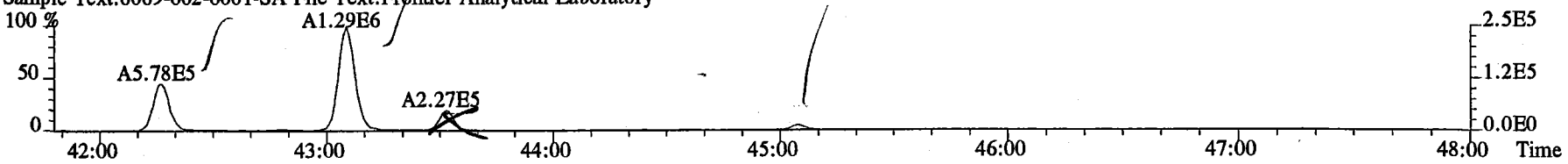
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



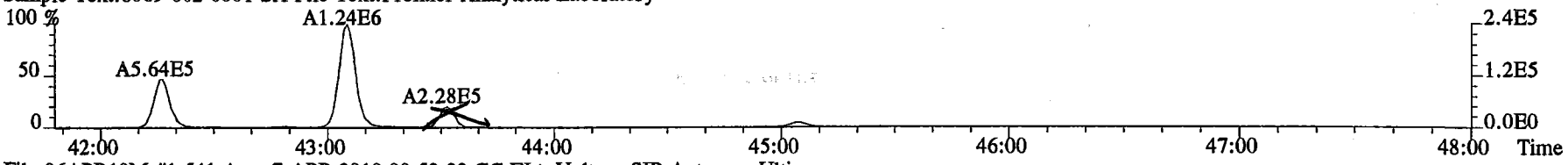
File:06APR10M #1-464 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



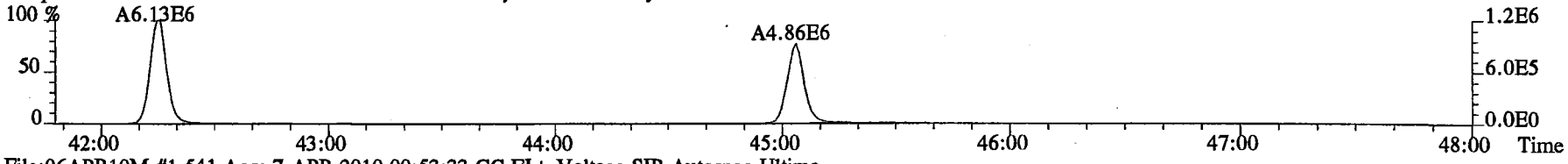
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



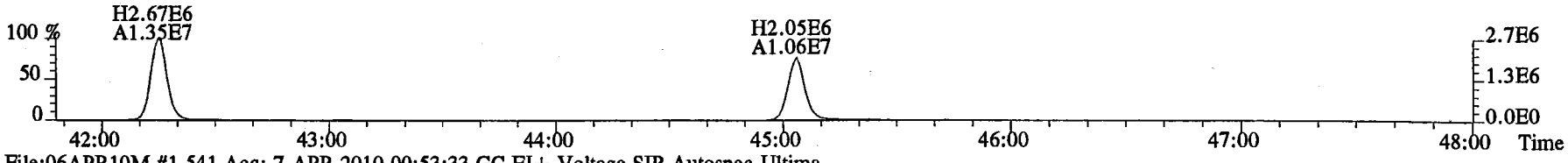
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



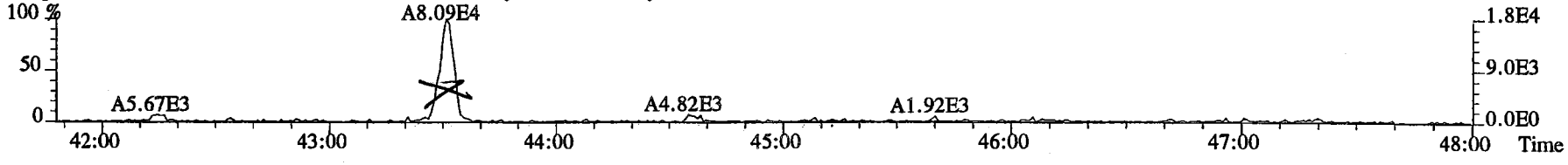
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



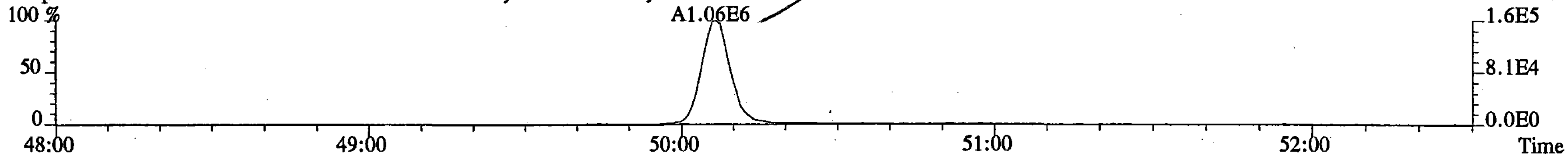
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



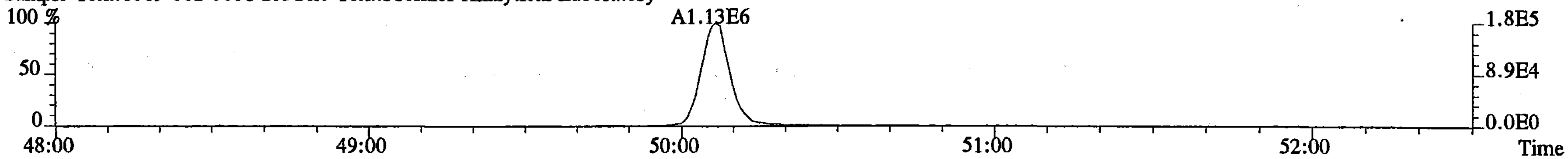
File:06APR10M #1-541 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



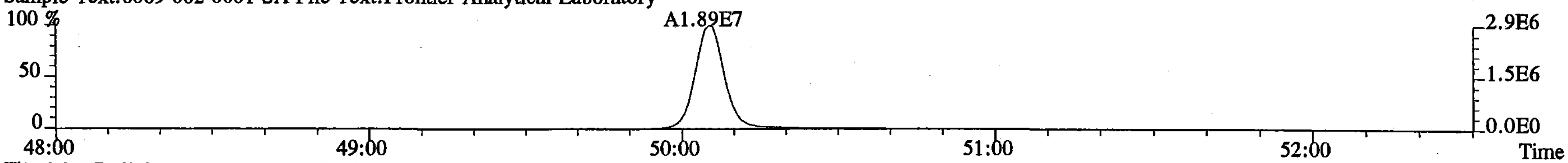
File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



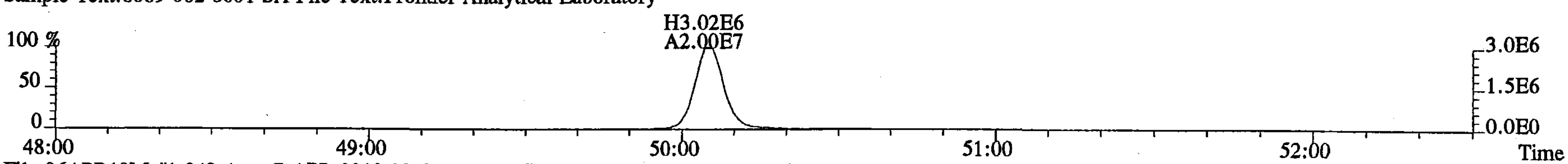
File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



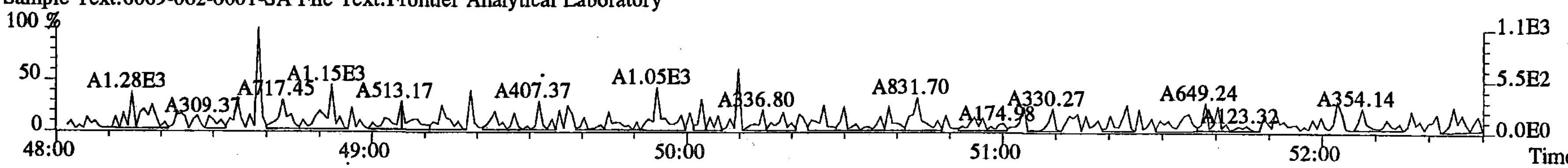
File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-348 Acq: 7-APR-2010 00:53:33 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-002-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 6069-003-0001-SA Filename: 06APR10M Sam:19 Acquired: 7-APR-10 01:48:52 ICal: PCDDFAL3-11-18-09
Client ID: CB1032510COMP ConCal: ST040610M2 EndCal: ST040610M3
Results: 6062-2 GC Column: DB5 Amount: 1.044 NATO 1989 Tox: 0.286
WHO 1998 Tox: 0.198 WHO 2005 Tox: 0.218

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	240	340	0.513
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.96	*		2.50	351	331	0.780
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	363	347	0.797
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.34	*		2.50	363	347	0.962
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.37	*		2.50	363	347	0.868
1,2,3,4,6,7,8-HpCDD	1.15e+05	0.95	y	44:10	1.17	15.3	J	2.50	-	-	*
OCDD	4.94e+05	0.93	y	49:44	1.21	90.7		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	348	700	0.500
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	601	498	0.908
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	601	498	1.02
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	1.00	*		2.50	246	274	0.475
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	246	274	0.496
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.99	*		2.50	246	274	0.616
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.09	*		2.50	246	274	0.669
1,2,3,4,6,7,8-HpCDF	3.47e+04	0.98	y	42:17	1.36	3.56	J	2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.61	*		2.50	137	168	0.438
OCDF	4.06e+04	0.86	y	50:05	0.84	6.80	J	2.50	-	-	*
											Rec
13C-2,3,7,8-TCDD	2.24e+07	0.71	y	27:20	0.94	1260					65.8
13C-1,2,3,7,8-PeCDD	1.99e+07	1.73	y	33:09	1.02	1040					54.3
13C-1,2,3,4,7,8-HxCDD	1.41e+07	1.27	y	38:32	0.98	1280					66.6
13C-1,2,3,6,7,8-HxCDD	1.24e+07	1.26	y	38:42	0.94	1180					61.4
13C-1,2,3,4,6,7,8-HpCDD	1.23e+07	1.00	y	44:09	0.90	1220					63.5
13C-OCDD	1.72e+07	1.00	y	49:44	0.67	2300					60.0
13C-2,3,7,8-TCDF	3.17e+07	0.87	y	26:34	0.88	1160					60.7
13C-1,2,3,7,8-PeCDF	2.93e+07	1.66	y	31:26	0.88	1080					56.2
13C-2,3,4,7,8-PeCDF	2.50e+07	1.66	y	32:44	0.85	949					49.5
13C-1,2,3,4,7,8-HxCDF	2.42e+07	0.48	y	37:09	1.72	1250					65.4
13C-1,2,3,6,7,8-HxCDF	2.63e+07	0.48	y	37:21	2.00	1170					61.0
13C-2,3,4,6,7,8-HxCDF	1.99e+07	0.48	y	38:16	1.74	1020					53.3
13C-1,2,3,7,8,9-HxCDF	1.75e+07	0.49	y	39:42	1.51	1040					54.2
13C-1,2,3,4,6,7,8-HpCDF	1.37e+07	0.47	y	42:15	1.10	1110					58.2
13C-1,2,3,4,7,8,9-HpCDF	1.05e+07	0.46	y	45:03	0.85	1110					57.8
13C-OCDF	2.72e+07	0.92	y	50:05	1.17	2060					53.8
37Cl-2,3,7,8-TCDD	9.66e+06			27:22	0.97	527					68.8
13C-1,2,3,4-TCDD	3.60e+07	0.73	y	26:46	-	132					
13C-1,2,3,4-TCDF	5.94e+07	0.87	y	25:31	-	123					
13C-1,2,3,7,8,9-HxCDD	2.15e+07	1.25	y	39:09	-	100					

								Fac	Noise-1	Noise-2	DL	#Hom
Total Tetra-Dioxins	*			NotFnd	1.02	*		2.50	240	340	0.513	0
Total Penta-Dioxins	*			NotFnd	0.96	*		2.50	351	331	0.780	0
Total Hexa-Dioxins	5.31e+04			36:05	1.36	5.65	J	2.50	-	-	*	2
Total Hepta-Dioxins	2.38e+05			42:48	1.17	31.8		2.50	-	-	*	2
Total Tetra-Furans	*			NotFnd	1.29	*		2.50	348	700	0.500	0
1st Fn. Tot Penta-Furans	*			NotFnd	0.90	*		2.50	601	498	1.02 PeCDF	0
Total Penta-Furans	*			NotFnd	0.90	*		2.50	601	498	1.02 0.00	0
Total Hexa-Furans	4.17e+04			35:30	0.99	3.67	J	2.50	-	-	*	2
Total Hepta-Furans	7.09e+04			42:17	1.47	7.45	J	2.50	-	-	*	2

Analyst: _____ Date: 4/7/10

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 24 File: 06APR10M S: 19 I: 1 F: 3
Acquired: 7-APR-10 01:48:52

Total Concentration: 5.65 Unnamed Concentration: 5.646

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
36:05	1.22e+04	1.07e+04	1.13	y	2.29e+04	2.43	
37:27	1.61e+04	1.41e+04	1.14	y	3.02e+04	3.21	

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 24 File: 06APR10M S: 19 I: 1 F: 4
Acquired: 7-APR-10 01:48:52

Total Concentration: 31.8 Unnamed Concentration: 16.514

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:48	5.98e+04	6.38e+04	0.94 y	1.24e+05	16.5	
44:10	5.59e+04	5.86e+04	0.95 y	1.15e+05	15.3	1,2,3,4,6,7,8-HpCDD

Totals class: Total Hexa-Furans Entry #: 45

Run: 24 File: 06APR10M S: 19 I: 1 F: 3
Acquired: 7-APR-10 01:48:52

Total Concentration: 3.67 Unnamed Concentration: 3.666

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
35:30	9.84e+03	7.52e+03	1.31 y	1.74e+04	1.53	
38:03	1.32e+04	1.11e+04	1.19 y	2.43e+04	2.14	

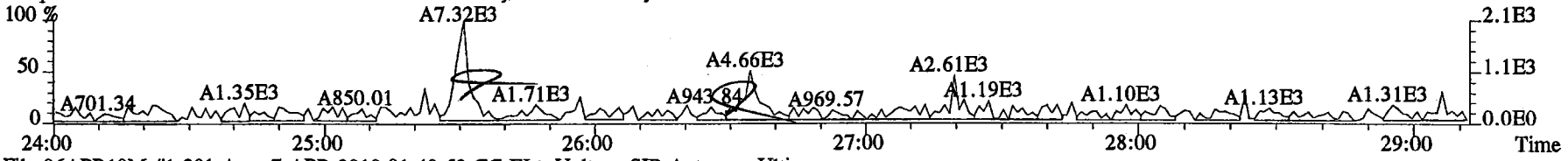
Totals class: Total Hepta-Furans Entry #: 46

Run: 24 File: 06APR10M S: 19 I: 1 F: 4
Acquired: 7-APR-10 01:48:52

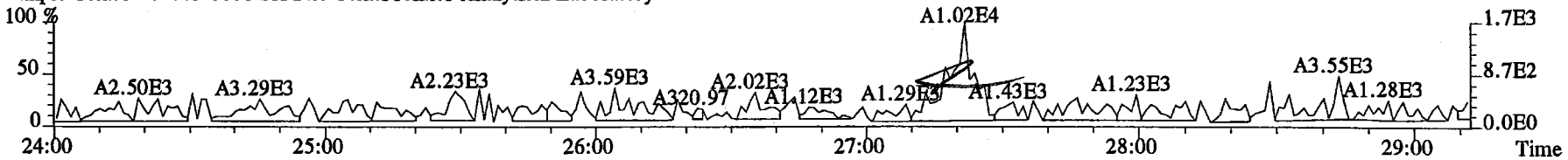
Total Concentration: 7.45 Unnamed Concentration: 3.890

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
42:17	1.72e+04	1.75e+04	0.98	y	3.47e+04	3.56	1,2,3,4,6,7,8-HpCDF
43:07	1.96e+04	1.66e+04	1.18	y	3.62e+04	3.89	

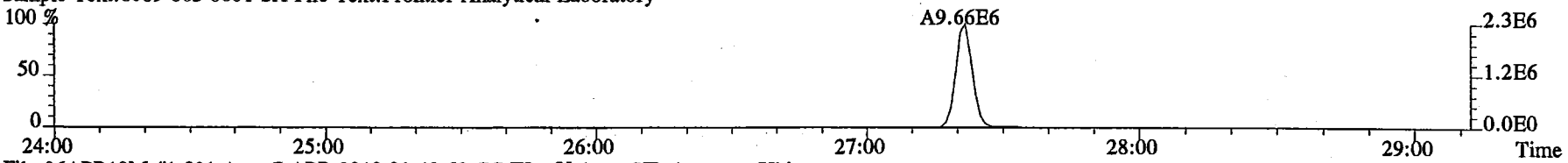
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



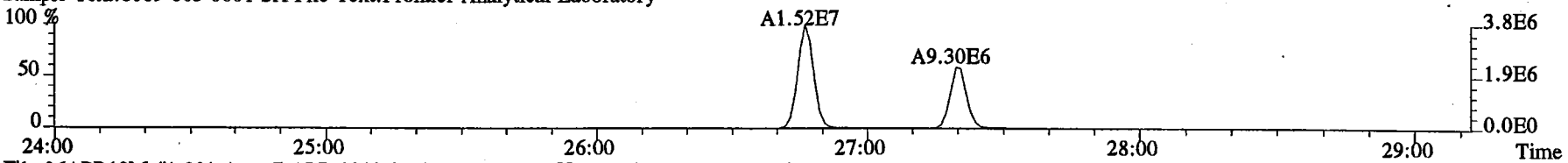
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



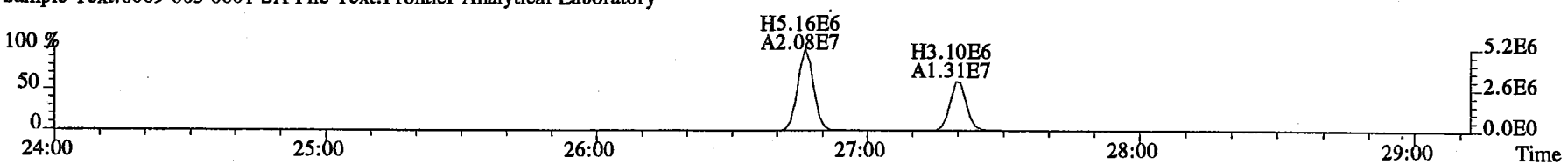
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



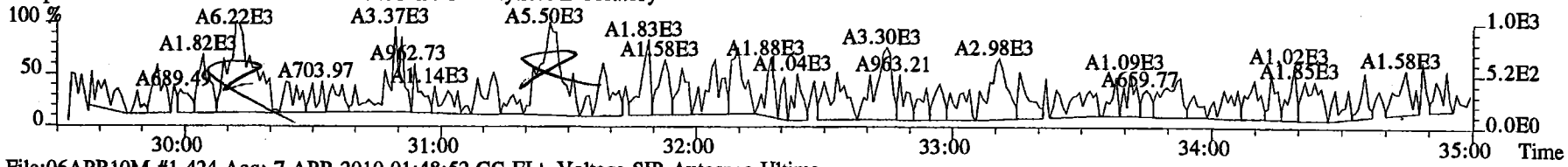
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



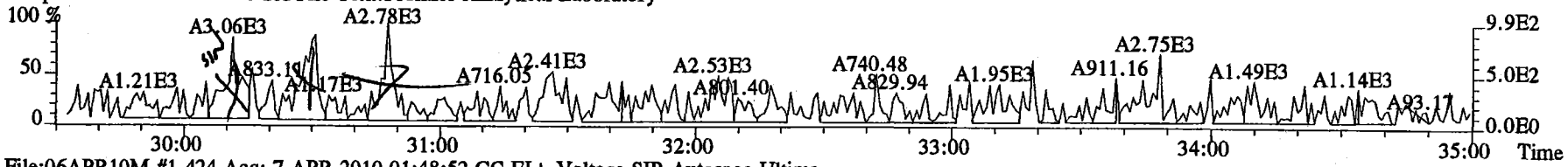
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



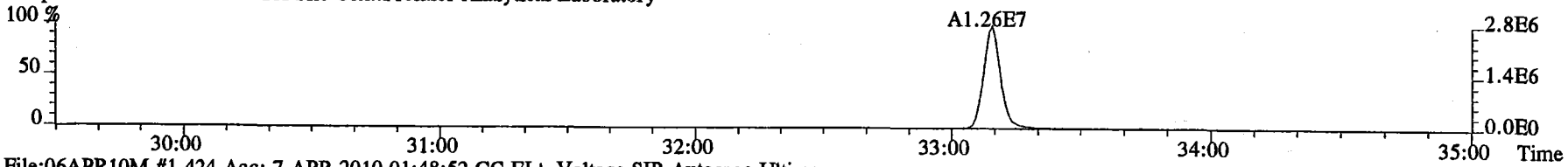
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



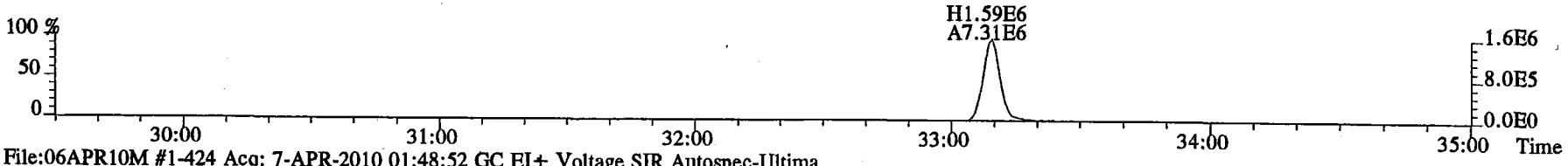
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



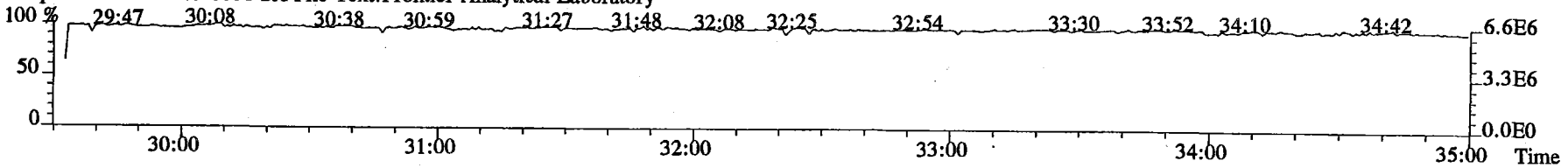
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



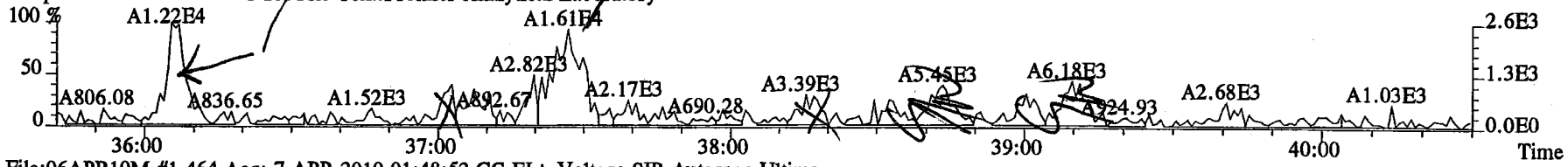
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



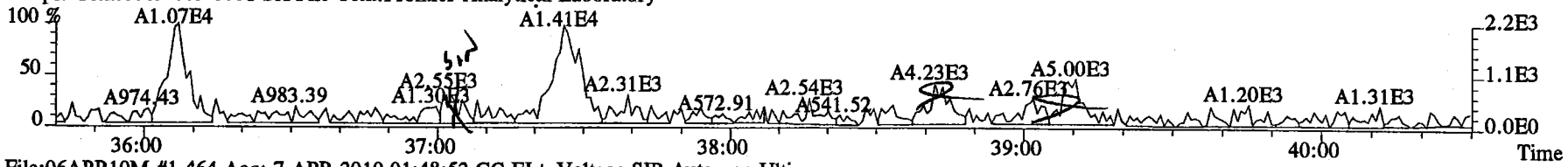
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:19 F:2 Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



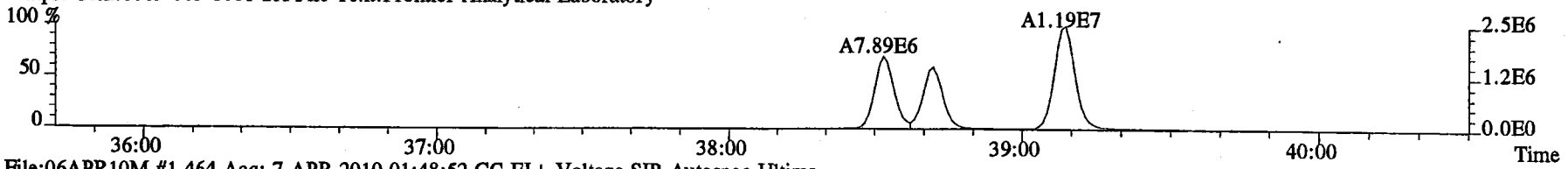
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



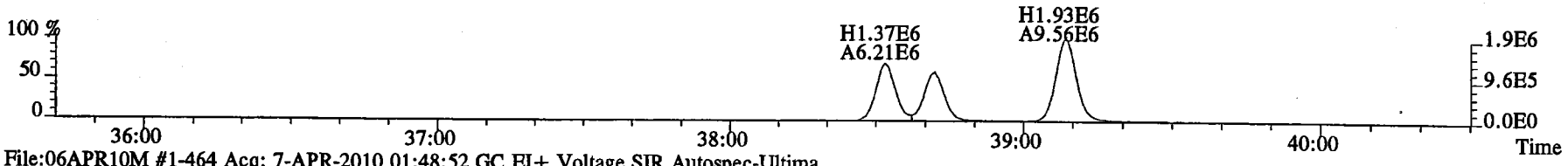
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



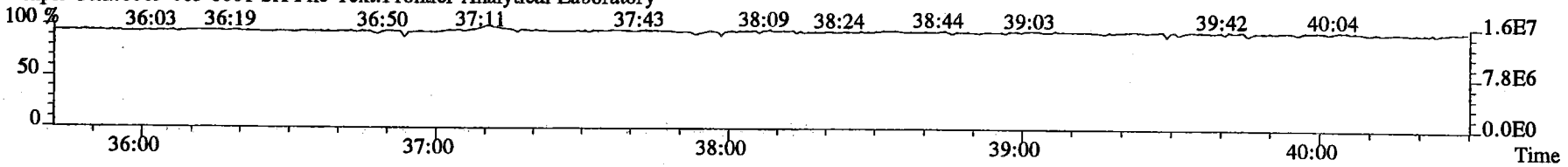
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



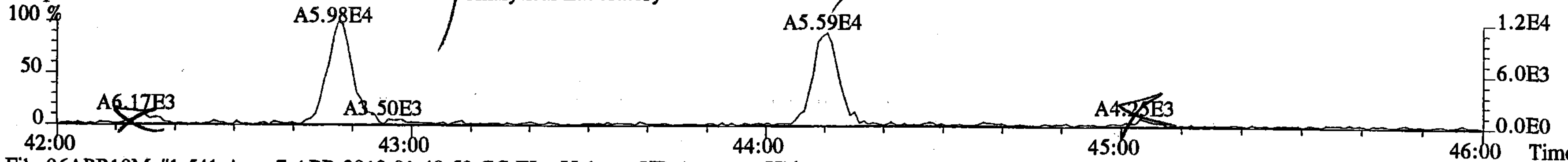
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



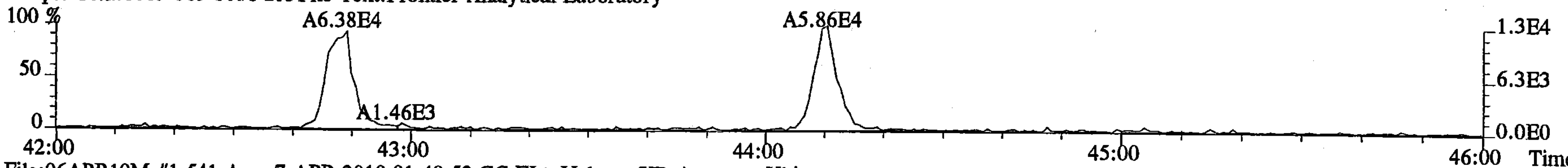
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:19 F:3 Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



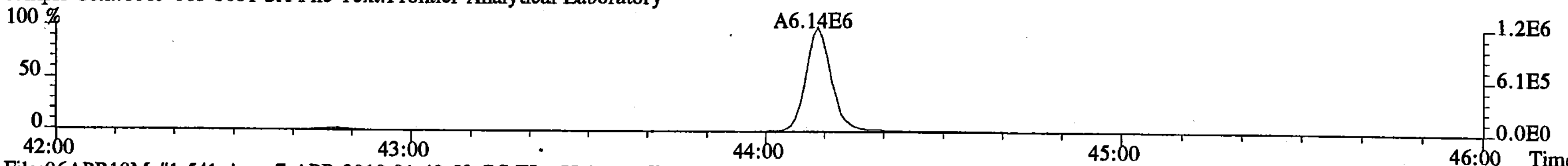
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



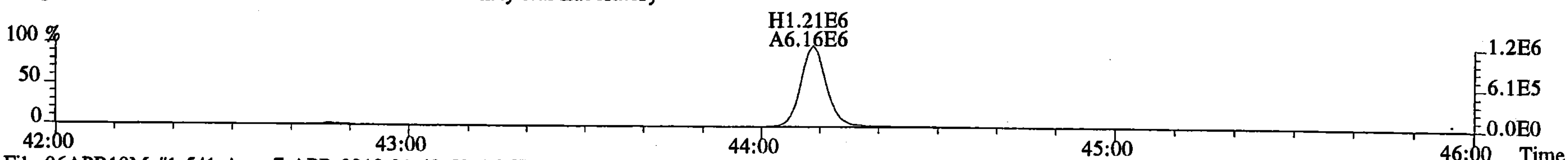
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



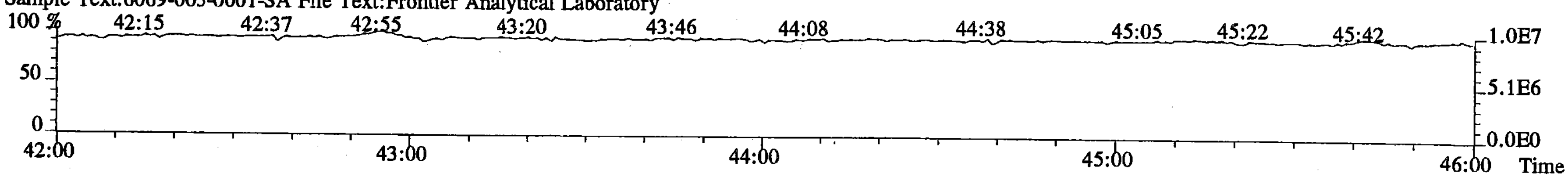
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



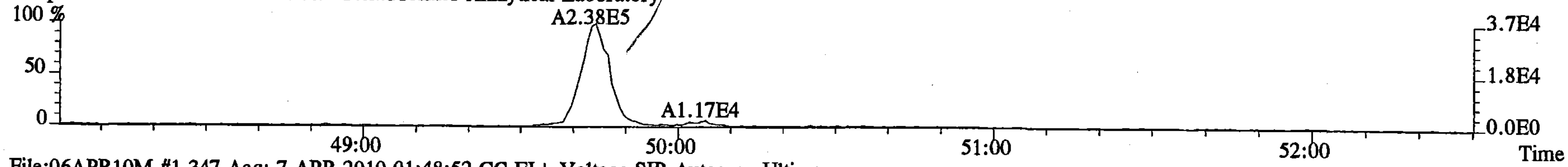
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



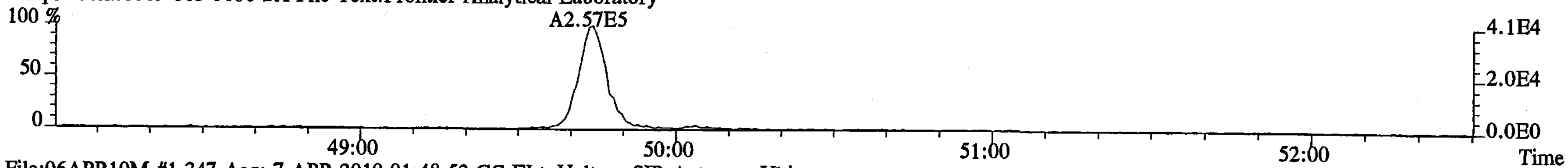
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:19 F:4 Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



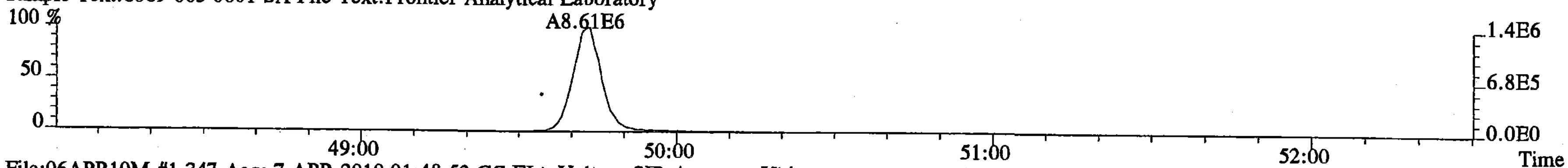
File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



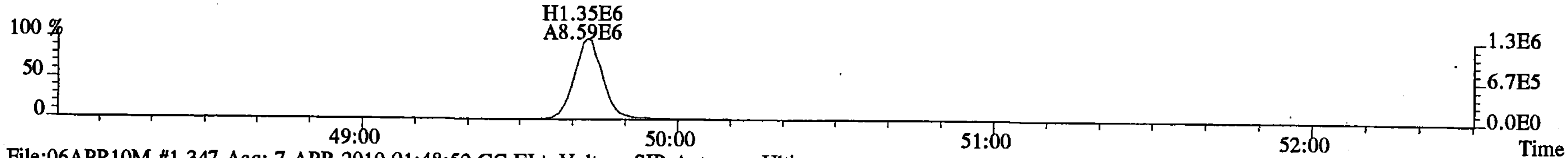
File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



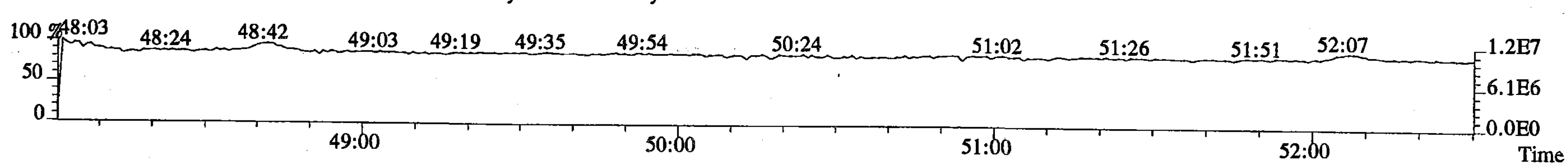
File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



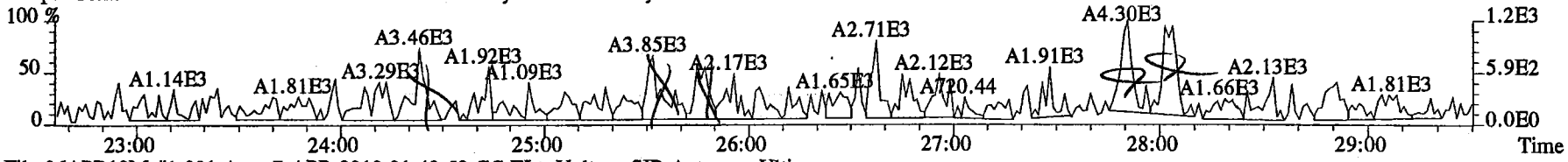
File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



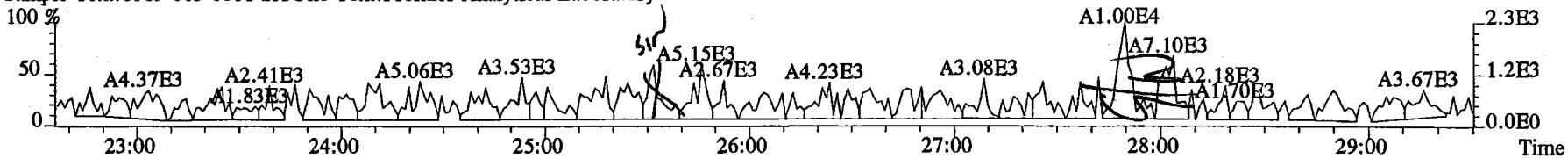
File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:19 F:5 Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



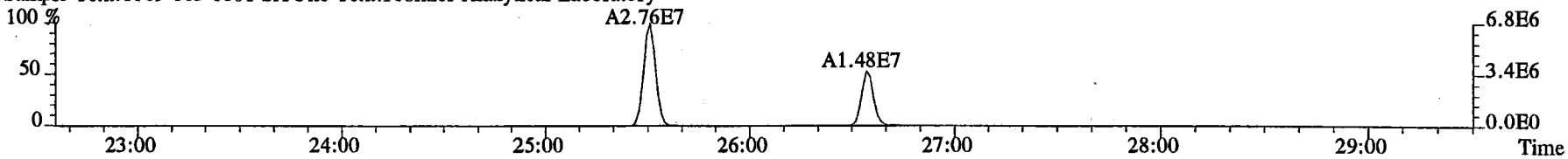
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



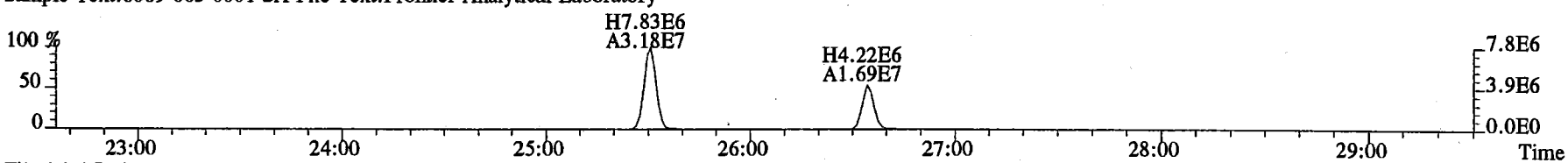
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



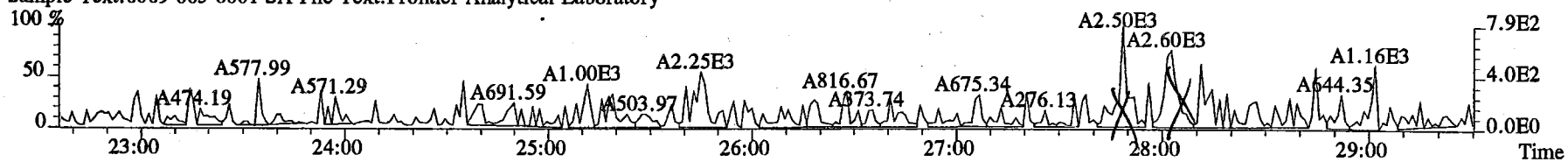
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



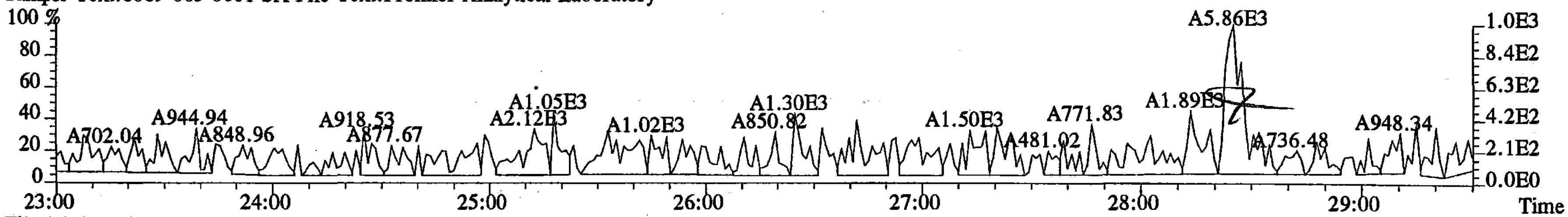
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



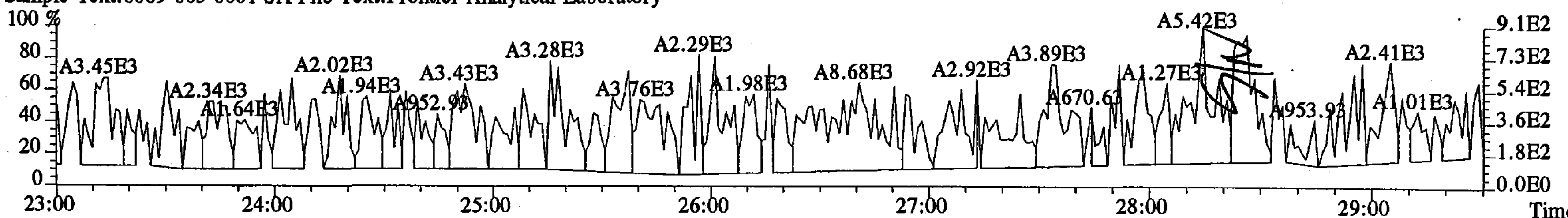
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



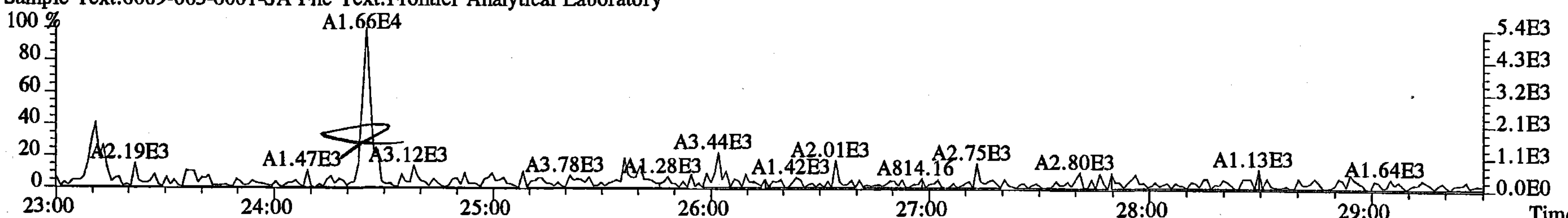
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



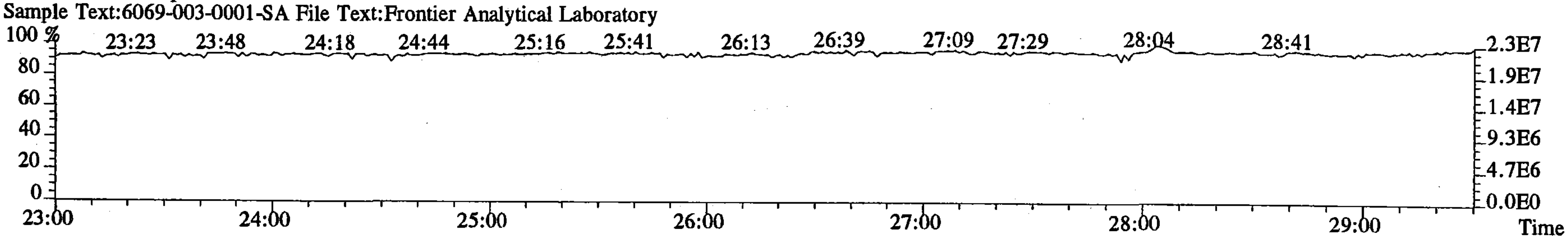
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



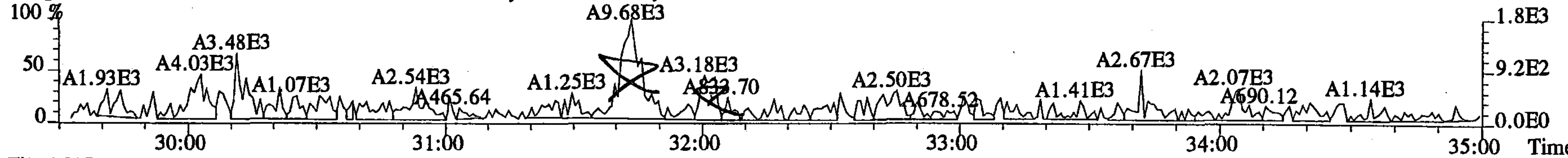
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:19 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



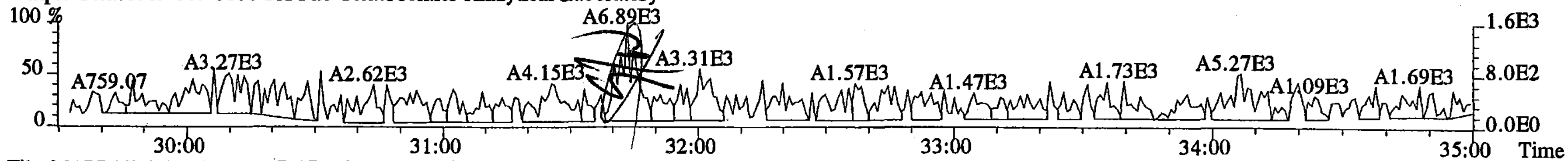
File:06APR10M #1-391 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:19 Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



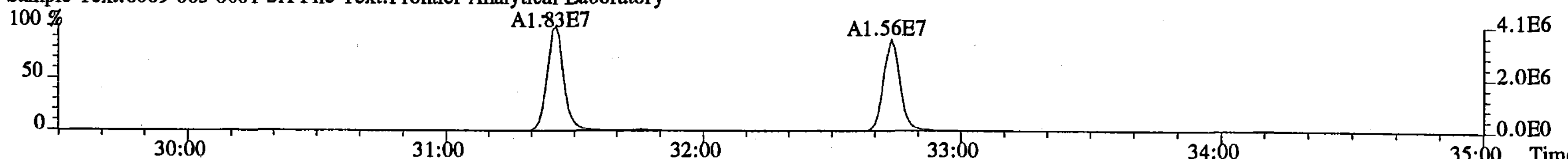
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



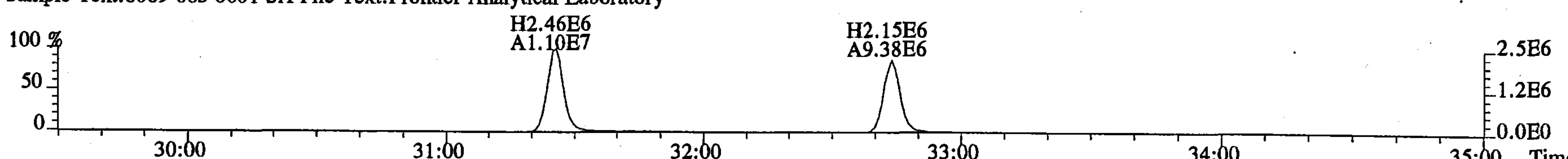
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



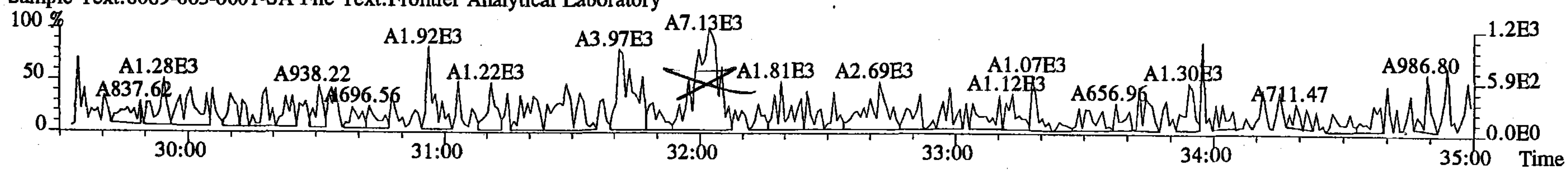
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



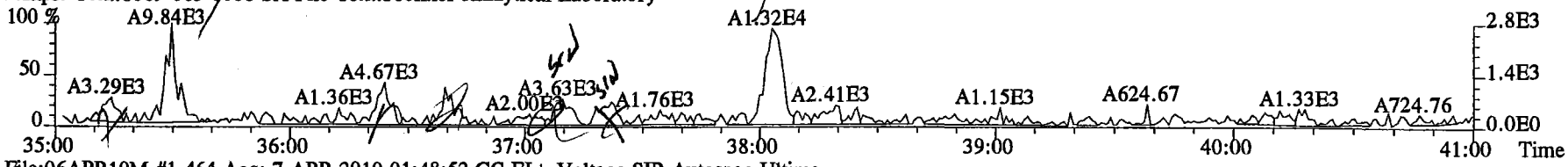
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



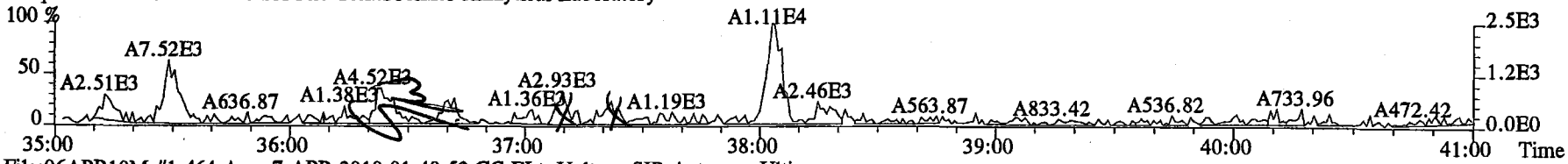
File:06APR10M #1-424 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:19 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



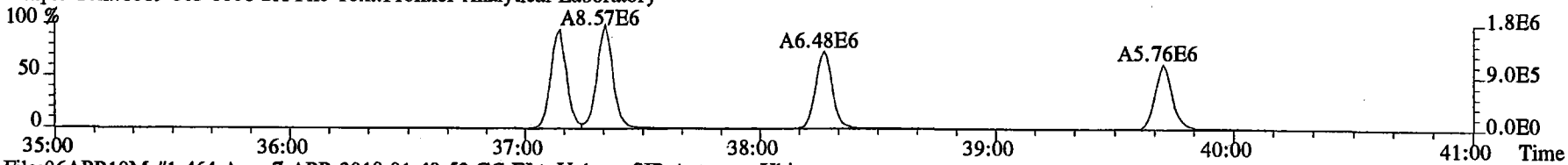
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



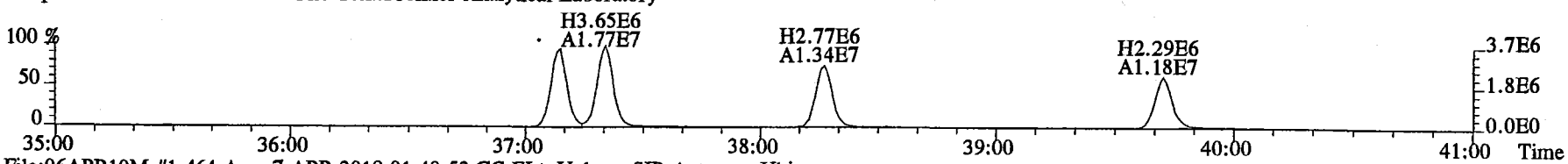
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



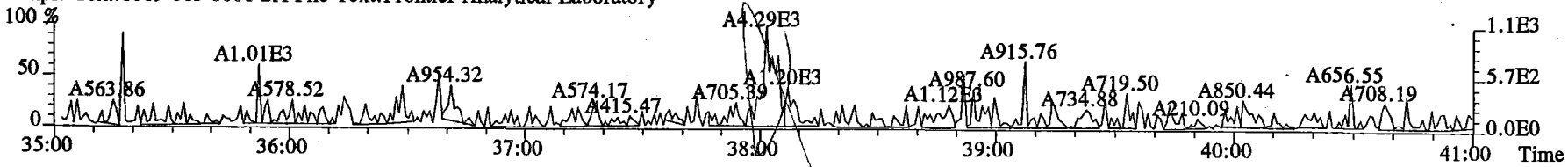
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



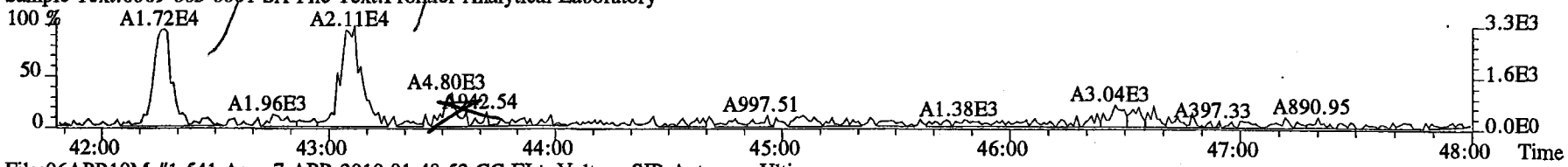
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



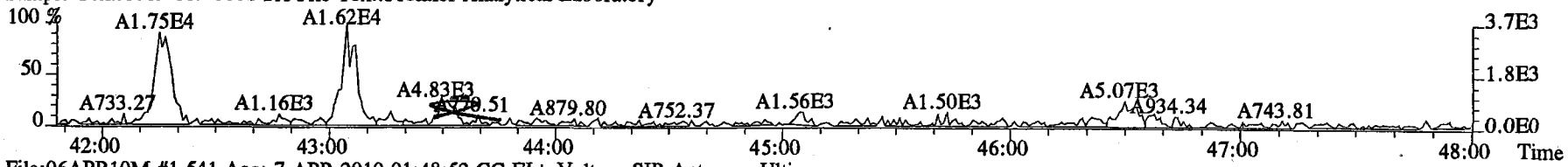
File:06APR10M #1-464 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:19 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



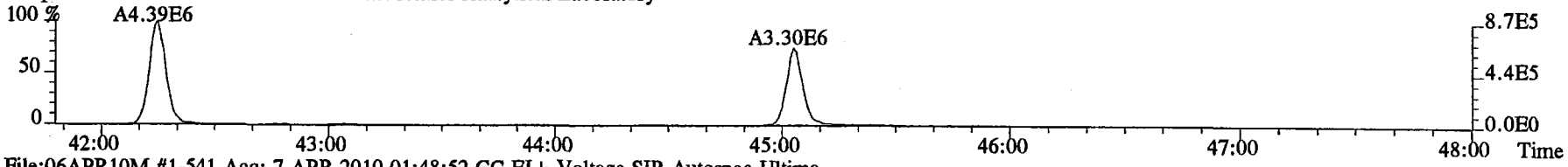
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



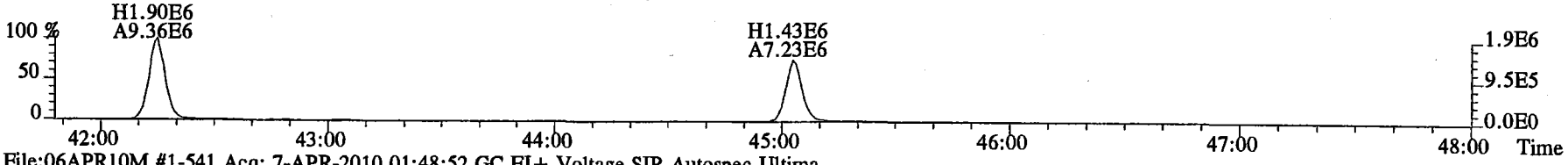
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



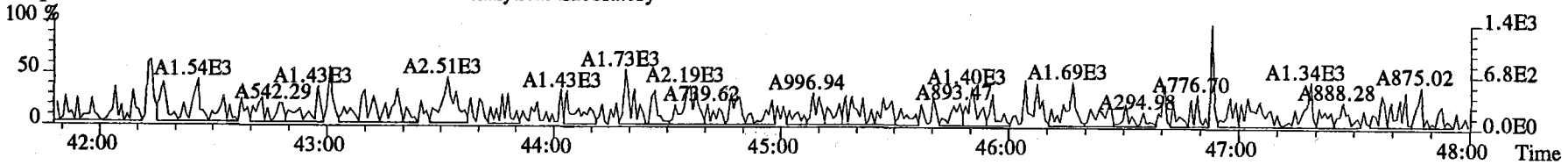
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



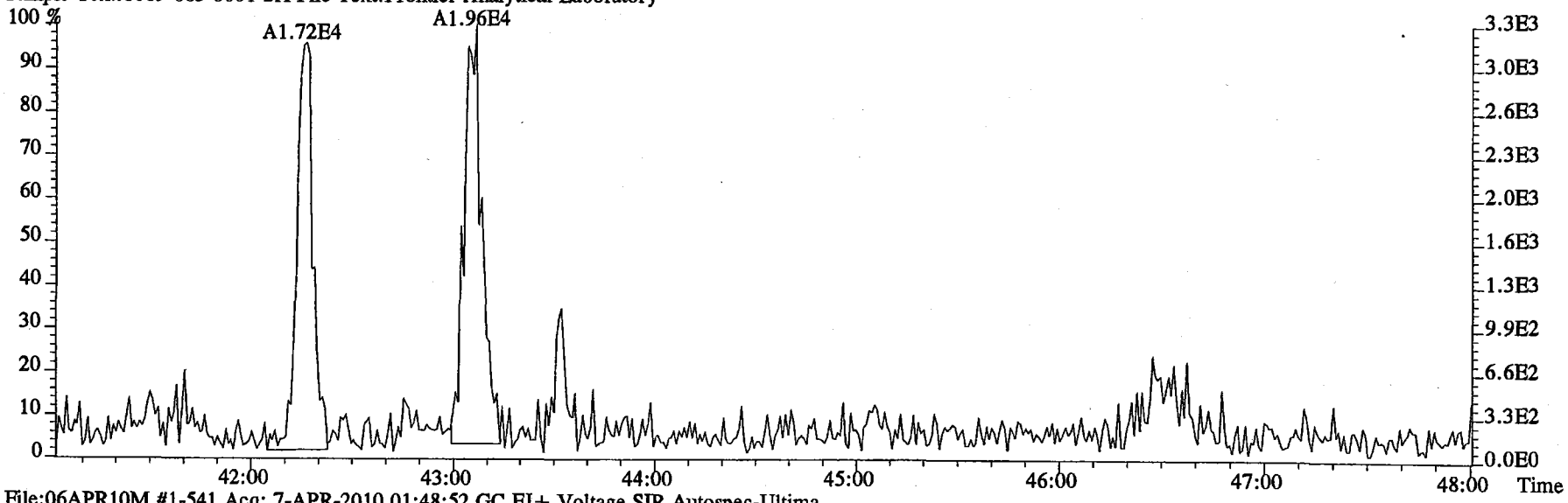
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



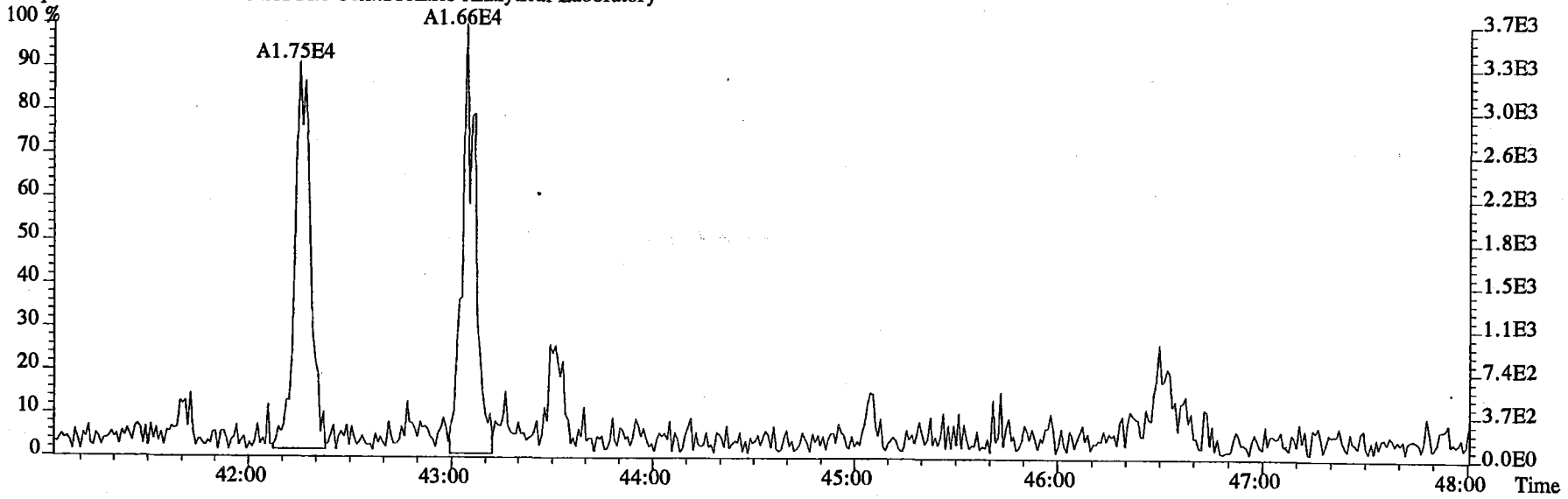
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



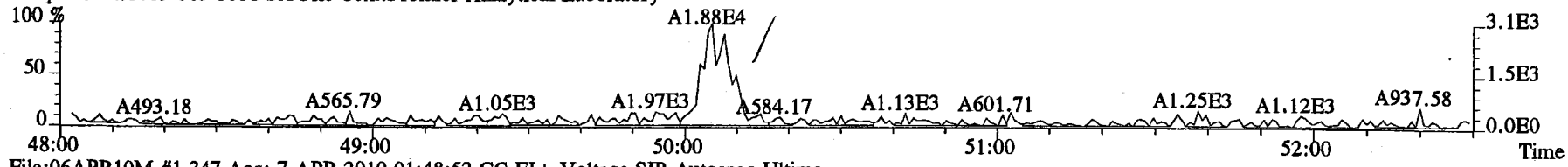
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



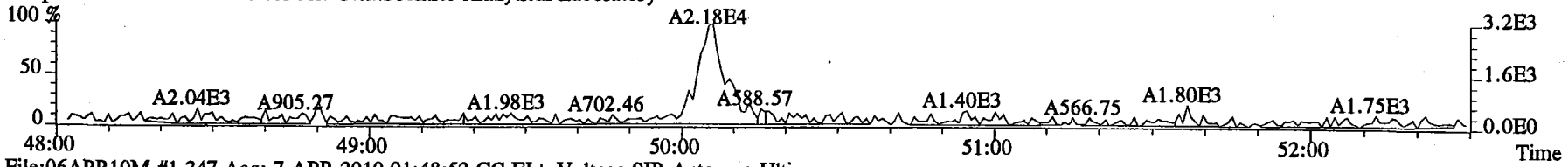
File:06APR10M #1-541 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:19 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



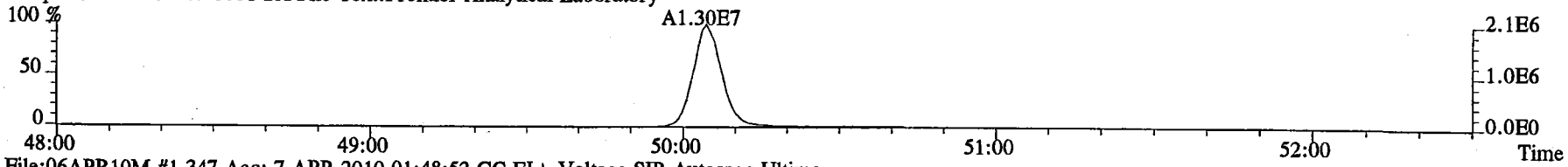
File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



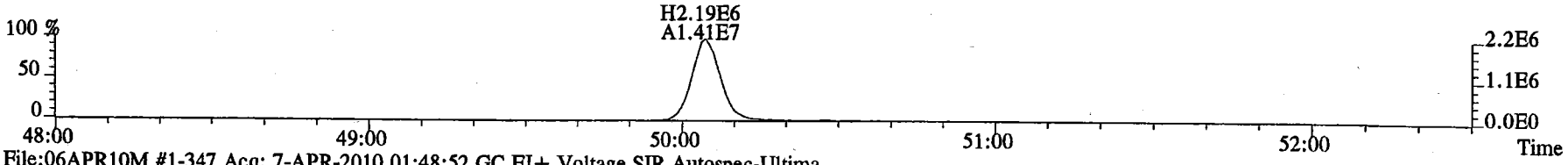
File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



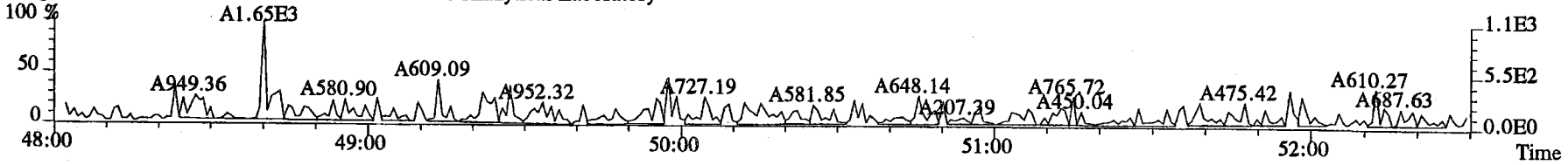
File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-347 Acq: 7-APR-2010 01:48:52 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:19 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-003-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 6069-004-0001-SA Filename: 06APR10M Sam:20 Acquired: 7-APR-10 02:44:11 ICal: PCDDFAL3-11-18-09
Client ID: CB101032510COMP ConCal: ST040610M2 EndCal: ST040610M3
Results: 6062-2 GC Column: DB5 Amount: 1.036 NATO 1989 Tox: 16.2
WHO 1998 Tox: 13.1 WHO 2005 Tox: 14.0

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	310	425	0.460
1,2,3,7,8-PeCDD	3.05e+04	1.35	y	33:10	0.96	2.25	J	2.50	-	-	*
1,2,3,4,7,8-HxCDD	5.56e+04	1.24	y	38:34	1.37	4.09	J	2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.42e+05	1.26	y	38:44	1.34	11.8	J	2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.04e+05	1.26	y	39:10	1.37	8.04	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	4.12e+06	0.94	y	44:11	1.17	405		2.50	-	-	*
OCDD	3.21e+07	0.93	y	49:45	1.21	4430		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	456	816	0.412
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	1170	802	1.27
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	1170	802	1.30
1,2,3,4,7,8-HxCDF	2.49e+05	1.24	y	37:11	1.00	15.6	J	2.50	-	-	*
1,2,3,6,7,8-HxCDF	9.79e+04	1.09	y	37:21	0.92	6.19	J	2.50	-	-	*
2,3,4,6,7,8-HxCDF	8.17e+04	1.14	y	38:19	0.99	5.41	J	2.50	-	-	*
1,2,3,7,8,9-HxCDF	2.35e+04	1.11	y	39:47	1.09	1.61	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.17e+06	1.05	y	42:17	1.36	94.7		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.11e+05	1.07	y	45:05	1.61	9.62	J	2.50	-	-	*
OCDF	2.06e+06	0.92	y	50:07	0.84	270		2.50	-	-	*
											Rec
13C-2,3,7,8-TCDD	3.14e+07	0.71	y	27:20	0.94	1810					93.7
13C-1,2,3,7,8-PeCDD	2.73e+07	1.73	y	33:10	1.02	1450					75.2
13C-1,2,3,4,7,8-HxCDD	1.91e+07	1.29	y	38:33	0.98	1710					88.5
13C-1,2,3,6,7,8-HxCDD	1.73e+07	1.28	y	38:42	0.94	1620					84.1
13C-1,2,3,4,6,7,8-HpCDD	1.68e+07	1.02	y	44:09	0.90	1650					85.3
13C-OCDD	2.30e+07	1.01	y	49:44	0.67	3040					78.8
13C-2,3,7,8-TCDF	4.72e+07	0.88	y	26:34	0.88	1800					93.3
13C-1,2,3,7,8-PeCDF	3.84e+07	1.66	y	31:26	0.88	1470					76.0
13C-2,3,4,7,8-PeCDF	3.68e+07	1.66	y	32:44	0.85	1450					75.4
13C-1,2,3,4,7,8-HxCDF	3.09e+07	0.49	y	37:09	1.72	1580					82.0
13C-1,2,3,6,7,8-HxCDF	3.33e+07	0.49	y	37:21	2.00	1460					75.9
13C-2,3,4,6,7,8-HxCDF	2.96e+07	0.49	y	38:16	1.74	1500					77.7
13C-1,2,3,7,8,9-HxCDF	2.59e+07	0.48	y	39:42	1.51	1520					78.6
13C-1,2,3,4,6,7,8-HpCDF	1.75e+07	0.46	y	42:15	1.10	1410					72.9
13C-1,2,3,4,7,8,9-HpCDF	1.39e+07	0.46	y	45:04	0.85	1450					75.0
13C-OCDF	3.49e+07	0.95	y	50:05	1.17	2620					67.9
37Cl-2,3,7,8-TCDD	1.41e+07			27:22	0.97	787					102
13C-1,2,3,4-TCDD	3.56e+07	0.72	y	26:46	-	131					
13C-1,2,3,4-TCDF	5.76e+07	0.88	y	25:31	-	120					
13C-1,2,3,7,8,9-HxCDD	2.19e+07	1.28	y	39:09	-	103					

								Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*			NotFnd	1.02	*		2.50	310	425	0.460		0
Total Penta-Dioxins	8.68e+04			30:14	0.96	6.39	J	2.50	-	-	*		3
Total Hexa-Dioxins	8.06e+05			36:06	1.36	63.4		2.50	-	-	*		6
Total Hepta-Dioxins	6.88e+06			42:48	1.17	677		2.50	-	-	*		2
Total Tetra-Furans	3.62e+05			23:47	1.29	11.5	D,M	2.50	-	-	*		4
1st Fn. Tot Penta-Furans	1.62e+05			28:26	0.90	9.25	D,M	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.20e+05			30:11	0.90	29.8	D,M	2.50	-	-	*	39.0	4
Total Hexa-Furans	2.65e+06			35:14	0.99	172	D,M	2.50	-	-	*	39.1	9
Total Hepta-Furans	3.81e+06			42:17	1.47	315		2.50	-	-	*		3

Analyst: _____ Date: 4/7/10

4/7/10

Totals class: Total Penta-Dioxins Entry #: 39

Run: 25 File: 06APR10M S: 20 I: 1 F: 2
Acquired: 7-APR-10 02:44:11

Total Concentration: 6.39 Unnamed Concentration: 4.147

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:14	1.96e+04	1.19e+04	1.64	y	3.16e+04	2.32	
31:38	1.41e+04	1.06e+04	1.33	y	2.48e+04	1.82	
33:10	1.75e+04	1.30e+04	1.35	y	3.05e+04	2.25	1,2,3,7,8-PeCDD

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 25 File: 06APR10M S: 20 I: 1 F: 3
Acquired: 7-APR-10 02:44:11

Total Concentration: 63.4 Unnamed Concentration: 39.380

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
36:06	8.22e+04	6.24e+04	1.32 y	1.45e+05	11.3	
37:02	2.82e+04	2.14e+04	1.32 y	4.97e+04	3.87	
37:28	1.70e+05	1.40e+05	1.22 y	3.11e+05	24.2	
38:34	3.08e+04	2.49e+04	1.24 y	5.56e+04	4.09	1,2,3,4,7,8-HxCDD
38:44	7.94e+04	6.29e+04	1.26 y	1.42e+05	11.8	1,2,3,6,7,8-HxCDD
39:10	5.78e+04	4.58e+04	1.26 y	1.04e+05	8.04	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 25 File: 06APR10M S: 20 I: 1 F: 4
Acquired: 7-APR-10 02:44:11

Total Concentration: 677 Unnamed Concentration: 271.899

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
42:48	1.33e+06	1.44e+06	0.92 y	2.76e+06	272	
44:11	1.99e+06	2.12e+06	0.94 y	4.12e+06	405	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 25 File: 06APR10M S: 20 I: 1 F: 1
Acquired: 7-APR-10 02:44:11

Total Concentration: 11.5 Unnamed Concentration: 11.532

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
23:47	1.03e+04	1.40e+04	0.73 y	2.42e+04	0.772	
25:47	2.10e+04	2.94e+04	0.71 y	5.03e+04	1.60	
27:50	7.77e+04	1.17e+05	0.66 y	1.95e+05	6.21	
28:03	3.67e+04	5.57e+04	0.66 y	9.25e+04	2.94	

Totals class: 1st Fn. Tot Penta-Furans Entry #: 43

Run: 25 File: 06APR10M S: 20 I: 1 F: 1
Acquired: 7-APR-10 02:44:11

Total Concentration: 9.25 Unnamed Concentration: 9.252

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
28:26	9.56e+04	6.62e+04	1.44 y	1.62e+05	9.25	

Totals class: Total Penta-Furans Entry #: 44

Run: 25 File: 06APR10M S: 20 I: 1 F: 2
Acquired: 7-APR-10 02:44:11

Total Concentration: 29.8 Unnamed Concentration: 29.759

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:11	7.44e+04	4.34e+04	1.71	y	1.18e+05	6.74	
31:43	1.42e+05	8.22e+04	1.72	y	2.24e+05	12.8	
32:02	5.76e+04	3.66e+04	1.57	y	9.42e+04	5.39	
34:05	5.02e+04	3.42e+04	1.47	y	8.43e+04	4.82	

Totals class: Total Hexa-Furans Entry #: 45

Run: 25 File: 06APR10M S: 20 I: 1 F: 3
Acquired: 7-APR-10 02:44:11

Total Concentration: 172 Unnamed Concentration: 143.296

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
35:14	7.05e+04	5.73e+04	1.23 y	1.28e+05	8.32	
35:29	2.96e+05	2.42e+05	1.22 y	5.39e+05	35.1	
36:24	4.37e+05	3.58e+05	1.22 y	7.94e+05	51.7	
36:40	3.99e+04	3.43e+04	1.16 y	7.43e+04	4.84	
37:11	1.38e+05	1.11e+05	1.24 y	2.49e+05	15.6	1,2,3,4,7,8-HxCDF
37:21	5.10e+04	4.69e+04	1.09 y	9.79e+04	6.19	1,2,3,6,7,8-HxCDF
38:04	3.68e+05	2.97e+05	1.24 y	6.66e+05	43.3	
38:19	4.35e+04	3.82e+04	1.14 y	8.17e+04	5.41	2,3,4,6,7,8-HxCDF
39:47	1.24e+04	1.11e+04	1.11 y	2.35e+04	1.61	1,2,3,7,8,9-HxCDF

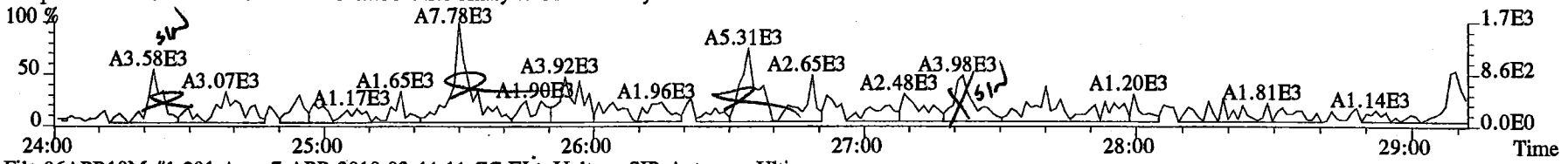
Totals class: Total Hepta-Furans Entry #: 46

Run: 25 File: 06APR10M S: 20 I: 1 F: 4
Acquired: 7-APR-10 02:44:11

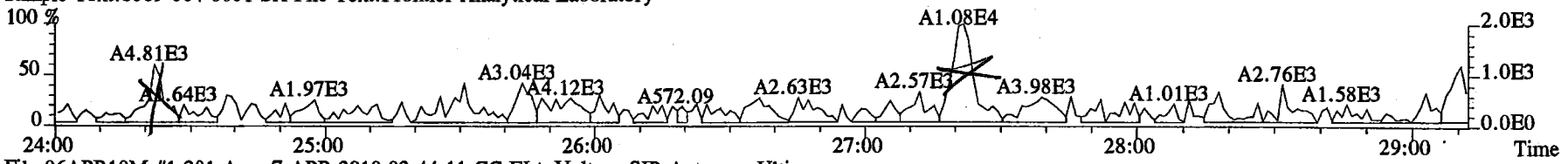
Total Concentration: 315 Unnamed Concentration: 211.085

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:17	6.00e+05	5.71e+05	1.05 y	1.17e+06	94.7	1,2,3,4,6,7,8-HpCDF
43:05	1.31e+06	1.21e+06	1.08 y	2.52e+06	211	
45:05	5.75e+04	5.38e+04	1.07 y	1.11e+05	9.62	1,2,3,4,7,8,9-HpCDF

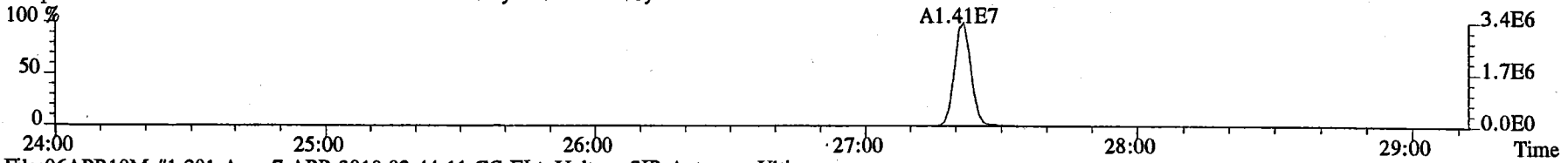
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



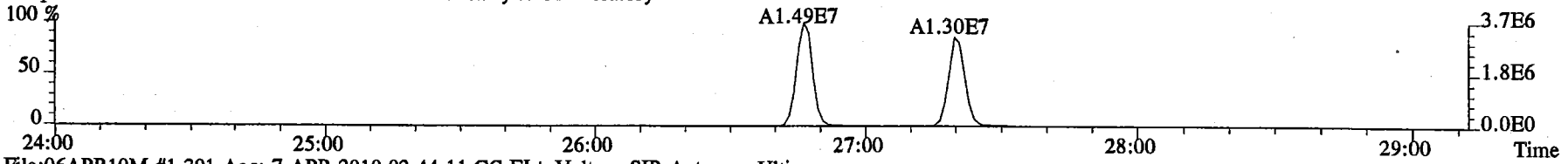
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



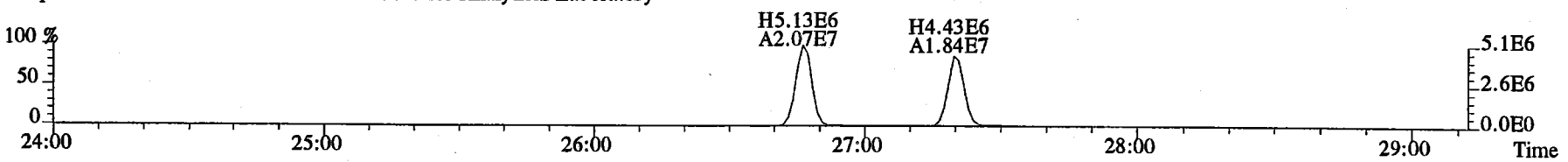
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



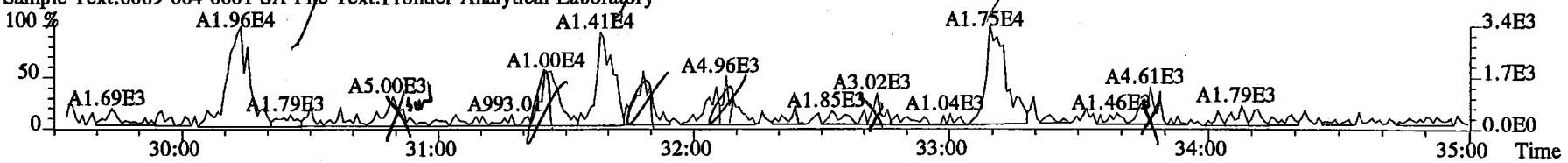
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



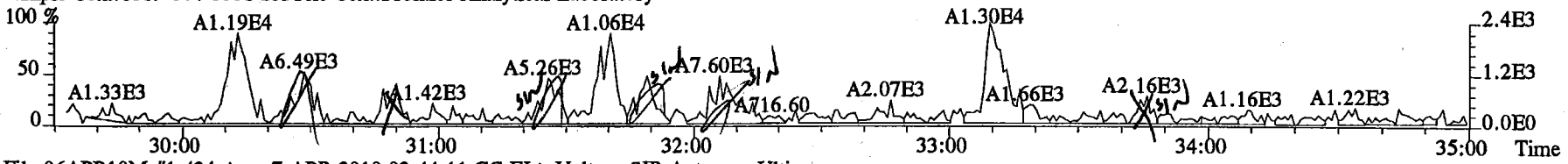
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



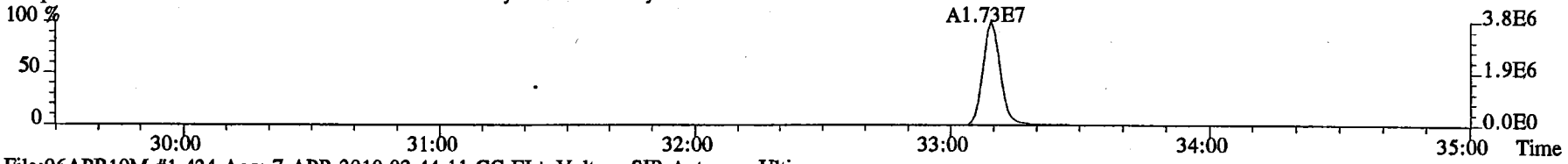
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



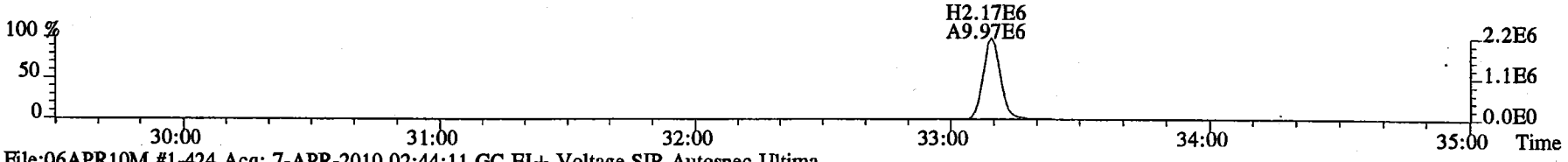
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



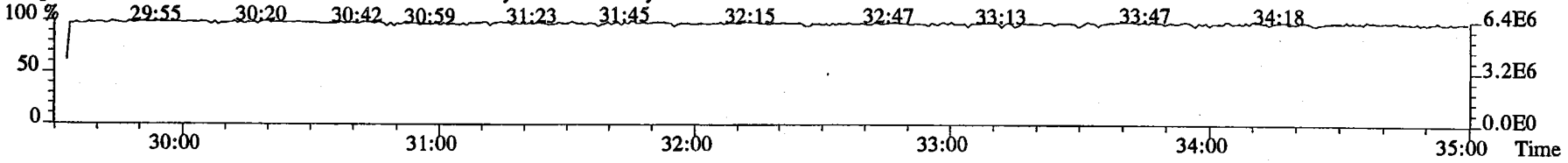
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



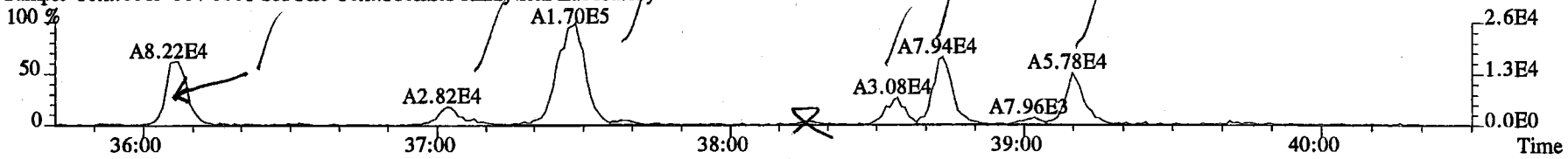
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



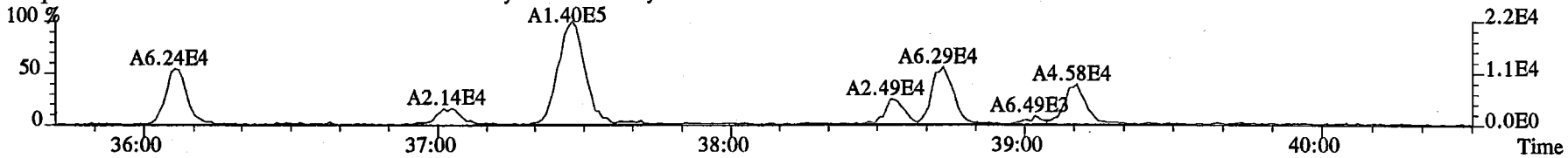
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:20 F:2 Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



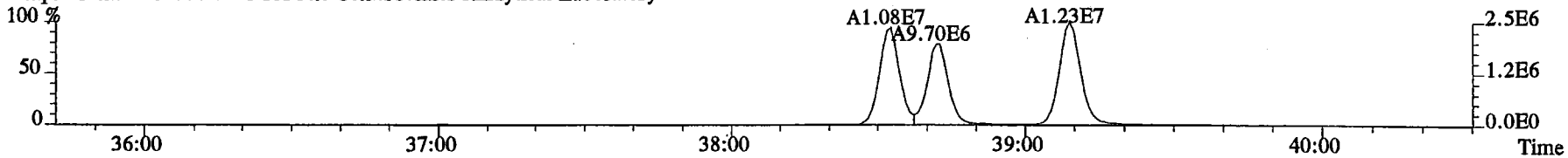
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



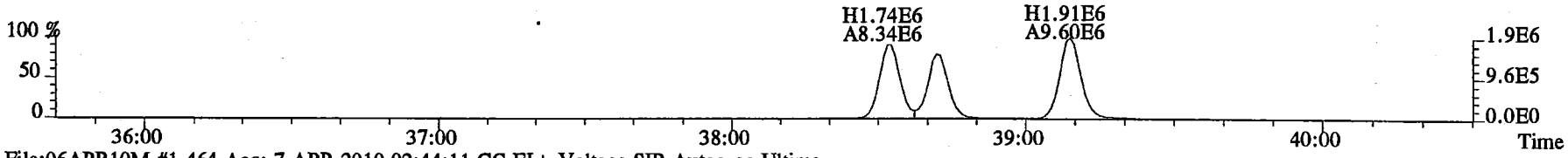
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



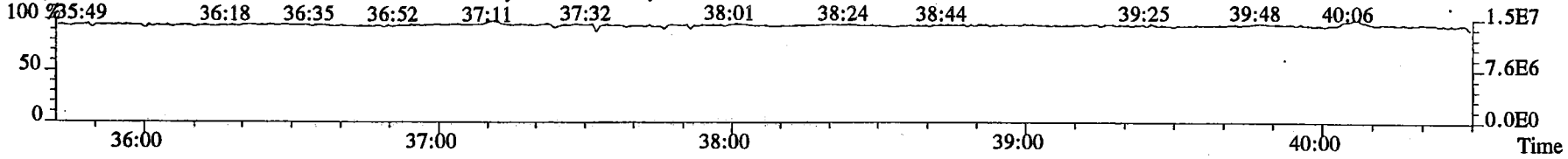
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



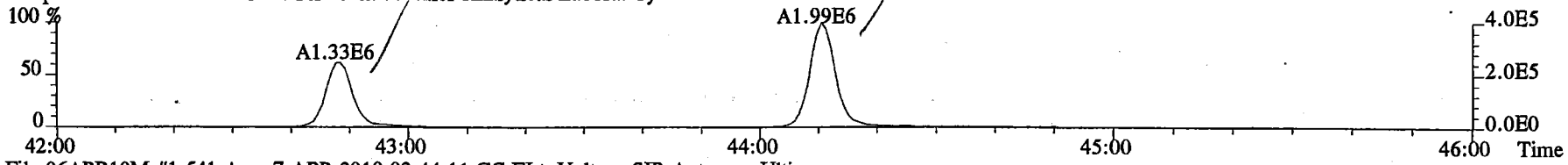
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



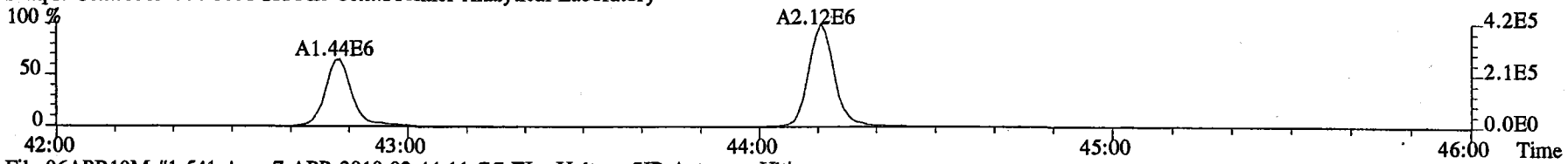
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:20 F:3 Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



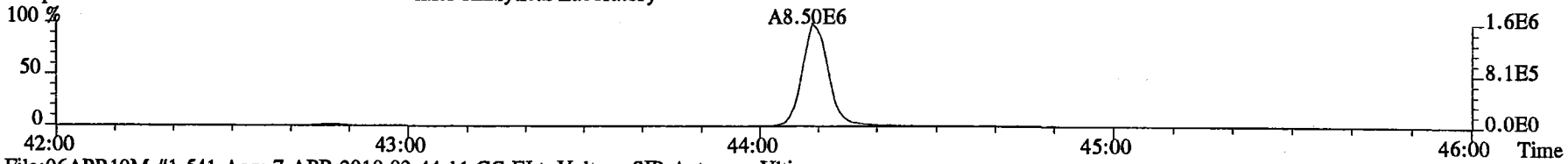
File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:20 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



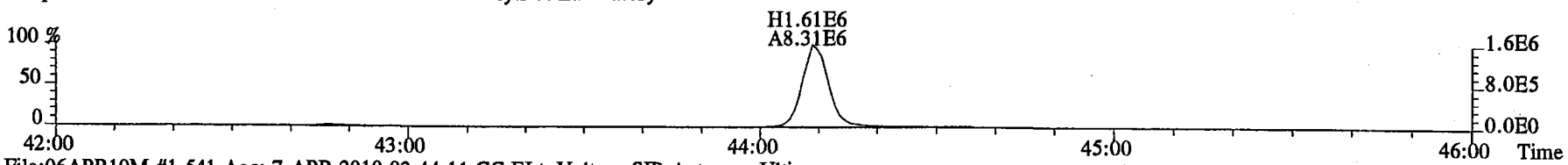
File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:20 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



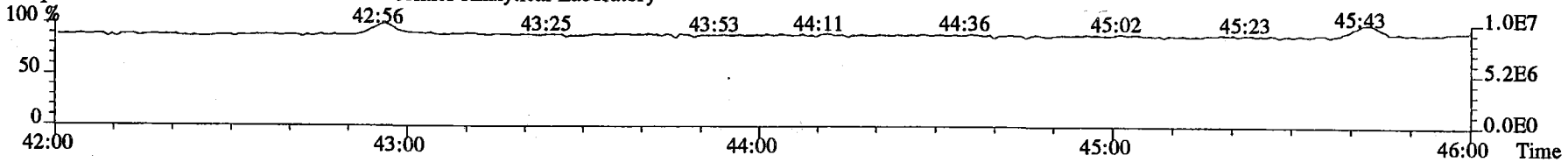
File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:20 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



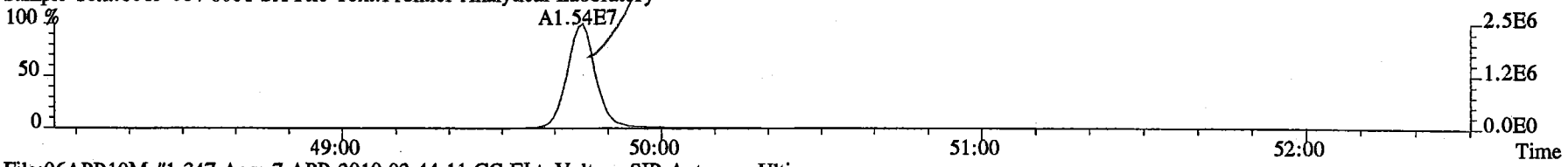
File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:20 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



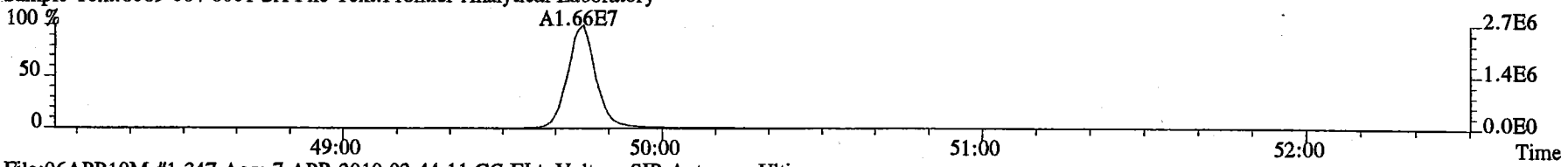
File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:20 F:4 Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



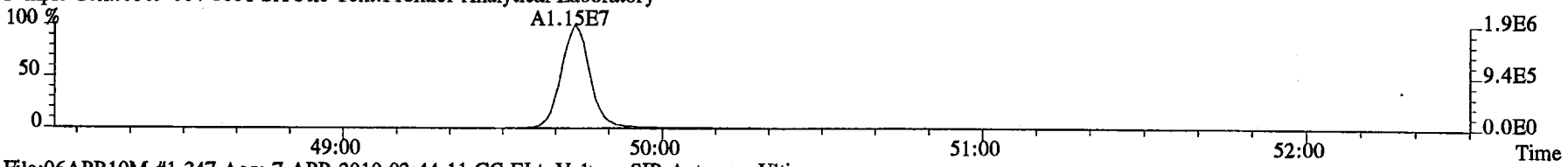
File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



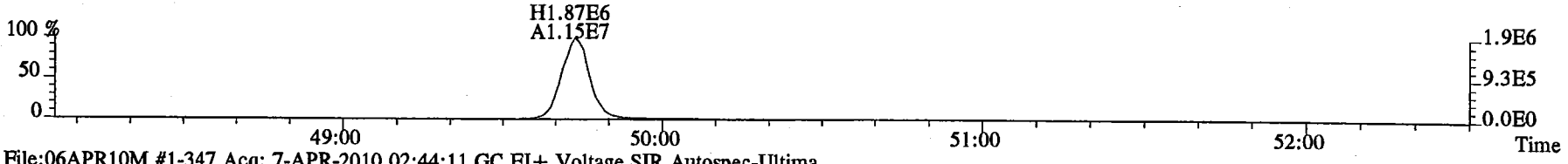
File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



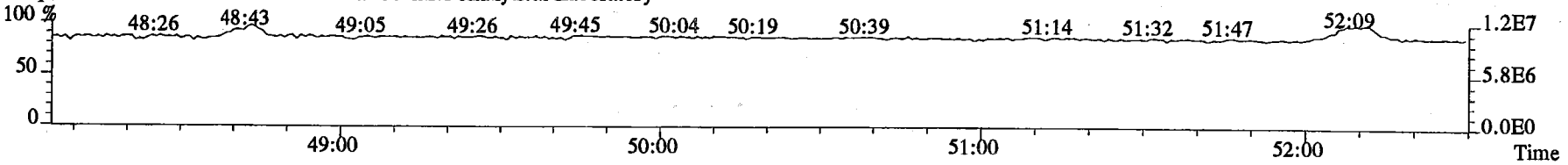
File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



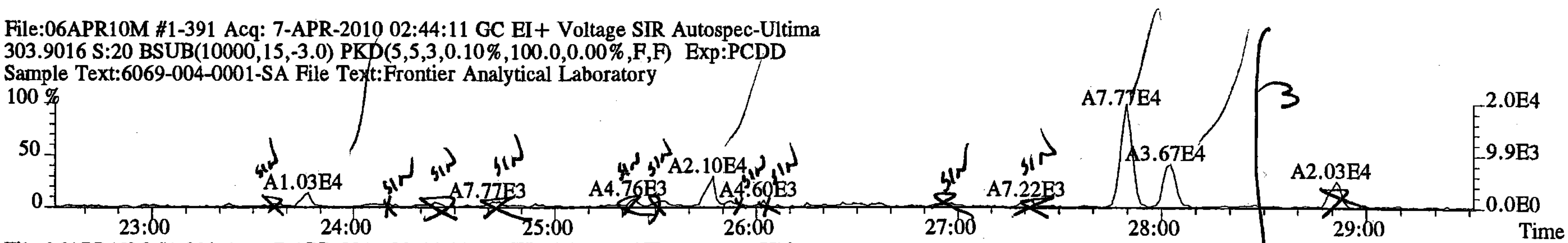
File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



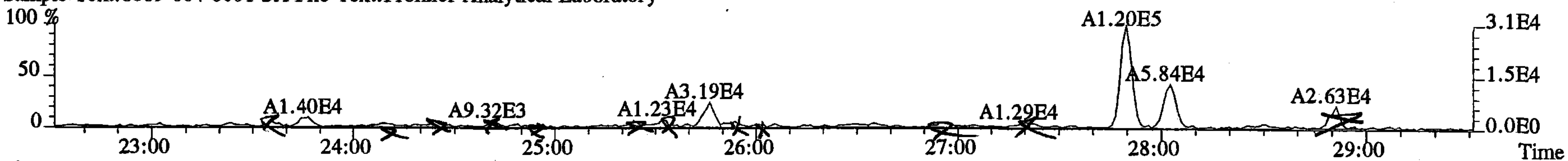
File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:20 F:5 Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



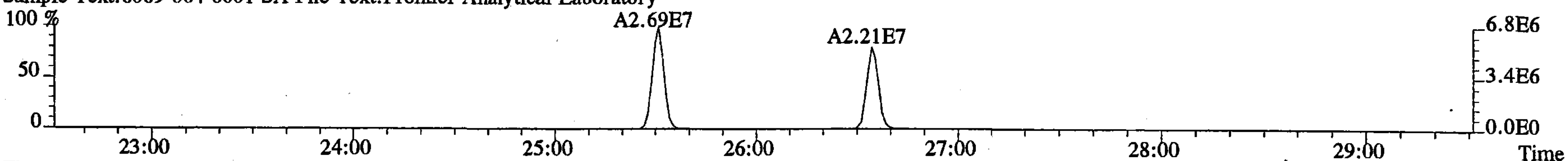
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



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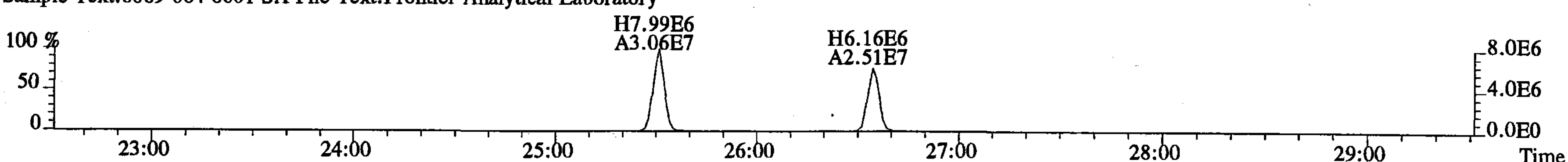
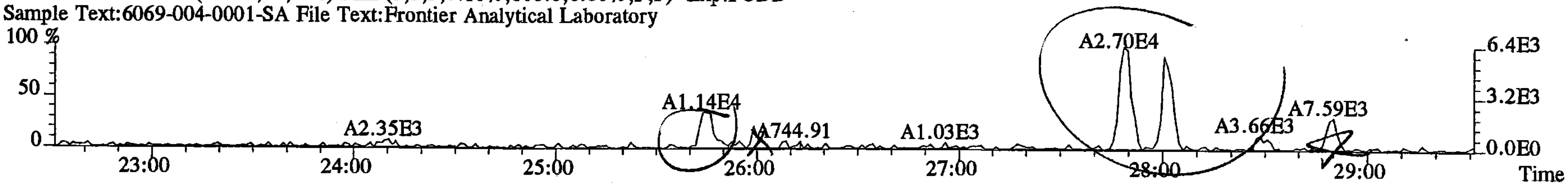
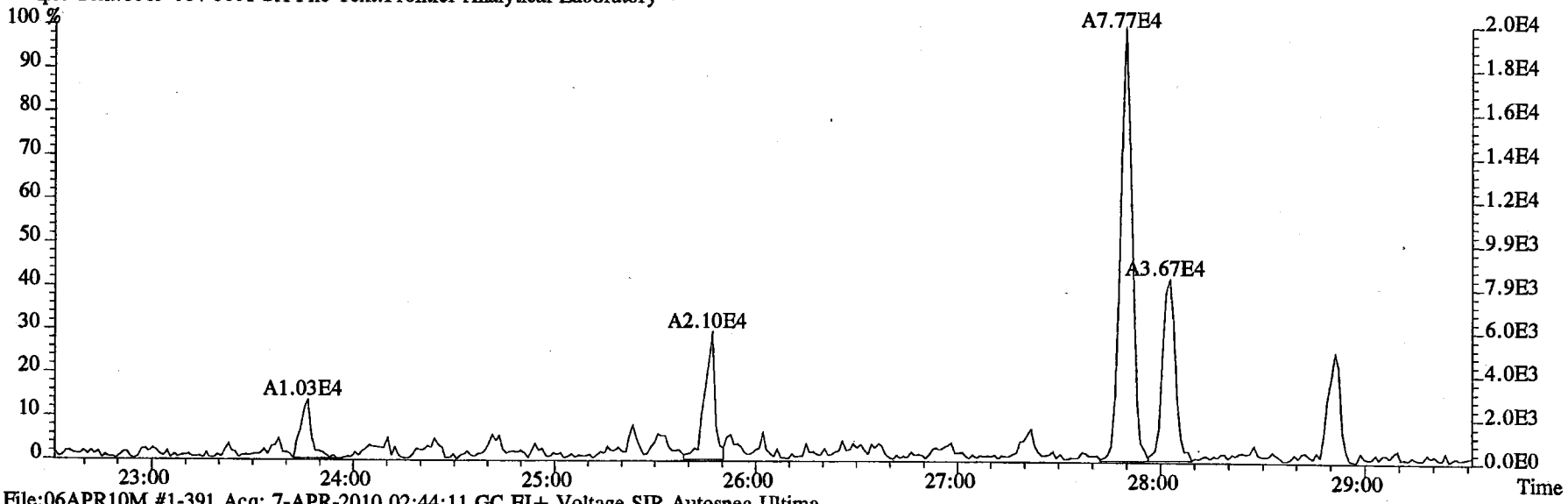
317.9389 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



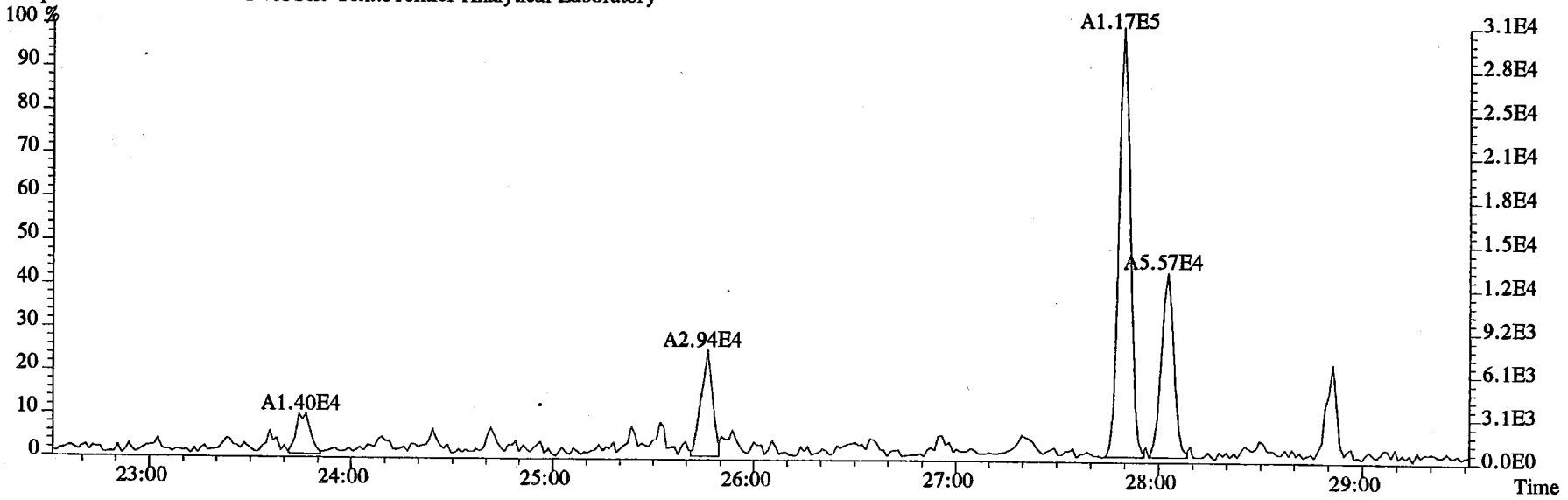
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



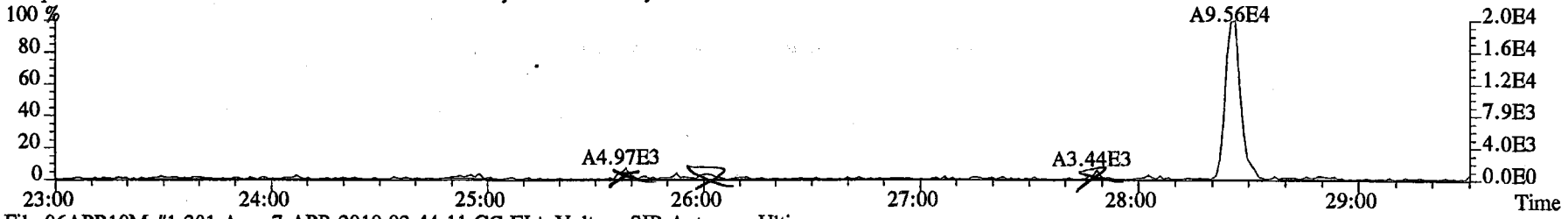
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



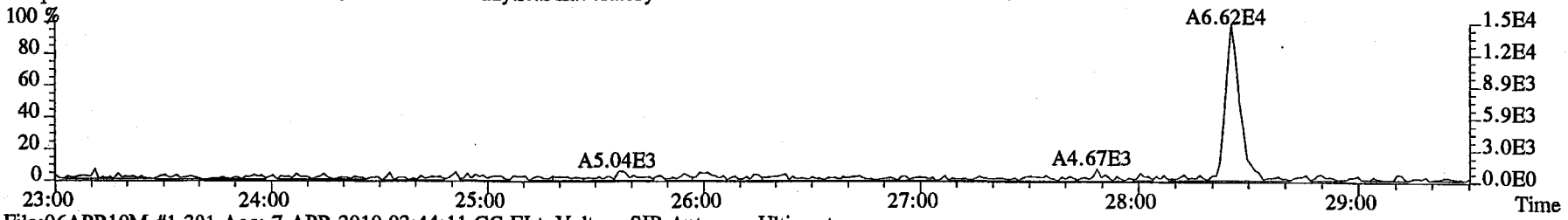
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



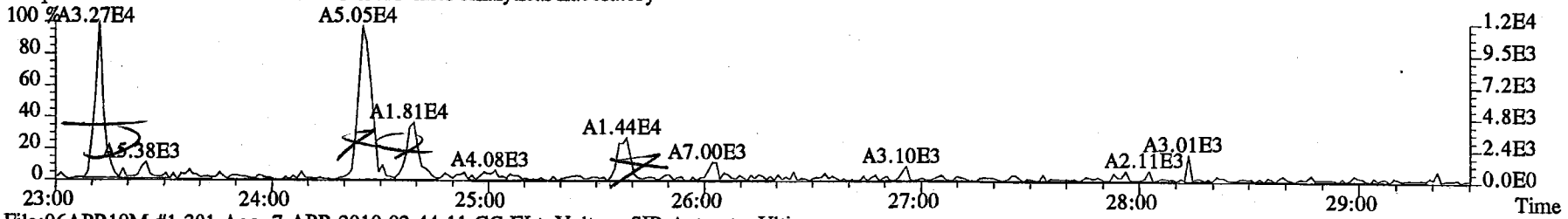
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



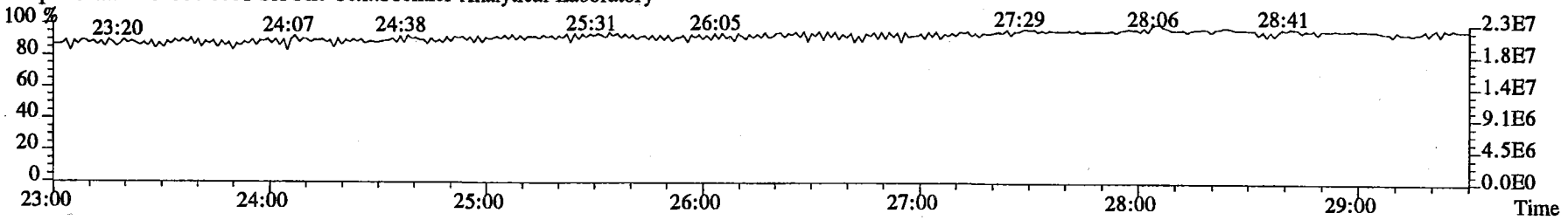
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



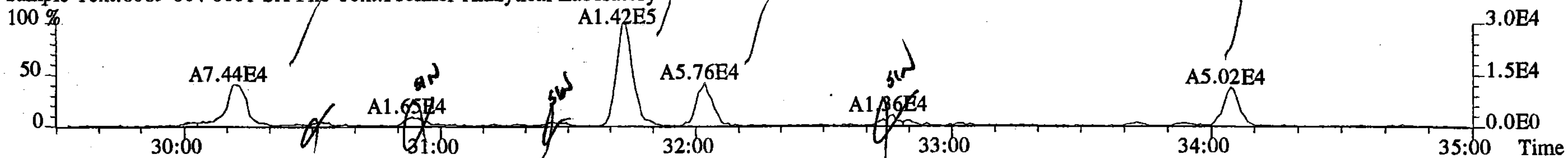
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:20 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



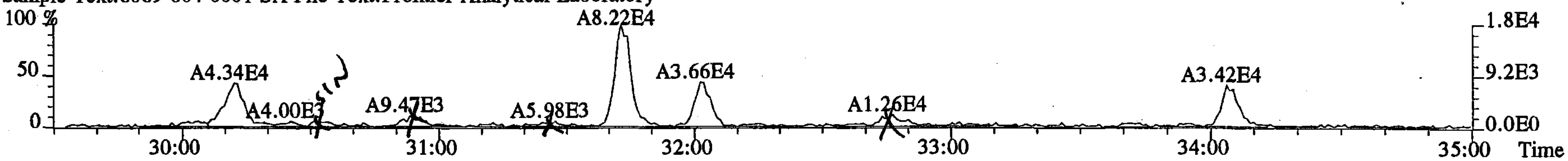
File:06APR10M #1-391 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:20 Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



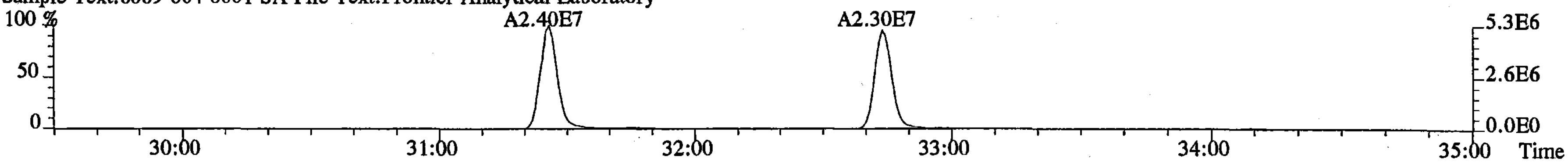
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



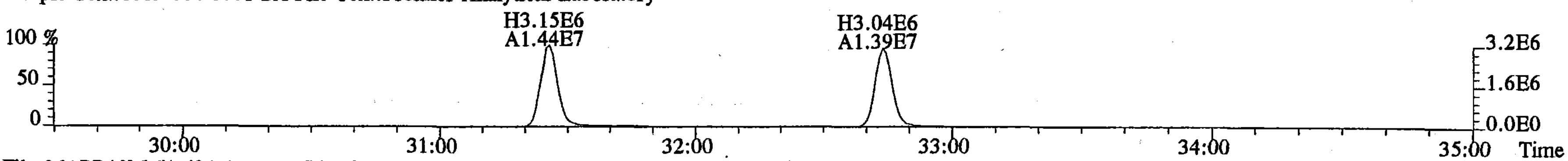
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



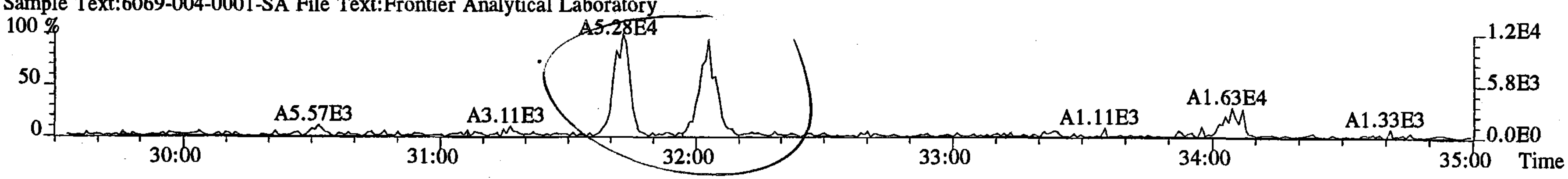
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



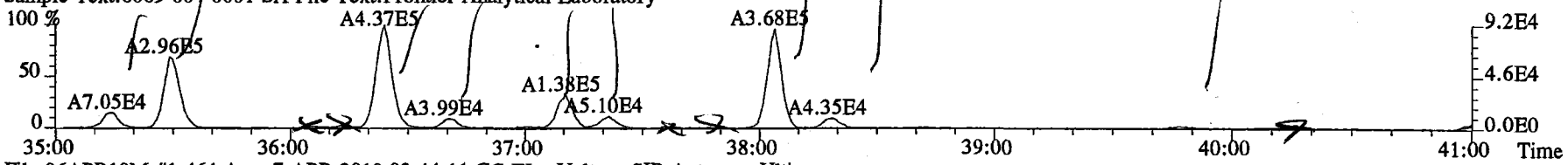
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



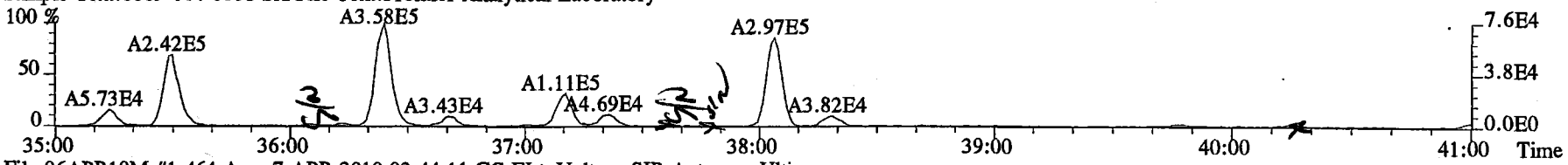
File:06APR10M #1-424 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:20 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



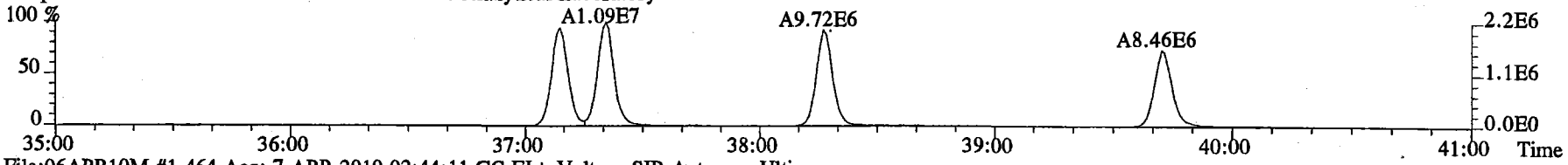
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



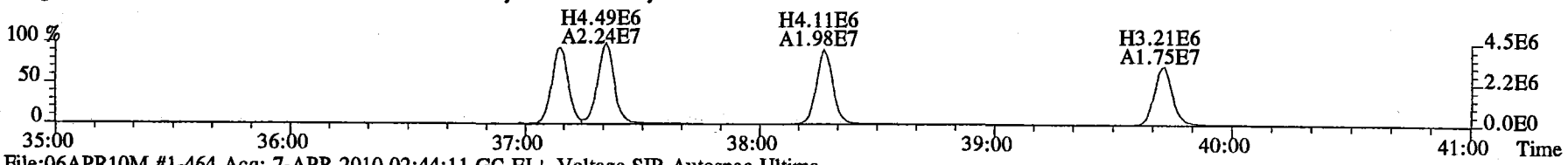
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



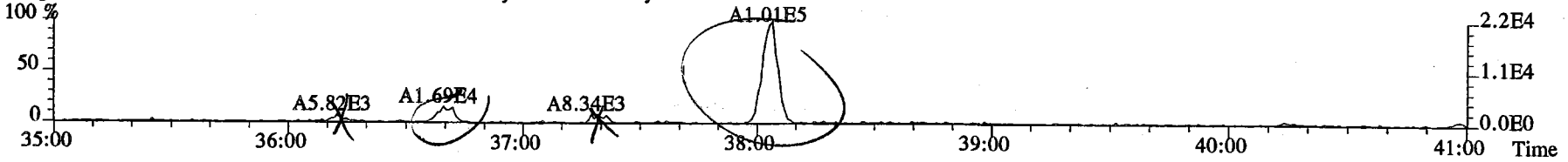
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



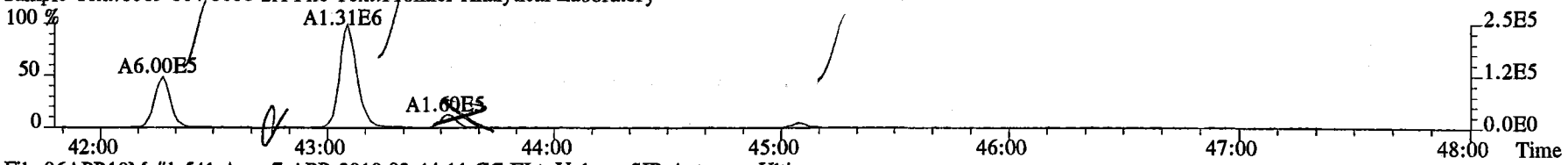
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



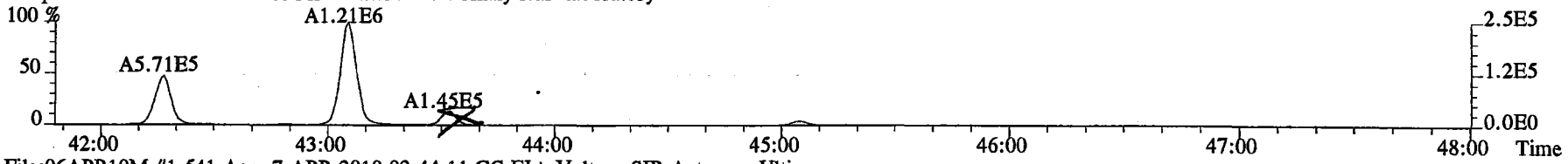
File:06APR10M #1-464 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:20 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



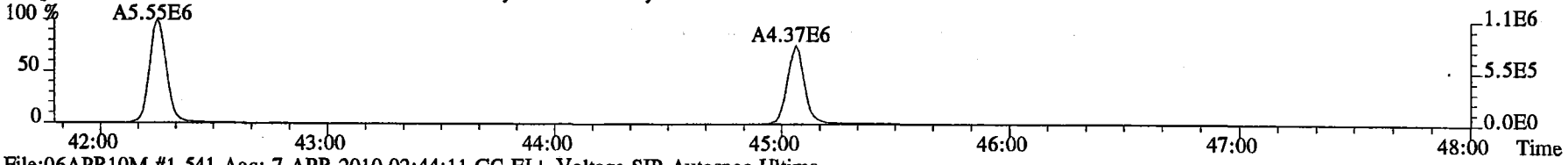
File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:20 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:20 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:20 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



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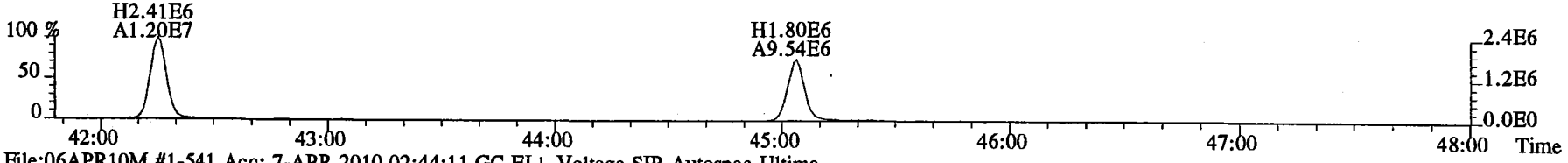
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-541 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
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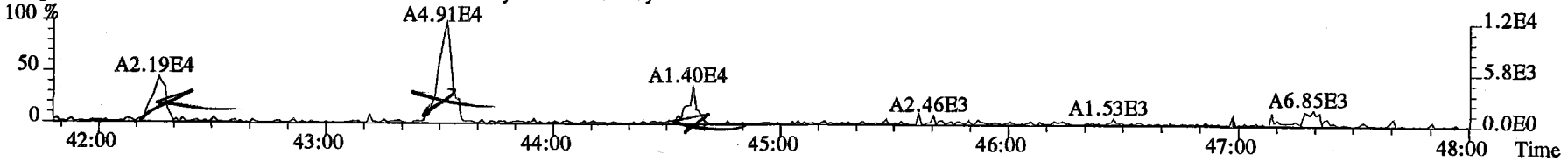
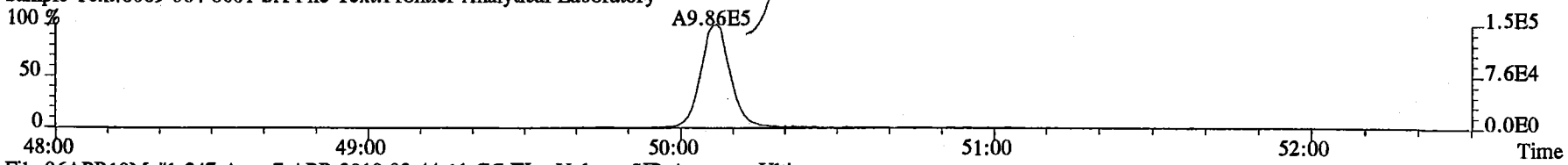
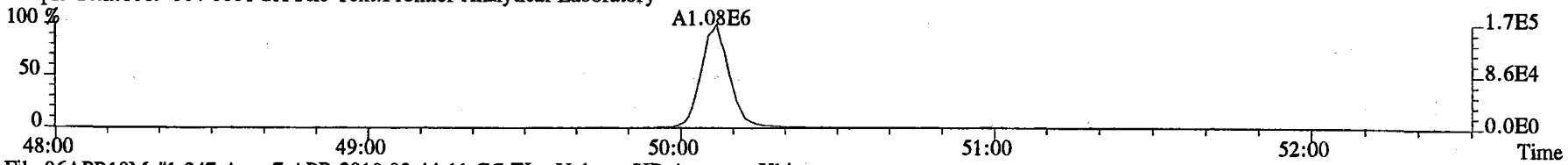
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



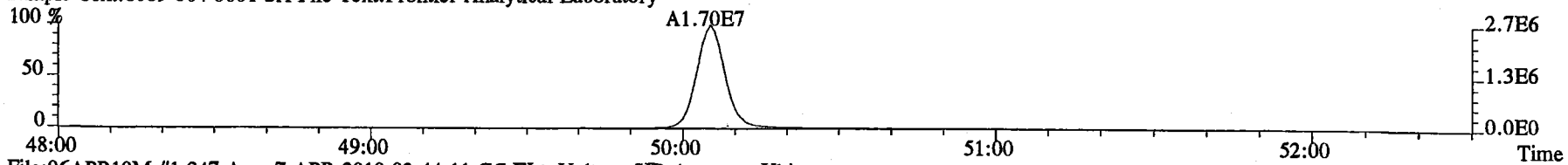
File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



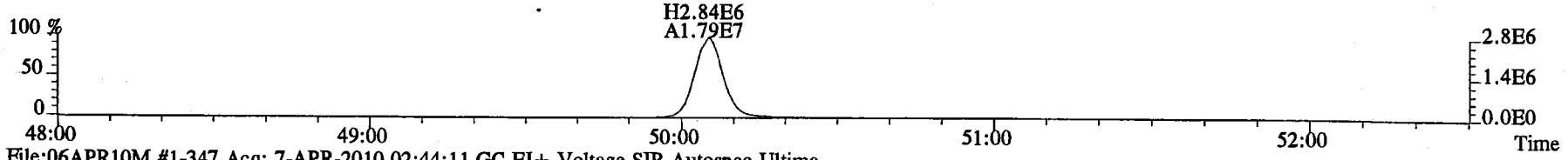
File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



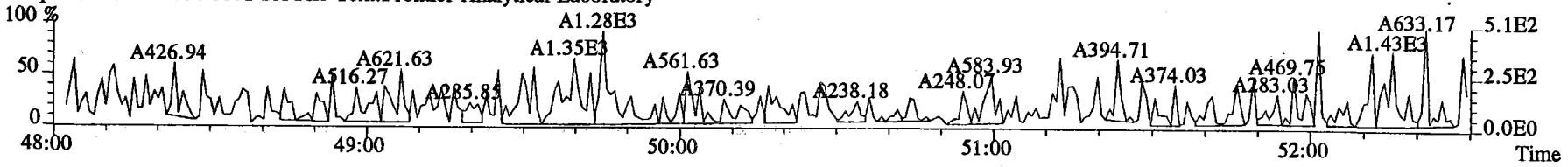
File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



File:06APR10M #1-347 Acq: 7-APR-2010 02:44:11 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:20 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:6069-004-0001-SA File Text:Frontier Analytical Laboratory



Initial Calibration Results

Frontier Analytical Laboratory

Data Filename: 18NOV09M

Analyte: PCDDFAL3-11-18-09 Cal: PCDDFAL3-11-18-09

Name	RRF	S. D.	%RSD	S2 RRF#1	S3 RRF#2	S4 RRF#3	S1 RRF#4	S5 RRF#5	S6 RRF#6
2,3,7,8-TCDD	1.02	0.0735	7.22 %	1.00	0.93	0.95	1.04	1.07	1.12
1,2,3,7,8-PeCDD	0.96	0.0778	8.09 %	0.88	0.88	0.93	0.99	1.02	1.07
1,2,3,4,7,8-HxCDD	1.37	0.110	8.00 %	1.26	1.27	1.31	1.41	1.48	1.52
1,2,3,6,7,8-HxCDD	1.34	0.0611	4.55 %	1.26	1.33	1.30	1.35	1.40	1.42
1,2,3,7,8,9-HxCDD	1.37	0.0751	5.49 %	1.32	1.27	1.32	1.40	1.43	1.47
1,2,3,4,6,7,8-HpCDD	1.17	0.0712	6.10 %	1.12	1.09	1.12	1.16	1.25	1.26
OCDD	1.21	0.113	9.27 %	1.09	1.11	1.17	1.23	1.34	1.35
2,3,7,8-TCDF	1.29	0.0564	4.39 %	1.22	1.28	1.25	1.26	1.31	1.38
1,2,3,7,8-PeCDF	0.89	0.0808	9.08 %	0.79	0.81	0.85	0.94	0.96	0.98
2,3,4,7,8-PeCDF	0.91	0.0710	7.85 %	0.83	0.84	0.87	0.92	0.98	1.00
1,2,3,4,7,8-HxCDF	1.00	0.0925	9.26 %	0.89	0.91	0.97	1.03	1.08	1.11
1,2,3,6,7,8-HxCDF	0.92	0.0747	8.16 %	0.82	0.86	0.88	0.93	0.99	1.01
2,3,4,6,7,8-HxCDF	0.99	0.0785	7.97 %	0.91	0.90	0.95	1.00	1.06	1.09
1,2,3,7,8,9-HxCDF	1.09	0.0901	8.28 %	0.98	1.01	1.06	1.11	1.17	1.20
1,2,3,4,6,7,8-HpCDF	1.36	0.131	9.61 %	1.22	1.22	1.31	1.39	1.50	1.51
1,2,3,4,7,8,9-HpCDF	1.61	0.159	9.90 %	1.49	1.44	1.50	1.62	1.77	1.82
OCDF	0.84	0.0791	9.39 %	0.75	0.76	0.81	0.86	0.93	0.93
13C-2,3,7,8-TCDD	0.94	0.0249	2.65 %	0.92	0.91	0.93	0.96	0.95	0.98
13C-1,2,3,7,8-PeCDD	1.02	0.0718	7.06 %	0.99	0.93	1.00	1.00	1.02	1.15
13C-1,2,3,4,7,8-HxCDD	0.98	0.0126	1.28 %	0.99	0.97	1.00	0.99	0.98	0.97
13C-1,2,3,6,7,8-HxCDD	0.94	0.0188	2.01 %	0.93	0.93	0.96	0.94	0.95	0.91
13C-1,2,3,4,6,7,8-HpCDD	0.90	0.0218	2.42 %	0.92	0.89	0.87	0.91	0.89	0.92
13C-OCDD	0.67	0.0306	4.59 %	0.69	0.66	0.62	0.69	0.64	0.70
13C-2,3,7,8-TCDF	0.88	0.0307	3.49 %	0.85	0.85	0.86	0.88	0.92	0.91
13C-1,2,3,7,8-PeCDF	0.88	0.0612	6.98 %	0.83	0.79	0.87	0.88	0.92	0.96
13C-2,3,4,7,8-PeCDF	0.85	0.0560	6.60 %	0.83	0.76	0.85	0.85	0.88	0.93
13C-1,2,3,4,7,8-HxCDF	1.72	0.0550	3.20 %	1.74	1.75	1.75	1.71	1.75	1.61
13C-1,2,3,6,7,8-HxCDF	2.00	0.0743	3.71 %	2.01	2.02	2.06	2.01	2.05	1.86
13C-2,3,4,6,7,8-HxCDF	1.74	0.0562	3.24 %	1.74	1.73	1.79	1.77	1.75	1.63
13C-1,2,3,7,8,9-HxCDF	1.51	0.0258	1.71 %	1.51	1.47	1.48	1.54	1.53	1.51
13C-1,2,3,4,6,7,8-HpCDF	1.10	0.0153	1.39 %	1.12	1.10	1.08	1.10	1.08	1.11
13C-1,2,3,4,7,8,9-HpCDF	0.85	0.0310	3.67 %	0.82	0.84	0.81	0.87	0.84	0.89
13C-OCDF	1.17	0.0555	4.73 %	1.18	1.15	1.10	1.21	1.14	1.26
37Cl-2,3,7,8-TCDD	0.97	0.0838	8.61 %	0.90	0.93	0.90	0.98	1.03	1.11
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-
13C-1,2,3,4-TCDF	-	-	- %	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-
Total Tetra-Dioxins	1.02	0.0735	7.22 %	1.00	0.93	0.95	1.04	1.07	1.12
Total Penta-Dioxins	0.96	0.0778	8.09 %	0.88	0.88	0.93	0.99	1.02	1.07
Total Hexa-Dioxins	1.36	0.0803	5.89 %	1.28	1.29	1.31	1.38	1.44	1.47
Total Hepta-Dioxins	1.17	0.0712	6.10 %	1.12	1.09	1.12	1.16	1.25	1.26
Total Tetra-Furans	1.29	0.0564	4.39 %	1.22	1.28	1.25	1.26	1.31	1.38
1st Fn. Tot Penta-Furans	0.90	0.0756	8.43 %	0.81	0.82	0.86	0.93	0.97	0.99
Total Penta-Furans	0.90	0.0756	8.43 %	0.81	0.82	0.86	0.93	0.97	0.99
Total Hexa-Furans	0.99	0.0838	8.45 %	0.89	0.91	0.96	1.01	1.07	1.10
Total Hepta-Furans	1.47	0.144	9.82 %	1.33	1.32	1.39	1.49	1.62	1.65

Analyst: _____ Date: 11/19/09

Run #1 Filename 18NOV09M S: 2 Acquired: 18-NOV-09 14:40:53 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M0 Analyte: FAL ID: 1613 CS0 090918G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	0.25	6.29e+04	0.72 y	27:25	-	0.999	y
2	Unk	1,2,3,7,8-PeCDD	1.25	2.97e+05	1.58 y	33:14	-	0.878	y
3	Unk	1,2,3,4,7,8-HxCDD	1.25	3.17e+05	1.22 y	38:36	-	1.26	y
4	Unk	1,2,3,6,7,8-HxCDD	1.25	2.97e+05	1.25 y	38:46	-	1.26	y
5	Unk	1,2,3,7,8,9-HxCDD	1.25	3.23e+05	1.29 y	39:13	-	1.32	y
6	Unk	1,2,3,4,6,7,8-HpCDD	1.25	2.62e+05	0.93 y	44:14	-	1.12	y
7	Unk	OCDD	2.50	3.81e+05	0.92 y	49:49	-	1.09	y
8	Unk	2,3,7,8-TCDF	0.25	1.27e+05	0.69 y	26:39	-	1.22	y
9	Unk	1,2,3,7,8-PeCDF	1.25	4.03e+05	1.75 y	31:30	-	0.794	y
10	Unk	2,3,4,7,8-PeCDF	1.25	4.20e+05	1.65 y	32:49	-	0.830	y
11	Unk	1,2,3,4,7,8-HxCDF	1.25	3.91e+05	1.24 y	37:13	-	0.887	y
12	Unk	1,2,3,6,7,8-HxCDF	1.25	4.20e+05	1.21 y	37:26	-	0.822	y
13	Unk	2,3,4,6,7,8-HxCDF	1.25	4.00e+05	1.29 y	38:21	-	0.906	y
14	Unk	1,2,3,7,8,9-HxCDF	1.25	3.77e+05	1.28 y	39:47	-	0.981	y
15	Unk	1,2,3,4,6,7,8-HpCDF	1.25	3.46e+05	1.00 y	42:19	-	1.22	y
16	Unk	1,2,3,4,7,8,9-HpCDF	1.25	3.09e+05	1.00 y	45:08	-	1.49	y
17	Unk	OCDF	2.50	4.50e+05	0.88 y	50:10	-	0.754	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.52e+07	0.73 y	27:23	-	0.925	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.71e+07	1.63 y	33:13	-	0.994	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	2.02e+07	1.31 y	38:35	-	0.994	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.89e+07	1.33 y	38:45	-	0.930	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.87e+07	1.06 y	44:12	-	0.922	y
23	IS	13C-OCDD	200.00	2.79e+07	1.01 y	49:47	-	0.689	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.15e+07	0.81 y	26:38	-	0.852	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	4.06e+07	1.67 y	31:28	-	0.835	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	4.04e+07	1.68 y	32:48	-	0.831	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.52e+07	0.48 y	37:12	-	1.74	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.09e+07	0.48 y	37:24	-	2.01	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.53e+07	0.49 y	38:20	-	1.74	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	3.07e+07	0.49 y	39:47	-	1.51	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.27e+07	0.46 y	42:18	-	1.12	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.66e+07	0.46 y	45:07	-	0.821	y
33	IS	13C-OCDF	200.00	4.77e+07	0.92 y	50:10	-	1.18	y
34	C/Up	37Cl-2,3,7,8-TCDD	0.25	6.12e+04		27:25	-	0.900	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.72e+07	0.74 y	26:49	2.72e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.87e+07	0.81 y	25:33	4.87e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	2.03e+07	1.33 y	39:12	2.03e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	0.999	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.878	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.28	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.12	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.22	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.812	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.812	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	0.893	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.33	y

Analyst: _____ Date: 11/19/09

Run #2 Filename 18NOV09M S: 3 Acquired: 18-NOV-09 15:36:11 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M1 Analyte: FAL ID: 1613 CS1 090918H

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	0.50	1.11e+05	0.75	y	27:24	-	0.929	y
2	Unk	1,2,3,7,8-PeCDD	2.50	5.36e+05	1.55	y	33:13	-	0.880	y
3	Unk	1,2,3,4,7,8-HxCDD	2.50	5.91e+05	1.24	y	38:36	-	1.27	y
4	Unk	1,2,3,6,7,8-HxCDD	2.50	5.90e+05	1.34	y	38:46	-	1.33	y
5	Unk	1,2,3,7,8,9-HxCDD	2.50	5.76e+05	1.27	y	39:13	-	1.27	y
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	4.64e+05	0.91	y	44:14	-	1.09	y
7	Unk	OCDD	5.00	7.02e+05	0.93	y	49:48	-	1.11	y
8	Unk	2,3,7,8-TCDF	0.50	2.57e+05	0.66	y	26:38	-	1.28	y
9	Unk	1,2,3,7,8-PeCDF	2.50	7.54e+05	1.68	y	31:29	-	0.811	y
10	Unk	2,3,4,7,8-PeCDF	2.50	7.51e+05	1.69	y	32:48	-	0.839	y
11	Unk	1,2,3,4,7,8-HxCDF	2.50	7.60e+05	1.28	y	37:12	-	0.906	y
12	Unk	1,2,3,6,7,8-HxCDF	2.50	8.29e+05	1.28	y	37:25	-	0.857	y
13	Unk	2,3,4,6,7,8-HxCDF	2.50	7.51e+05	1.20	y	38:21	-	0.905	y
14	Unk	1,2,3,7,8,9-HxCDF	2.50	7.09e+05	1.26	y	39:47	-	1.01	y
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	6.45e+05	1.00	y	42:19	-	1.22	y
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	5.81e+05	0.96	y	45:08	-	1.44	y
17	Unk	OCDF	5.00	8.42e+05	0.93	y	50:11	-	0.763	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.38e+07	0.73	y	27:22	-	0.913	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.44e+07	1.69	y	33:12	-	0.934	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.86e+07	1.36	y	38:35	-	0.969	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.78e+07	1.31	y	38:44	-	0.928	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.70e+07	1.07	y	44:12	-	0.886	y
23	IS	13C-OCDD	200.00	2.54e+07	1.00	y	49:47	-	0.662	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.01e+07	0.81	y	26:37	-	0.850	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.72e+07	1.68	y	31:28	-	0.790	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.58e+07	1.71	y	32:47	-	0.759	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.36e+07	0.48	y	37:11	-	1.75	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	3.87e+07	0.48	y	37:23	-	2.02	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.32e+07	0.49	y	38:20	-	1.73	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	2.82e+07	0.49	y	39:46	-	1.47	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.11e+07	0.45	y	42:17	-	1.10	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.61e+07	0.45	y	45:07	-	0.842	y
33	IS	13C-OCDF	200.00	4.41e+07	0.92	y	50:09	-	1.15	y
34	C/Up	37Cl-2,3,7,8-TCDD	0.50	1.21e+05			27:24	-	0.926	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.61e+07	0.73	y	26:48	2.61e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.71e+07	0.81	y	25:32	4.71e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.92e+07	1.31	y	39:11	1.92e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	0.929	y
39	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.880	y
40	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.29	y
41	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.09	y
42	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.28	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	-	n	-	-	0.824	y
44	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.824	y
45	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	0.913	y
46	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.32	y

Analyst: _____ Date: 11/19/09

Run #3 Filename 18NOV09M S: 4 Acquired: 18-NOV-09 16:31:26 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M2 Analyte: FAL ID: 1613 CS2 090918I

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	2.00	4.69e+05	0.80	y	27:23	-	0.945	y
2	Unk	1,2,3,7,8-PeCDD	10.00	2.50e+06	1.55	y	33:13	-	0.933	y
3	Unk	1,2,3,4,7,8-HxCDD	10.00	2.60e+06	1.24	y	38:36	-	1.31	y
4	Unk	1,2,3,6,7,8-HxCDD	10.00	2.48e+06	1.24	y	38:46	-	1.30	y
5	Unk	1,2,3,7,8,9-HxCDD	10.00	2.57e+06	1.27	y	39:12	-	1.32	y
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	1.93e+06	0.91	y	44:13	-	1.12	y
7	Unk	OCDD	20.00	2.90e+06	0.92	y	49:48	-	1.17	y
8	Unk	2,3,7,8-TCDF	2.00	1.02e+06	0.66	y	26:38	-	1.25	y
9	Unk	1,2,3,7,8-PeCDF	10.00	3.54e+06	1.71	y	31:29	-	0.852	y
10	Unk	2,3,4,7,8-PeCDF	10.00	3.49e+06	1.69	y	32:48	-	0.868	y
11	Unk	1,2,3,4,7,8-HxCDF	10.00	3.37e+06	1.23	y	37:12	-	0.972	y
12	Unk	1,2,3,6,7,8-HxCDF	10.00	3.62e+06	1.22	y	37:25	-	0.884	y
13	Unk	2,3,4,6,7,8-HxCDF	10.00	3.37e+06	1.24	y	38:20	-	0.951	y
14	Unk	1,2,3,7,8,9-HxCDF	10.00	3.10e+06	1.21	y	39:47	-	1.06	y
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	2.82e+06	1.00	y	42:18	-	1.31	y
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	2.41e+06	1.01	y	45:08	-	1.50	y
17	Unk	OCDF	20.00	3.55e+06	0.91	y	50:10	-	0.813	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.48e+07	0.73	y	27:22	-	0.929	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.68e+07	1.66	y	33:12	-	1.00	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.99e+07	1.32	y	38:35	-	1.00	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.91e+07	1.31	y	38:44	-	0.964	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.73e+07	1.06	y	44:12	-	0.871	y
23	IS	13C-OCDD	200.00	2.47e+07	0.98	y	49:46	-	0.624	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.07e+07	0.82	y	26:37	-	0.856	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	4.15e+07	1.68	y	31:28	-	0.873	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	4.02e+07	1.66	y	32:47	-	0.845	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.46e+07	0.49	y	37:11	-	1.75	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.09e+07	0.50	y	37:23	-	2.06	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.55e+07	0.50	y	38:19	-	1.79	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	2.93e+07	0.49	y	39:46	-	1.48	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.15e+07	0.46	y	42:18	-	1.08	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.60e+07	0.46	y	45:06	-	0.809	y
33	IS	13C-OCDF	200.00	4.36e+07	0.93	y	50:09	-	1.10	y
34	C/Up	37Cl-2,3,7,8-TCDD	2.00	4.80e+05			27:23	-	0.899	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.67e+07	0.74	y	26:48	2.67e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.76e+07	0.81	y	25:31	4.76e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.98e+07	1.32	y	39:12	1.98e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	0.945	y
39	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.933	y
40	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.31	y
41	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.12	y
42	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.25	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	-	n	-	-	0.860	y
44	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.860	y
45	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	0.959	y
46	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.39	y

Analyst: _____ Date: 11/19/09

Run #4 Filename 18NOV09M S: 1 Acquired: 18-NOV-09 13:45:10 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M3 Analyte: FAL ID: 1613 CS3 090918J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	10.00	2.56e+06	0.76 y	27:24	-	1.04	y
2	Unk	1,2,3,7,8-PeCDD	50.00	1.28e+07	1.56 y	33:14	-	0.993	y
3	Unk	1,2,3,4,7,8-HxCDD	50.00	1.38e+07	1.29 y	38:36	-	1.41	y
4	Unk	1,2,3,6,7,8-HxCDD	50.00	1.26e+07	1.28 y	38:47	-	1.35	y
5	Unk	1,2,3,7,8,9-HxCDD	50.00	1.34e+07	1.27 y	39:14	-	1.40	y
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	1.05e+07	0.95 y	44:14	-	1.16	y
7	Unk	OCDD	100.00	1.68e+07	0.91 y	49:49	-	1.23	y
8	Unk	2,3,7,8-TCDF	10.00	5.06e+06	0.66 y	26:38	-	1.26	y
9	Unk	1,2,3,7,8-PeCDF	50.00	1.89e+07	1.72 y	31:30	-	0.936	y
10	Unk	2,3,4,7,8-PeCDF	50.00	1.80e+07	1.72 y	32:49	-	0.923	y
11	Unk	1,2,3,4,7,8-HxCDF	50.00	1.75e+07	1.25 y	37:13	-	1.03	y
12	Unk	1,2,3,6,7,8-HxCDF	50.00	1.87e+07	1.25 y	37:25	-	0.930	y
13	Unk	2,3,4,6,7,8-HxCDF	50.00	1.77e+07	1.26 y	38:21	-	1.00	y
14	Unk	1,2,3,7,8,9-HxCDF	50.00	1.70e+07	1.24 y	39:48	-	1.11	y
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	1.53e+07	1.01 y	42:19	-	1.39	y
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	1.40e+07	0.99 y	45:09	-	1.62	y
17	Unk	OCDF	100.00	2.08e+07	0.92 y	50:11	-	0.863	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.46e+07	0.74 y	27:22	-	0.959	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.58e+07	1.60 y	33:13	-	1.00	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.96e+07	1.34 y	38:36	-	0.985	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.88e+07	1.34 y	38:45	-	0.943	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.81e+07	1.09 y	44:13	-	0.909	y
23	IS	13C-OCDD	200.00	2.74e+07	1.02 y	49:48	-	0.689	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.03e+07	0.82 y	26:37	-	0.883	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	4.03e+07	1.68 y	31:28	-	0.884	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.90e+07	1.69 y	32:47	-	0.854	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.40e+07	0.49 y	37:11	-	1.71	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.01e+07	0.49 y	37:24	-	2.01	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.52e+07	0.49 y	38:20	-	1.77	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	3.06e+07	0.49 y	39:46	-	1.54	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.19e+07	0.46 y	42:18	-	1.10	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.74e+07	0.44 y	45:08	-	0.872	y
33	IS	13C-OCDF	200.00	4.82e+07	0.94 y	50:10	-	1.21	y
34	C/Up	37Cl-2,3,7,8-TCDD	10.00	2.51e+06		27:24	-	0.978	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.57e+07	0.74 y	26:48	2.57e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.56e+07	0.81 y	25:32	4.56e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.99e+07	1.34 y	39:12	1.99e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.04	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.993	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.38	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.16	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.26	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.930	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.930	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.01	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.49	y

Analyst: _____ Date: 11/19/09

Run #5 Filename 18NOV09M S: 5 Acquired: 18-NOV-09 17:26:40 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M4 Analyte: FAL ID: 1613 CS4 090918K

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	40.00	1.15e+07	0.78	y	27:23	-	1.07	y
2	Unk	1,2,3,7,8-PeCDD	200.00	5.92e+07	1.60	y	33:13	-	1.02	y
3	Unk	1,2,3,4,7,8-HxCDD	200.00	6.29e+07	1.27	y	38:35	-	1.48	y
4	Unk	1,2,3,6,7,8-HxCDD	200.00	5.74e+07	1.28	y	38:46	-	1.40	y
5	Unk	1,2,3,7,8,9-HxCDD	200.00	5.95e+07	1.26	y	39:13	-	1.43	y
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	4.77e+07	0.95	y	44:13	-	1.25	y
7	Unk	OCDD	400.00	7.39e+07	0.92	y	49:48	-	1.34	y
8	Unk	2,3,7,8-TCDF	40.00	2.33e+07	0.66	y	26:37	-	1.31	y
9	Unk	1,2,3,7,8-PeCDF	200.00	8.59e+07	1.69	y	31:29	-	0.964	y
10	Unk	2,3,4,7,8-PeCDF	200.00	8.30e+07	1.71	y	32:48	-	0.978	y
11	Unk	1,2,3,4,7,8-HxCDF	200.00	8.21e+07	1.25	y	37:12	-	1.08	y
12	Unk	1,2,3,6,7,8-HxCDF	200.00	8.80e+07	1.25	y	37:24	-	0.991	y
13	Unk	2,3,4,6,7,8-HxCDF	200.00	8.00e+07	1.23	y	38:21	-	1.06	y
14	Unk	1,2,3,7,8,9-HxCDF	200.00	7.74e+07	1.25	y	39:47	-	1.17	y
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	7.01e+07	1.02	y	42:18	-	1.50	y
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	6.47e+07	1.02	y	45:08	-	1.77	y
17	Unk	OCDF	400.00	9.18e+07	0.92	y	50:11	-	0.930	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.70e+07	0.73	y	27:22	-	0.950	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.91e+07	1.73	y	33:12	-	1.02	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	2.13e+07	1.33	y	38:35	-	0.983	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	2.05e+07	1.33	y	38:44	-	0.946	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.91e+07	1.06	y	44:12	-	0.885	y
23	IS	13C-OCDD	200.00	2.76e+07	0.99	y	49:47	-	0.638	y
24	IS	13C-2,3,7,8-TCDF	100.00	4.44e+07	0.82	y	26:36	-	0.918	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	4.45e+07	1.70	y	31:27	-	0.921	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	4.24e+07	1.70	y	32:47	-	0.877	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.79e+07	0.50	y	37:11	-	1.75	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.44e+07	0.49	y	37:23	-	2.05	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.79e+07	0.49	y	38:19	-	1.75	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	3.30e+07	0.48	y	39:46	-	1.53	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.33e+07	0.47	y	42:17	-	1.08	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.82e+07	0.46	y	45:07	-	0.843	y
33	IS	13C-OCDF	200.00	4.94e+07	0.92	y	50:09	-	1.14	y
34	C/Up	37Cl-2,3,7,8-TCDD	40.00	1.17e+07			27:23	-	1.03	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.85e+07	0.74	y	26:47	2.85e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	4.84e+07	0.82	y	25:32	4.84e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	2.16e+07	1.31	y	39:12	2.16e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.07	y
39	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	1.02	y
40	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.44	y
41	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.25	y
42	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.31	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	-	n	-	-	0.971	y
44	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.971	y
45	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.07	y
46	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.62	y

Analyst: _____ Date: 11/19/09

Run #6 Filename 18NOV09M S: 6 Acquired: 18-NOV-09 18:21:58 Cal: PCDDFAL3-11-18-09
Client ID: ST111809M5 Analyte: PCDDFAL3-11-18-09 FAL ID: 1613 CS5 090918L

	Typ	Name	Amount	Resp	RA		RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	200.00	4.98e+07	0.78	y	27:23	-	1.12	y
2	Unk	1,2,3,7,8-PeCDD	1000.00	2.79e+08	1.55	y	33:13	-	1.07	y
3	Unk	1,2,3,4,7,8-HxCDD	1000.00	3.29e+08	1.27	y	38:36	-	1.52	y
4	Unk	1,2,3,6,7,8-HxCDD	1000.00	2.88e+08	1.27	y	38:46	-	1.42	y
5	Unk	1,2,3,7,8,9-HxCDD	1000.00	3.07e+08	1.25	y	39:13	-	1.47	y
6	Unk	1,2,3,4,6,7,8-HpCDD	1000.00	2.60e+08	0.97	y	44:13	-	1.26	y
7	Unk	OCDD	2000.00	4.20e+08	0.91	y	49:49	-	1.35	y
8	Unk	2,3,7,8-TCDF	200.00	1.00e+08	0.68	y	26:38	-	1.38	y
9	Unk	1,2,3,7,8-PeCDF	1000.00	3.75e+08	1.67	y	31:29	-	0.979	y
10	Unk	2,3,4,7,8-PeCDF	1000.00	3.68e+08	1.68	y	32:48	-	0.995	y
11	Unk	1,2,3,4,7,8-HxCDF	1000.00	3.99e+08	1.26	y	37:12	-	1.11	y
12	Unk	1,2,3,6,7,8-HxCDF	1000.00	4.18e+08	1.25	y	37:24	-	1.01	y
13	Unk	2,3,4,6,7,8-HxCDF	1000.00	3.97e+08	1.25	y	38:20	-	1.09	y
14	Unk	1,2,3,7,8,9-HxCDF	1000.00	4.04e+08	1.24	y	39:47	-	1.20	y
15	Unk	1,2,3,4,6,7,8-HpCDF	1000.00	3.72e+08	1.01	y	42:18	-	1.51	y
16	Unk	1,2,3,4,7,8,9-HpCDF	1000.00	3.62e+08	1.01	y	45:08	-	1.82	y
17	Unk	OCDF	2000.00	5.23e+08	0.93	y	50:12	-	0.933	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.22e+07	0.74	y	27:22	-	0.980	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.61e+07	1.65	y	33:12	-	1.15	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	2.17e+07	1.33	y	38:35	-	0.972	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	2.02e+07	1.33	y	38:44	-	0.909	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	2.06e+07	1.07	y	44:12	-	0.923	y
23	IS	13C-OCDD	200.00	3.11e+07	1.02	y	49:48	-	0.698	y
24	IS	13C-2,3,7,8-TCDF	100.00	3.62e+07	0.83	y	26:37	-	0.911	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.83e+07	1.66	y	31:27	-	0.963	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.70e+07	1.70	y	32:46	-	0.930	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	3.59e+07	0.49	y	37:11	-	1.61	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	4.14e+07	0.50	y	37:23	-	1.86	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	3.63e+07	0.49	y	38:20	-	1.63	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	3.35e+07	0.48	y	39:46	-	1.51	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.47e+07	0.46	y	42:17	-	1.11	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.99e+07	0.47	y	45:06	-	0.892	y
33	IS	13C-OCDF	200.00	5.61e+07	0.94	y	50:10	-	1.26	y
34	C/Up	37Cl-2,3,7,8-TCDD	200.00	5.04e+07			27:23	-	1.11	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.27e+07	0.74	y	26:47	2.27e+05	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	3.98e+07	0.82	y	25:31	3.98e+05	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	2.23e+07	1.31	y	39:11	2.23e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.12	y
39	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	1.07	y
40	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.47	y
41	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.26	y
42	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.38	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	-	n	-	-	0.987	y
44	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.987	y
45	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.10	y
46	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.65	y

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 18NOV09M S2 CS3 Data Filename: 18NOV09M S1

CS1 Data Filename: 18NOV09M S3 CS4 Data Filename: 18NOV09M S5

CS2 Data Filename: 18NOV09M S4 CS5 Data Filename: 18NOV09M S6

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
NATIVE ANALYTES								
2,3,7,8-TCDD	1.00	0.93	0.95	1.04	1.07	1.12	1.02	7.22
1,2,3,7,8-PeCDD	0.88	0.88	0.93	0.99	1.02	1.07	0.96	8.09
1,2,3,4,7,8-HxCDD	1.26	1.27	1.31	1.41	1.48	1.52	1.37	8.00
1,2,3,6,7,8-HxCDD	1.26	1.33	1.30	1.35	1.40	1.42	1.34	4.55
1,2,3,7,8,9-HxCDD	1.32	1.27	1.32	1.40	1.43	1.47	1.37	5.49
1,2,3,4,6,7,8-HpCDD	1.12	1.09	1.12	1.16	1.25	1.26	1.17	6.10
OCDD	1.09	1.11	1.17	1.23	1.34	1.35	1.21	9.27
2,3,7,8-TCDF	1.22	1.28	1.25	1.26	1.31	1.38	1.29	4.39
1,2,3,7,8-PeCDF	0.79	0.81	0.85	0.94	0.96	0.98	0.89	9.08
2,3,4,7,8-PeCDF	0.83	0.84	0.87	0.92	0.98	1.00	0.91	7.85
1,2,3,4,7,8-HxCDF	0.89	0.91	0.97	1.03	1.08	1.11	1.00	9.26
1,2,3,6,7,8-HxCDF	0.82	0.86	0.88	0.93	0.99	1.01	0.92	8.16
2,3,4,6,7,8-HxCDF	0.91	0.90	0.95	1.00	1.06	1.09	0.99	7.97
1,2,3,7,8,9-HxCDF	0.98	1.01	1.06	1.11	1.17	1.20	1.09	8.28
1,2,3,4,6,7,8-HpCDF	1.22	1.22	1.31	1.39	1.50	1.51	1.36	9.61
1,2,3,4,7,8,9-HpCDF	1.49	1.44	1.50	1.62	1.77	1.82	1.61	9.90
OCDF	0.75	0.76	0.81	0.86	0.93	0.93	0.84	9.39

Analyst:  Date: 11/19/09

USEPA - ITD

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 18NOV09M S2 CS4 Data Filename: 18NOV09M S1

CS1 Data Filename: 18NOV09M S3 CS4 Data Filename: 18NOV09M S5

CS2 Data Filename: 18NOV09M S4 CS5 Data Filename: 18NOV09M S6

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
LABELED COMPOUNDS								
13C-2,3,7,8-TCDD	0.92	0.91	0.93	0.96	0.95	0.98	0.94	2.65
13C-1,2,3,7,8-PeCDD	0.99	0.93	1.00	1.00	1.02	1.15	1.02	7.06
13C-1,2,3,4,7,8-HxCDD	0.99	0.97	1.00	0.99	0.98	0.97	0.98	1.28
13C-1,2,3,6,7,8-HxCDD	0.93	0.93	0.96	0.94	0.95	0.91	0.94	2.01
13C-1,2,3,4,6,7,8-HpCDD	0.92	0.89	0.87	0.91	0.89	0.92	0.90	2.42
13C-OCDD	0.69	0.66	0.62	0.69	0.64	0.70	0.67	4.59
13C-2,3,7,8-TCDF	0.85	0.85	0.86	0.88	0.92	0.91	0.88	3.49
13C-1,2,3,7,8-PeCDF	0.83	0.79	0.87	0.88	0.92	0.96	0.88	6.98
13C-2,3,4,7,8-PeCDF	0.83	0.76	0.85	0.85	0.88	0.93	0.85	6.60
13C-1,2,3,4,7,8-HxCDF	1.74	1.75	1.75	1.71	1.75	1.61	1.72	3.20
13C-1,2,3,6,7,8-HxCDF	2.01	2.02	2.06	2.01	2.05	1.86	2.00	3.71
13C-2,3,4,6,7,8-HxCDF	1.74	1.73	1.79	1.77	1.75	1.63	1.74	3.24
13C-1,2,3,7,8,9-HxCDF	1.51	1.47	1.48	1.54	1.53	1.51	1.51	1.71
13C-1,2,3,4,6,7,8-HpCDF	1.12	1.10	1.08	1.10	1.08	1.11	1.10	1.39
13C-1,2,3,4,7,8,9-HpCDF	0.82	0.84	0.81	0.87	0.84	0.89	0.85	3.67
13C-OCDF	1.18	1.15	1.10	1.21	1.14	1.26	1.17	4.73
CLEANUP STANDARD								
37Cl-2,3,7,8-TCDD	0.90	0.93	0.90	0.98	1.03	1.11	0.97	8.61

Analyst: _____ Date: 11/19/09

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: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 18NOV09M S2 CS3 Data Filename: 18NOV09M S1

CS1 Data Filename: 18NOV09M S3 CS4 Data Filename: 18NOV09M S5

CS2 Data Filename: 18NOV09M S4 CS5 Data Filename: 18NOV09M S6

NATIVE ANALYTES	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS
2,3,7,8-TCDD	M/M+2	0.72	0.75	0.80	0.76	0.78	0.78	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.55	1.55	1.56	1.60	1.55	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.24	1.24	1.29	1.27	1.27	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.34	1.24	1.28	1.28	1.27	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.27	1.27	1.27	1.26	1.25	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.93	0.91	0.91	0.95	0.95	0.97	0.88-1.20
OCDD	M+2/M+4	0.92	0.93	0.92	0.91	0.92	0.91	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.69	0.66	0.66	0.66	0.66	0.68	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.75	1.68	1.71	1.72	1.69	1.67	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.65	1.69	1.69	1.72	1.71	1.68	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.28	1.23	1.25	1.25	1.26	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.21	1.28	1.22	1.25	1.25	1.25	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.20	1.24	1.26	1.23	1.25	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.26	1.21	1.24	1.25	1.24	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.00	1.00	1.00	1.01	1.02	1.01	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.96	1.01	0.99	1.02	1.01	0.88-1.20
OCDF	M+2/M+4	0.88	0.93	0.91	0.92	0.92	0.93	0.76-1.02

Analyst: _____ Date: 11/19/09

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: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 18NOV09M S2 CS3 Data Filename: 18NOV09M S1

CS1 Data Filename: 18NOV09M S3 CS4 Data Filename: 18NOV09M S5

CS2 Data Filename: 18NOV09M S4 CS5 Data Filename: 18NOV09M S6

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	0.73	0.73	0.73	0.74	0.73	0.74	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.63	1.69	1.66	1.60	1.73	1.65	1.32-1.78
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.36	1.32	1.34	1.33	1.33	1.05-1.43
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.33	1.31	1.31	1.34	1.33	1.33	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	1.07	1.06	1.09	1.06	1.07	0.88-1.20
13C-OCDD	M+2/M+4	1.01	1.00	0.98	1.02	0.99	1.02	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.81	0.81	0.82	0.82	0.82	0.83	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.67	1.68	1.68	1.68	1.70	1.66	1.32-1.78
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.68	1.71	1.66	1.69	1.70	1.70	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.48	0.48	0.49	0.49	0.50	0.49	0.43-0.59
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.48	0.48	0.50	0.49	0.49	0.50	0.43-0.59
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.49	0.50	0.49	0.49	0.49	0.43-0.59
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.49	0.49	0.49	0.49	0.48	0.48	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.45	0.46	0.46	0.47	0.46	0.37-0.51
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.45	0.46	0.44	0.46	0.47	0.37-0.51
13C-OCDF	M+2/M+4	0.92	0.92	0.93	0.94	0.92	0.94	0.76-1.02

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 18NOV09M Sam:1 Analysis Date: 18-NOV-09 13:45:10

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.2	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	51.6	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	51.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	50.1	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	51.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.95	0.88-1.20	y	49.5	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	101	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.66	0.65-0.89	y	9.77	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.72	1.32-1.78	y	52.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.72	1.32-1.78	y	50.9	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.8	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	50.9	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	51.1	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	51.3	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.99	0.88-1.20	y	50.3	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	102	63.0 - 159

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

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

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

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 18NOV09M Sam:1 Analysis Date: 18-NOV-09 13:45:10

	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	0.74	0.65-0.89	y	102	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.60	1.32-1.78	y	98.5	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.34	1.05-1.43	y	100	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.34	1.05-1.43	y	101	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.09	0.88-1.20	y	101	72.0 - 138
13C-OCDD	M+2/M+4	1.02	0.76-1.02	y	207	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.82	0.65-0.89	y	100	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.68	1.32-1.78	y	101	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.69	1.32-1.78	y	101	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	99.5	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	101	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	102	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.49	0.43-0.59	y	102	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37-0.51	y	100	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	103	77.0 - 129
13C-OCDF	M+2/M+4	0.94	0.76-1.02	y	206	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					10.0	7.80 - 12.8

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

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

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

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

Analyst: _____ Date: 11/19/09

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: 11/18/09

RT Window Data Filename: 18NOV09M Sam:1 Analysis Date: 18-NOV-09 Time: 13:45:10

DB-5 IS Data Filename: 18NOV09M Sam:1 Analysis Date: 18-NOV-09 Time: 13:45:10

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)	28:20	1,2,8,9-TCDF (L)	28:33
1,2,4,7,9-PeCDD (F)	30:15	1,3,4,6,8-PeCDF (F)	28:26
1,2,3,8,9-PeCDD (L)	33:49	1,2,3,8,9-PeCDF (L)	34:14
1,2,4,6,7,9-HxCDD (F)	36:09	1,2,3,4,6,8-HxCDF (F)	35:16
1,2,3,7,8,9-HxCDD (L)	39:14	1,2,3,7,8,9-HxCDF (L)	39:48
1,2,3,4,6,7,9-HpCDD (F)	42:51	1,2,3,4,6,7,8-HpCDF (F)	42:19
1,2,3,4,6,7,8-HpCDD (L)	44:14	1,2,3,4,7,8,9-HpCDF (L)	45:09

(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: 11/19/09

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 18-NOV-09 13:45:10 CS3 or VER Data Filename: 18NOV09M 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	1.023	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		1.224	0.923-1.303

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

Analyst: _____ Date: 11/19/09

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 18-NOV-09 13:45:10 CS3 or VER Data Filename: 18NOV09M 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	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-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	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	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		1.280	1.000-1.311

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

Analyst: _____ Date: 11/19/09

FAL ID: ST111809M3 Filename: 18NOV09M Sam:1 Acquired: 18-NOV-09 13:45:10 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 090918J ConCal: ST111809M3 EndCal: ST111809M6
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 103
WHO 1998 Tox: 128 WHO 2005 Tox: 117

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.56e+06	0.76 y	27:24	1.02	10.2		2.50	-	-	*
1,2,3,7,8-PeCDD	1.28e+07	1.56 y	33:14	0.96	51.6		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.38e+07	1.29 y	38:36	1.37	51.2		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.26e+07	1.28 y	38:47	1.34	50.1		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.34e+07	1.27 y	39:14	1.37	51.1		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	1.05e+07	0.95 y	44:14	1.17	49.5		2.50	-	-	*
OCDD	1.68e+07	0.91 y	49:49	1.21	101		2.50	-	-	*
2,3,7,8-TCDF	5.06e+06	0.66 y	26:38	1.29	9.77		2.50	-	-	*
1,2,3,7,8-PeCDF	1.89e+07	1.72 y	31:30	0.89	52.6		2.50	-	-	*
2,3,4,7,8-PeCDF	1.80e+07	1.72 y	32:49	0.91	50.9		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.75e+07	1.25 y	37:13	1.00	51.5		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.87e+07	1.25 y	37:25	0.92	50.8		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.77e+07	1.26 y	38:21	0.99	50.9		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.70e+07	1.24 y	39:48	1.09	51.1		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.53e+07	1.01 y	42:19	1.36	51.3		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.40e+07	0.99 y	45:09	1.61	50.3		2.50	-	-	*
OCDF	2.08e+07	0.92 y	50:11	0.84	102		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.46e+07	0.74 y	27:22	0.94	102					102
13C-1,2,3,7,8-PeCDD	2.58e+07	1.60 y	33:13	1.02	98.5					98.5
13C-1,2,3,4,7,8-HxCDD	1.96e+07	1.34 y	38:36	0.98	100					100
13C-1,2,3,6,7,8-HxCDD	1.88e+07	1.34 y	38:45	0.94	101					101
13C-1,2,3,4,6,7,8-HpCDD	1.81e+07	1.09 y	44:13	0.90	101					101
13C-OCDD	2.74e+07	1.02 y	49:48	0.67	207					103
13C-2,3,7,8-TCDF	4.03e+07	0.82 y	26:37	0.88	100					100
13C-1,2,3,7,8-PeCDF	4.03e+07	1.68 y	31:28	0.88	101					101
13C-2,3,4,7,8-PeCDF	3.90e+07	1.69 y	32:47	0.85	101					101
13C-1,2,3,4,7,8-HxCDF	3.40e+07	0.49 y	37:11	1.72	99.5					99.5
13C-1,2,3,6,7,8-HxCDF	4.01e+07	0.49 y	37:24	2.00	101					101
13C-2,3,4,6,7,8-HxCDF	3.52e+07	0.49 y	38:20	1.74	102					102
13C-1,2,3,7,8,9-HxCDF	3.06e+07	0.49 y	39:46	1.51	102					102
13C-1,2,3,4,6,7,8-HpCDF	2.19e+07	0.46 y	42:18	1.10	100					100
13C-1,2,3,4,7,8,9-HpCDF	1.74e+07	0.44 y	45:08	0.85	103					103
13C-OCDF	4.82e+07	0.94 y	50:10	1.17	206					103
37Cl-2,3,7,8-TCDD	2.51e+06		27:24	0.97	10.0					100
13C-1,2,3,4-TCDD	2.57e+07	0.74 y	26:48	-	98.3					
13C-1,2,3,4-TCDF	4.56e+07	0.81 y	25:32	-	98.8					
13C-1,2,3,7,8,9-HxCDD	1.99e+07	1.34 y	39:12	-	97.0					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.39e+07		24:23	1.02	55.3	2.50	-	-	*		20
Total Penta-Dioxins	2.72e+07		30:15	0.96	110	2.50	-	-	*		13
Total Hexa-Dioxins	4.52e+07		36:09	1.36	173	2.50	-	-	*		14
Total Hepta-Dioxins	2.21e+07		42:51	1.17	105	2.50	-	-	*		10
Total Tetra-Furans	2.16e+07		23:02	1.29	41.7	2.50	-	-	*		18
1st Fn. Tot Penta-Furans	1.85e+07		28:26	0.90	51.9	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.36e+07		30:11	0.90	151	2.50	-	-	*	203	9
Total Hexa-Furans	8.22e+07		35:16	0.99	237	2.50	-	-	*		15
Total Hepta-Furans	2.95e+07		42:19	1.47	102	2.50	-	-	*		4

Analyst: _____ Date: 11/19/09

Frontier Analytical Laboratory - Acquisition Log

Run Name:18NOV09M Instrument: FAL3 GC: DB5 Experiment:PCDD

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
18NOV09M	1	ST111809M3	1613 CS3 090918J	18-NOV-09 13:45:10	ST111809M3	ST111809M6	BS
18NOV09M	2	ST111809M0	1613 CS0 090918G	18-NOV-09 14:40:53	ST111809M3	ST111809M6	BS
18NOV09M	3	ST111809M1	1613 CS1 090918H	18-NOV-09 15:36:11	ST111809M3	ST111809M6	BS
18NOV09M	4	ST111809M2	1613 CS2 090918I	18-NOV-09 16:31:26	ST111809M3	ST111809M6	BS
18NOV09M	5	ST111809M4	1613 CS4 090918K	18-NOV-09 17:26:40	ST111809M3	ST111809M6	BS
18NOV09M	6	ST111809M5	1613 CS5 090918L	18-NOV-09 18:21:58	ST111809M3	ST111809M6	BS
18NOV09M	7	SB111809M1	Solvent Blank	18-NOV-09 19:17:18	ST111809M3	ST111809M6	BS
18NOV09M	8	1882-001-0001-OPR	OPR	18-NOV-09 20:12:37	ST111809M3	ST111809M6	BS
18NOV09M	9	1882-001-0001-MB	Method Blank	18-NOV-09 21:07:56	ST111809M3	ST111809M6	BS
18NOV09M	10	5820-009-0001-SA	EDS-114-106+69-C1-0.7	18-NOV-09 22:03:10	ST111809M3	ST111809M6	BS
18NOV09M	11	5820-014-0001-SA	EDS-116-105+86-W2-7.1	18-NOV-09 22:58:30	ST111809M3	ST111809M6	BS
18NOV09M	12	5820-002-0001-SA	EDS-119-106+09-W3-5.2	18-NOV-09 23:53:48	ST111809M3	ST111809M6	BS
18NOV09M	13	5820-011-0001-SA	EDS-105-106+69-W2-6.0	19-NOV-09 00:49:06	ST111809M3	ST111809M6	BS
18NOV09M	14	SB111809M2	Solvent Blank	19-NOV-09 01:44:25	ST111809M3	ST111809M6	BS
18NOV09M	15	SB111809M3	Solvent Blank	19-NOV-09 02:39:43	ST111809M3	ST111809M6	BS
18NOV09M	16	ST111809M6	1613 CS3 090918J	19-NOV-09 03:35:00	ST111809M6	ST111809M7	BS
18NOV09M	17	5820-003-0001-SA	EDS-117-105+86-W3-4.9	19-NOV-09 04:30:11	ST111809M6	ST111809M7	BS
18NOV09M	18	5820-006-0001-SA	EDS-118-106+09-W2-5.7	19-NOV-09 05:25:26	ST111809M6	ST111809M7	BS
18NOV09M	19	5820-010-0001-SA	EDS-104-106+69-W1-5.5	19-NOV-09 06:20:41	ST111809M6	ST111809M7	BS
18NOV09M	20	5820-008-0001-SA	EDS-120-106+09-W4-6.4	19-NOV-09 07:16:00	ST111809M6	ST111809M7	BS
18NOV09M	21	5820-007-0001-SA	EDS-113-106+44-W8-7.6	19-NOV-09 08:11:14	ST111809M6	ST111809M7	BS
18NOV09M	22	5820-004-0001-SA	EDS-107-106+69-W4-7.5	19-NOV-09 09:06:32	ST111809M6	ST111809M7	BS
18NOV09M	23	5820-001-0001-SA	EDS-115-105+86-W1-5.8	19-NOV-09 10:01:51	ST111809M6	ST111809M7	BS
18NOV09M	24	5820-005-0001-SA	EDS-106-106+69-W3-7.0	19-NOV-09 10:57:09	ST111809M6	ST111809M7	BS
18NOV09M	25	SB111809M4	Solvent Blank	19-NOV-09 11:52:24	ST111809M6	ST111809M7	BS
18NOV09M	26	SB111809M5	Solvent Blank	19-NOV-09 12:47:43	ST111809M6	ST111809M7	BS
18NOV09M	27	ST111809M7	1613 CS3 090918J	19-NOV-09 13:43:06	ST111809M6	ST111809M7	BS

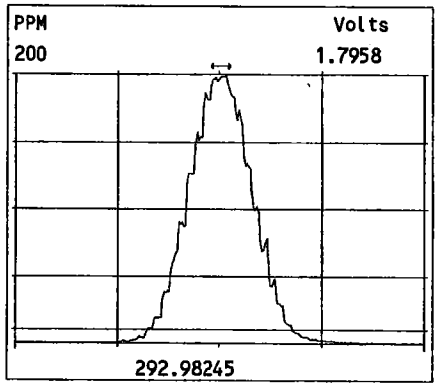
DN 11/19/09

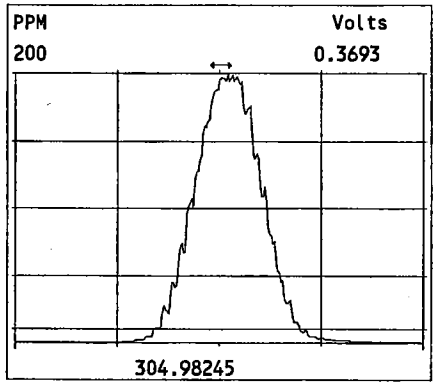
Data Backed Up:_____

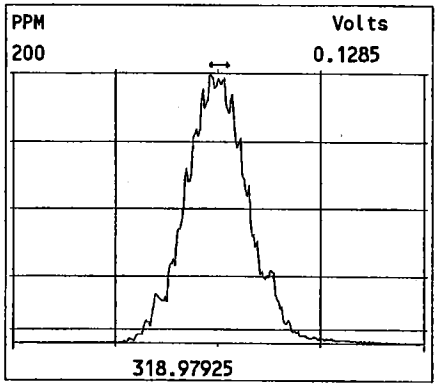
Date:_____

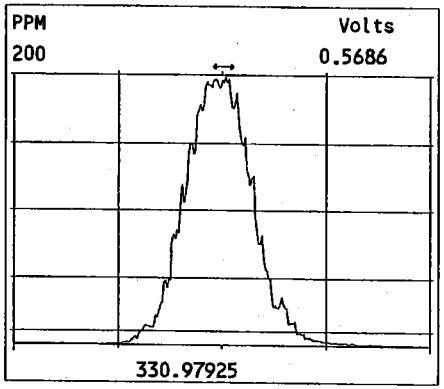
Peak Locate Examination:18-NOV-2009:13:42 File:18NOV09M

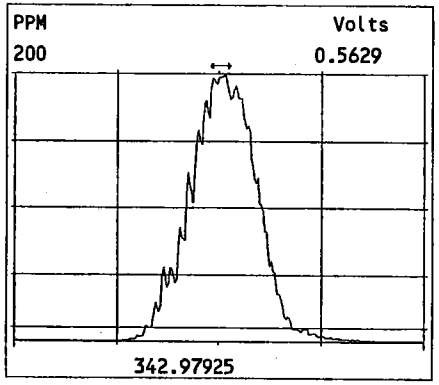
Experiment:PCDD Function:1 Reference:PFK

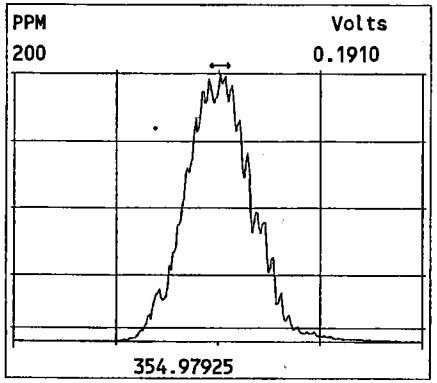


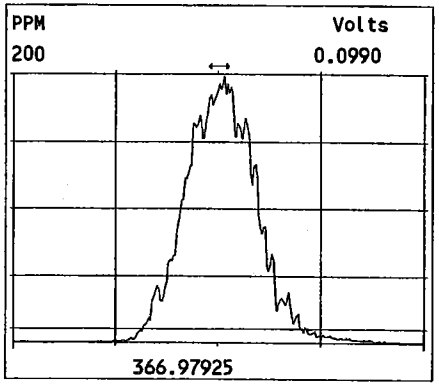


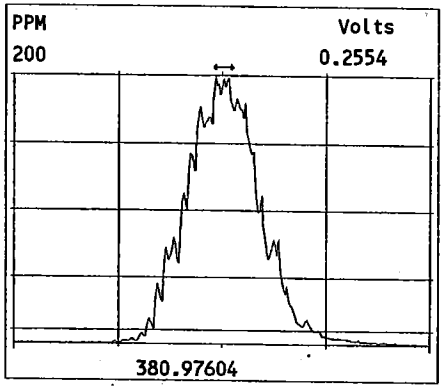


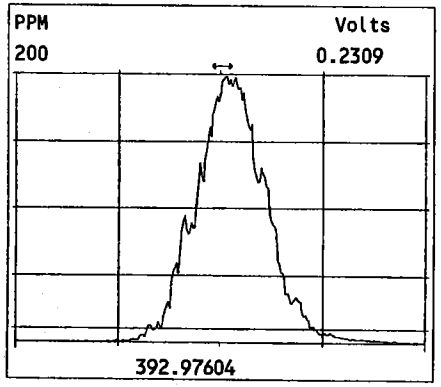


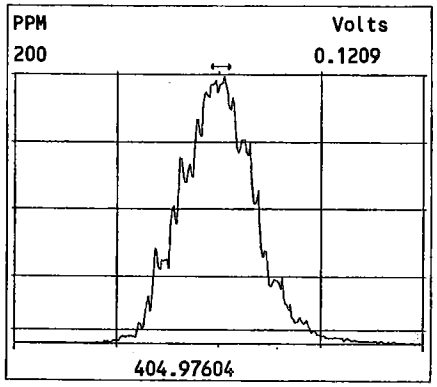


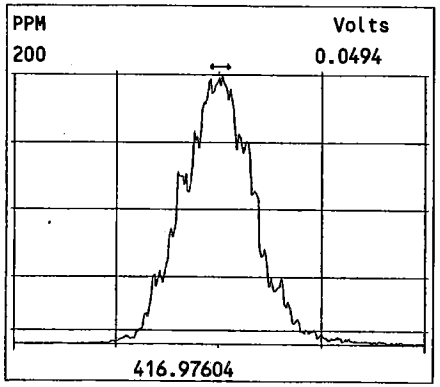






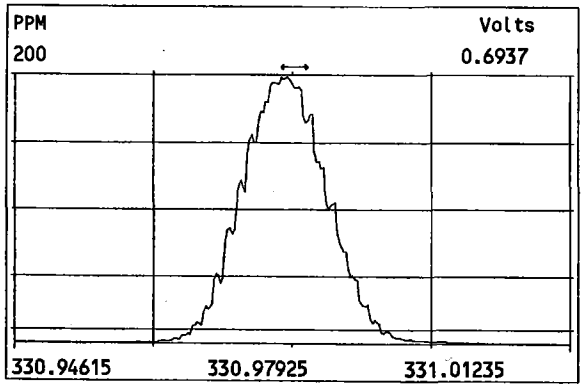


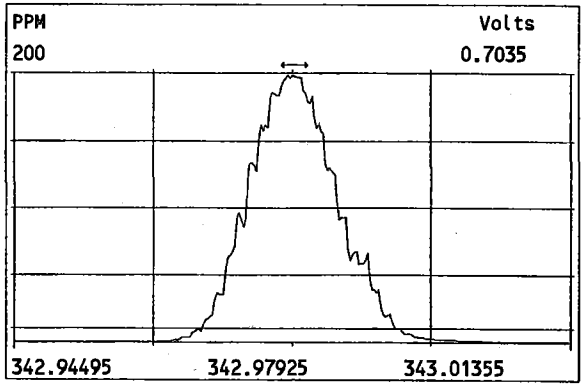


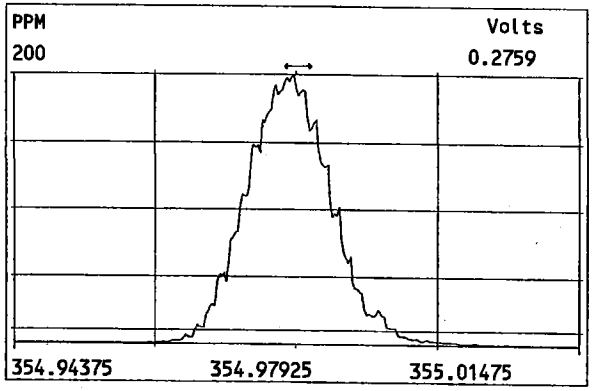


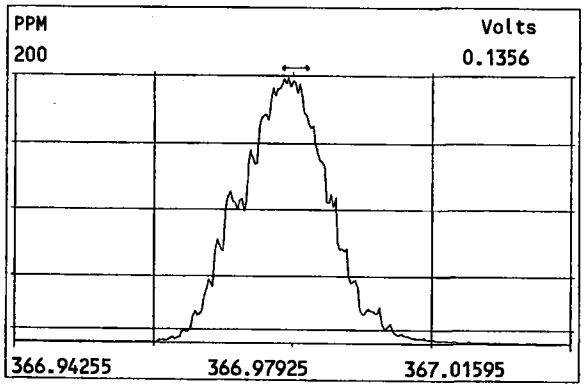
Peak Locate Examination:18-NOV-2009:13:43 File:18NOV09M

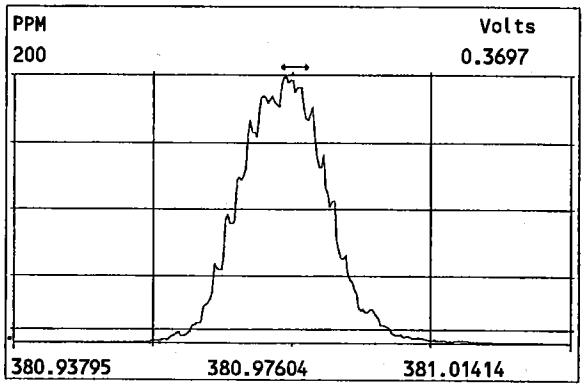
Experiment:PCDD Function:2 Reference:PFK

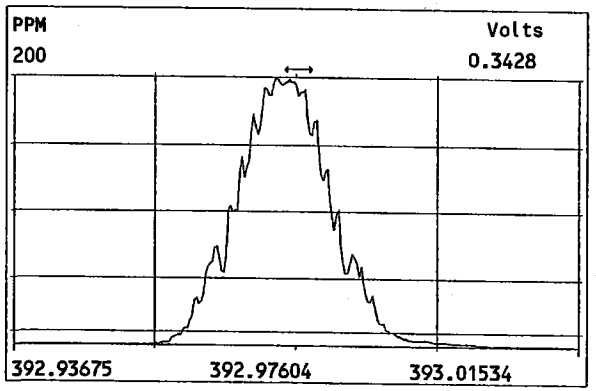


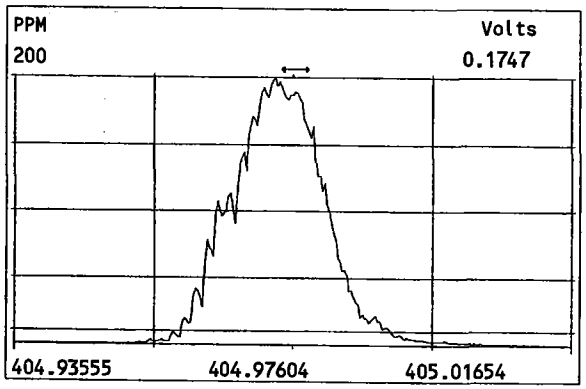


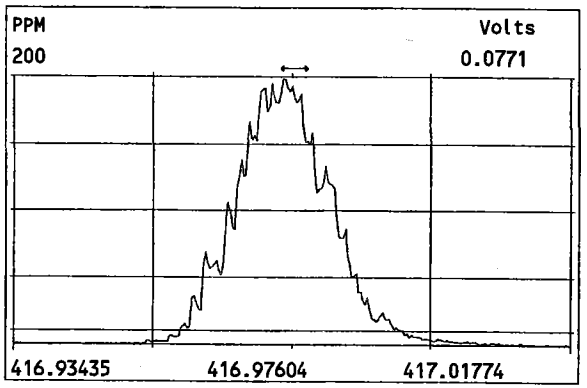




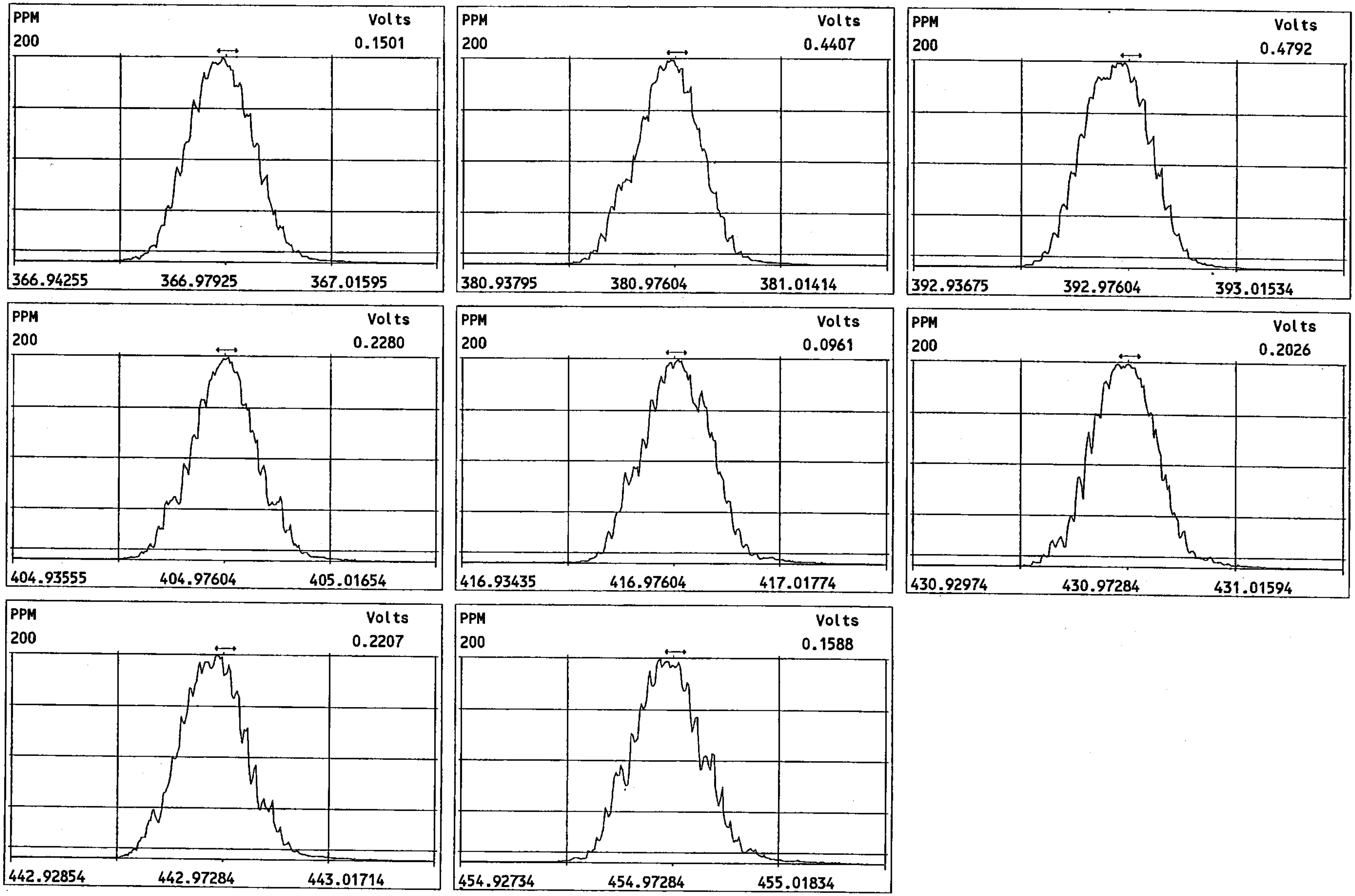






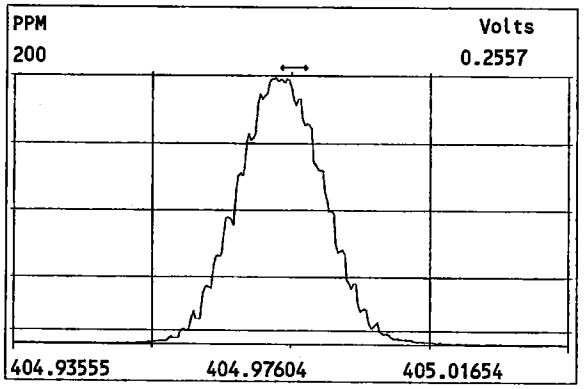


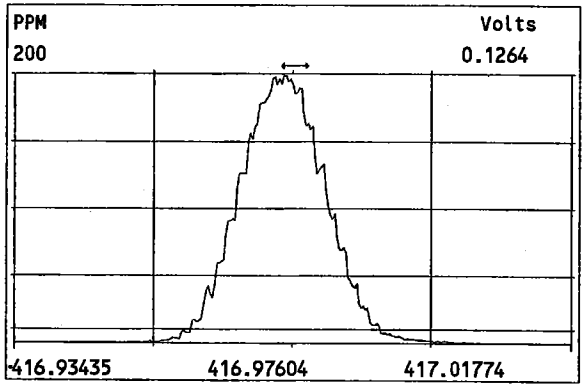
Peak Locate Examination:18-NOV-2009:13:43 File:18NOV09M
Experiment:PCDD Function:3 Reference:PFK

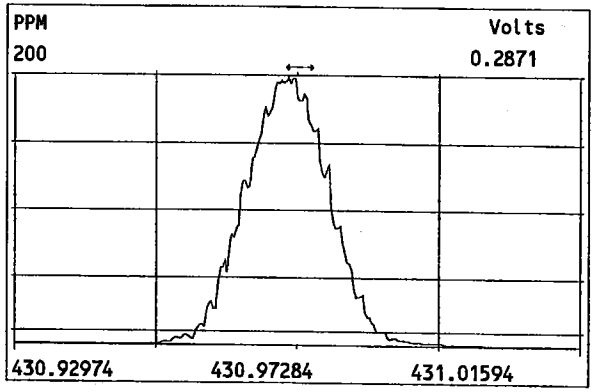


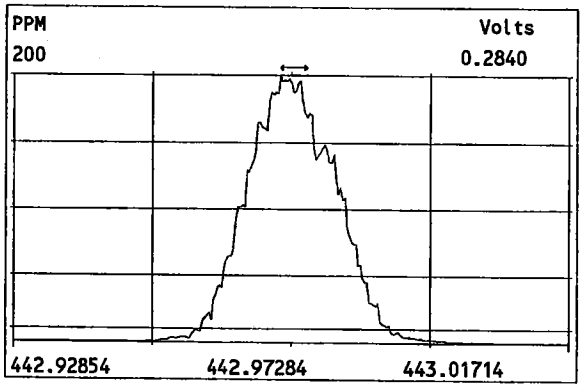
Peak Locate Examination:18-NOV-2009:13:44 File:18NOV09M

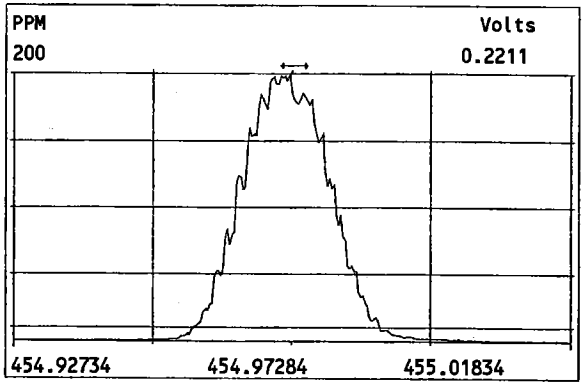
Experiment:PCDD Function:4 Reference:PFK

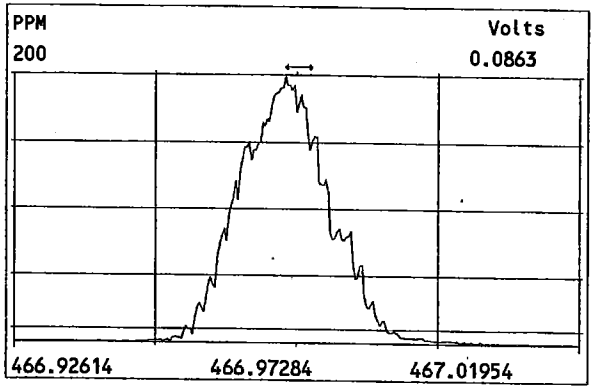


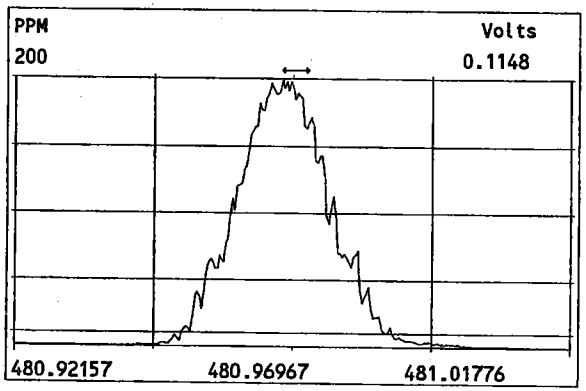




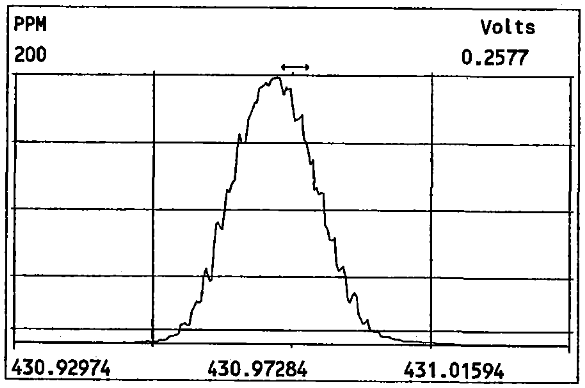


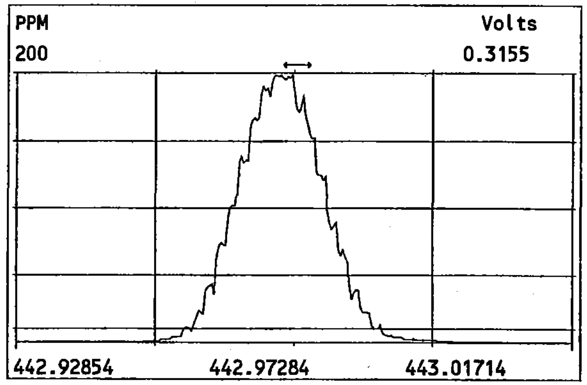


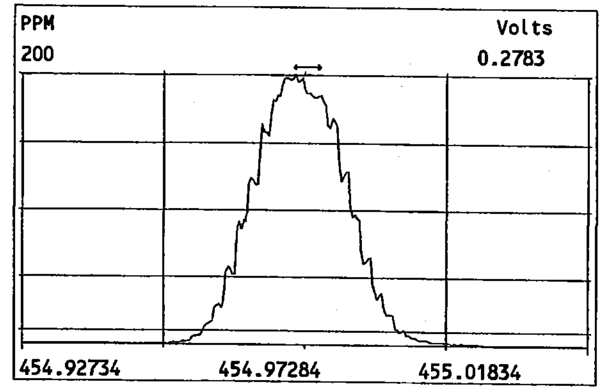


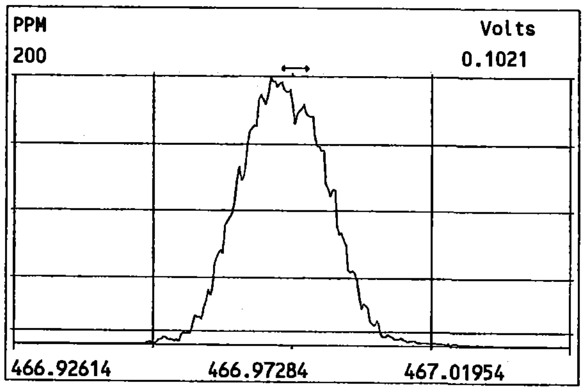


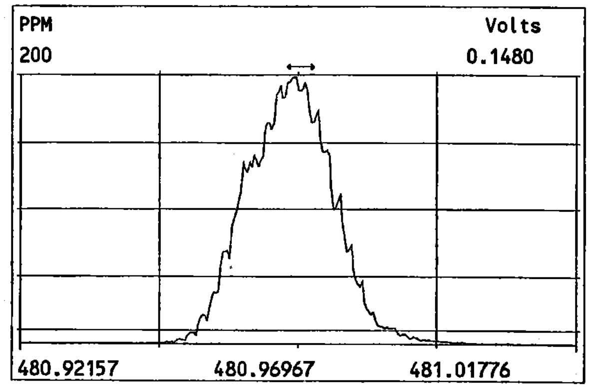
Peak Locate Examination:18-NOV-2009:13:44 File:18NOV09M
Experiment:PCDD Function:5 Reference:PFK

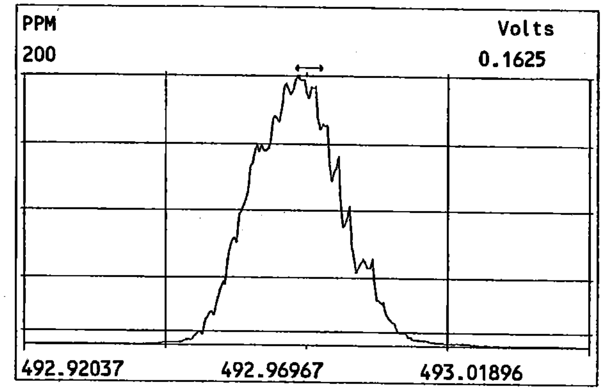


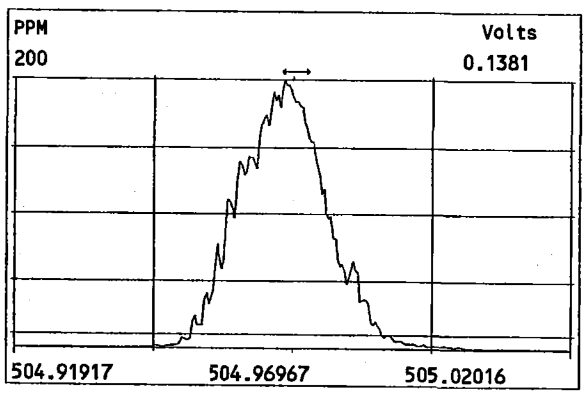


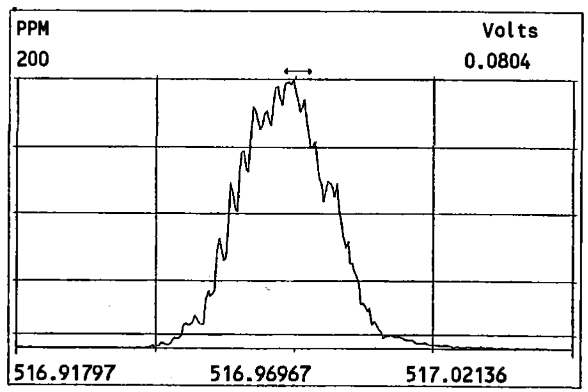




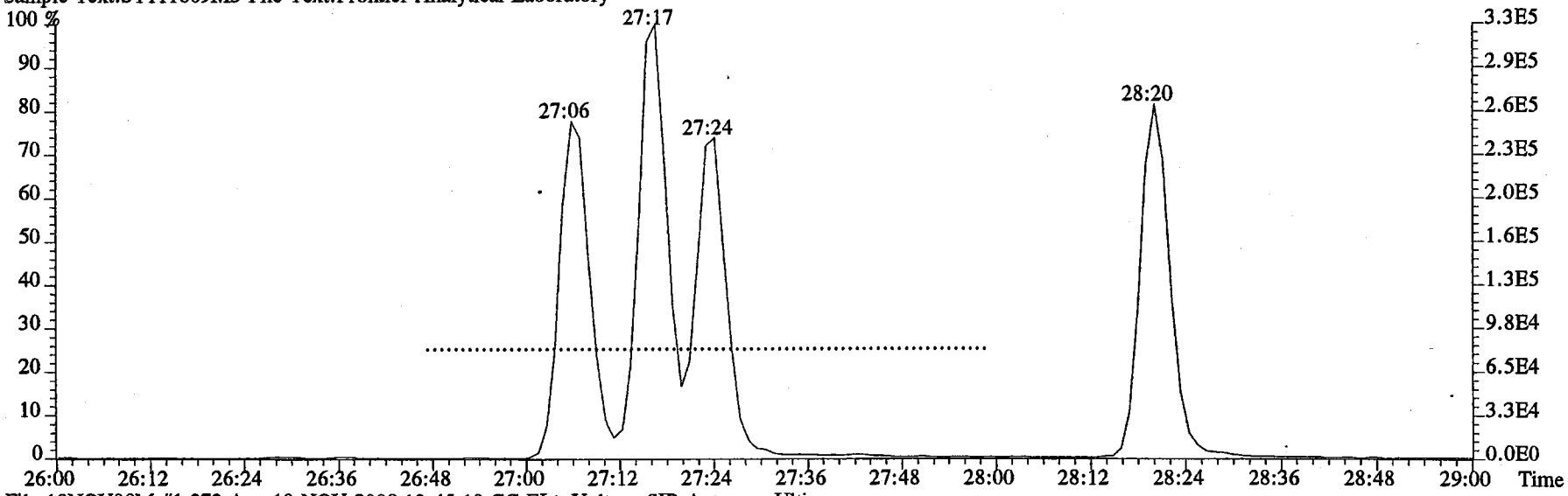




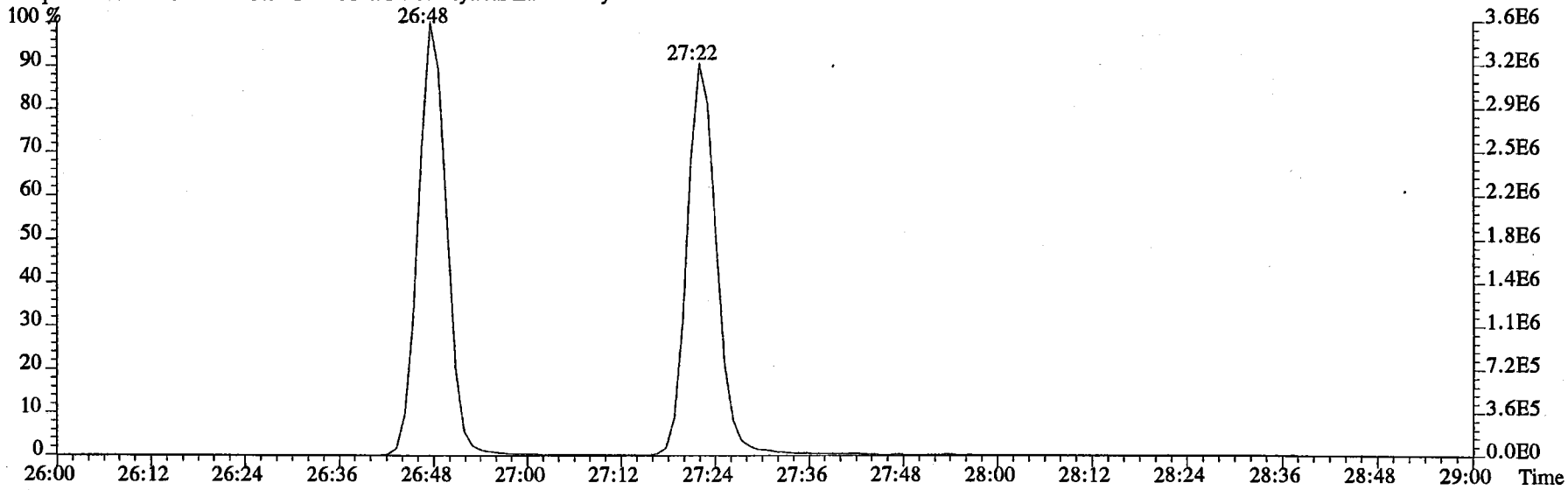




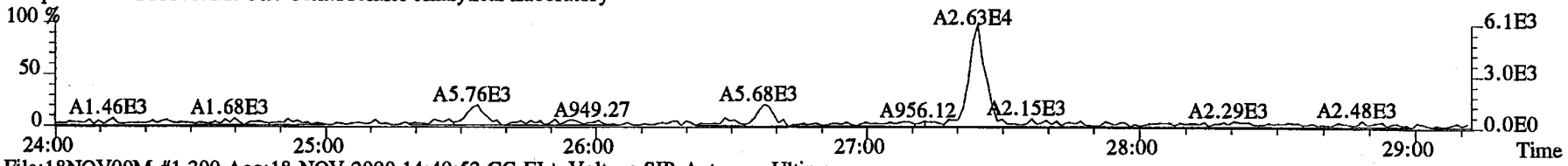
File:18NOV09M #1-372 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



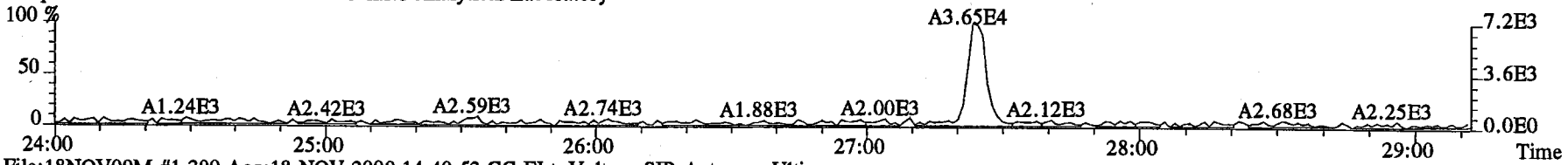
File:18NOV09M #1-372 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



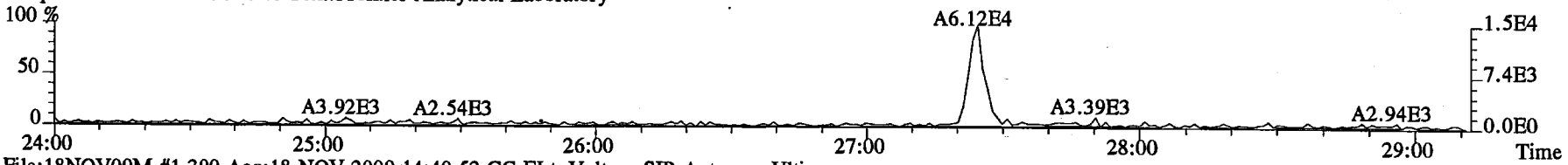
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



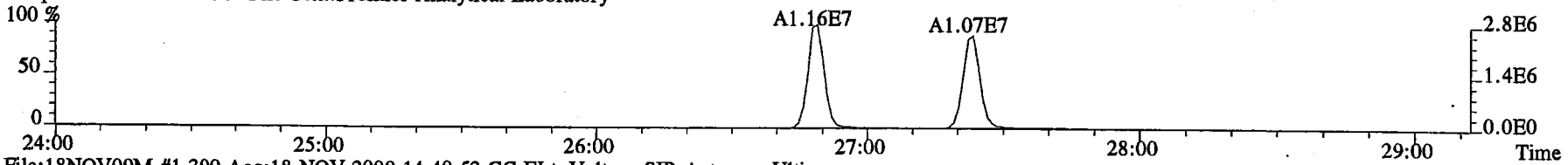
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



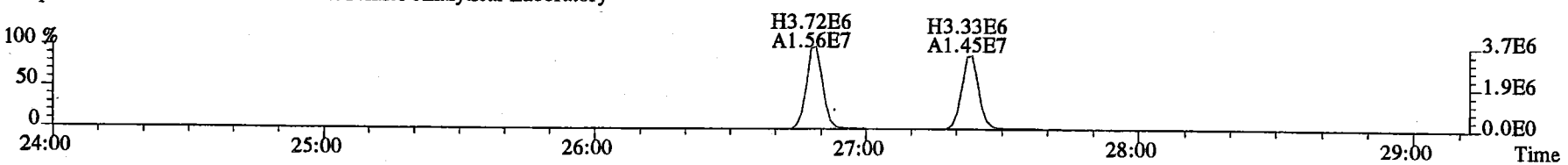
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



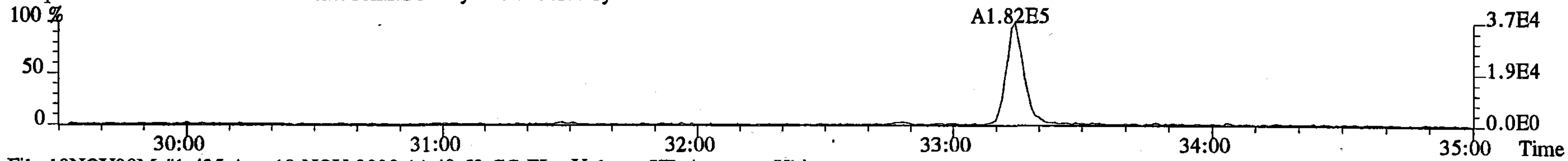
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



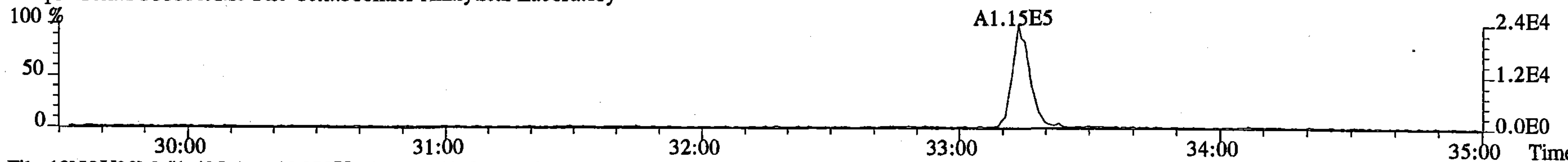
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



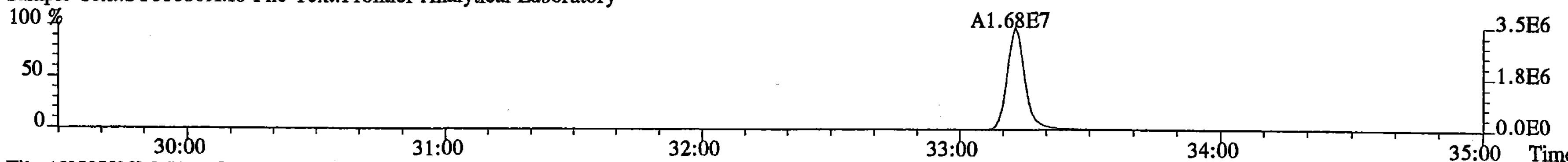
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



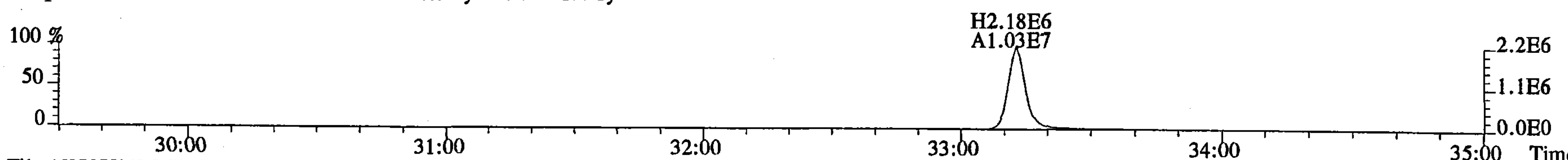
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



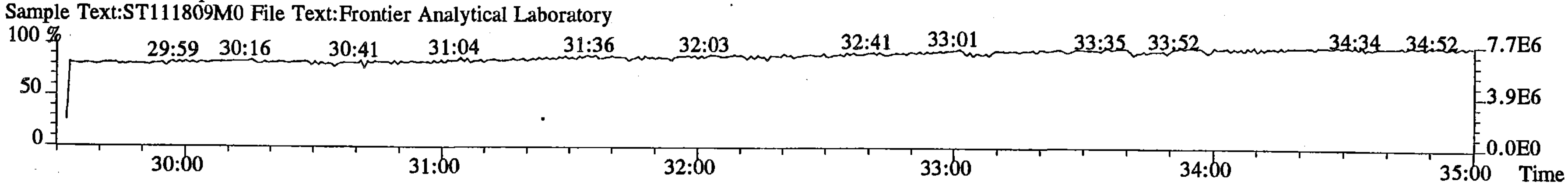
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



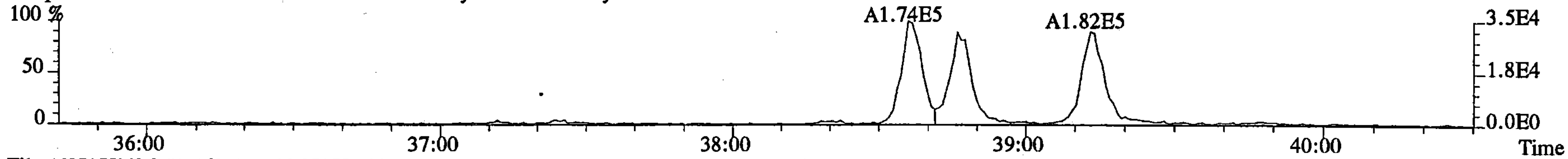
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



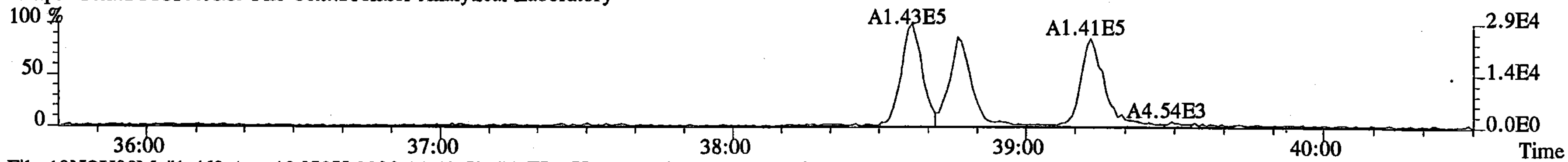
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



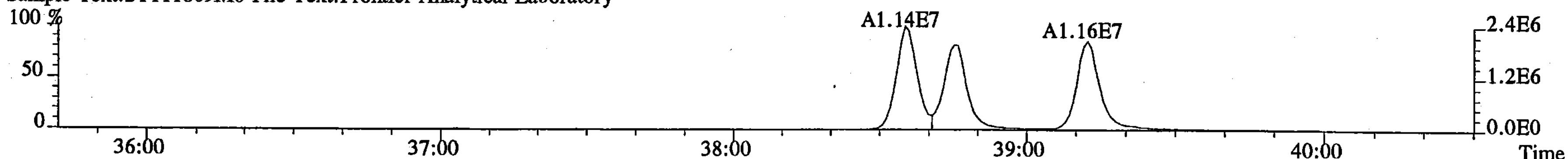
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



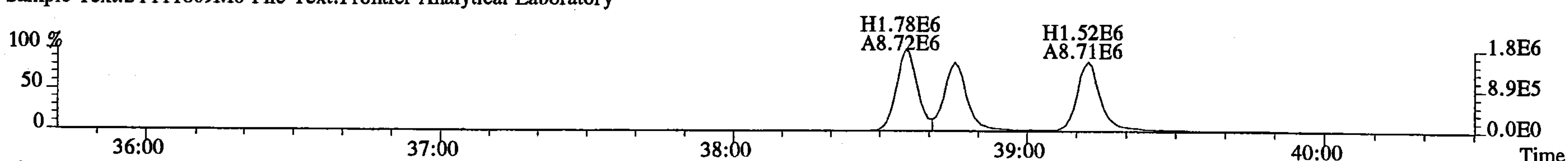
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



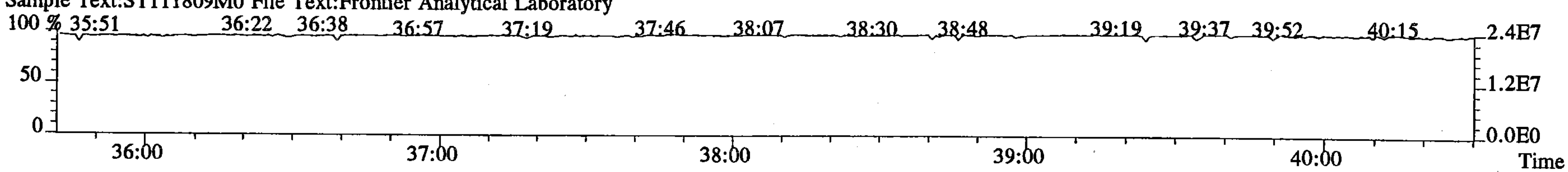
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



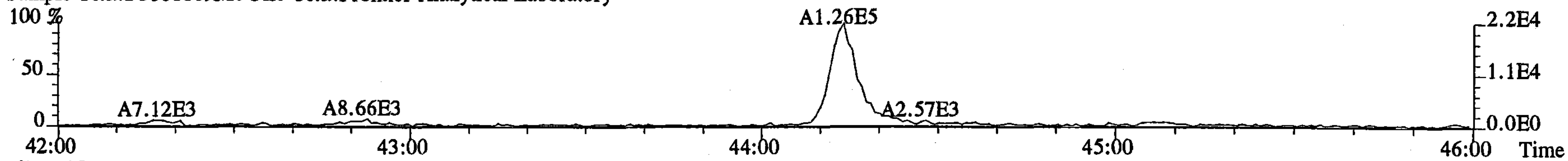
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



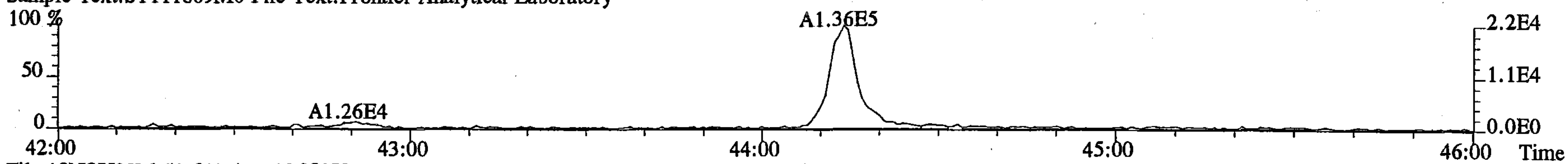
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



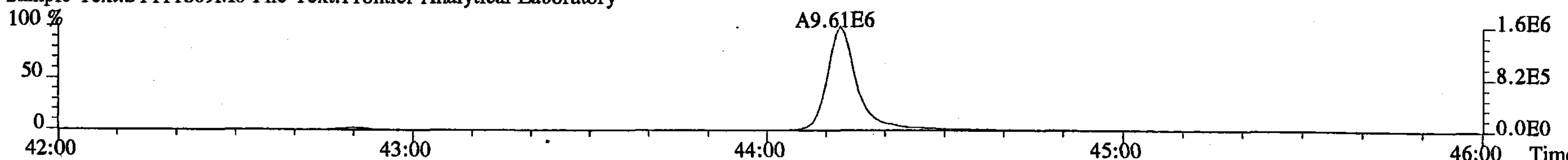
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



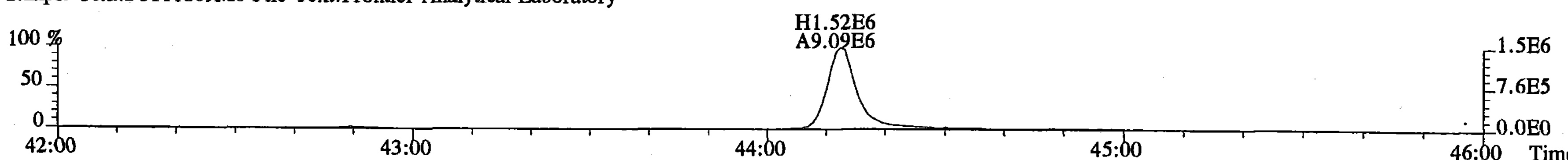
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



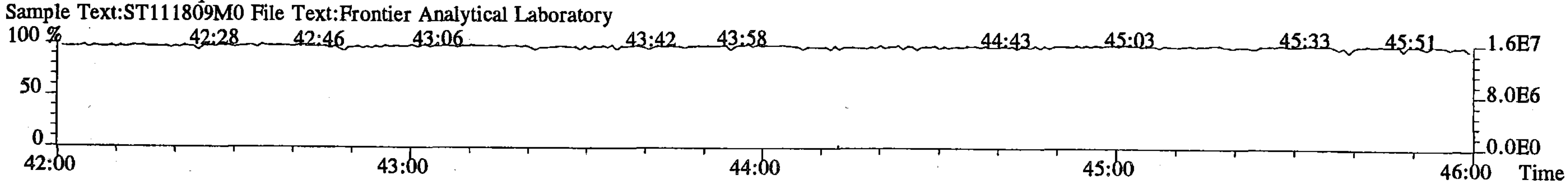
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



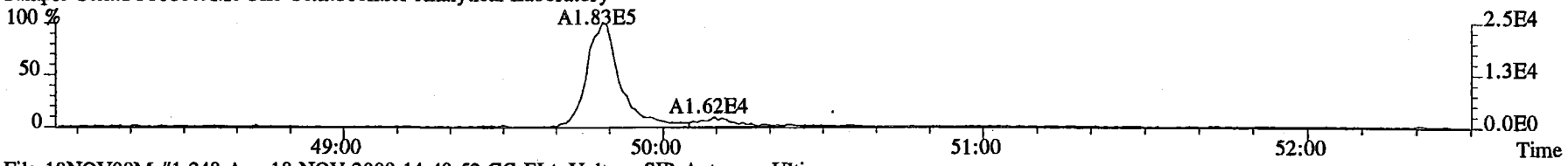
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



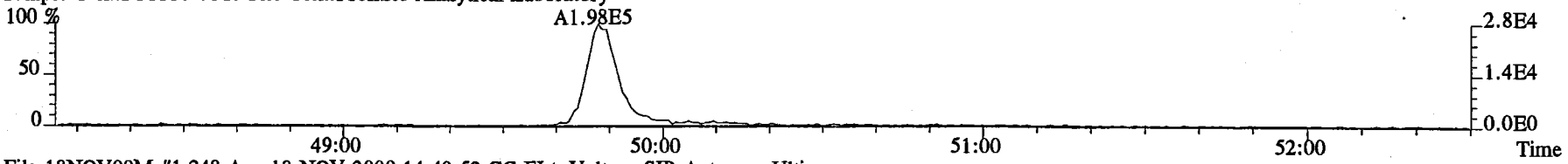
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



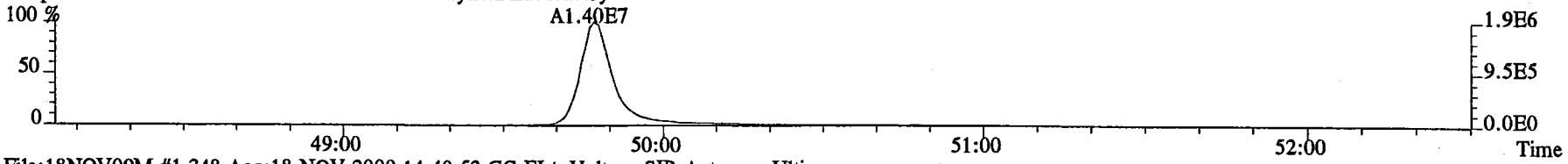
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



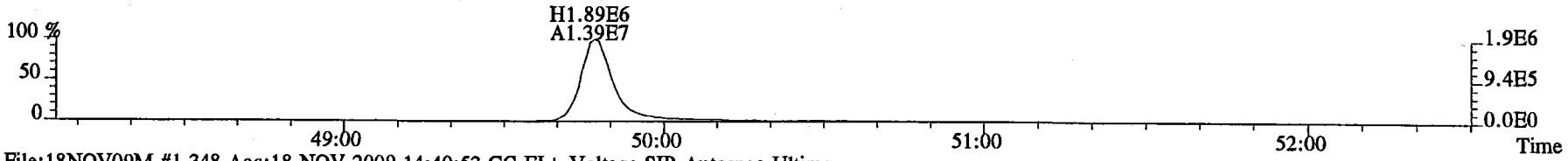
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



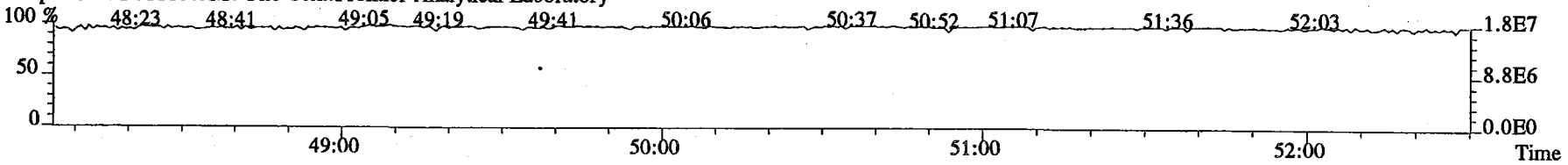
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



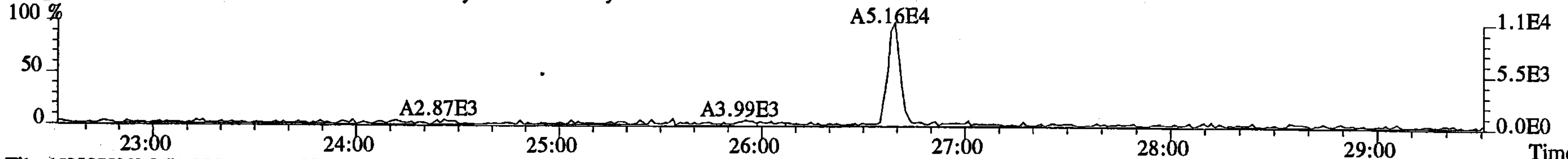
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



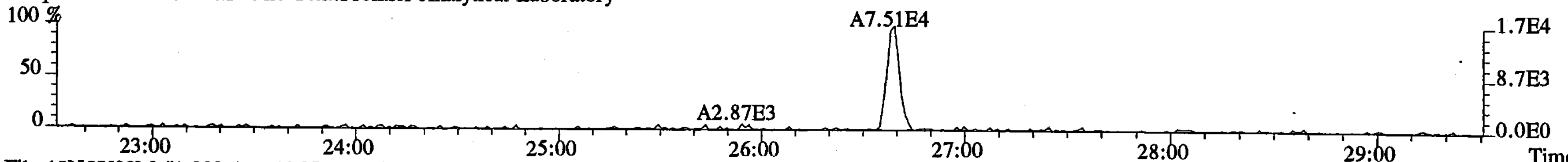
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



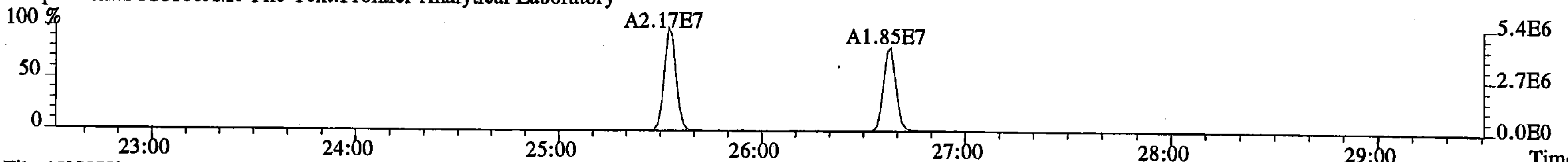
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



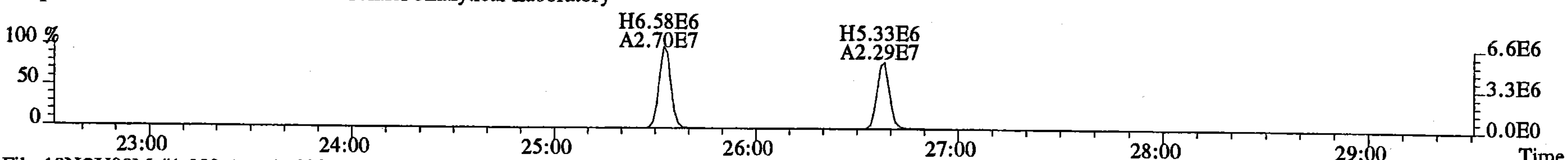
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,0.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



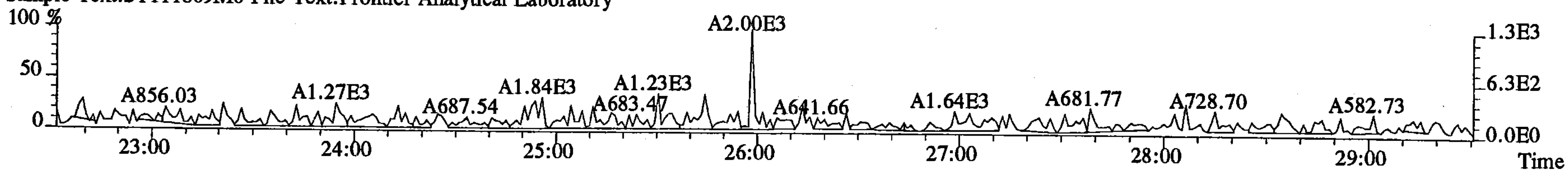
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



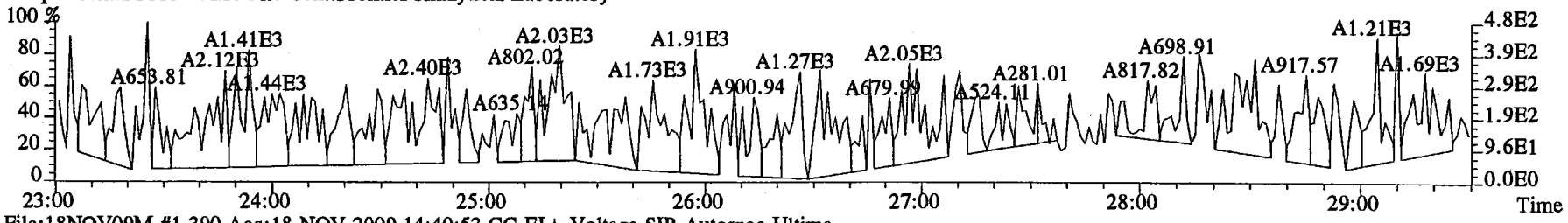
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



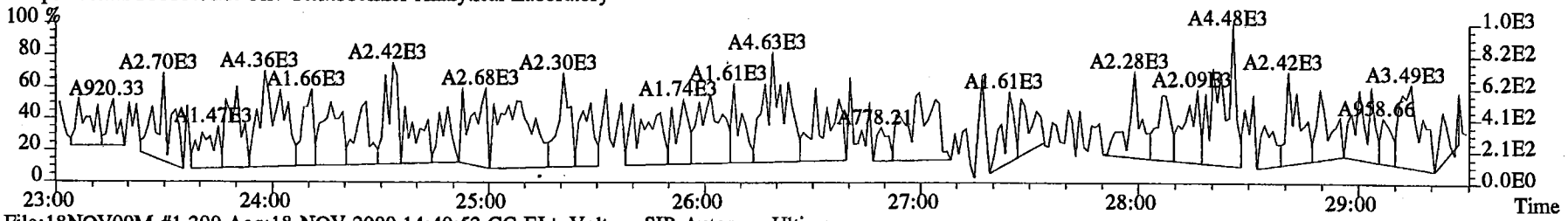
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



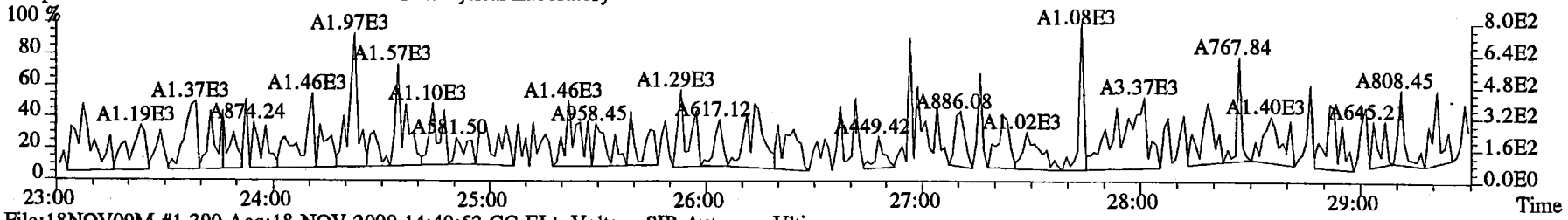
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



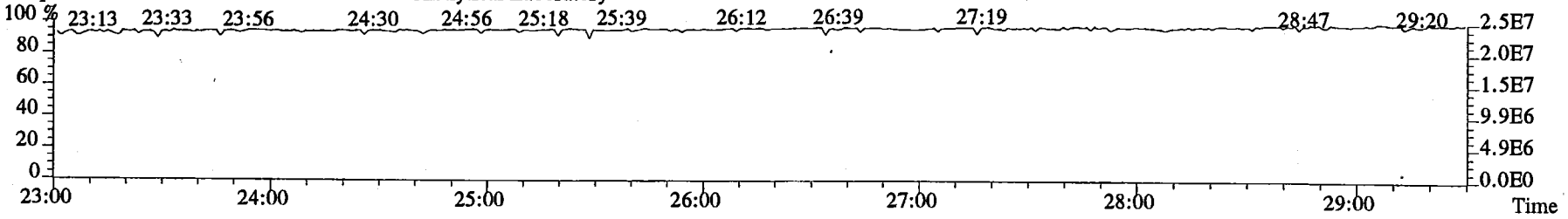
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



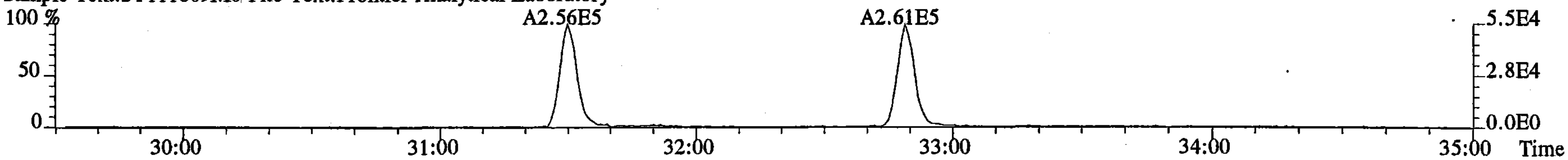
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



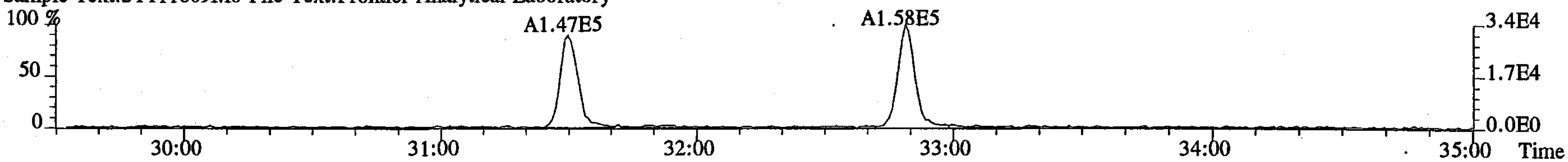
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



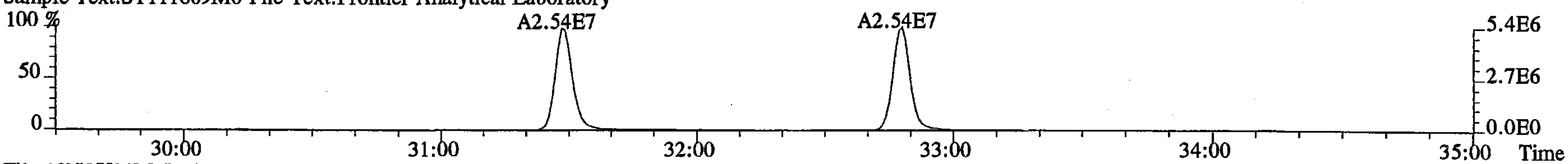
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



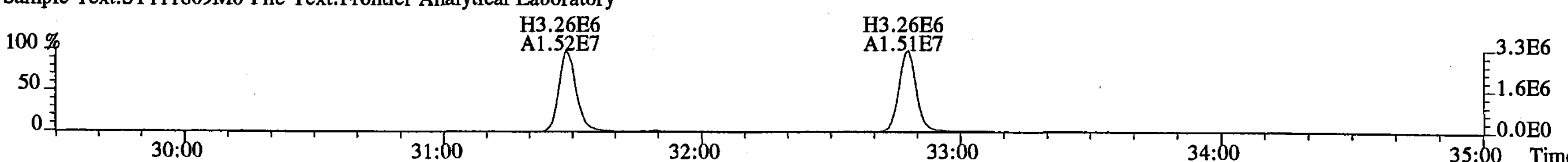
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



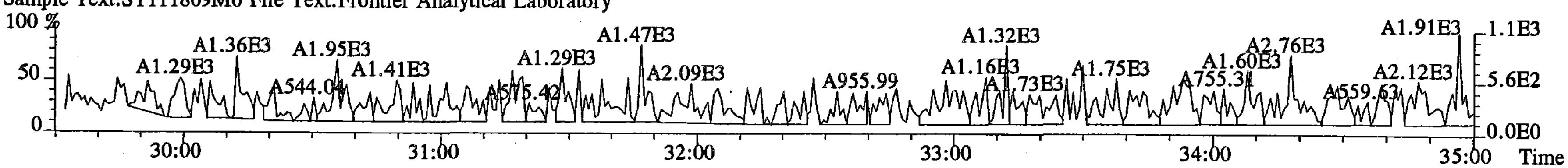
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



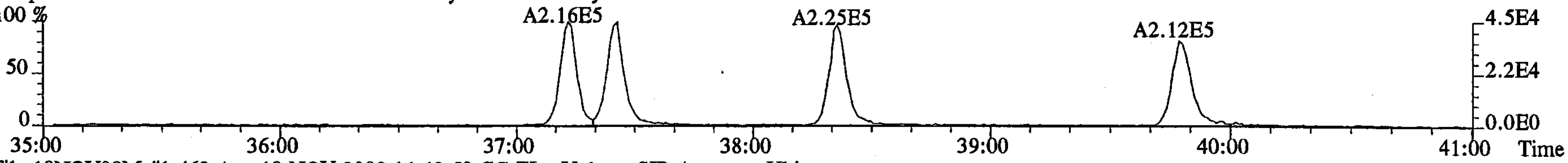
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



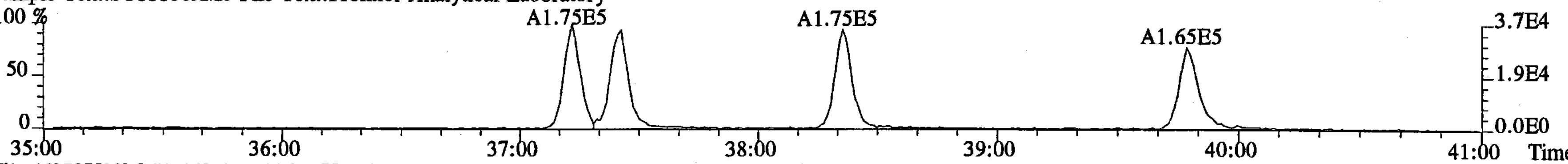
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



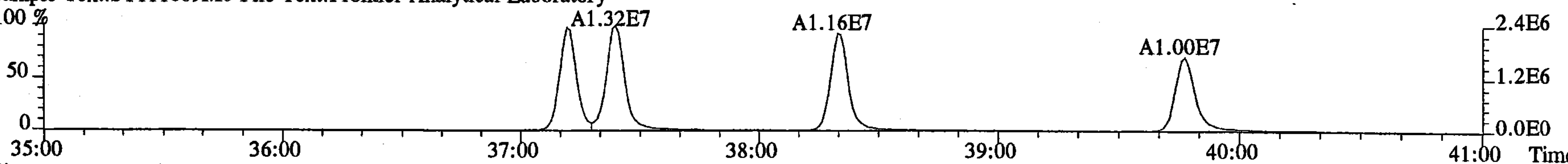
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



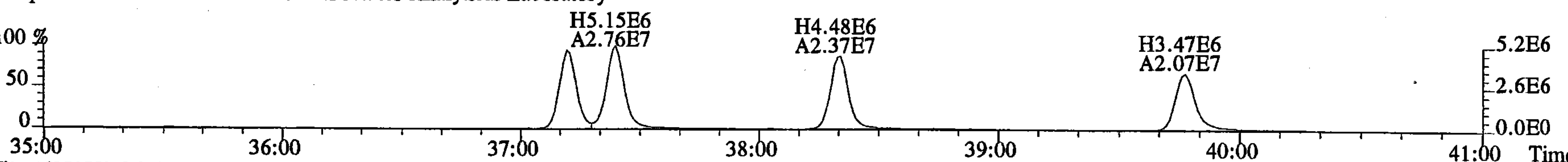
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



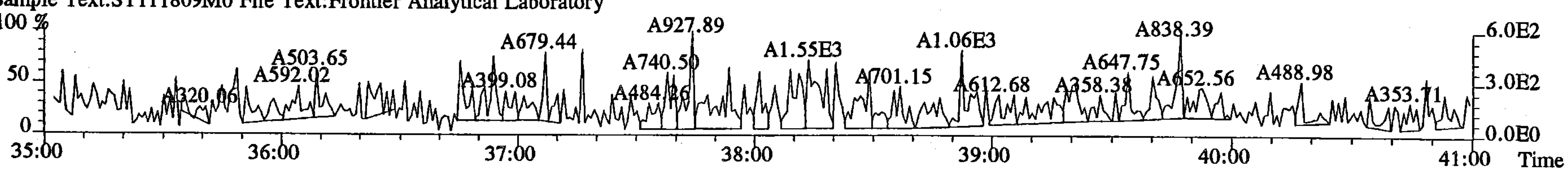
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



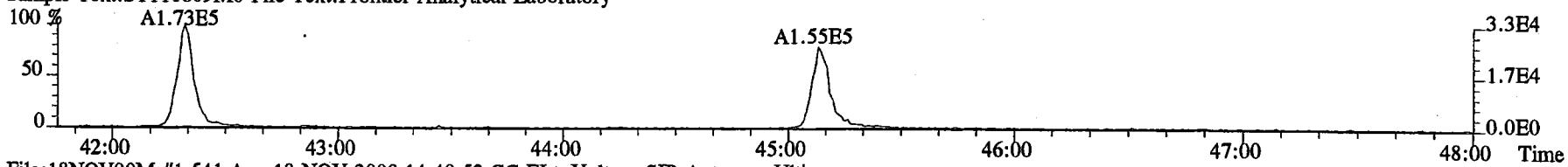
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



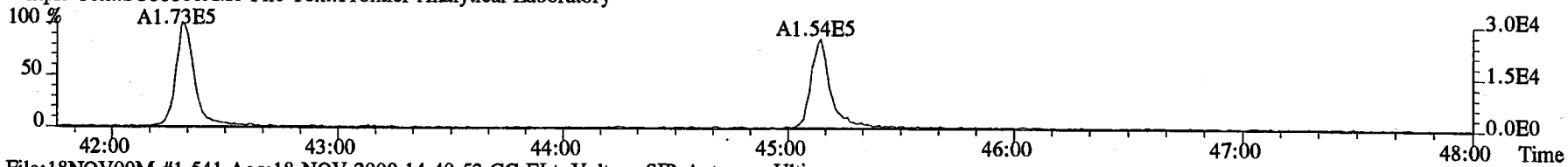
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



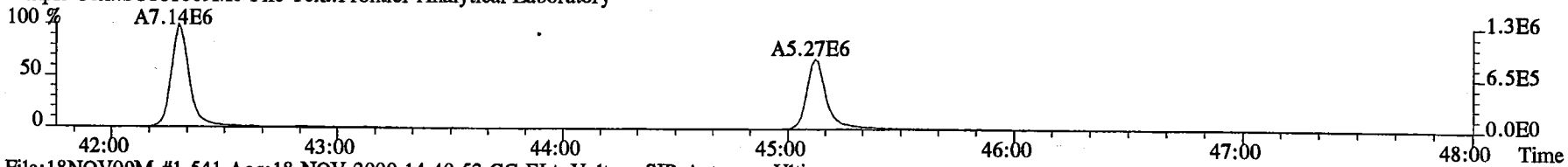
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



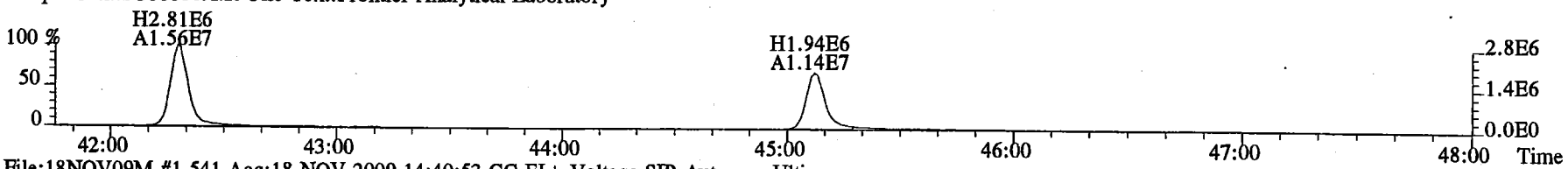
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



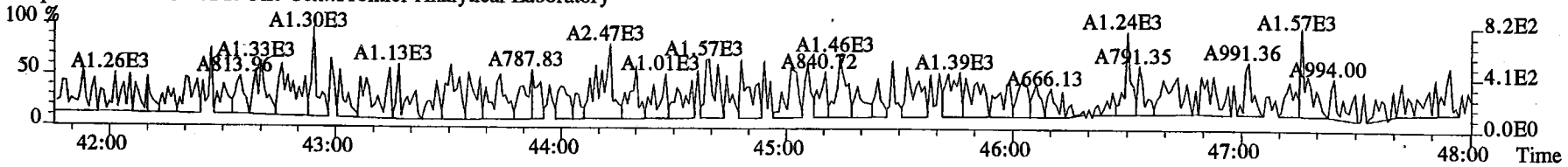
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



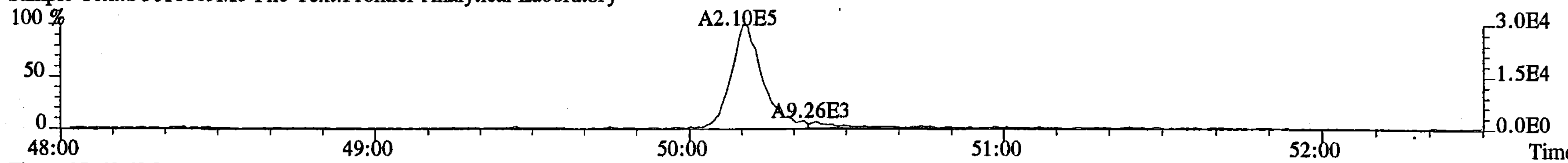
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



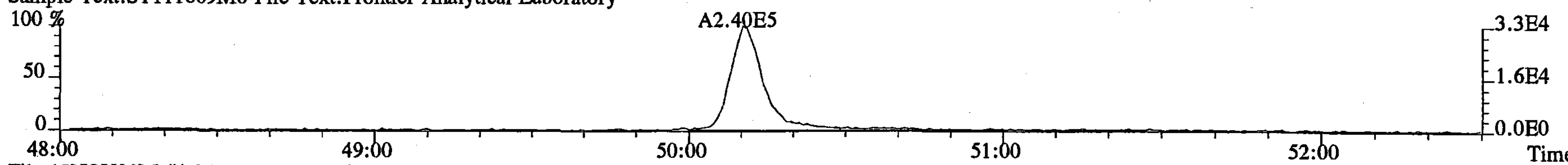
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



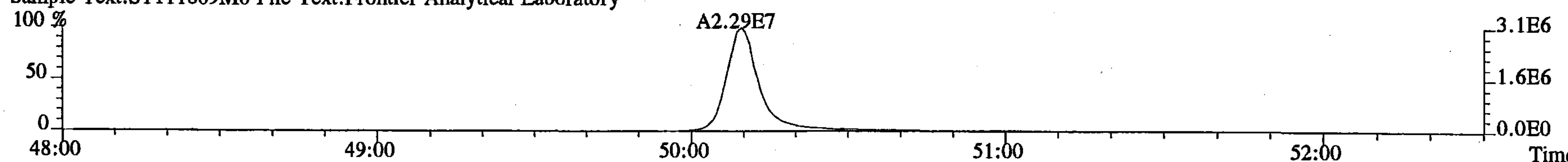
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



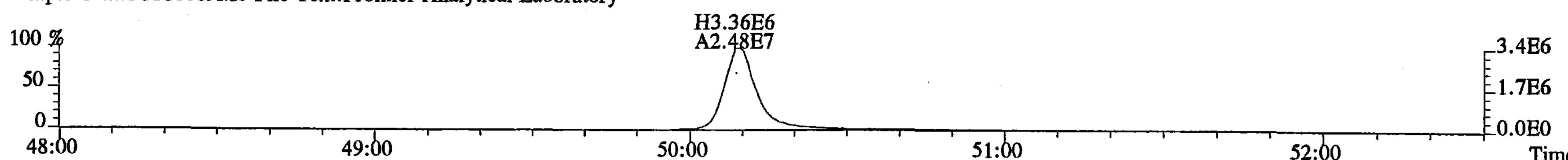
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



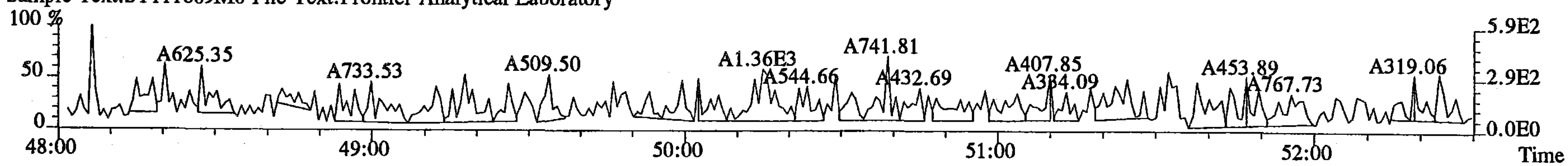
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



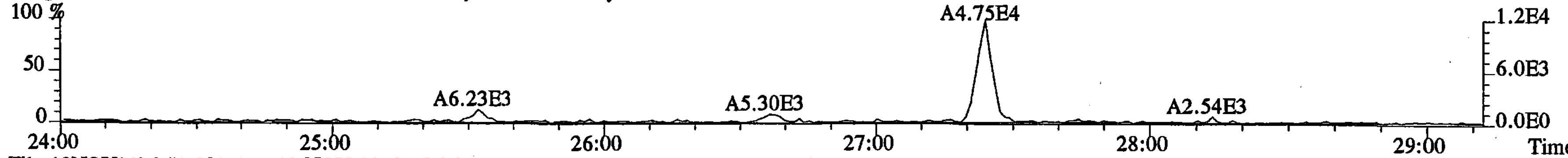
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



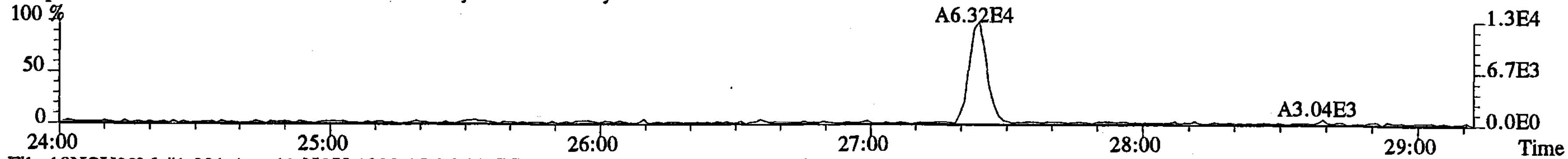
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



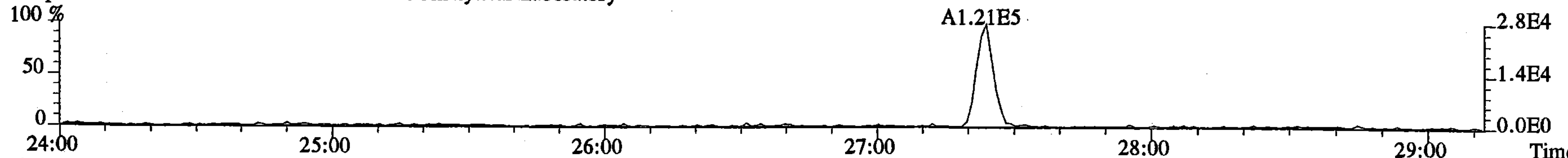
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



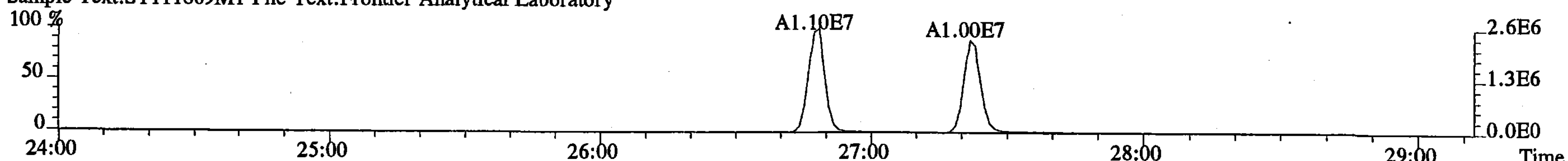
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



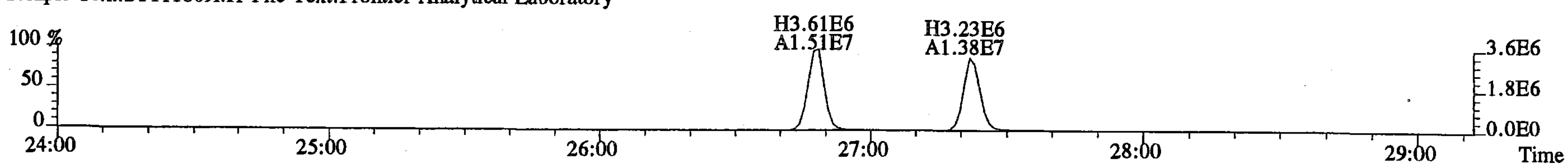
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



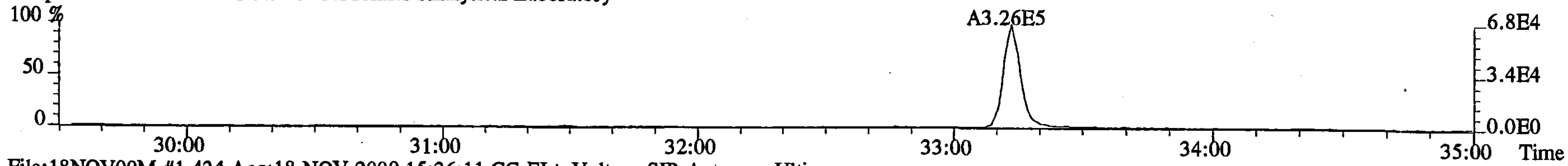
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



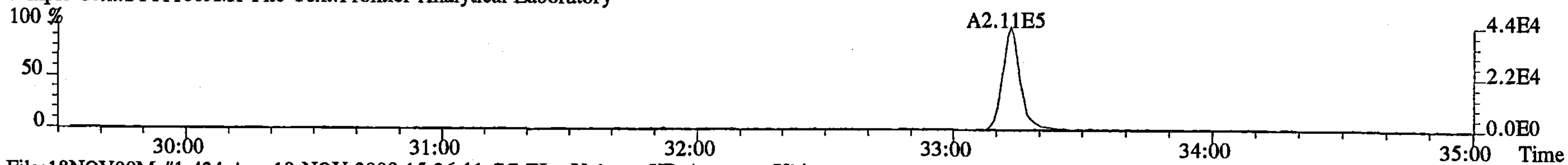
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



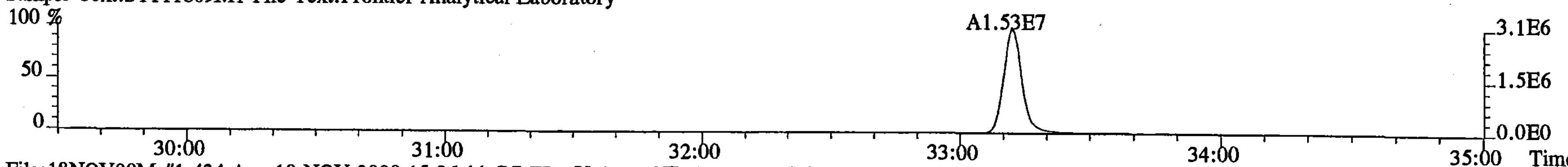
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



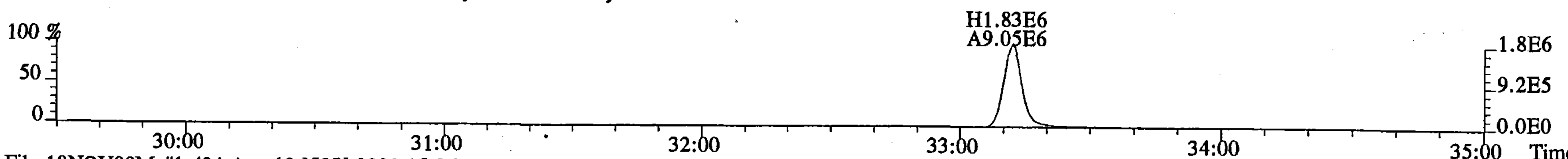
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



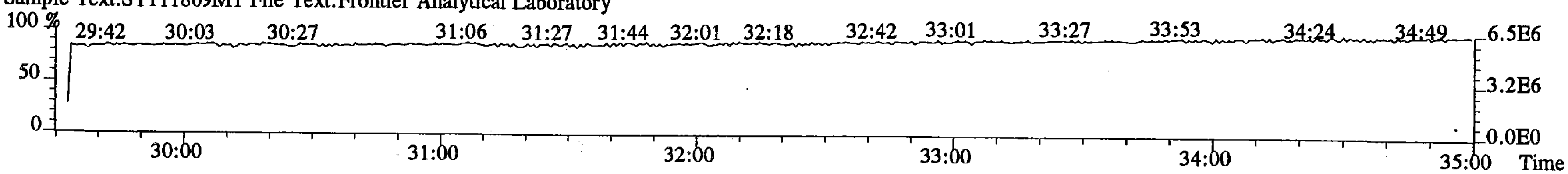
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



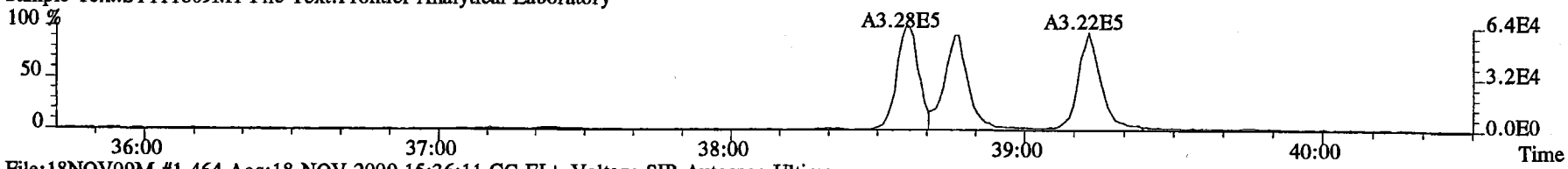
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



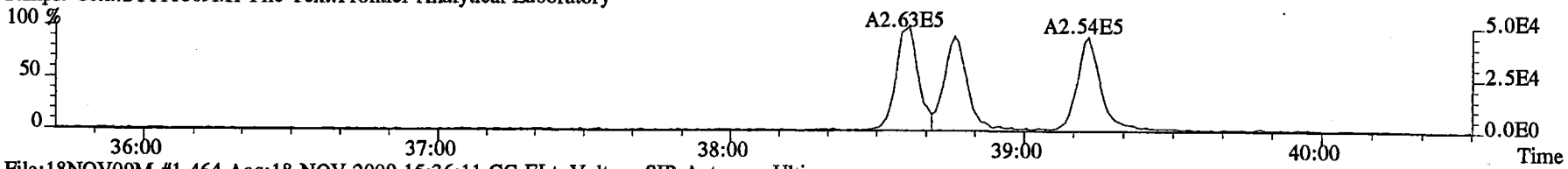
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



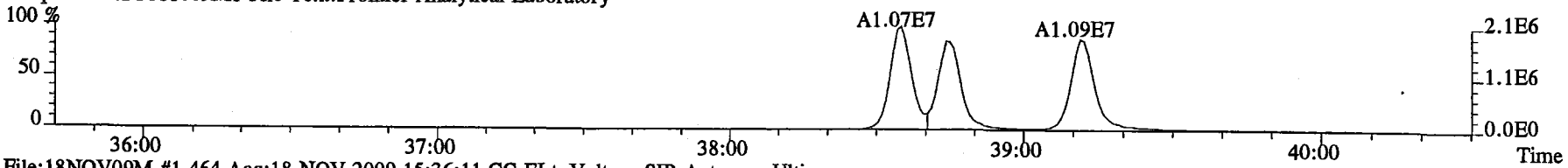
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



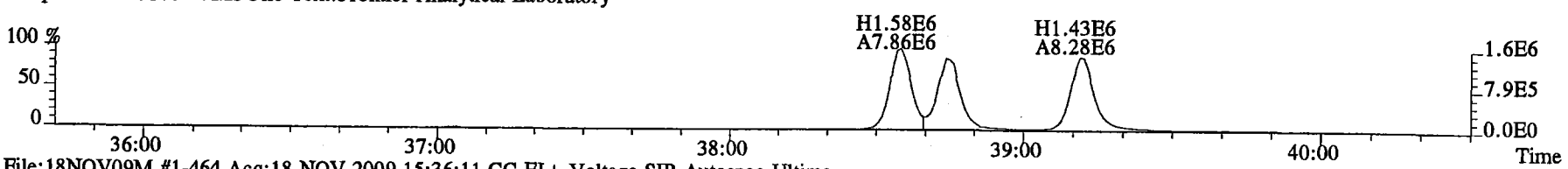
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



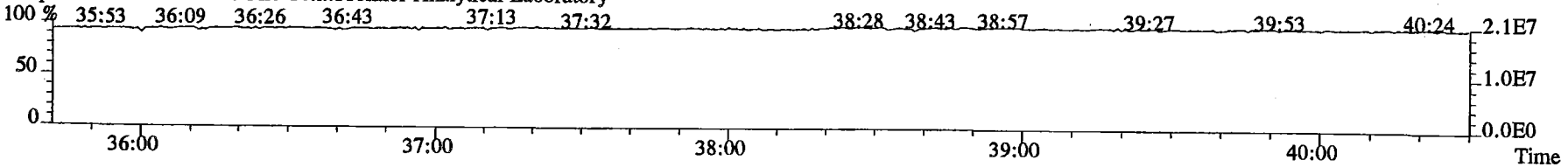
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



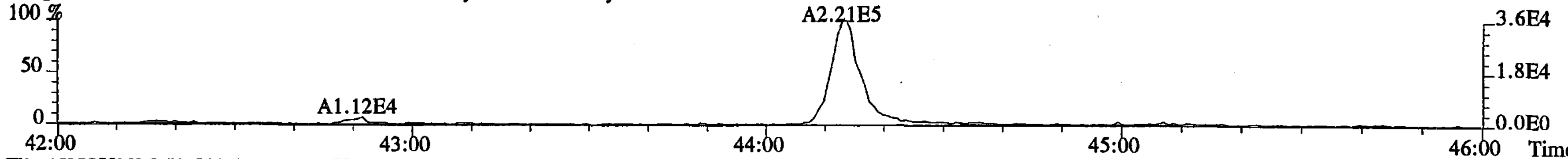
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



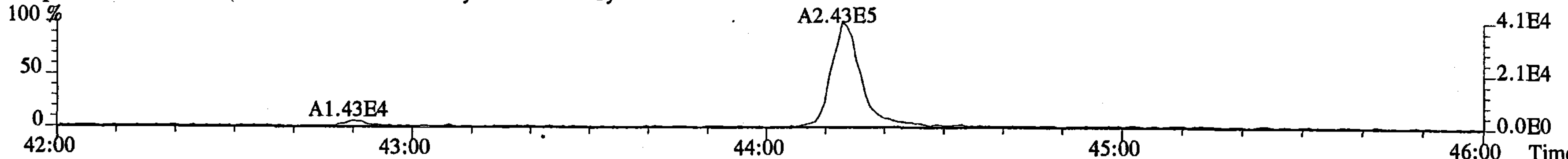
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



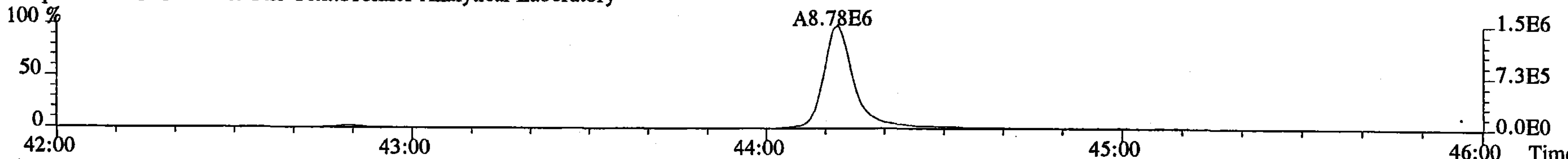
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



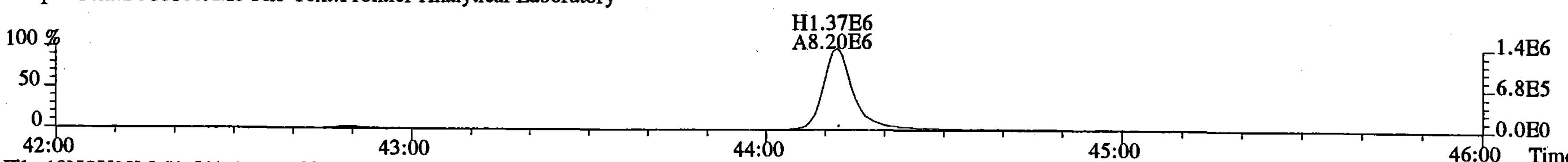
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



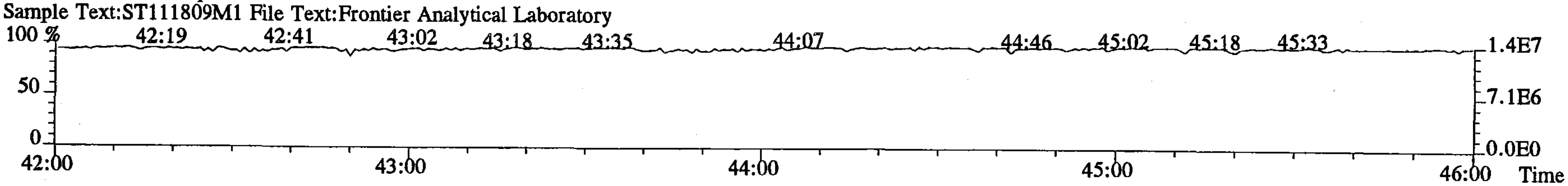
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



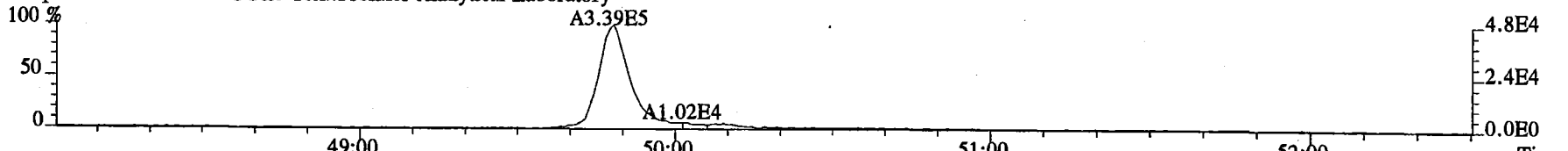
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



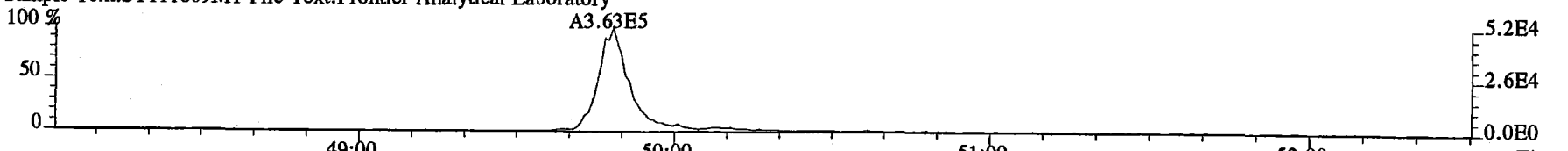
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



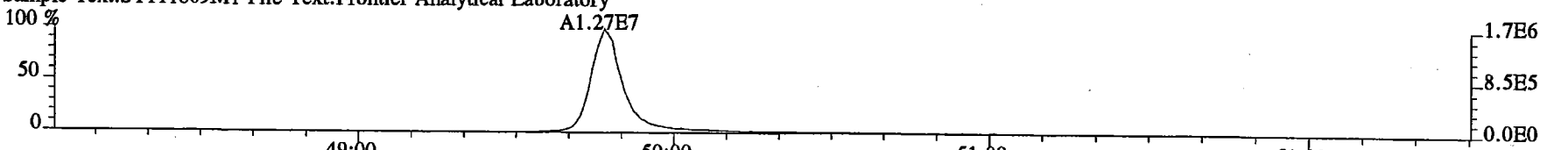
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



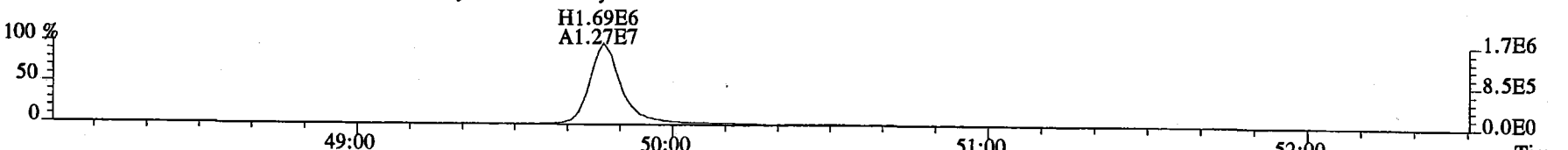
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



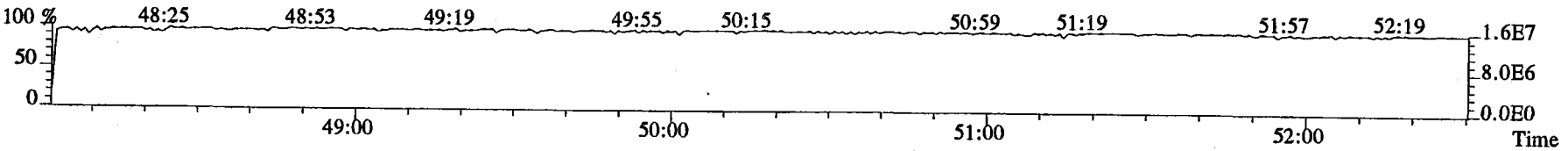
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



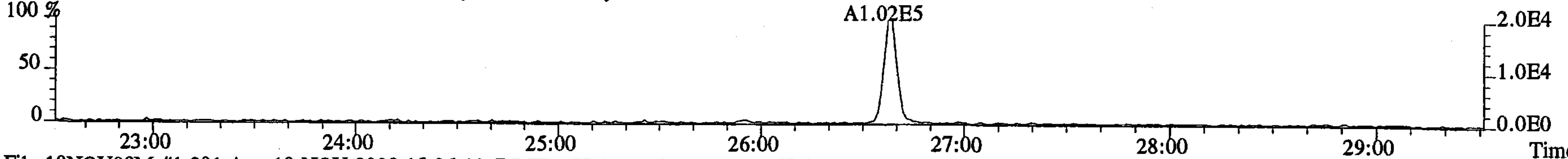
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



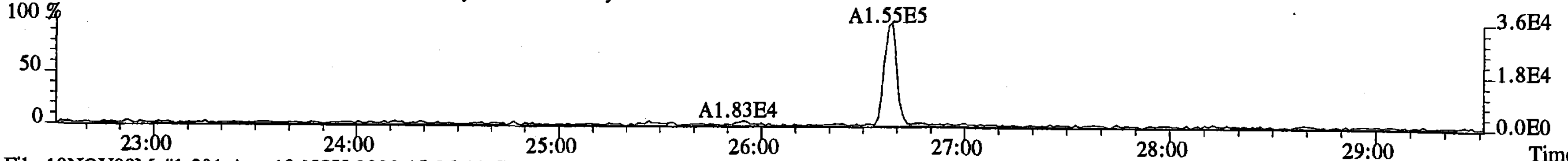
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



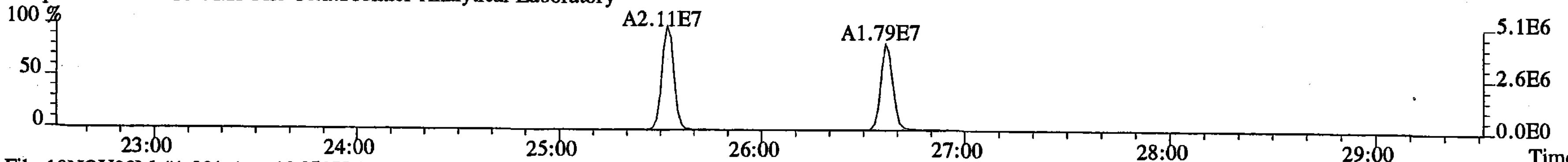
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



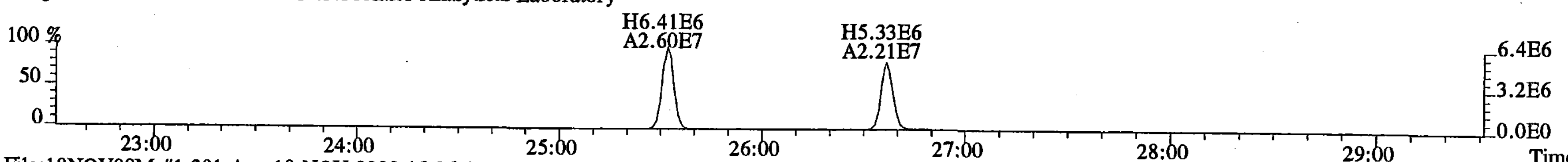
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



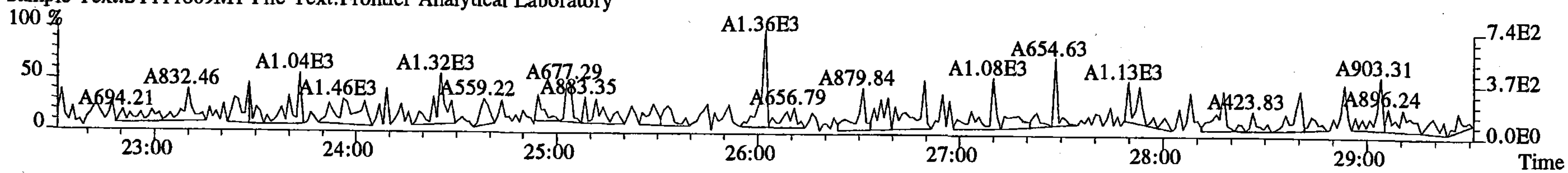
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



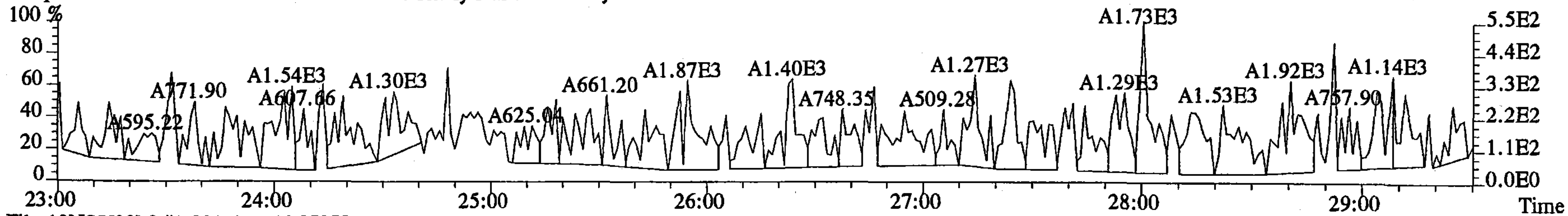
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



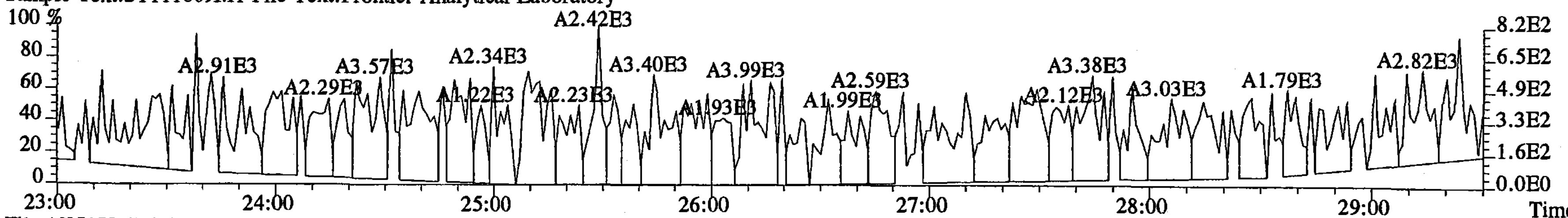
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



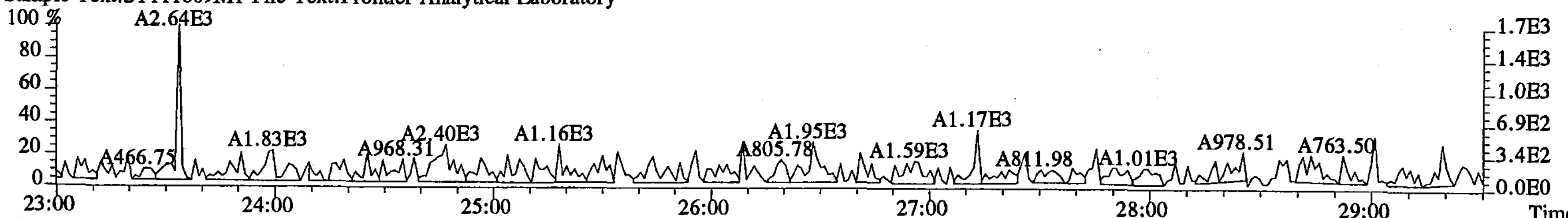
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



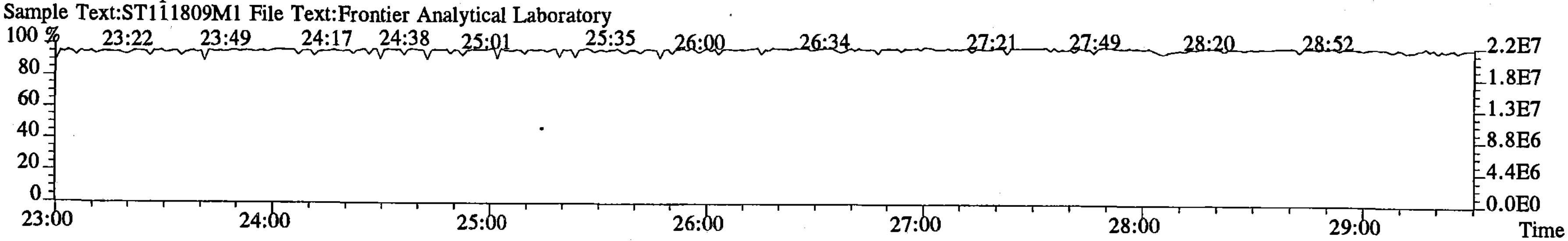
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



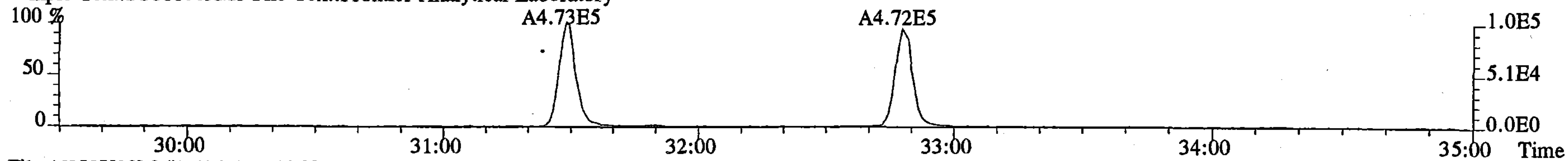
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



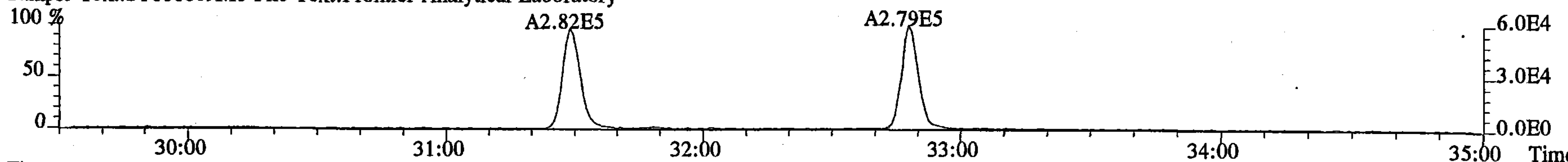
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



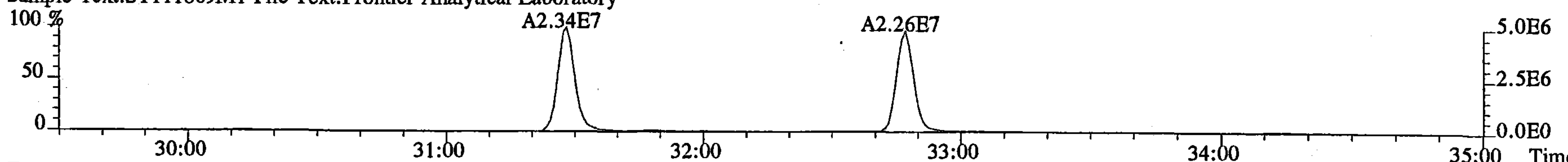
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



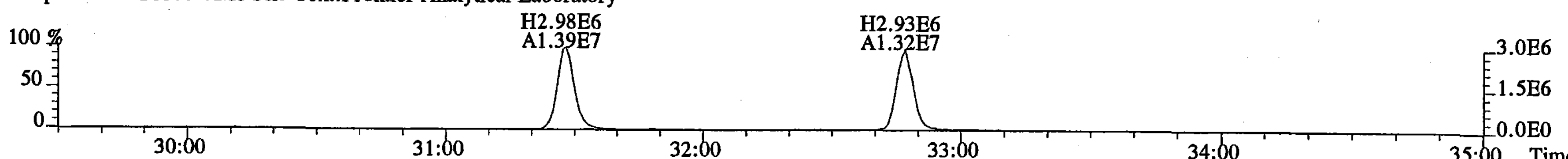
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



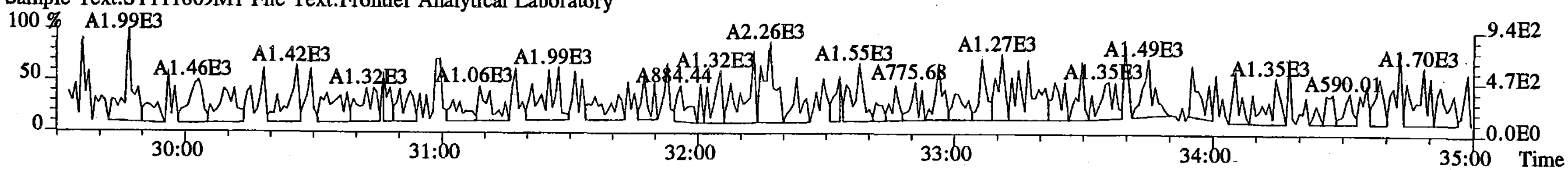
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 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:ST111809M1 File Text:Frontier Analytical Laboratory



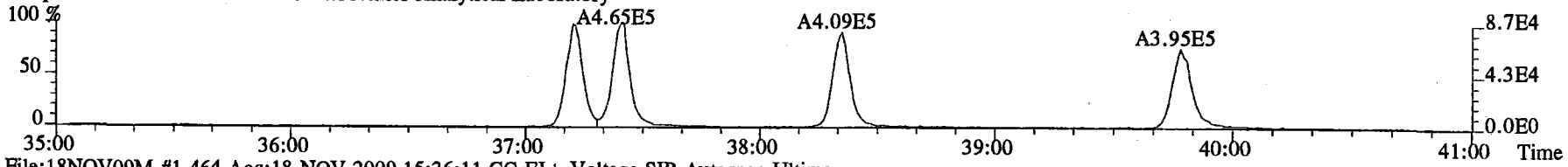
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



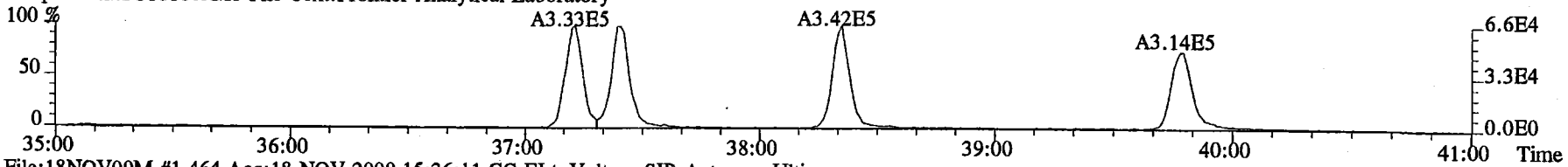
000166 of 000305

QQ20 : 00931

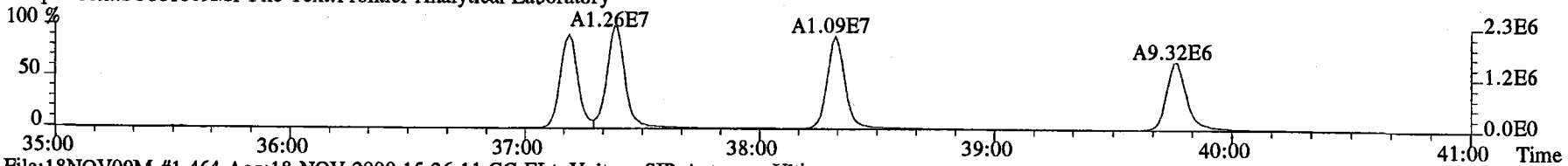
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



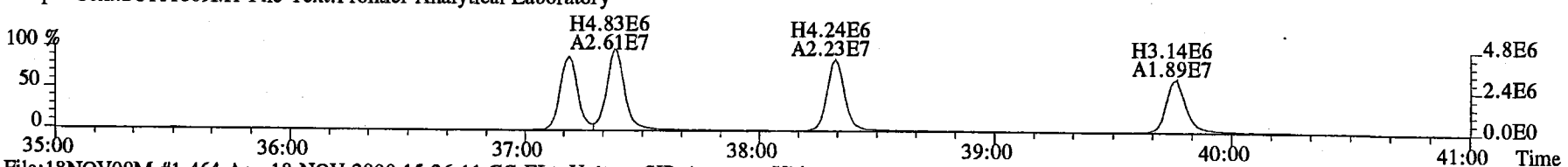
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



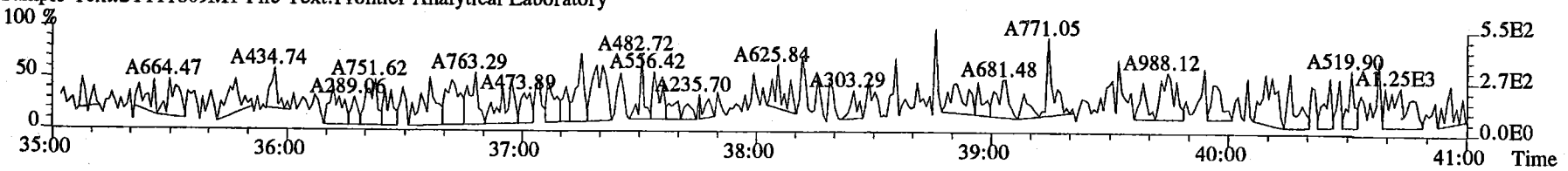
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



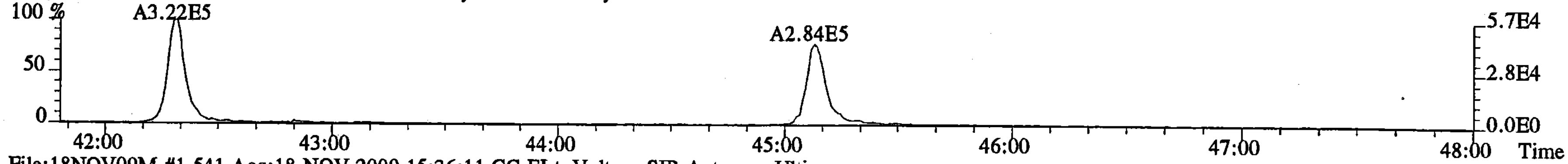
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



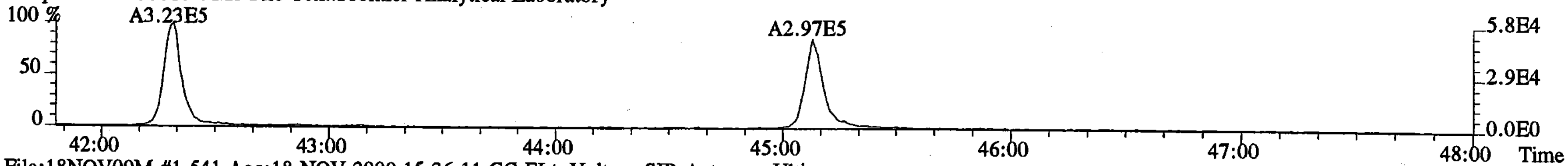
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



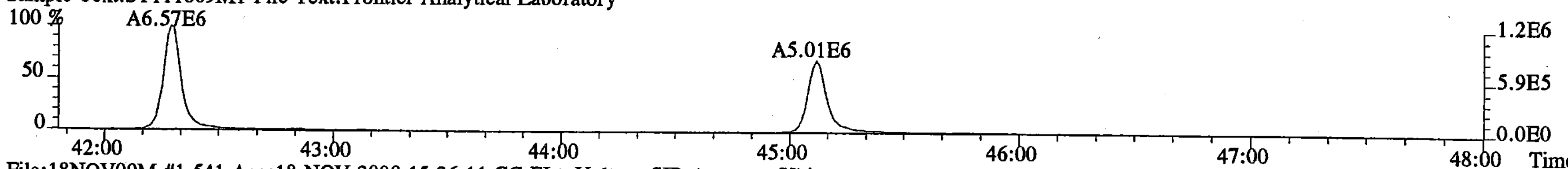
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



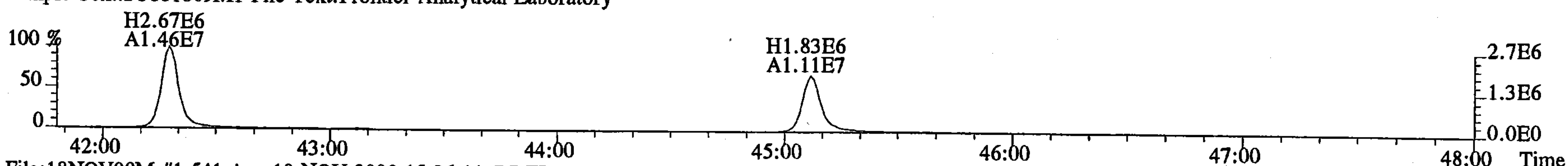
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



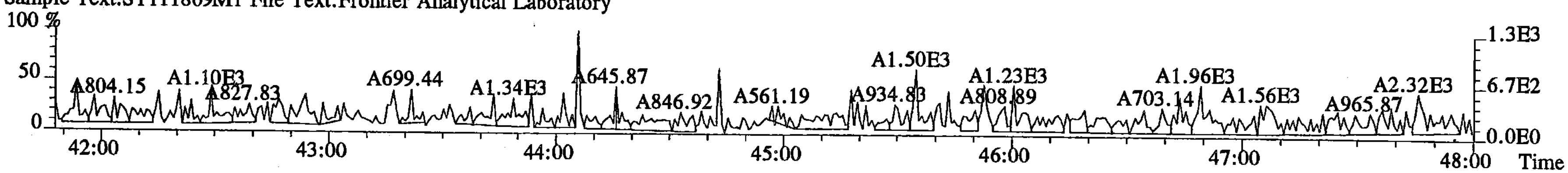
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



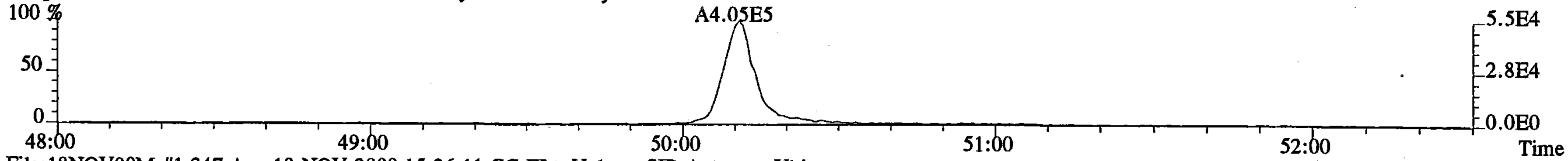
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



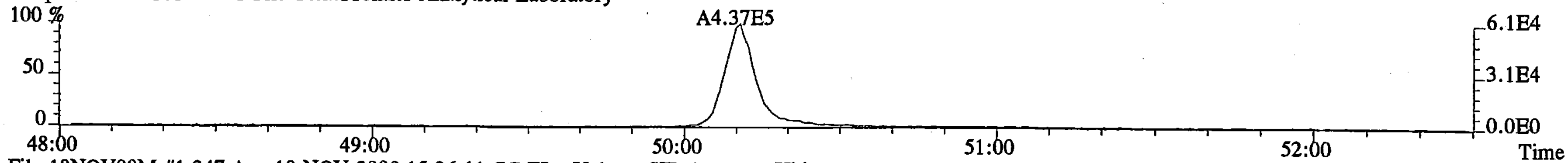
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



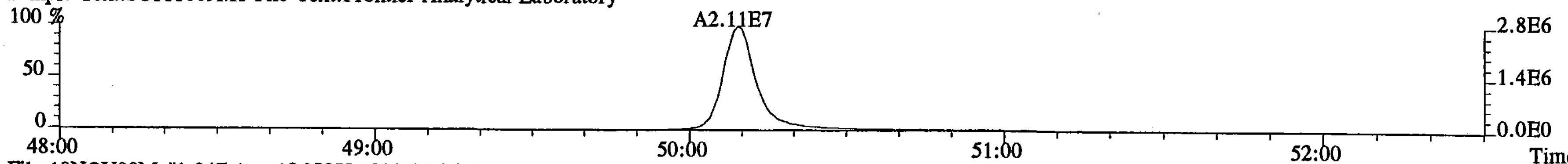
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



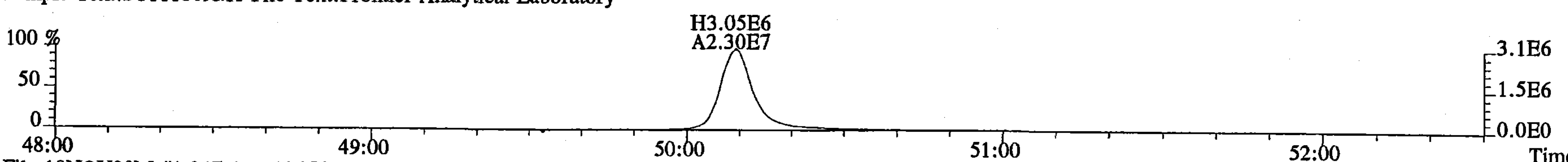
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



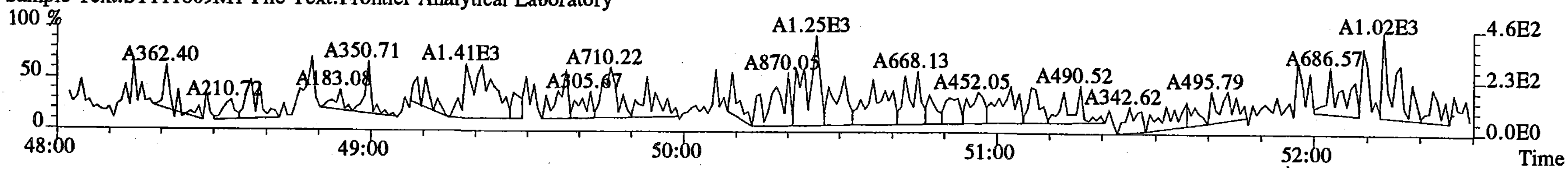
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



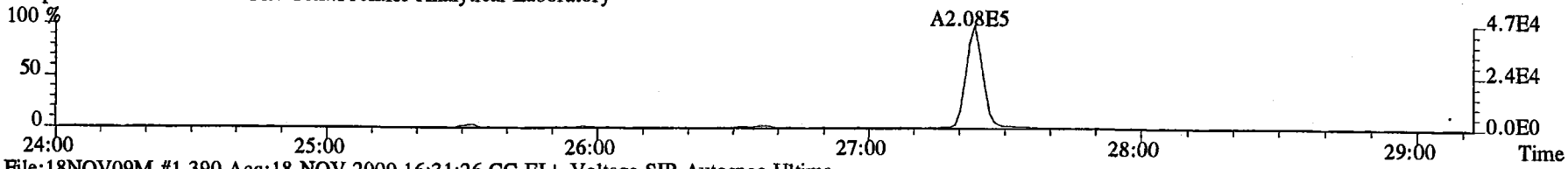
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



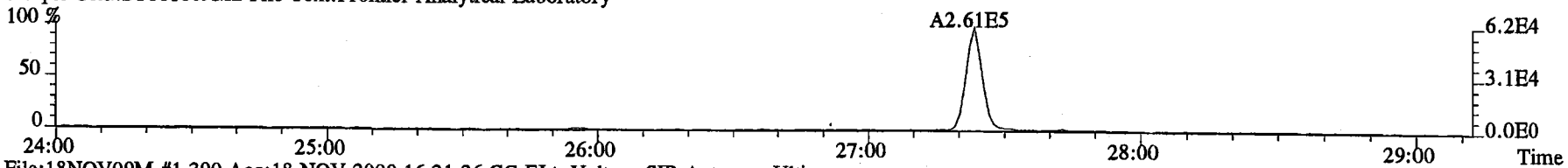
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



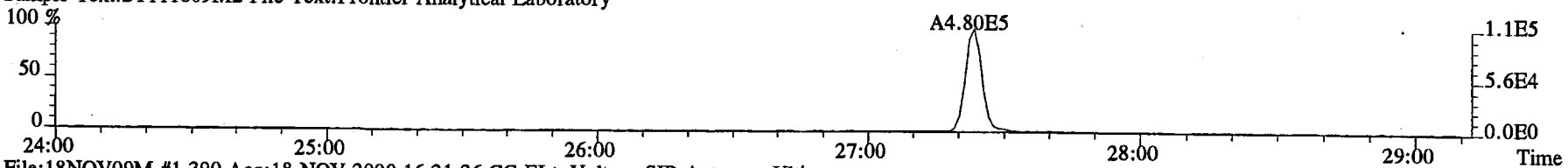
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



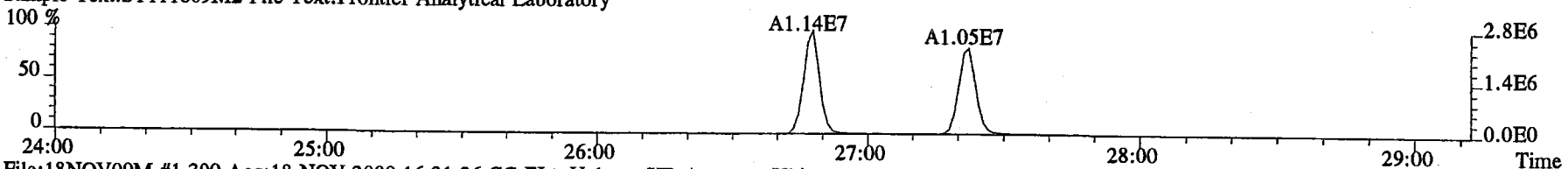
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



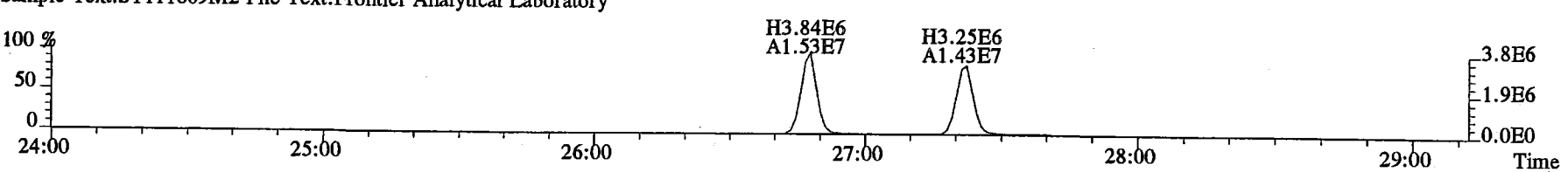
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



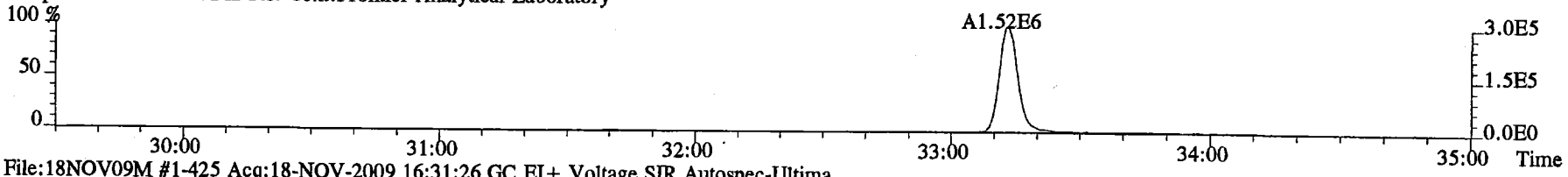
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



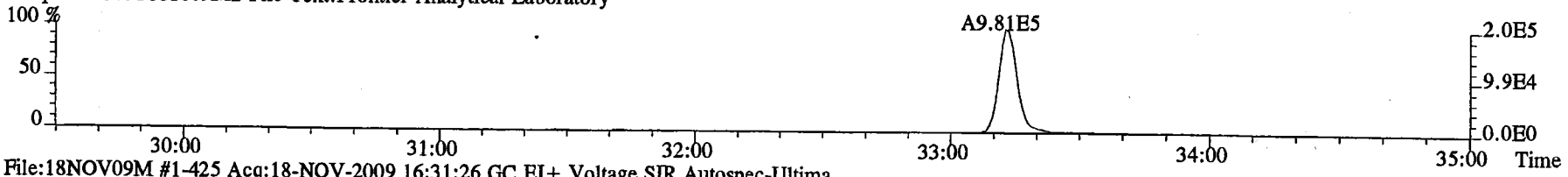
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



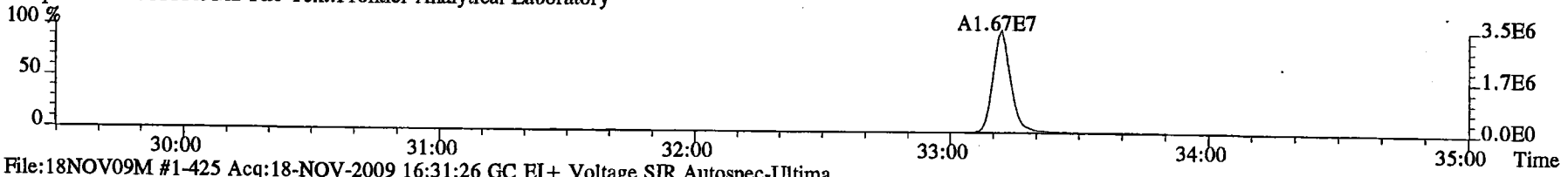
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



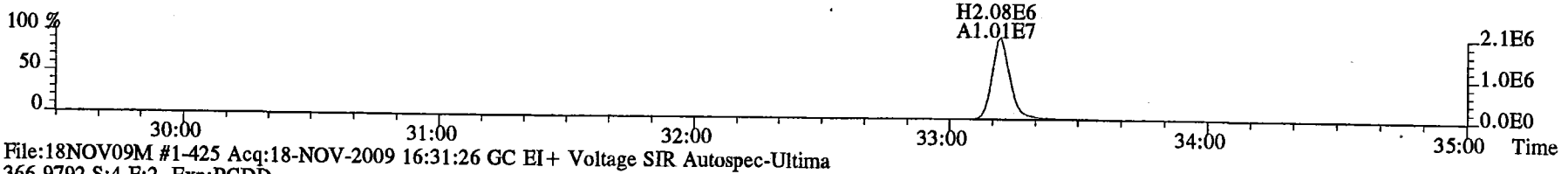
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



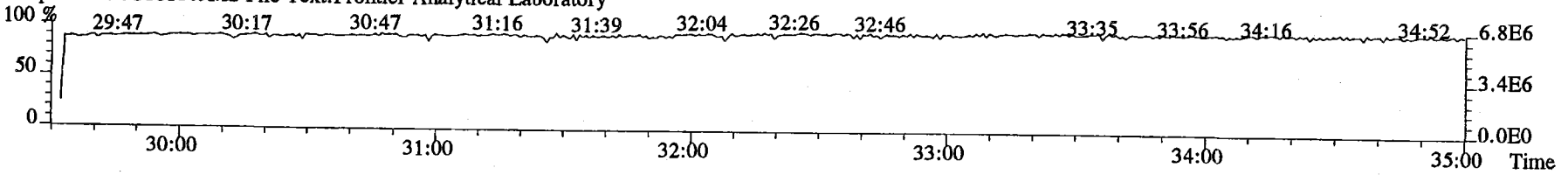
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



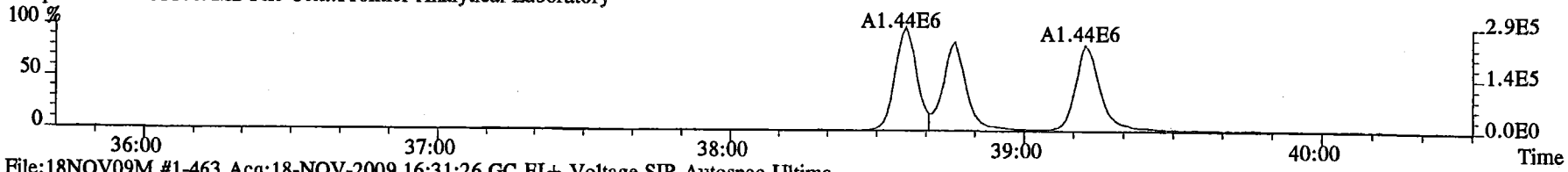
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



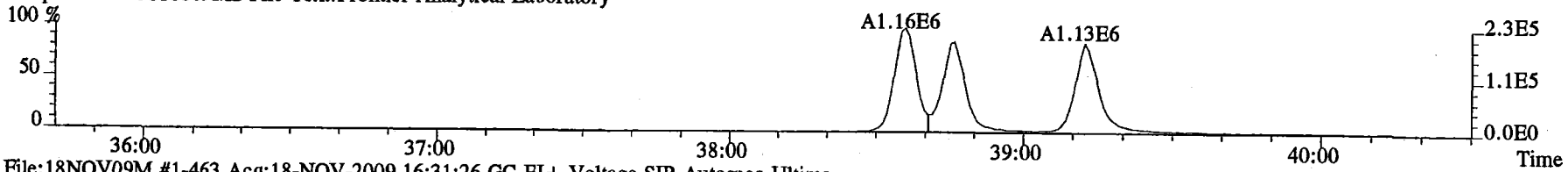
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



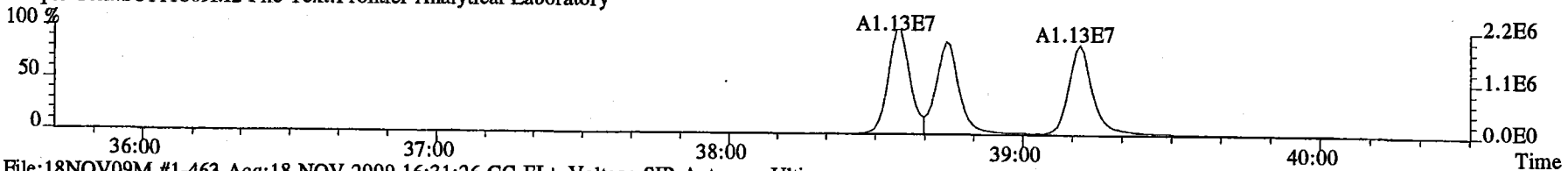
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



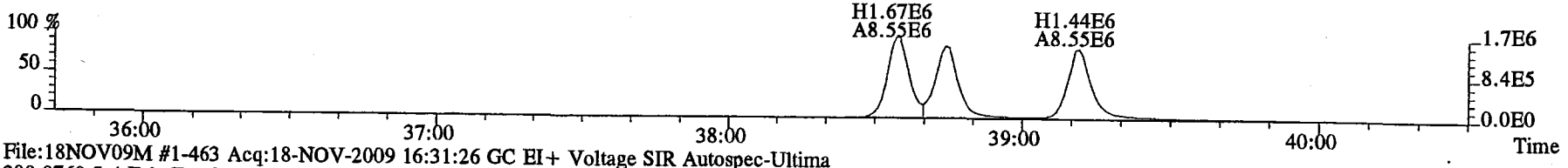
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



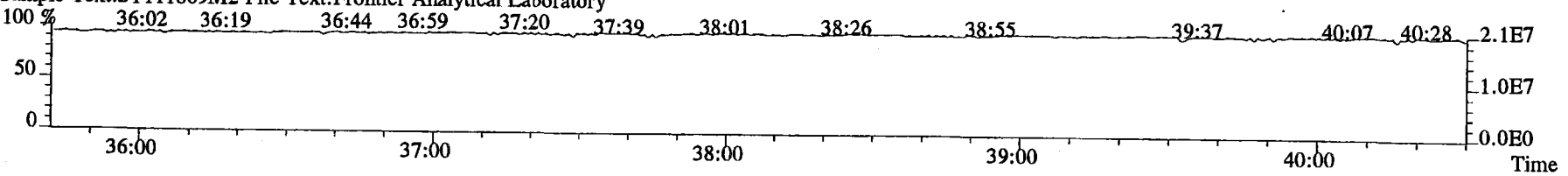
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



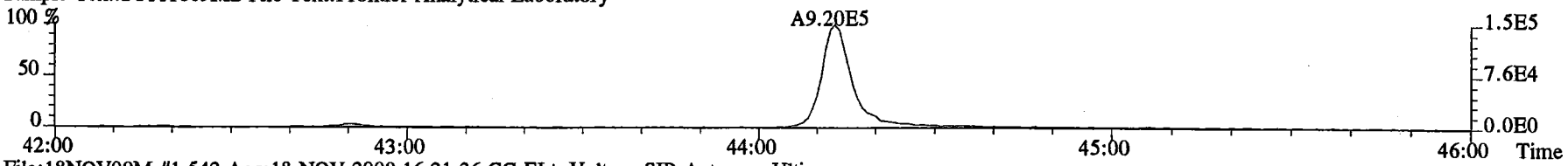
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



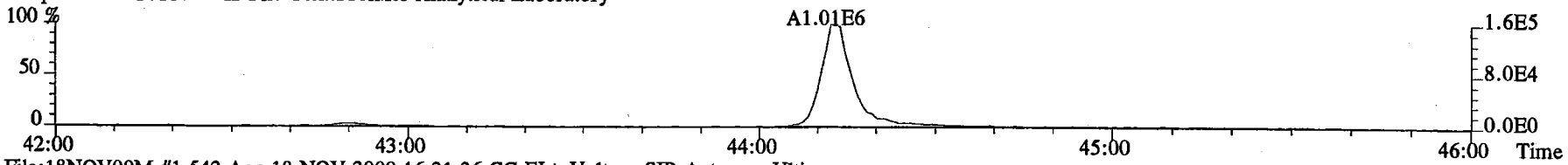
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



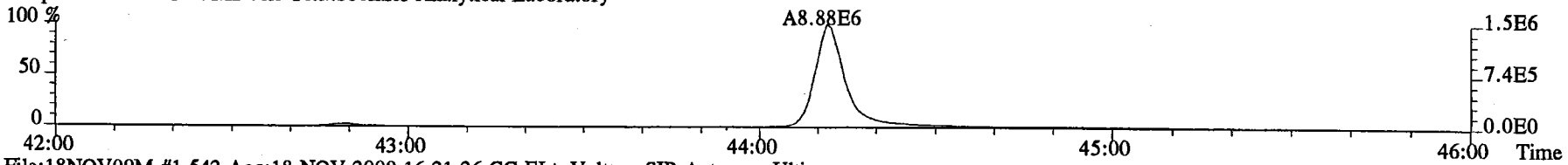
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



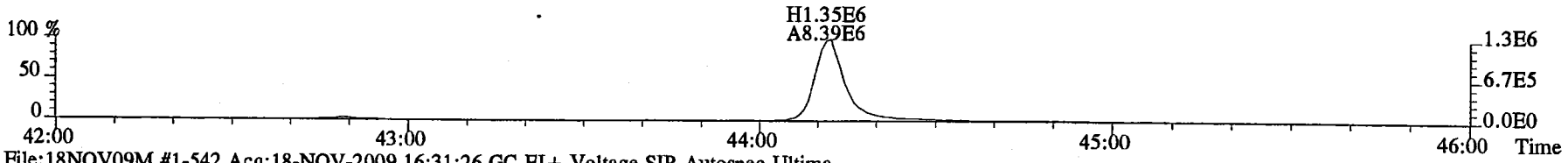
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



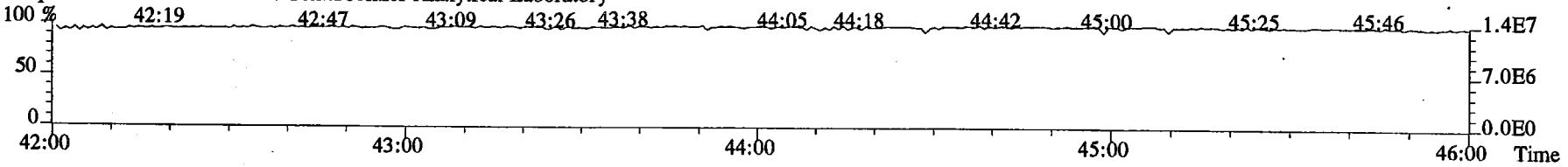
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



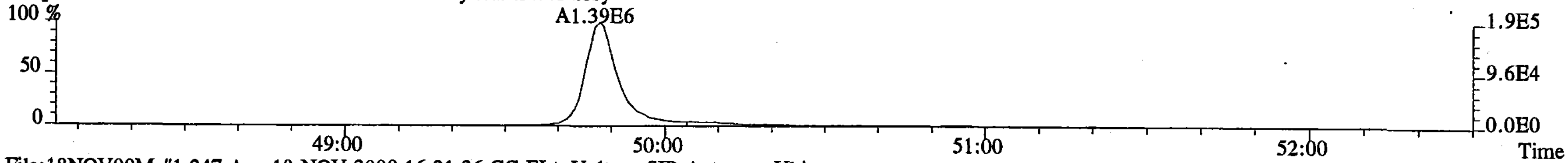
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



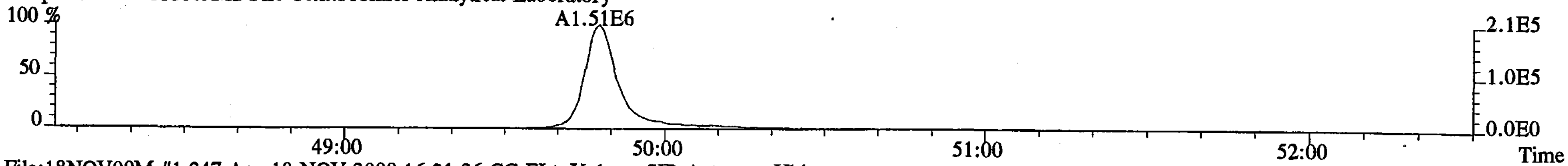
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



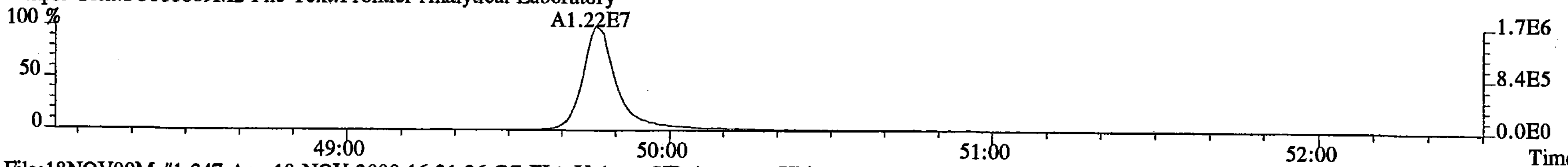
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 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:ST111809M2 File Text:Frontier Analytical Laboratory

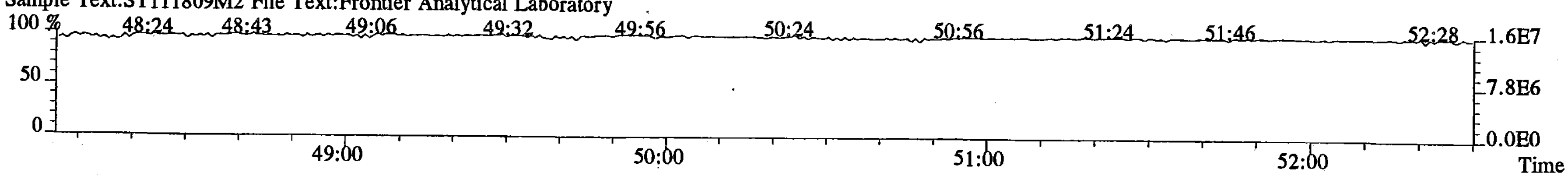


File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory

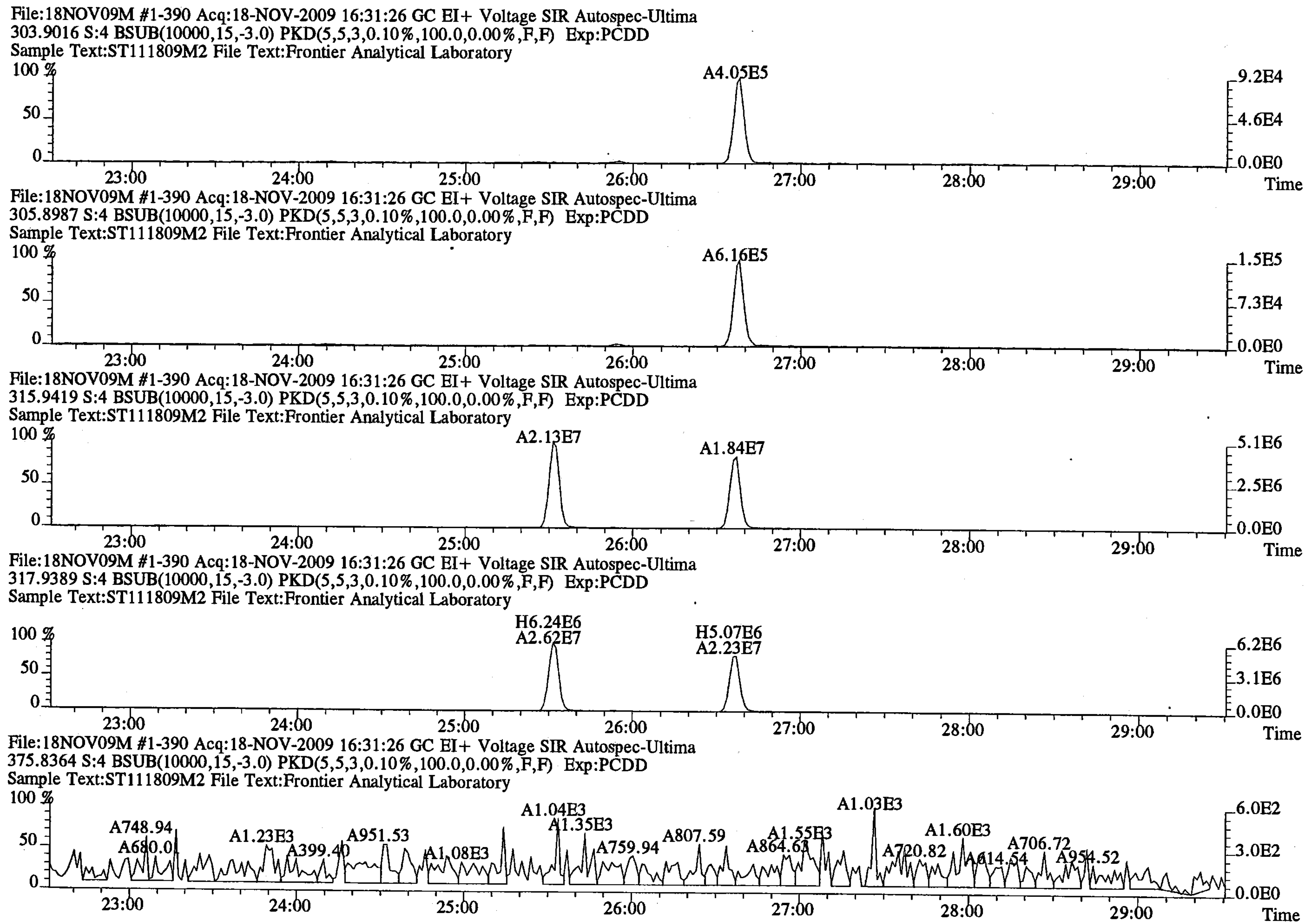


File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory

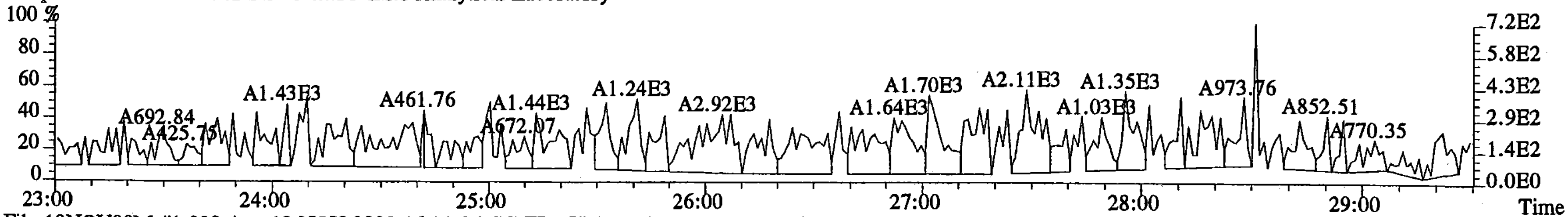
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



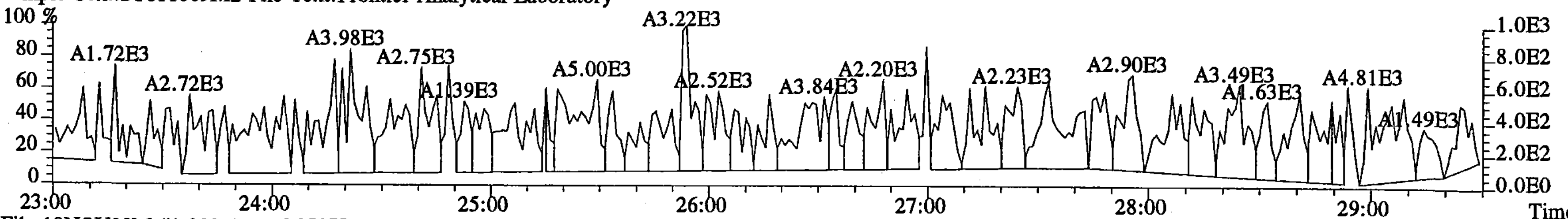
QQ20 : 00939


File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 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:ST111809M2 File Text:Frontier Analytical Laboratory
A4.05E5
9.2E4
4.6E4
0.0E0
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 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:ST111809M2 File Text:Frontier Analytical Laboratory
A6.16E5
1.5E5
7.3E4
0.0E0
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 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:ST111809M2 File Text:Frontier Analytical Laboratory
A2.13E7
A1.84E7
5.1E6
2.5E6
0.0E0
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 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:ST111809M2 File Text:Frontier Analytical Laboratory
H6.24E6
A2.62E7
H5.07E6
A2.23E7
6.2E6
3.1E6
0.0E0
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 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:ST111809M2 File Text:Frontier Analytical Laboratory
A748.94
A680.0
A1.23E3
A399.40
A951.53
A1.08E3
A1.04E3
A1.35E3
A759.94
A807.59
A864.63
A1.55E3
A1.03E3
A720.82
A1.60E3
A614.54
A706.72
A954.52
6.0E2
3.0E2
0.0E0
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00
29:00
Time

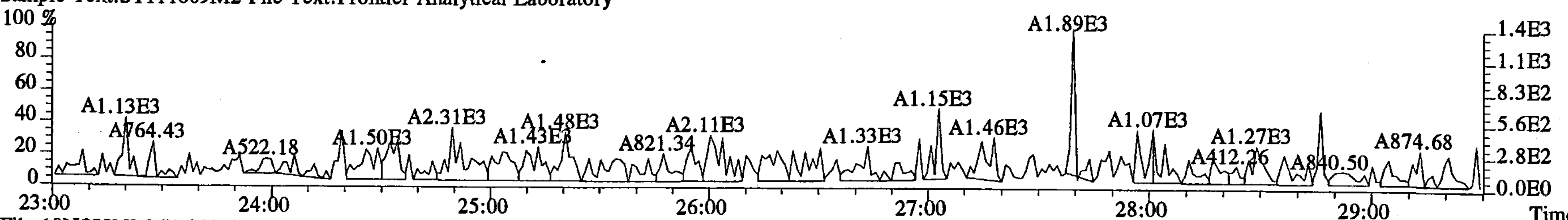
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



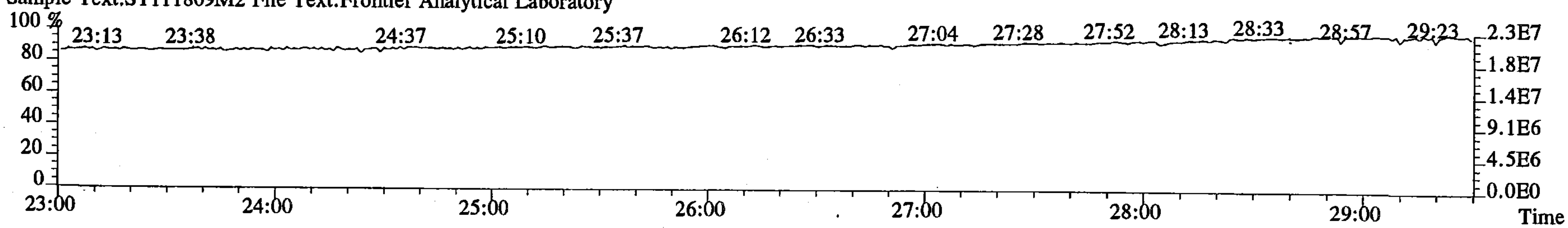
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



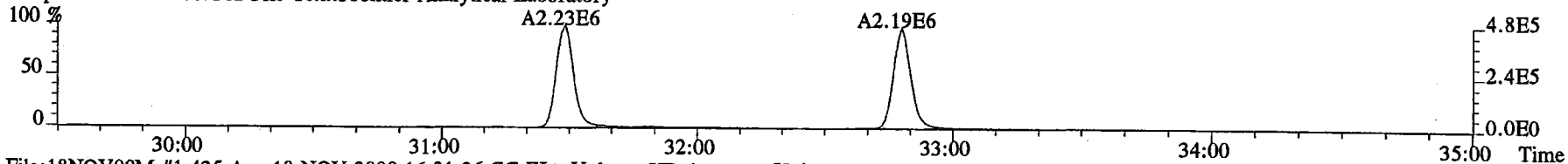
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



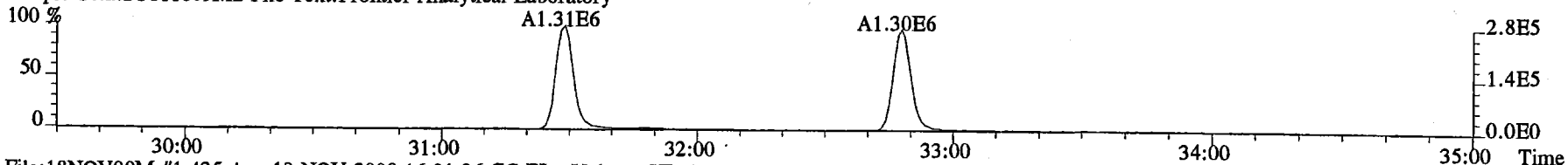
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:4 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



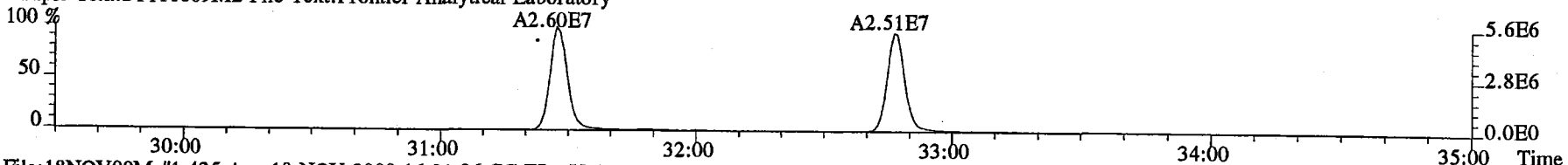
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



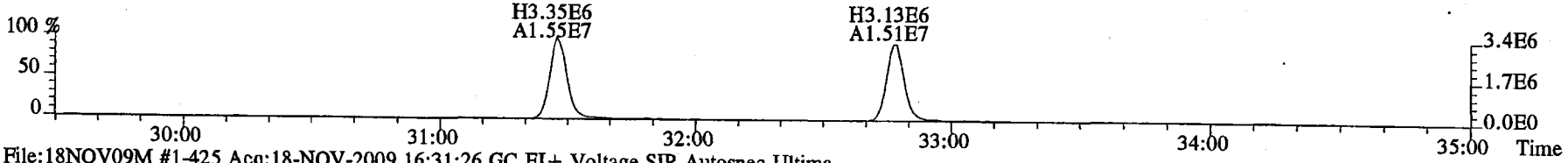
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



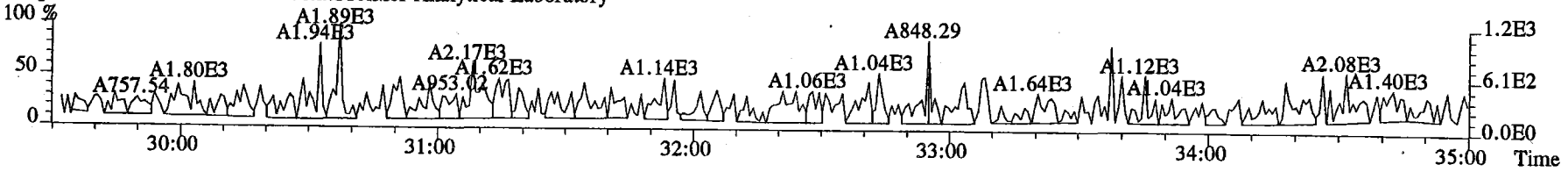
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



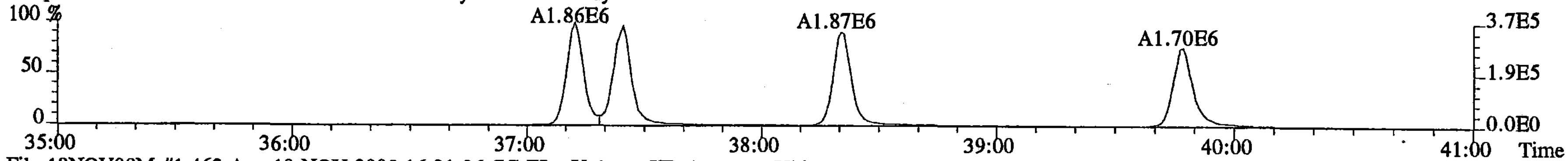
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



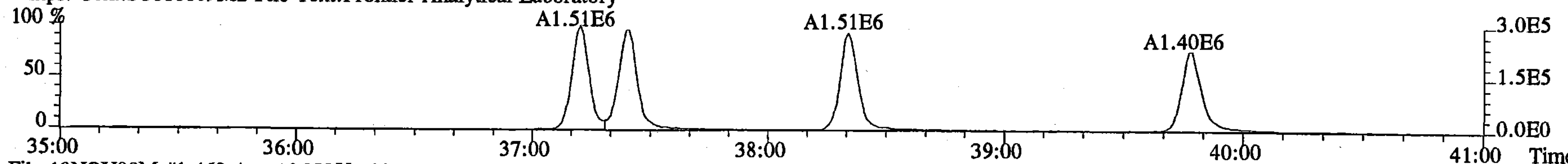
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



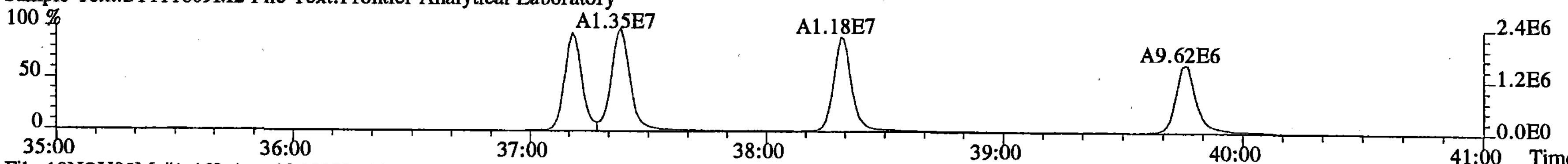
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



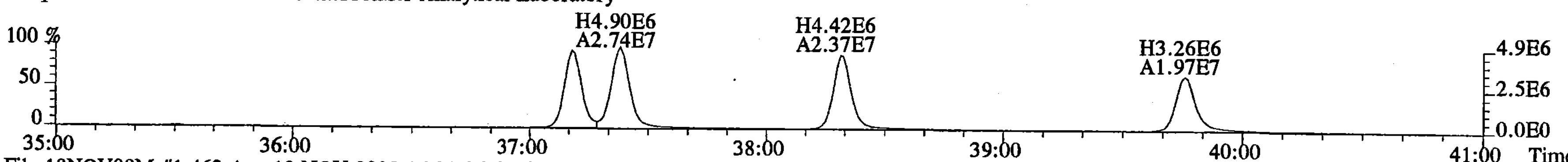
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



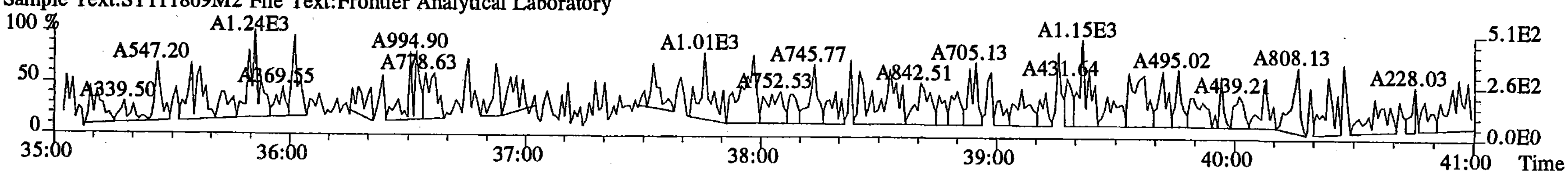
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



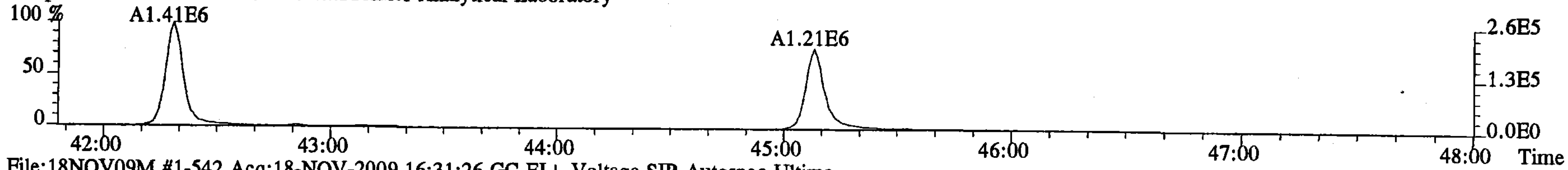
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



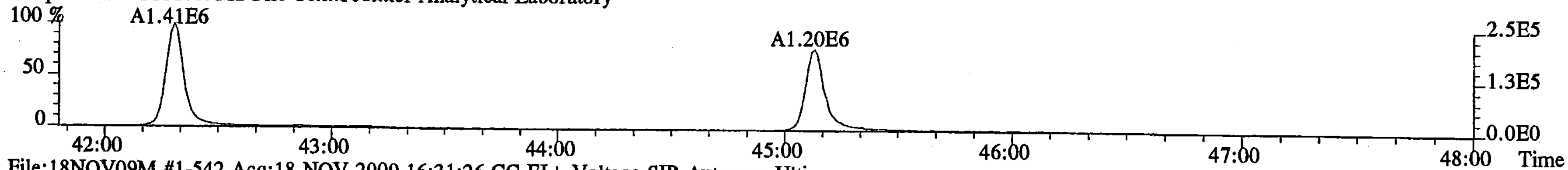
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



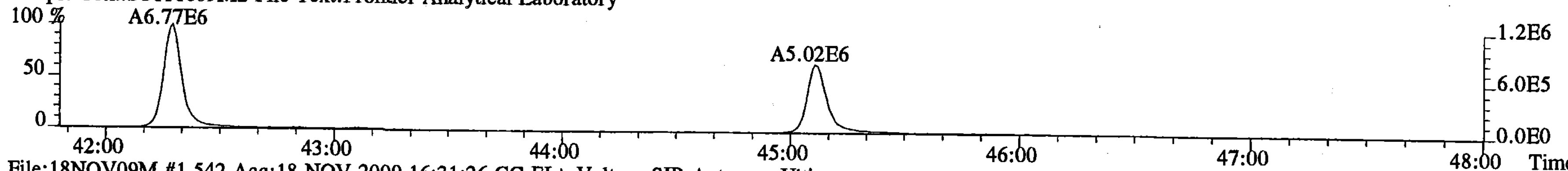
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



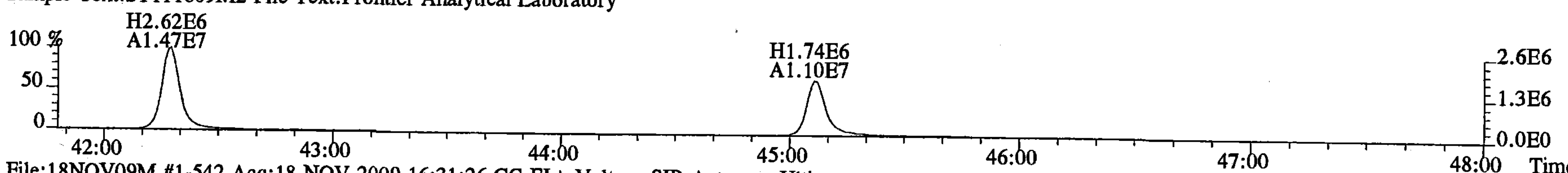
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



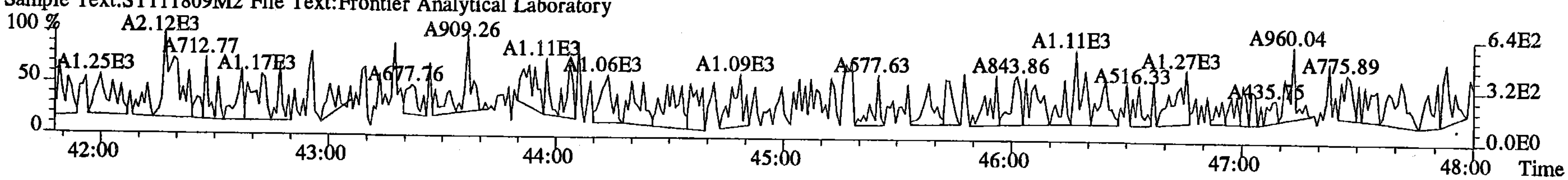
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



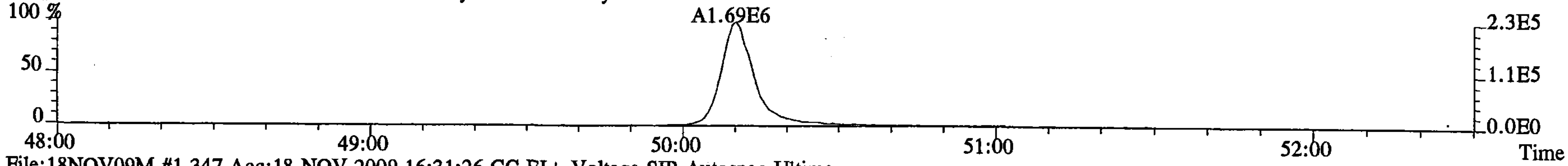
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



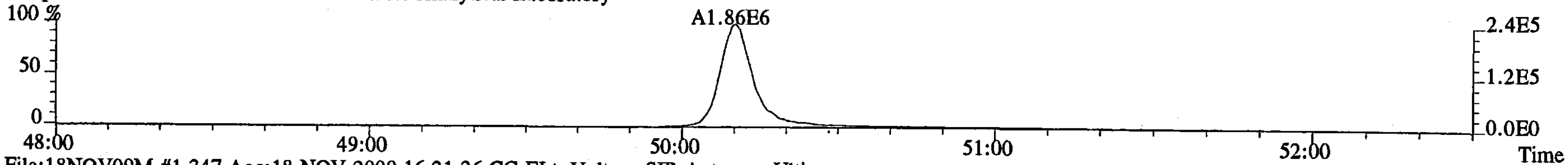
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



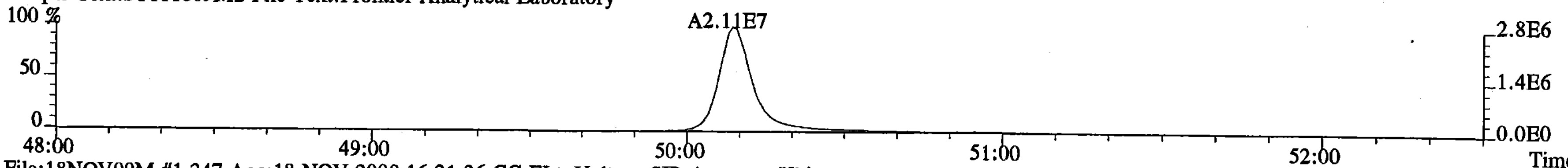
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



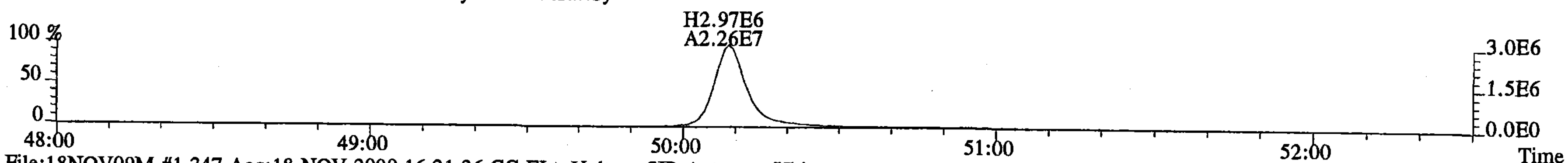
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



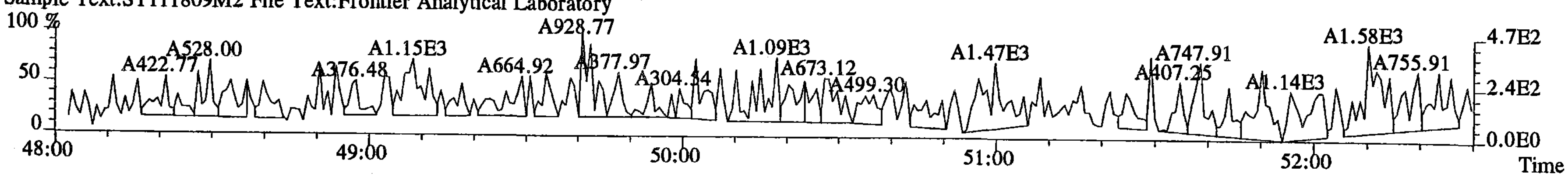
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



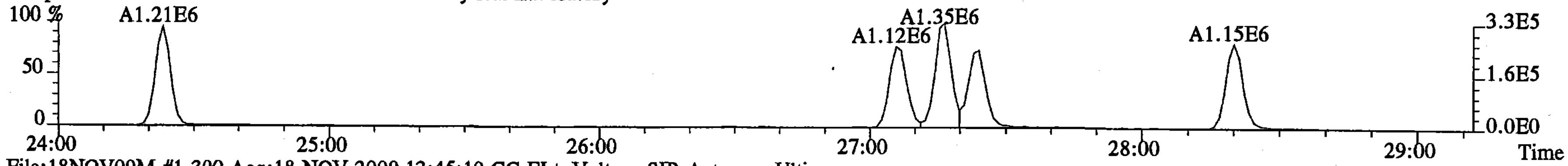
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



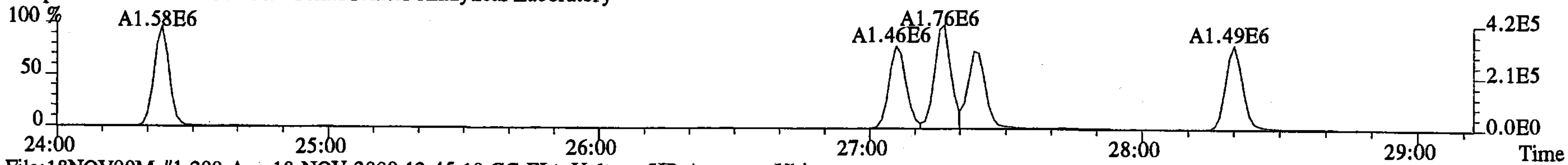
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 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:ST111809M3 File Text:Frontier Analytical Laboratory

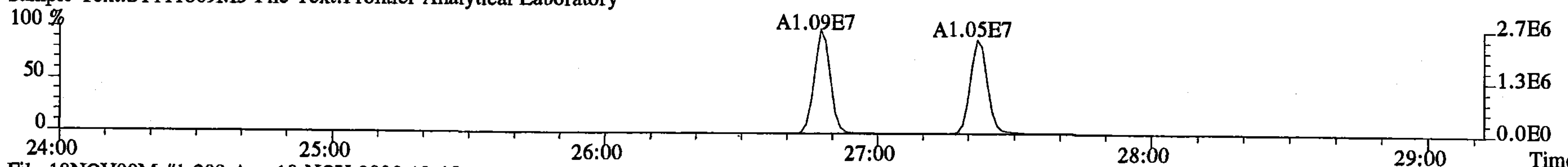


File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory

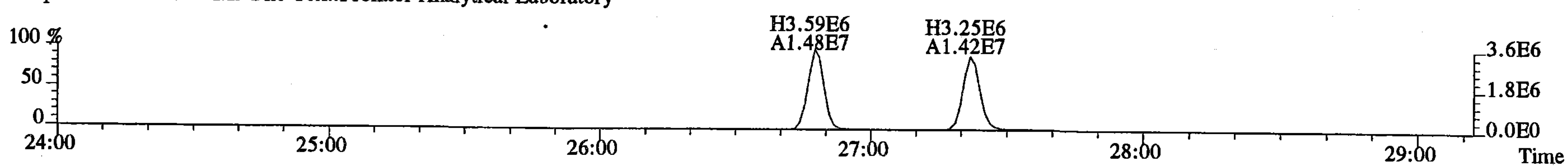


File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory

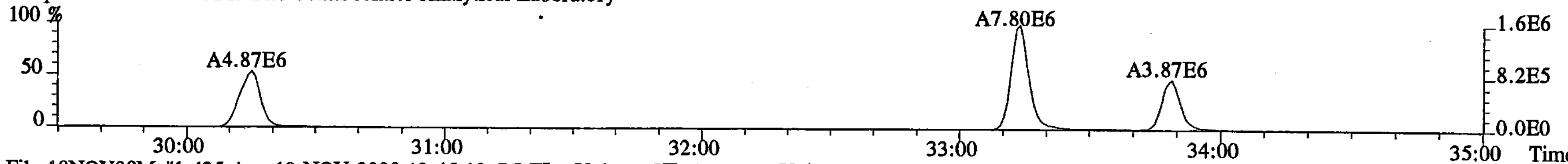
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



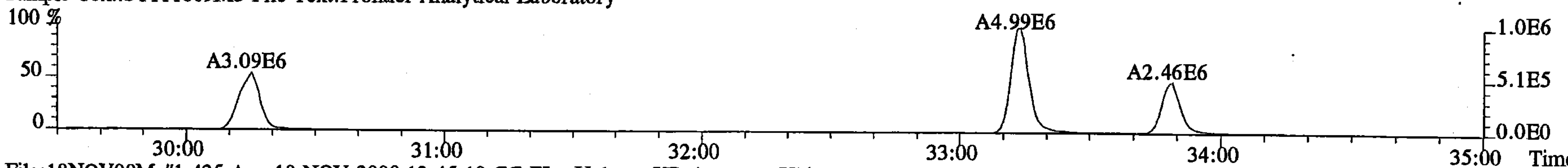
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



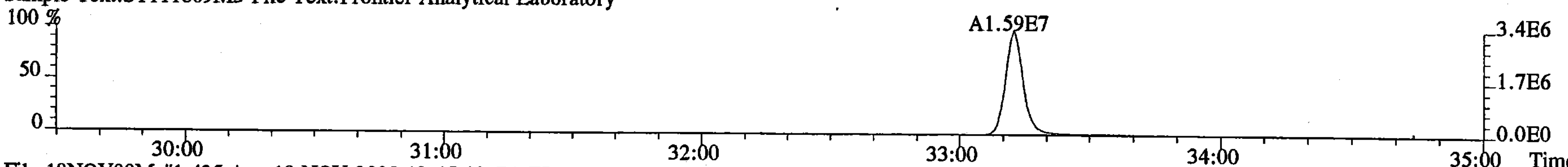
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



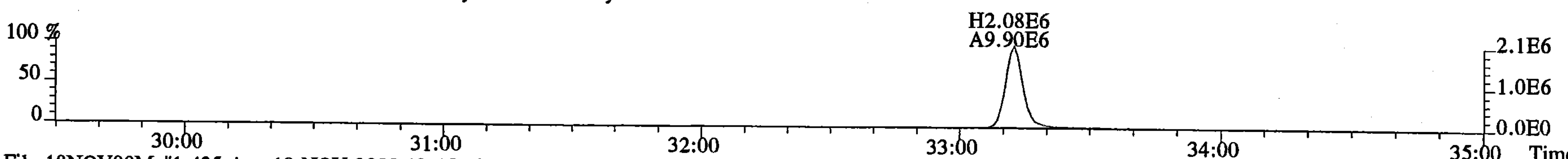
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



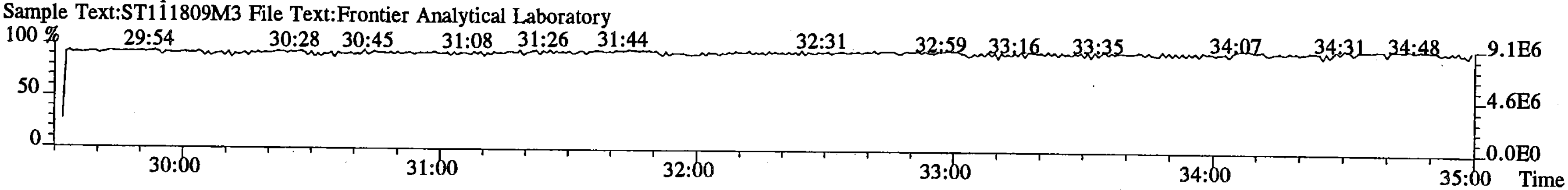
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



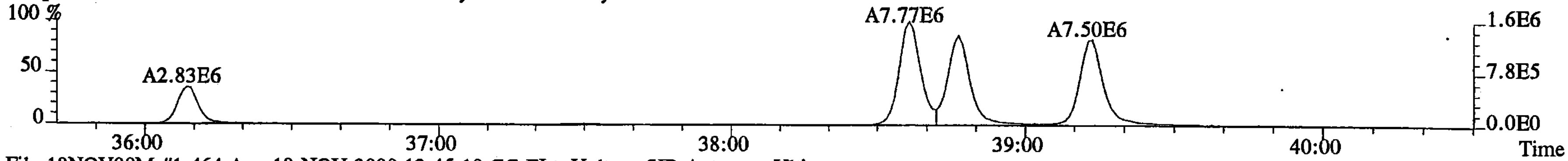
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



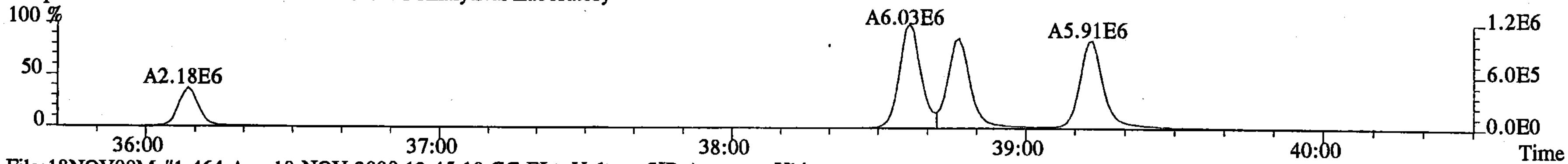
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



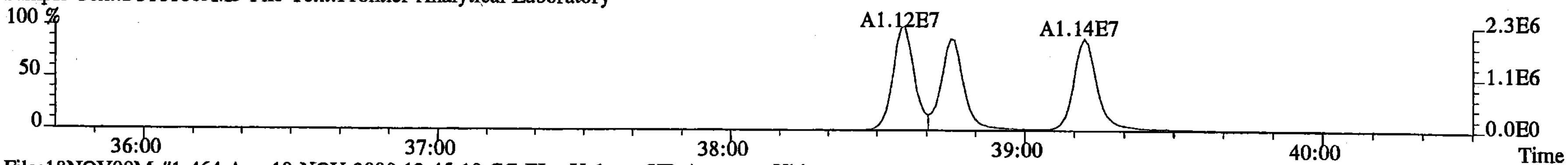
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



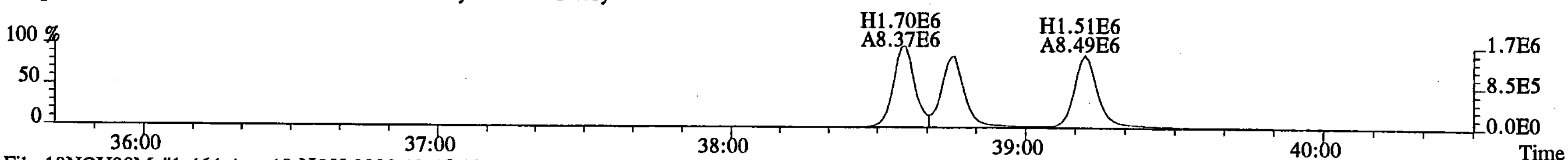
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



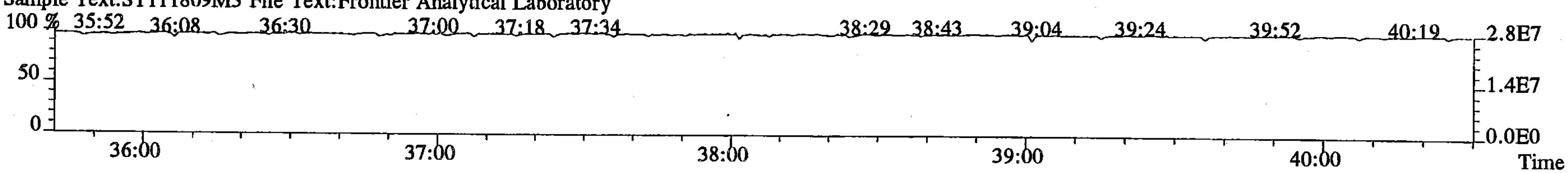
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



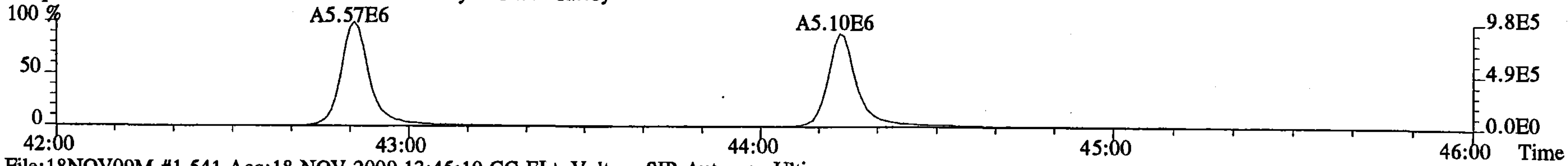
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



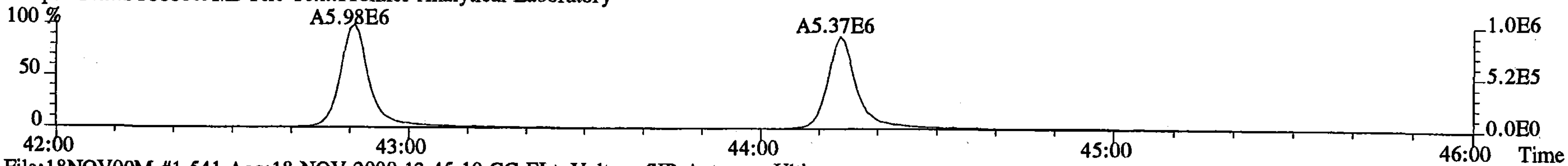
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



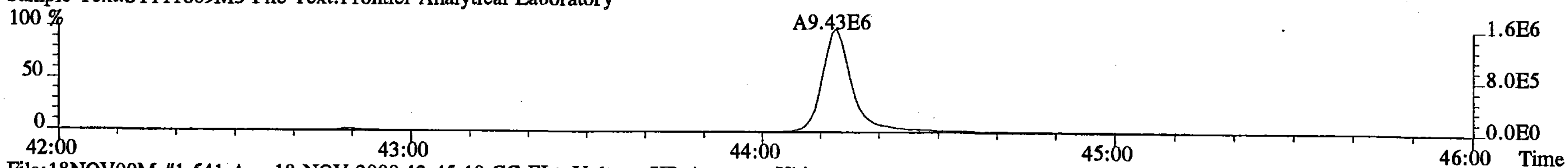
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



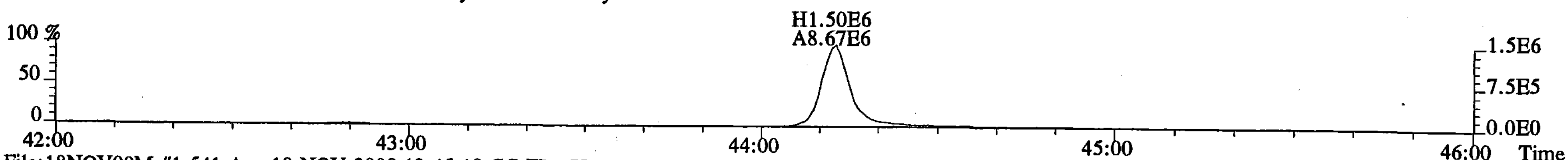
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



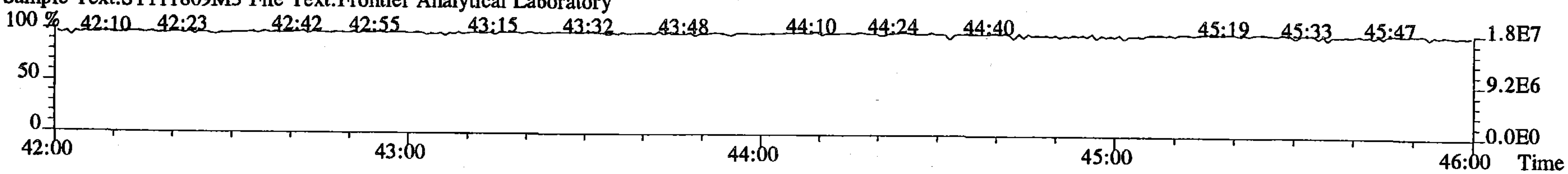
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



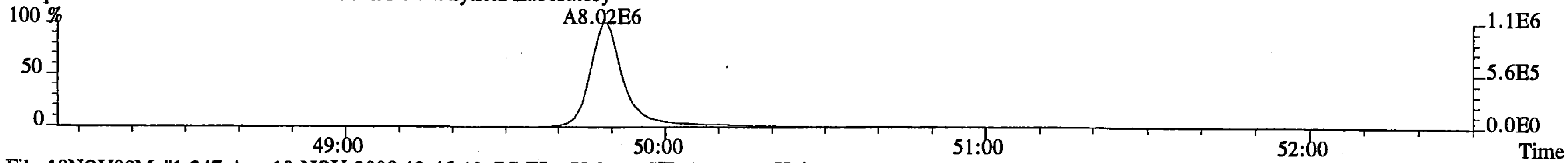
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



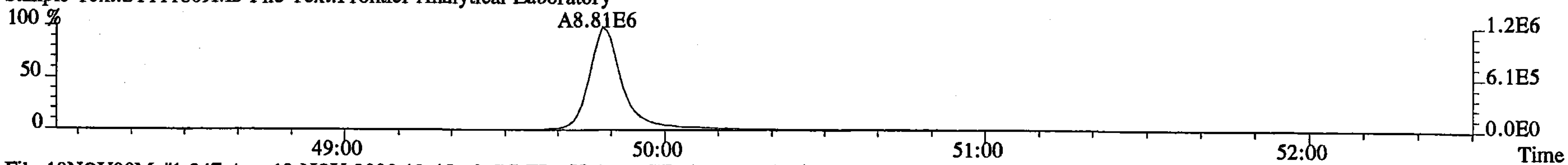
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 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:ST111809M3 File Text:Frontier Analytical Laboratory

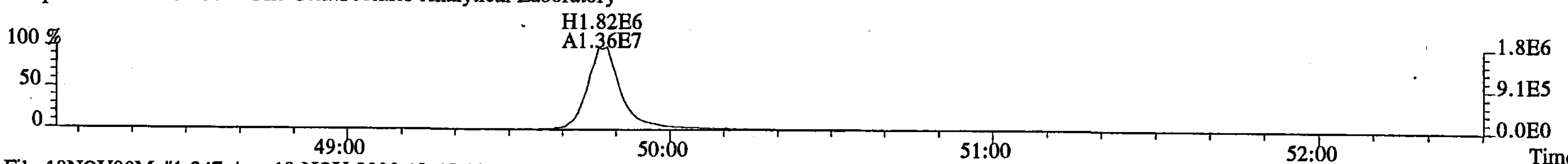


File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory

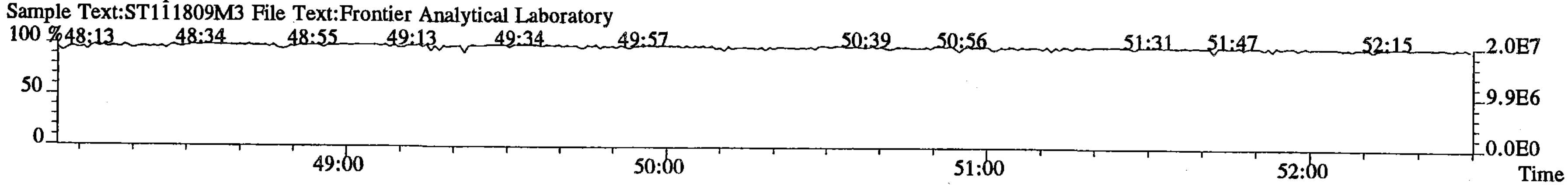


File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory

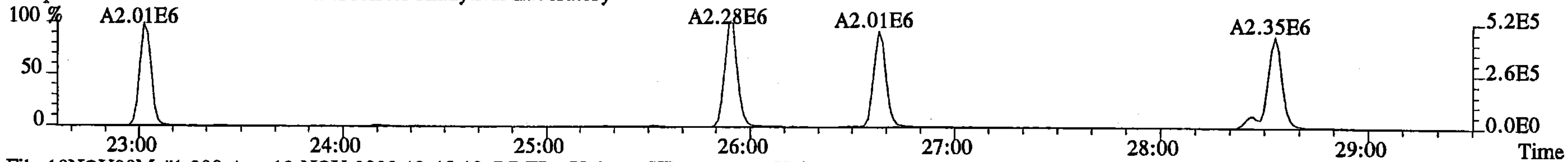
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



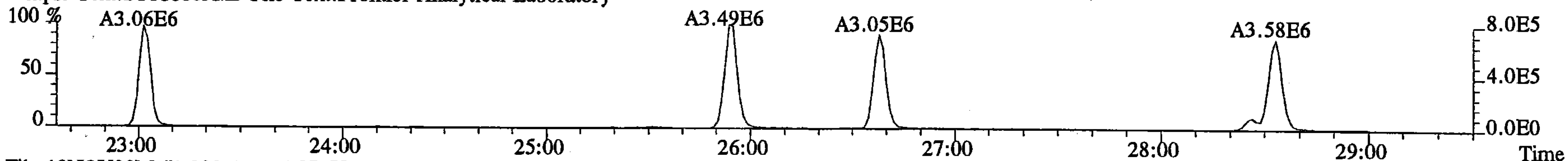
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



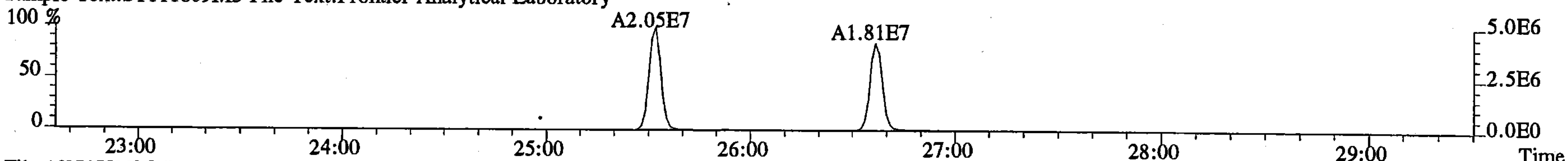
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



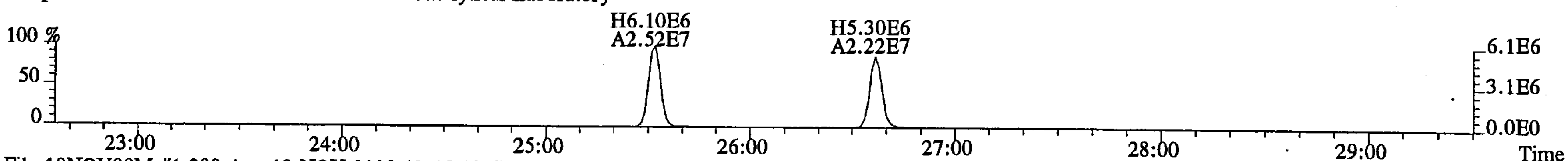
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



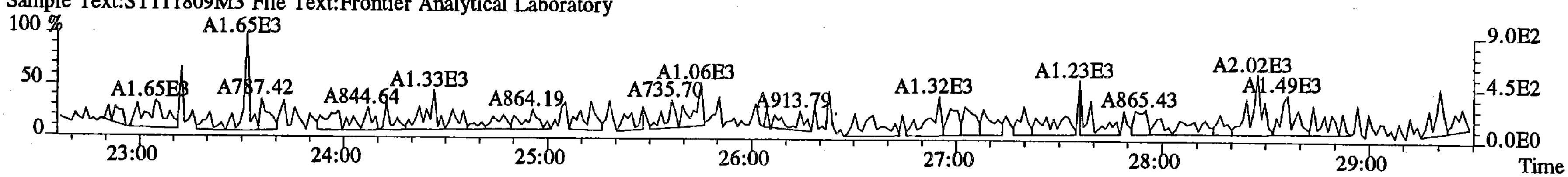
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



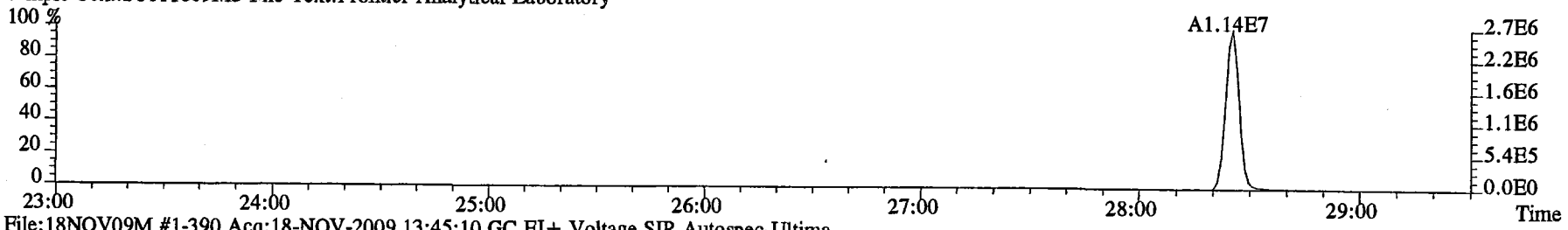
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



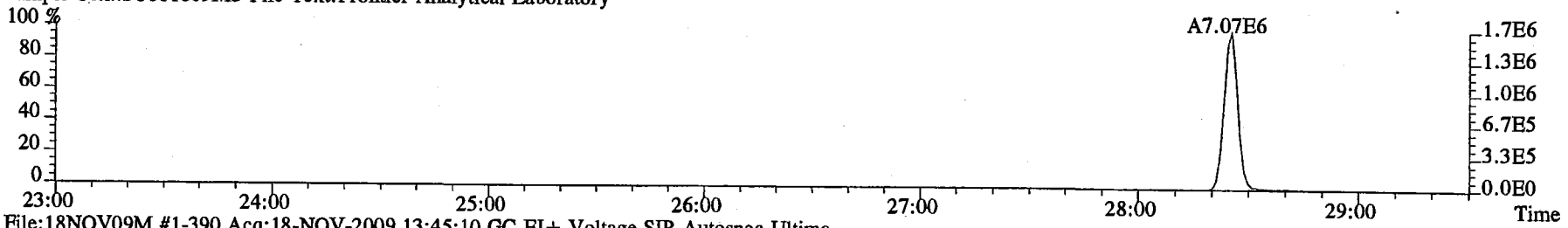
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



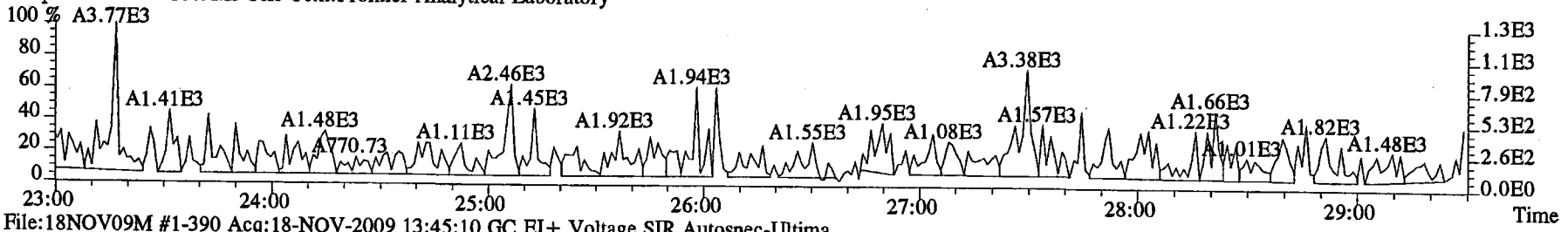
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



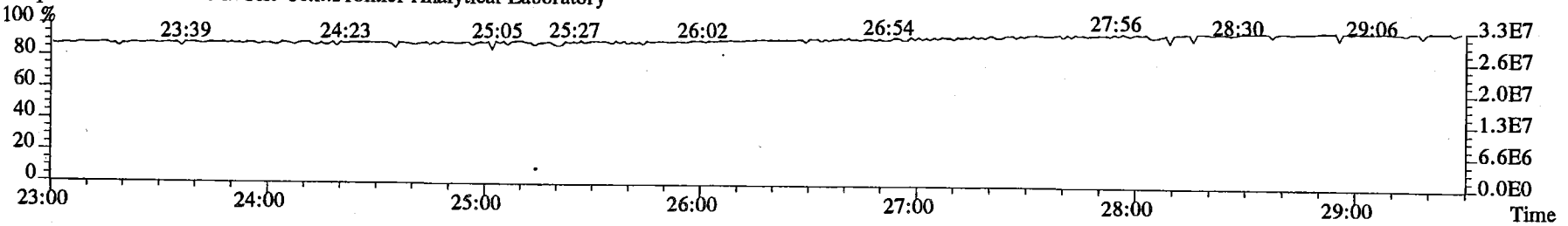
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



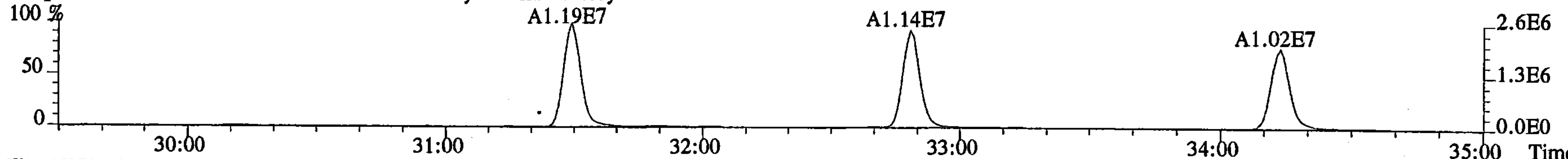
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



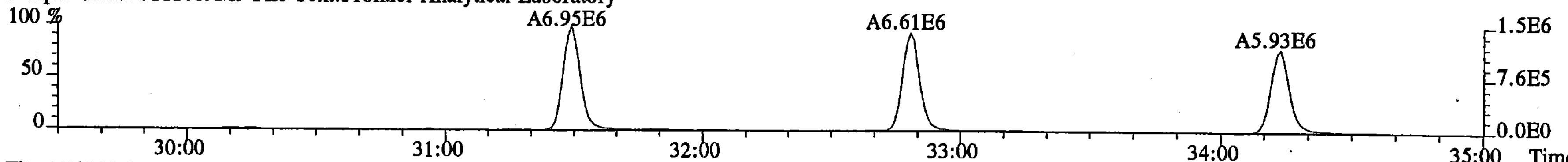
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



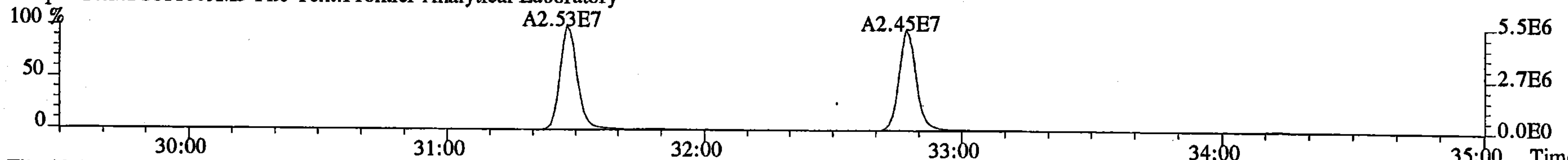
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



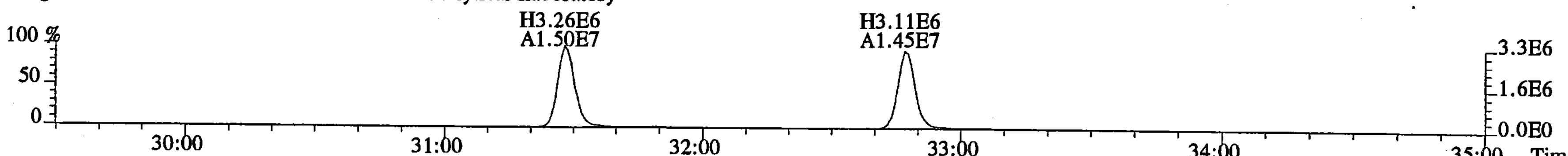
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



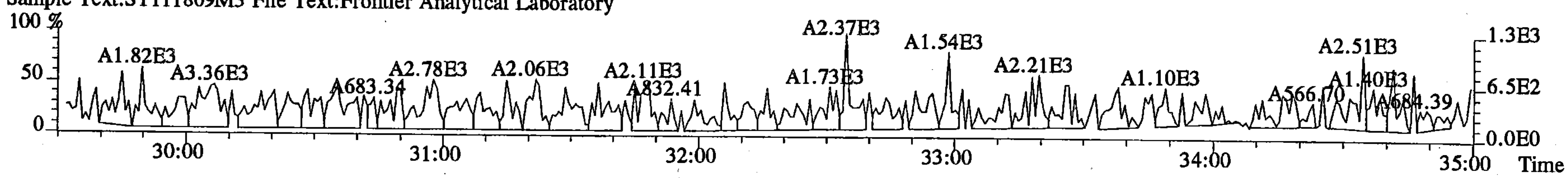
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



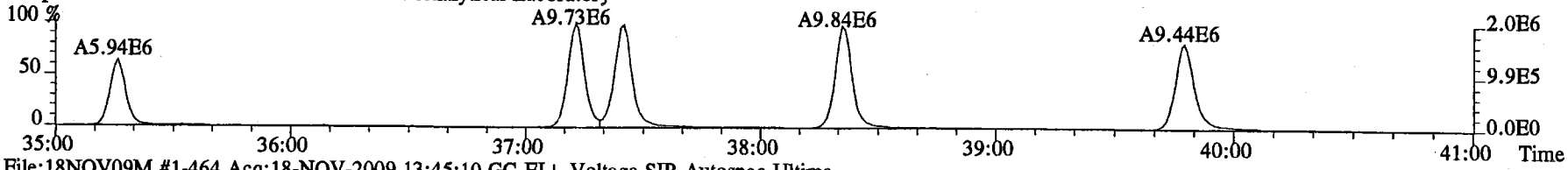
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



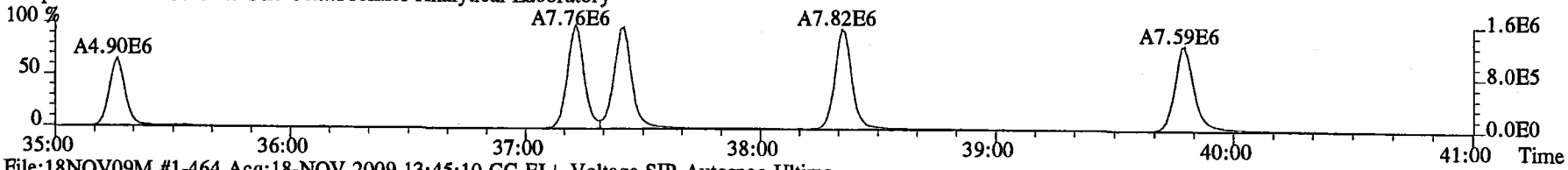
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



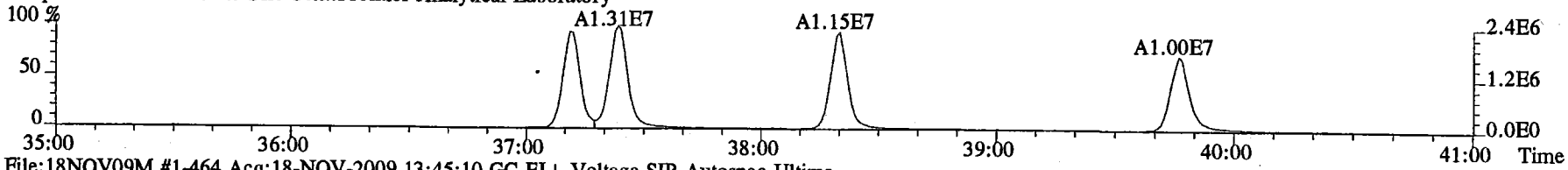
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



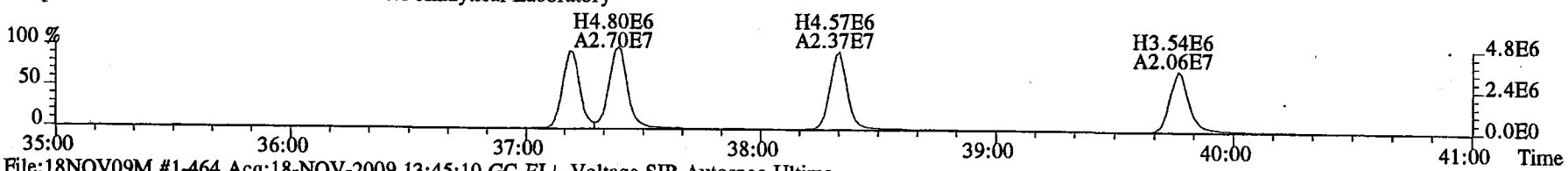
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



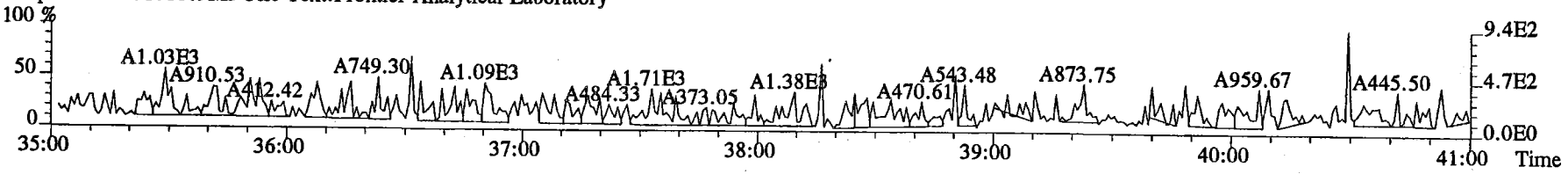
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



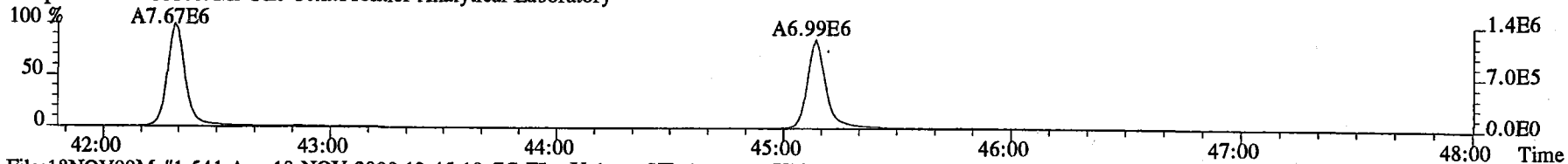
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



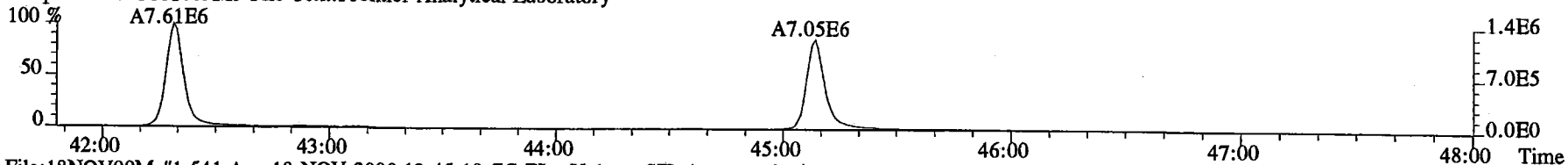
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



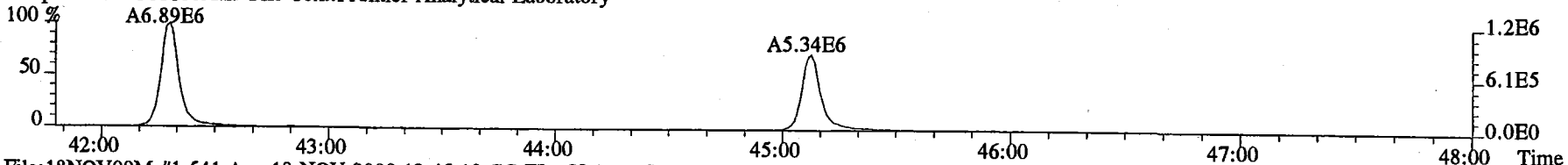
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



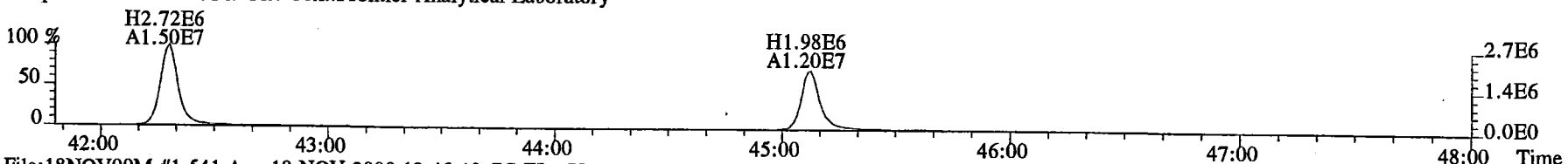
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



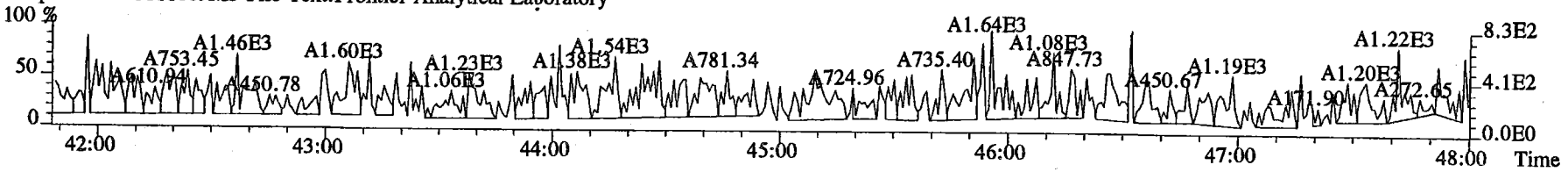
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



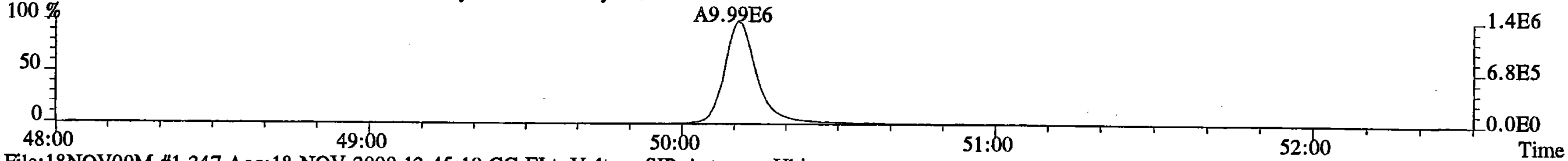
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



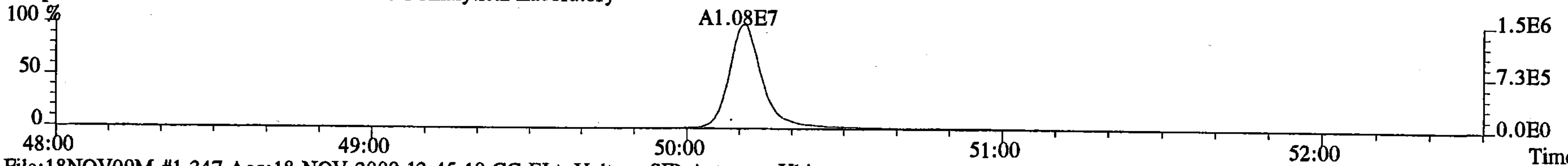
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



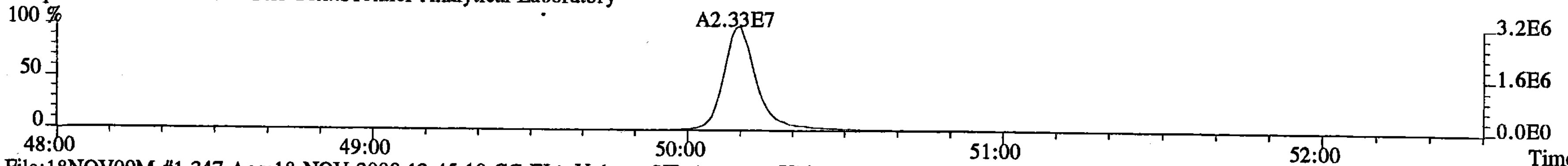
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



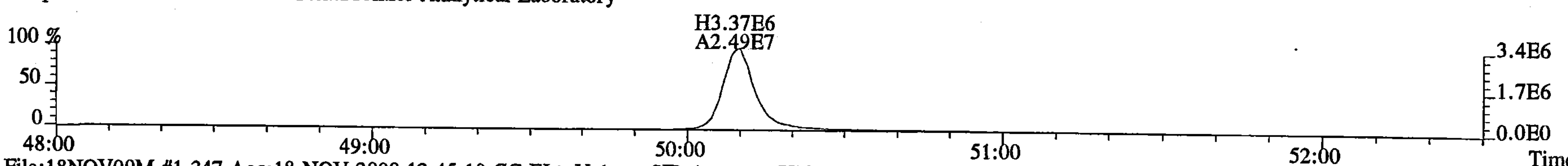
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



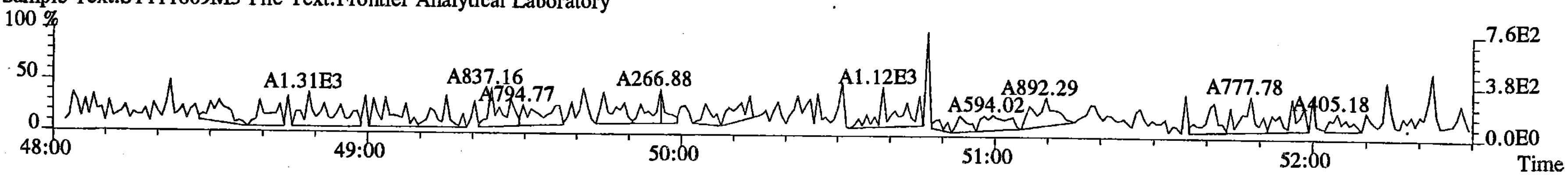
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



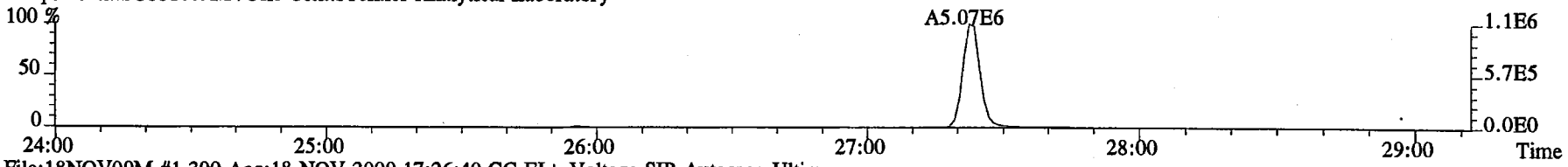
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



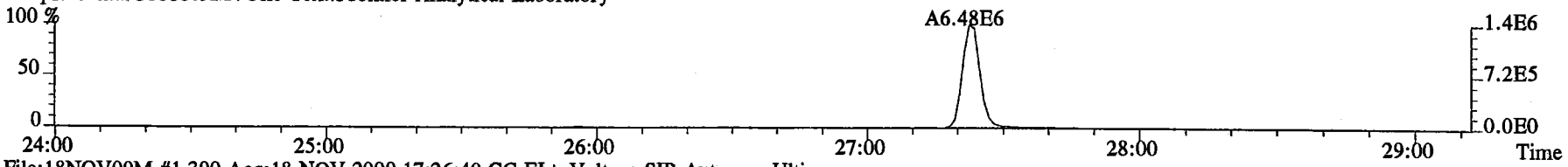
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



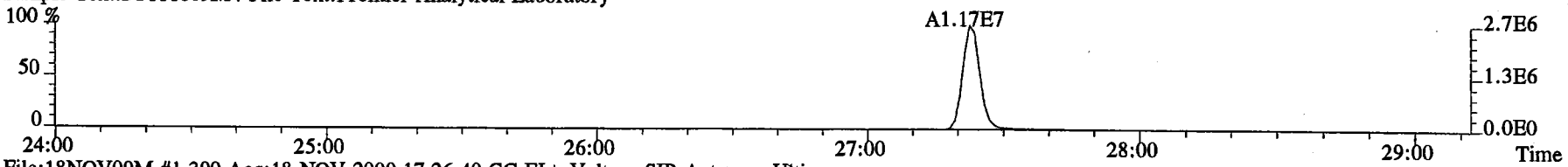
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



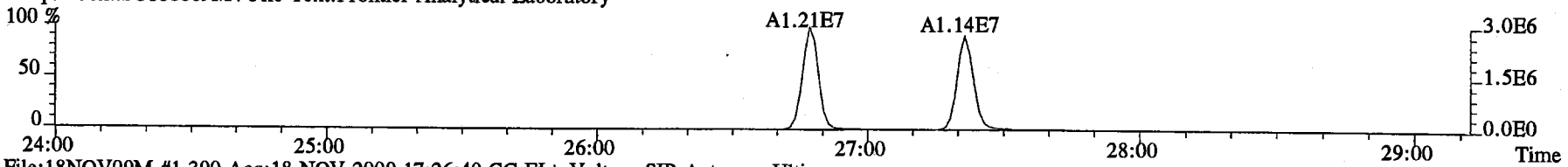
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



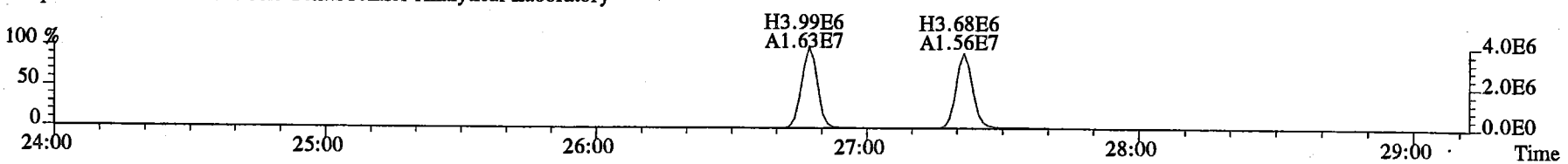
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



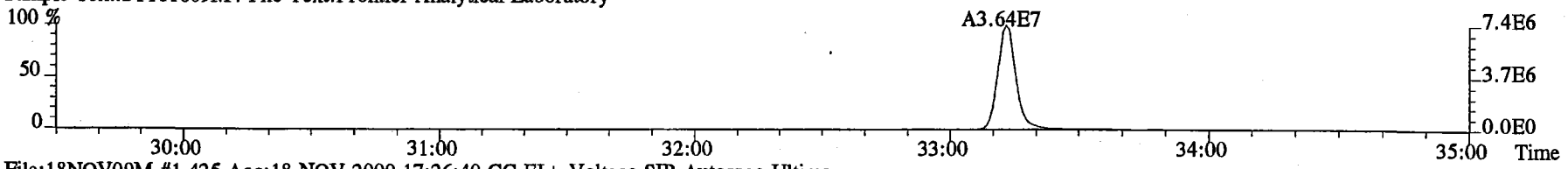
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



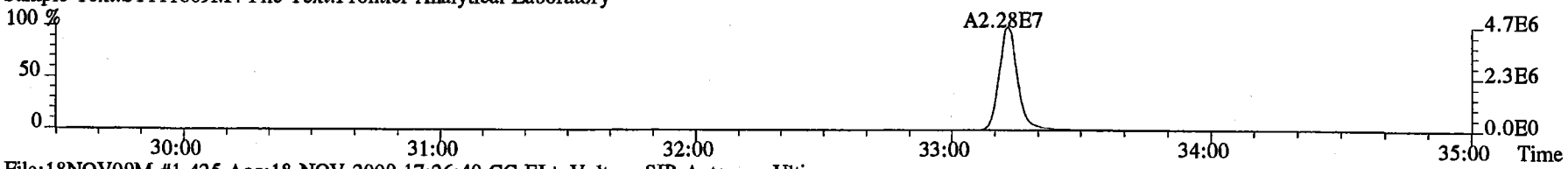
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



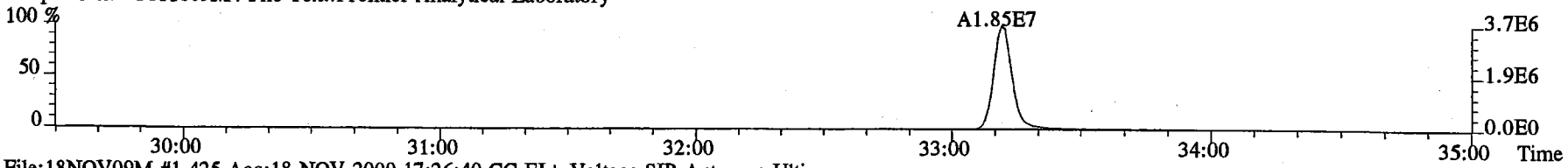
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



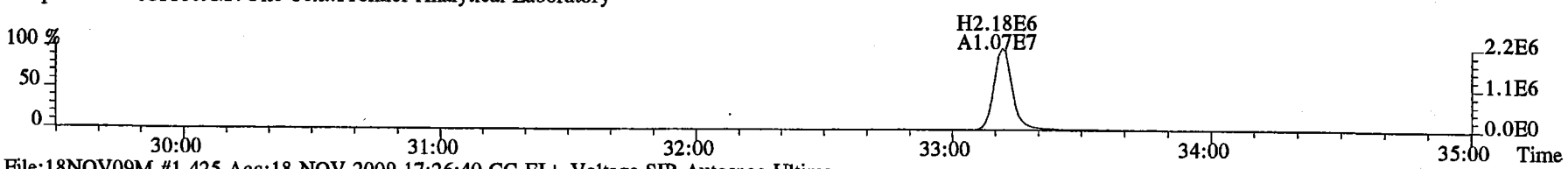
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



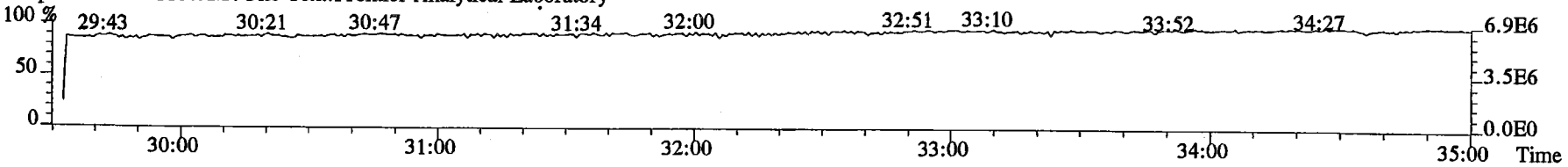
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



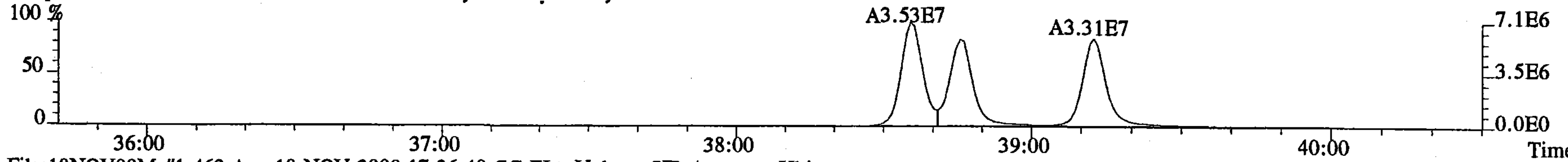
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



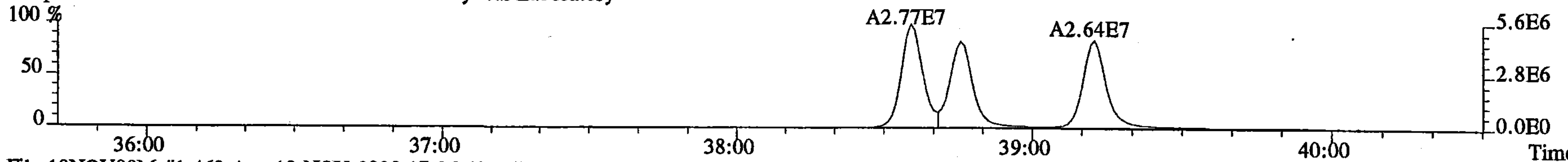
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



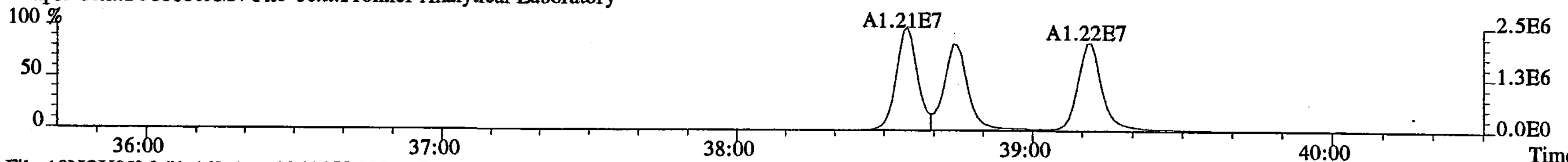
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



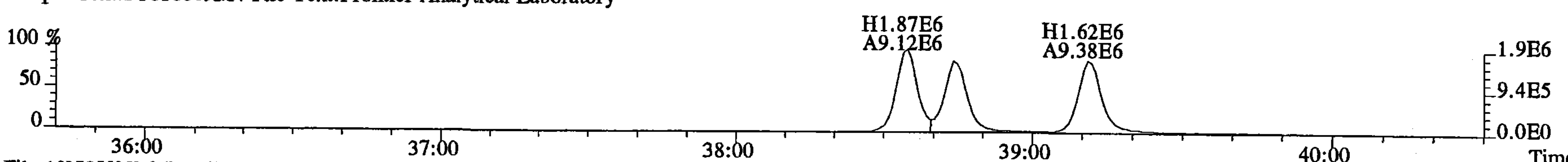
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



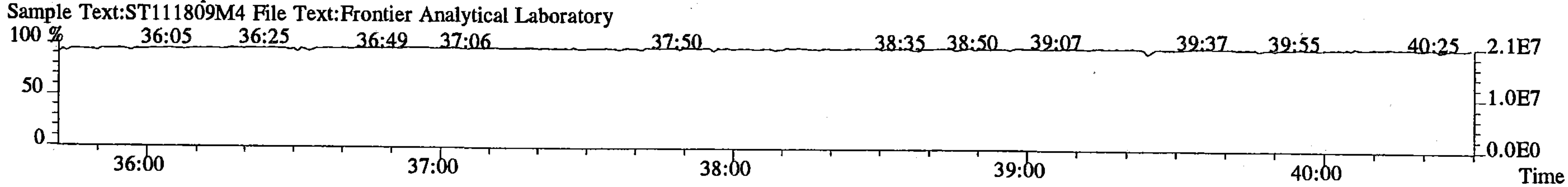
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 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:ST111809M4 File Text:Frontier Analytical Laboratory

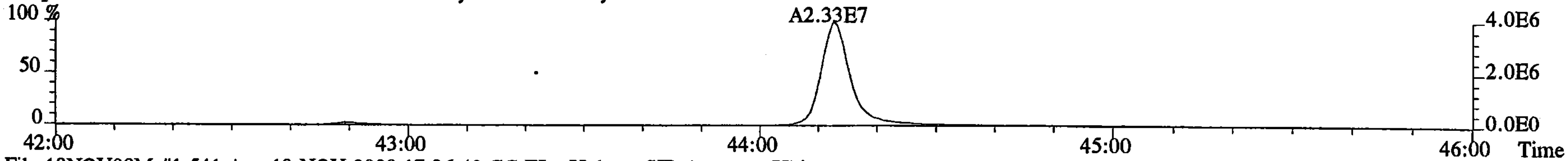


File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory

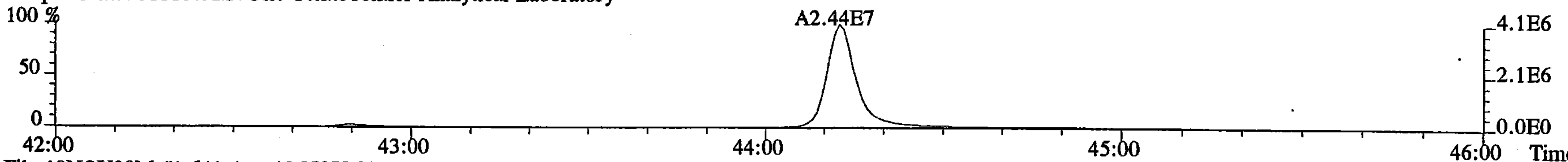


Q020 : 00959

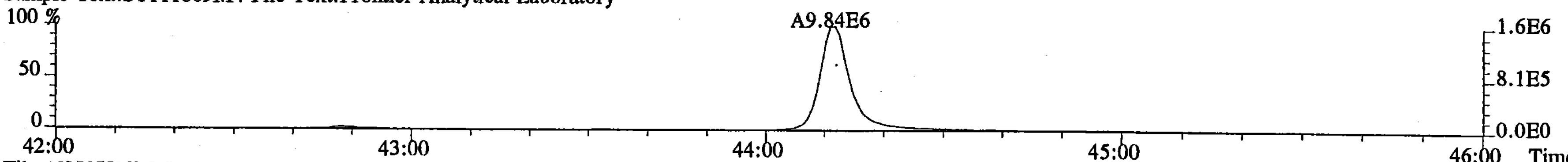
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



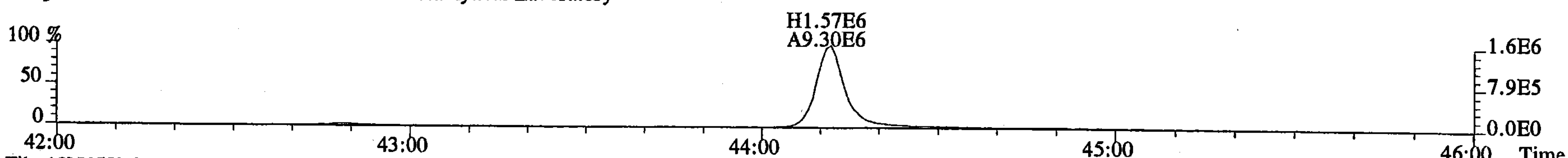
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



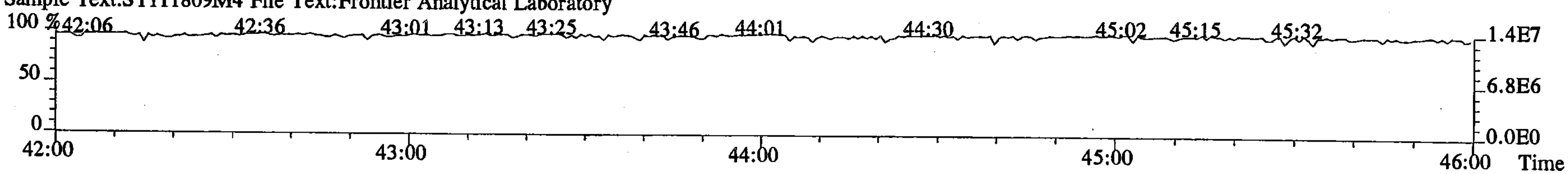
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



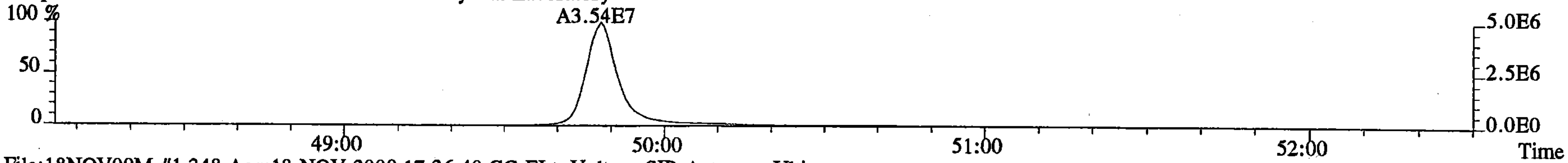
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



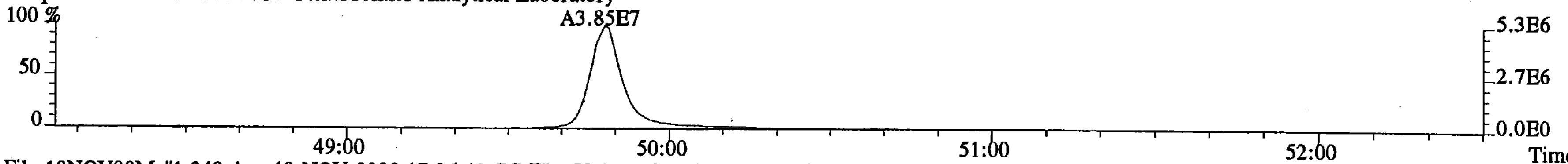
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 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:ST111809M4 File Text:Frontier Analytical Laboratory



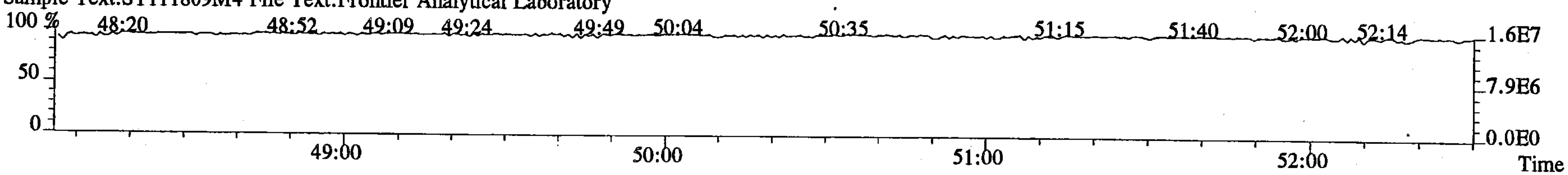
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



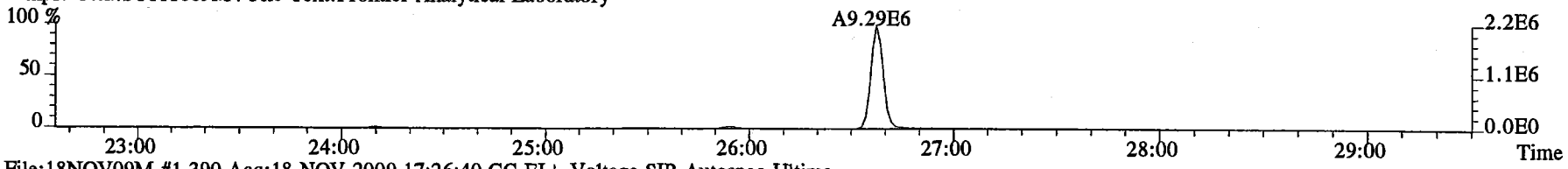
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory

File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 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:ST111809M4 File Text:Frontier Analytical Laboratory

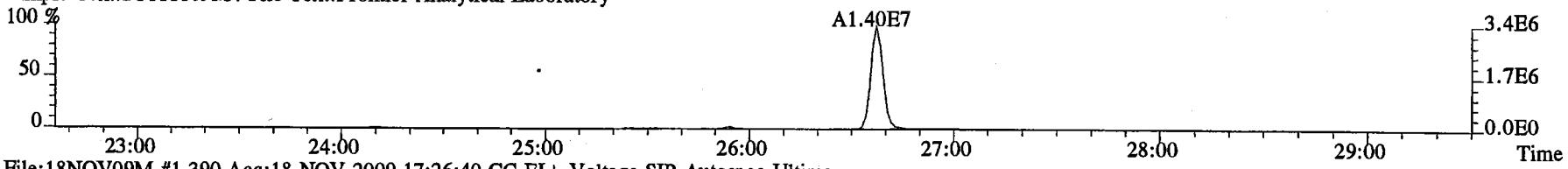
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



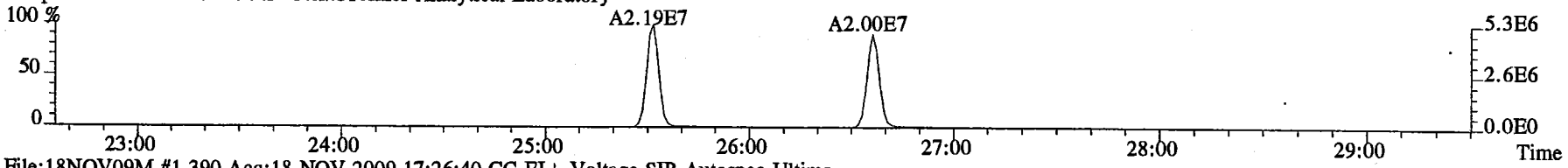
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



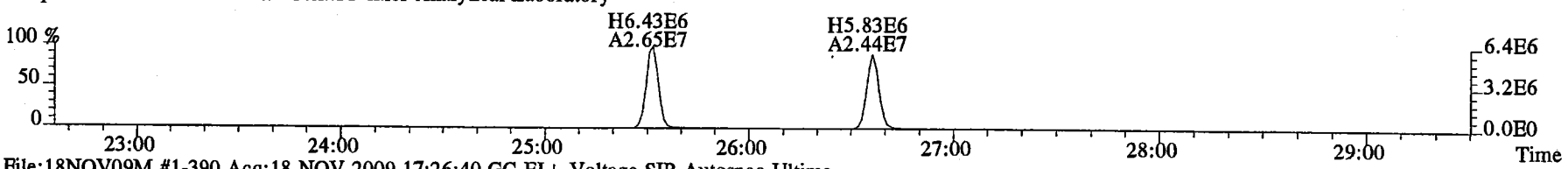
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



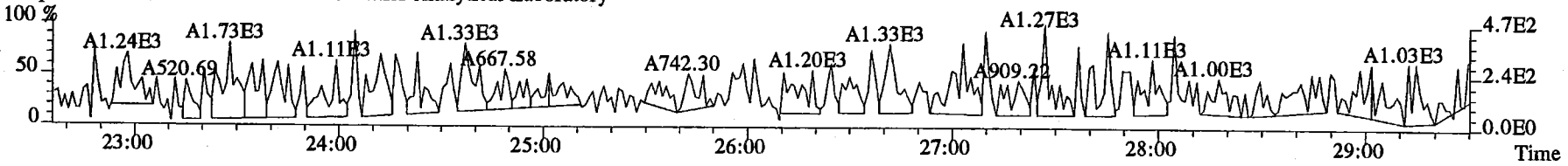
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



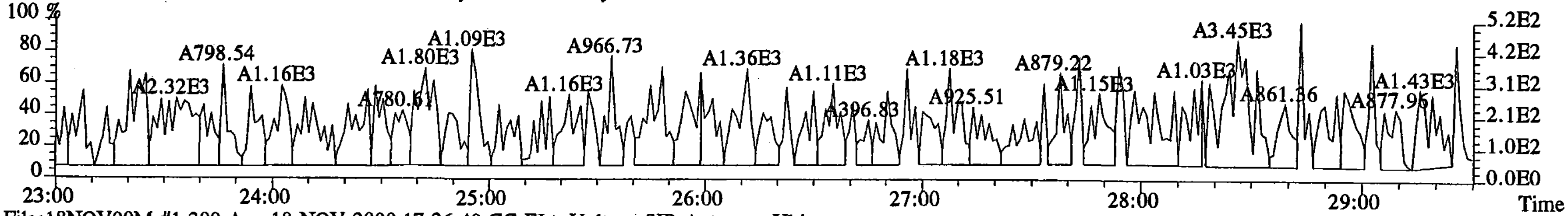
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



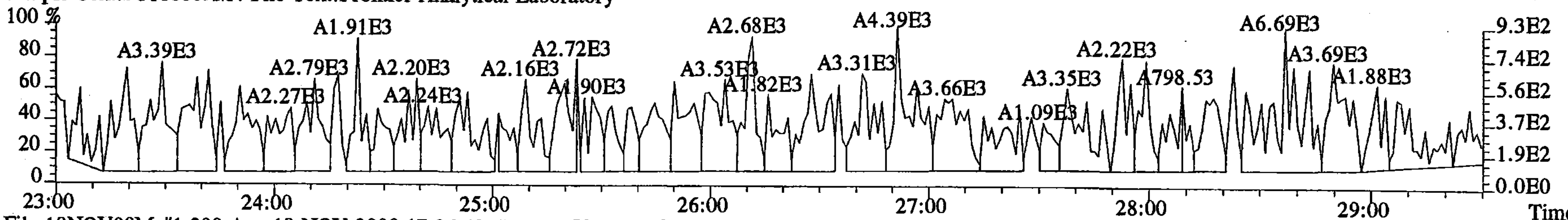
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



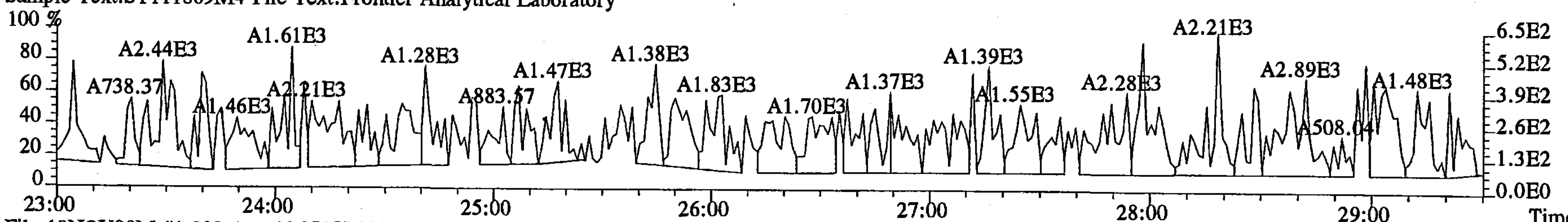
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



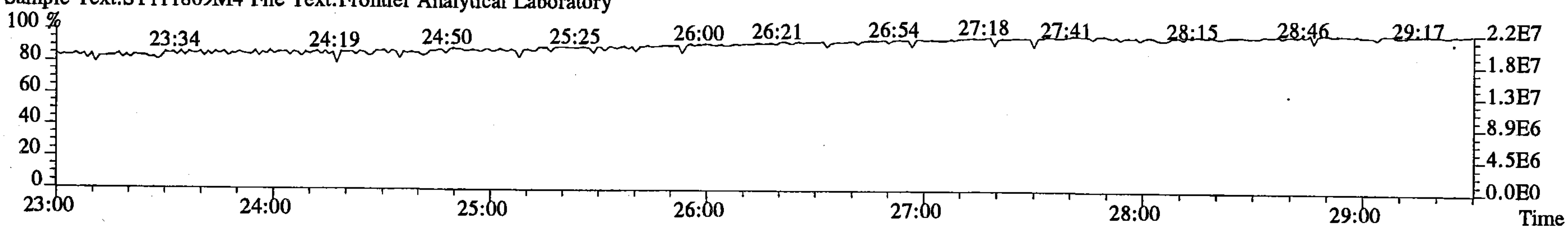
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



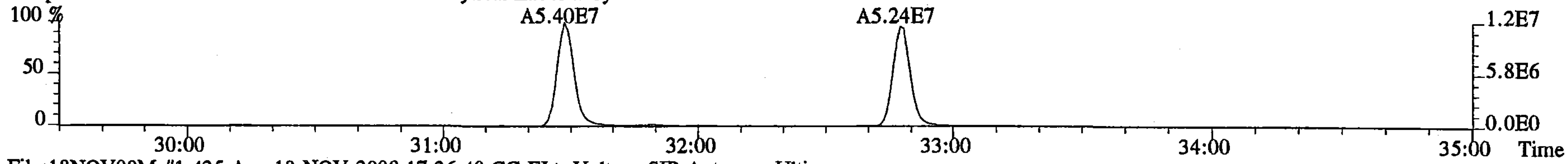
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



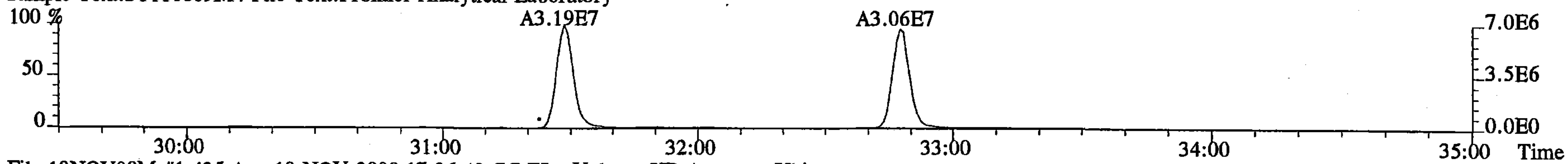
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



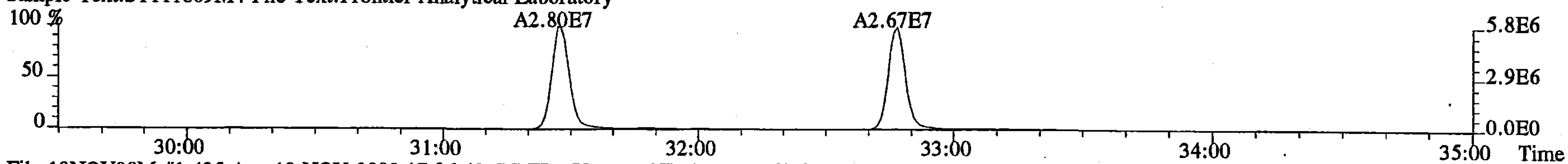
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



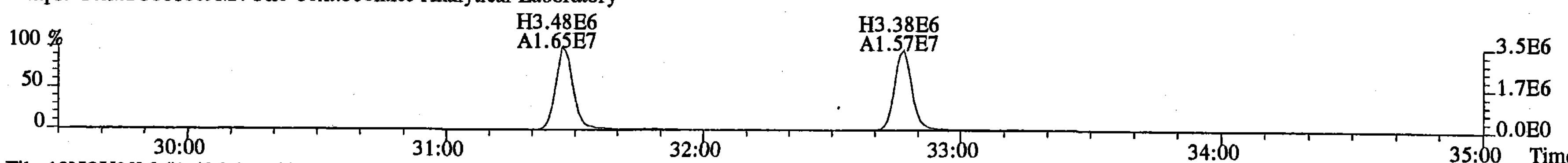
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



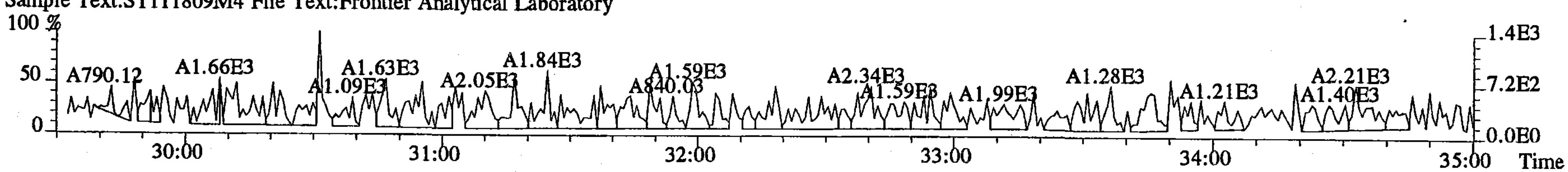
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 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:ST111809M4 File Text:Frontier Analytical Laboratory

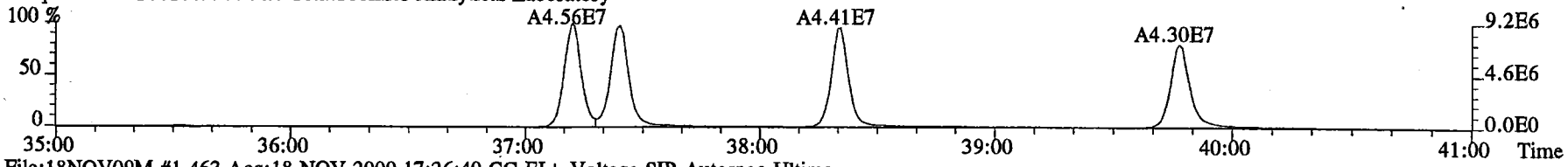


File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory

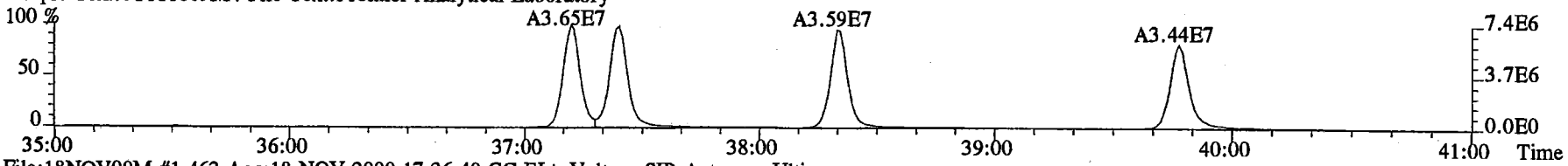


Q020 : 00964

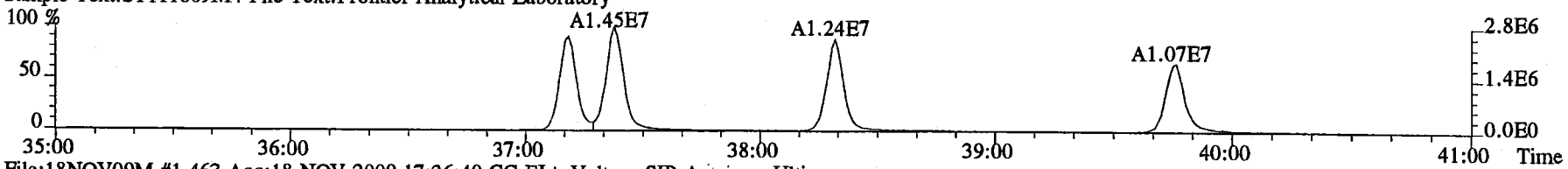
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



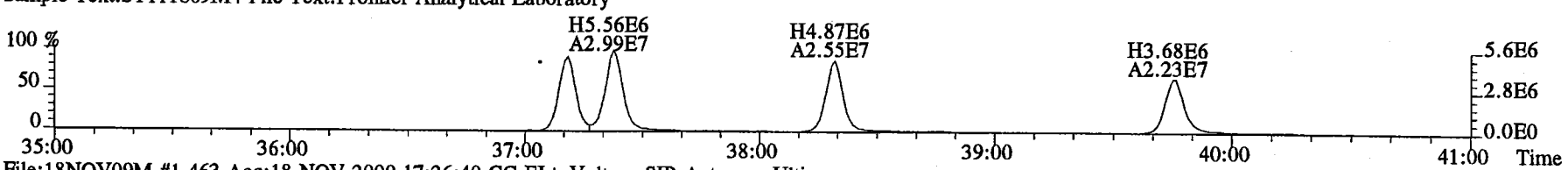
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



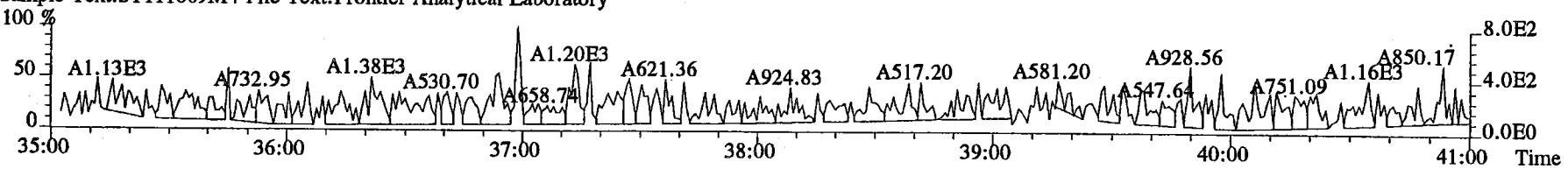
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



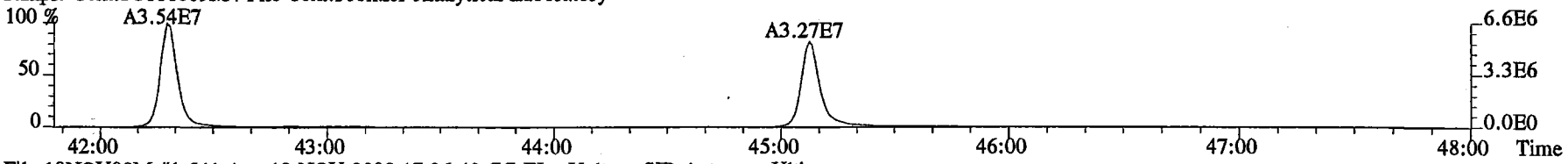
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



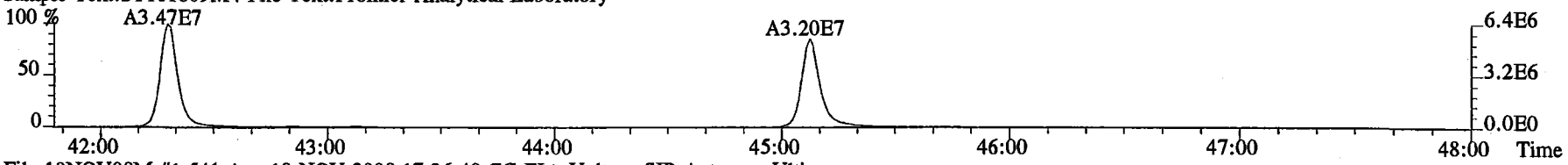
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



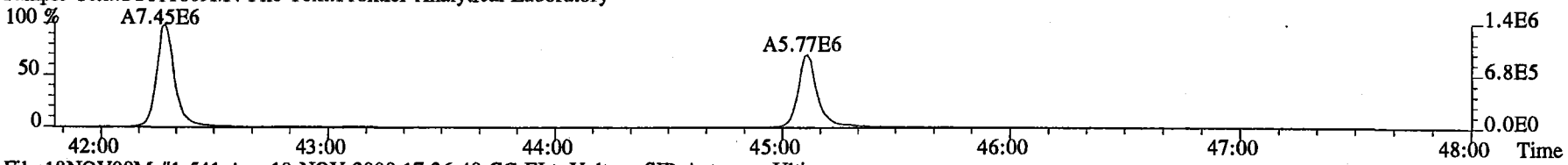
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



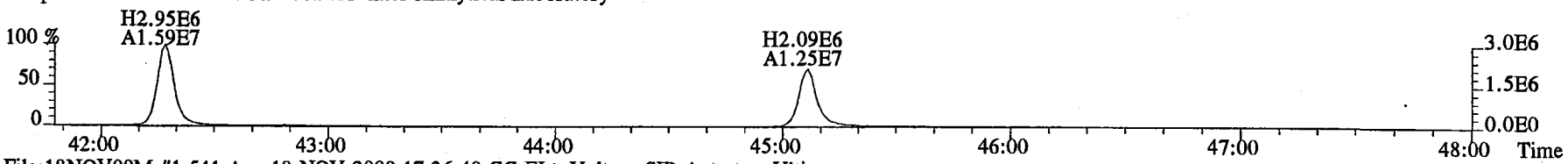
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



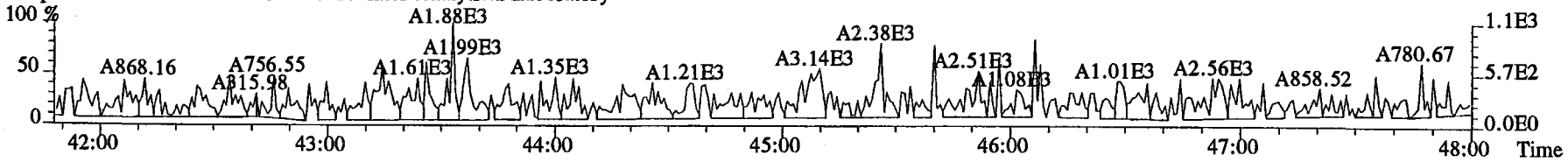
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



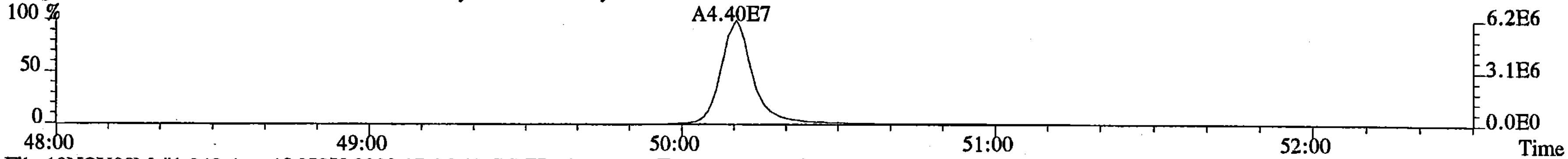
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



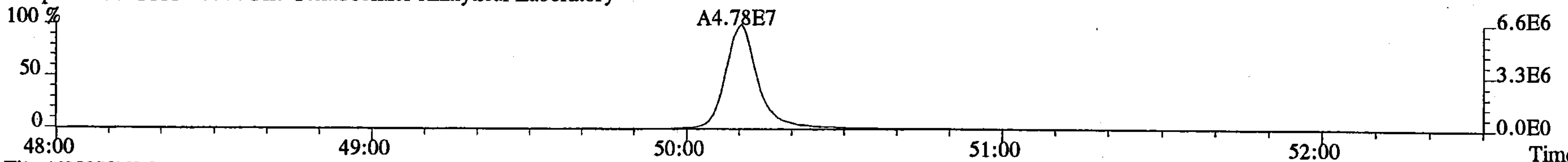
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



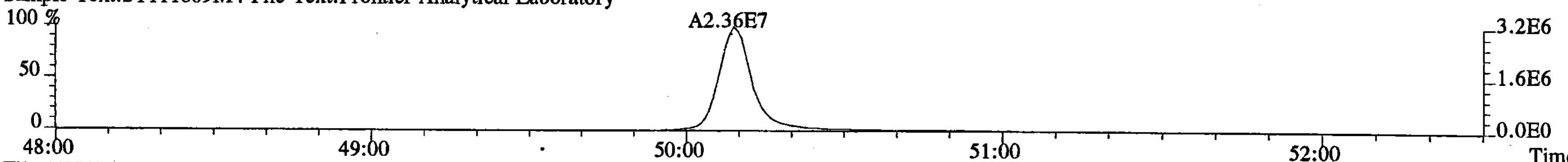
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



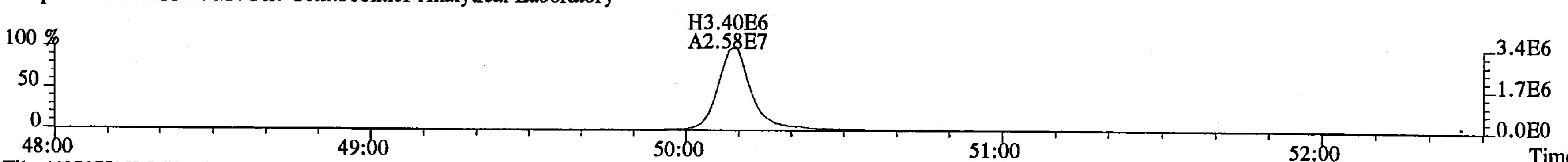
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



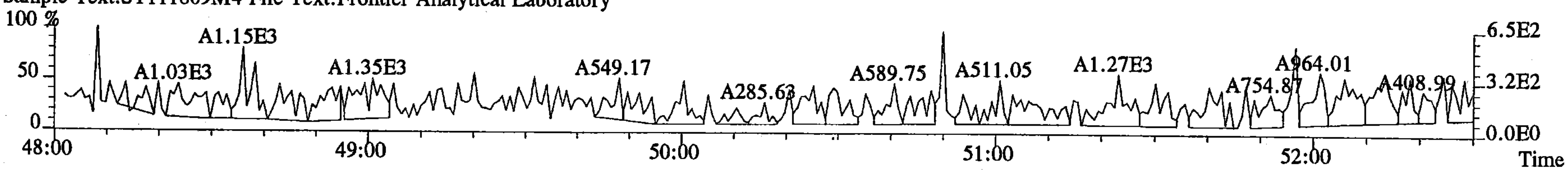
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



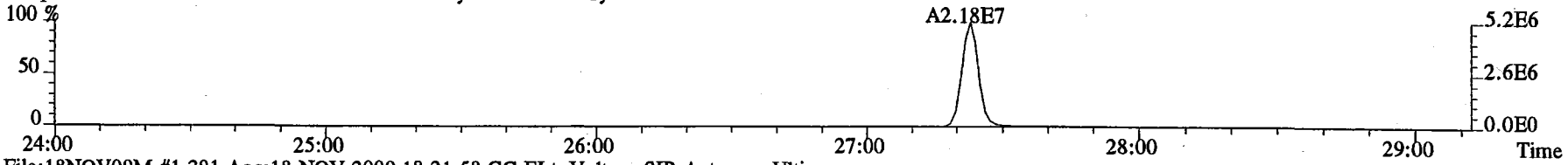
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



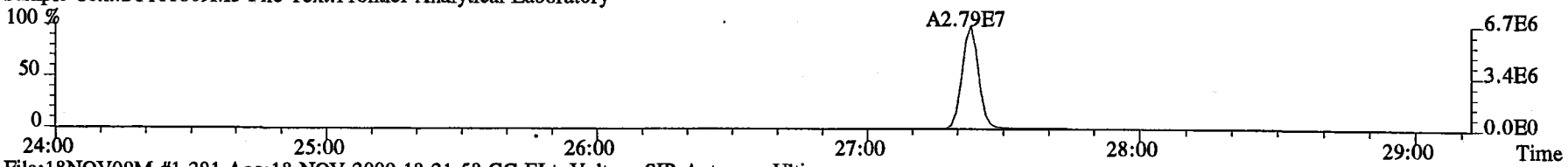
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



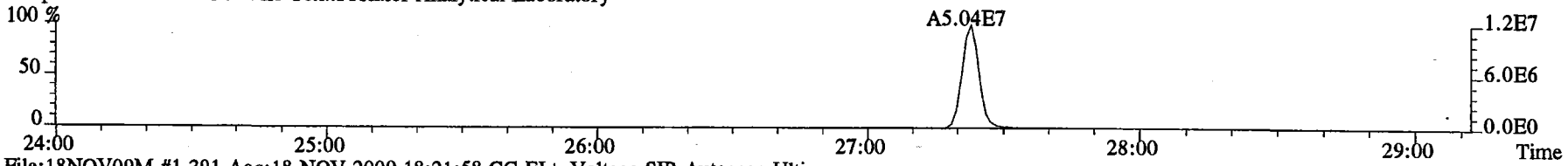
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



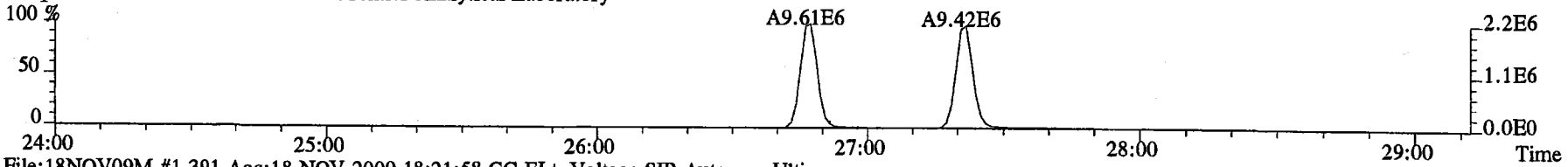
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



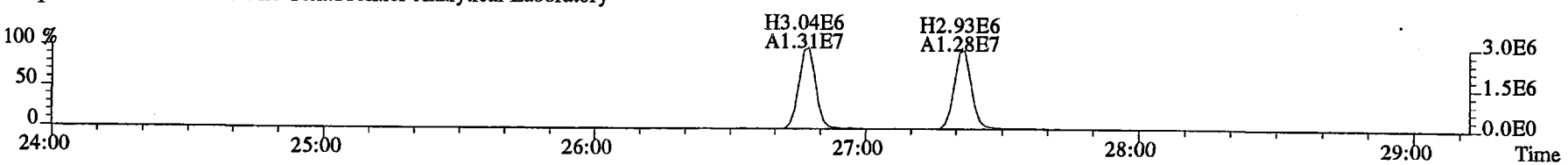
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



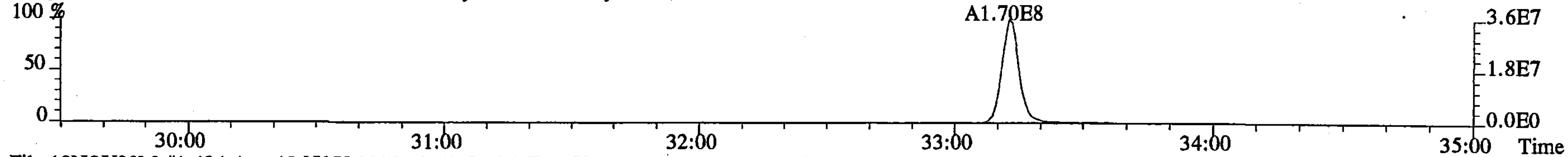
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



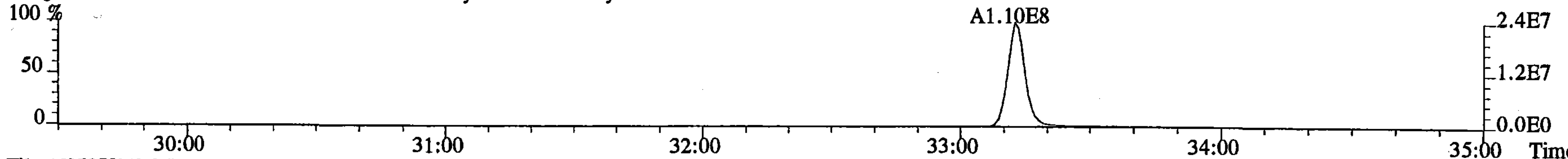
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



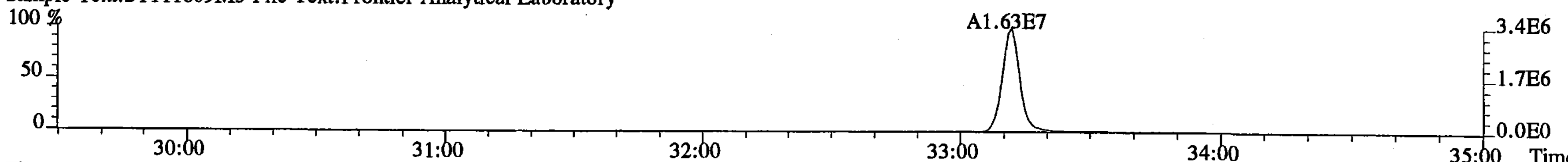
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



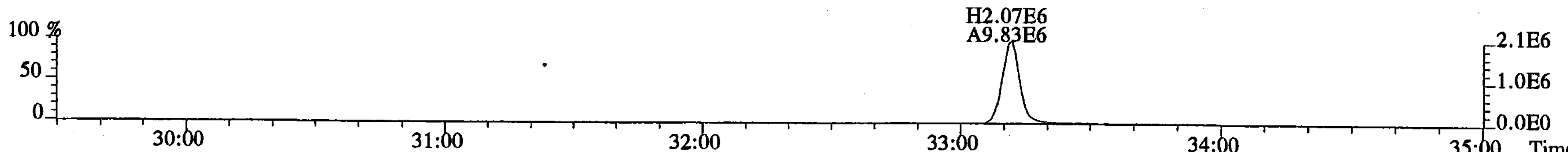
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



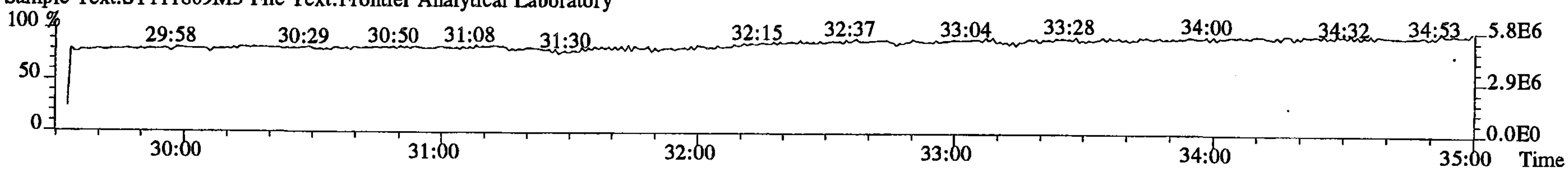
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 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:ST111809M5 File Text:Frontier Analytical Laboratory

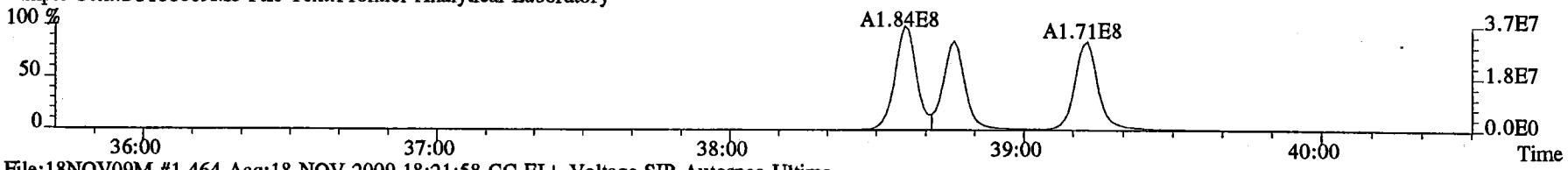


File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

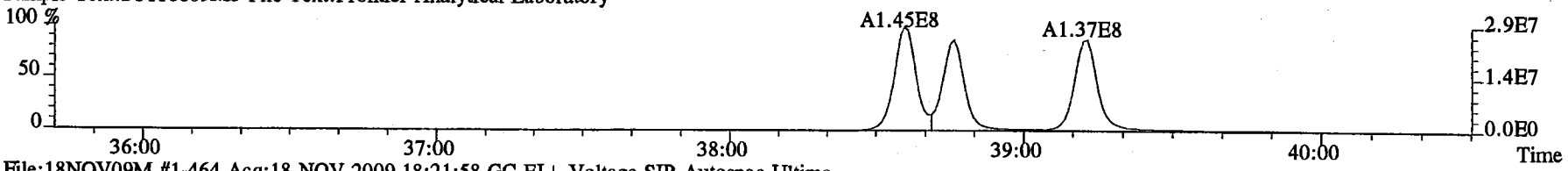


QQ20 : 00969

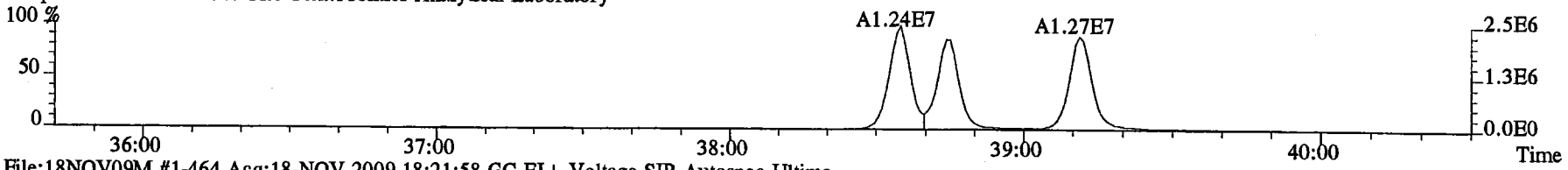
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



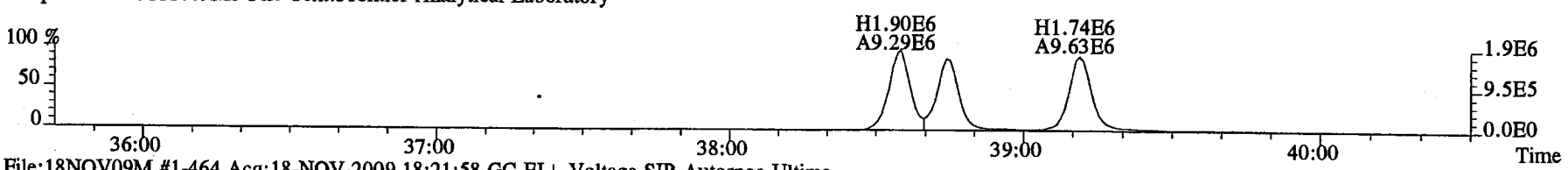
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



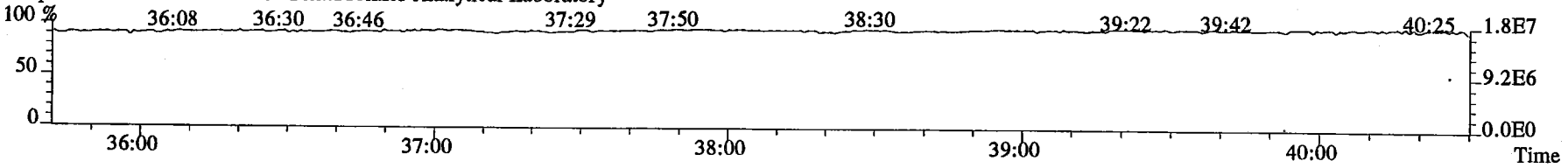
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



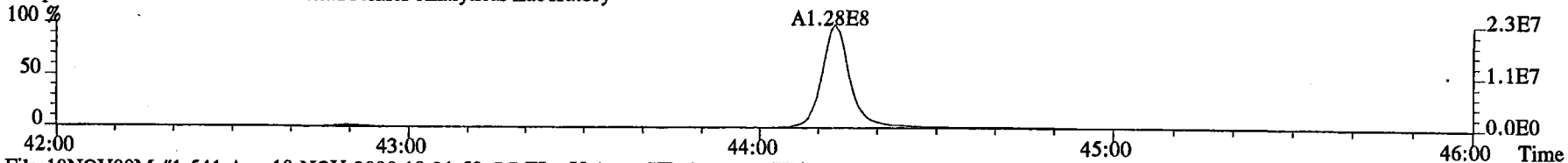
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



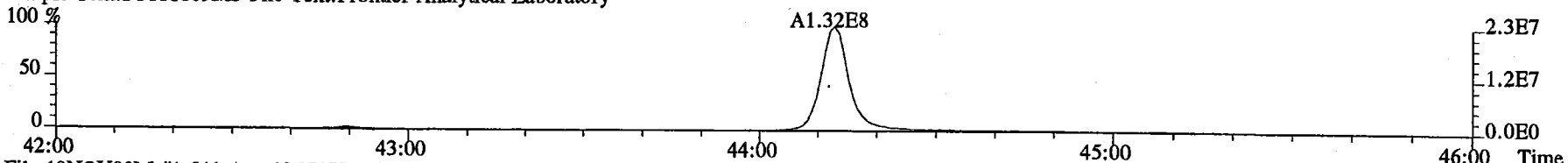
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



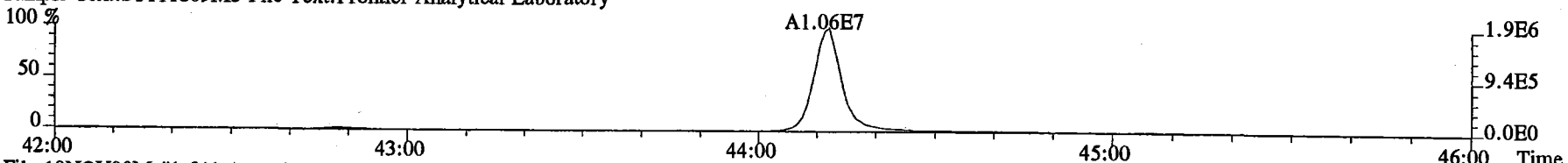
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



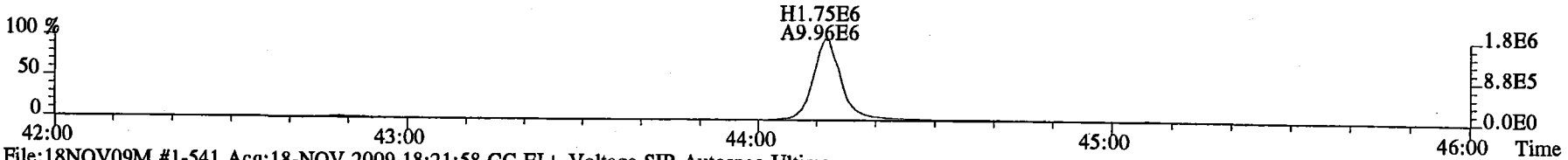
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



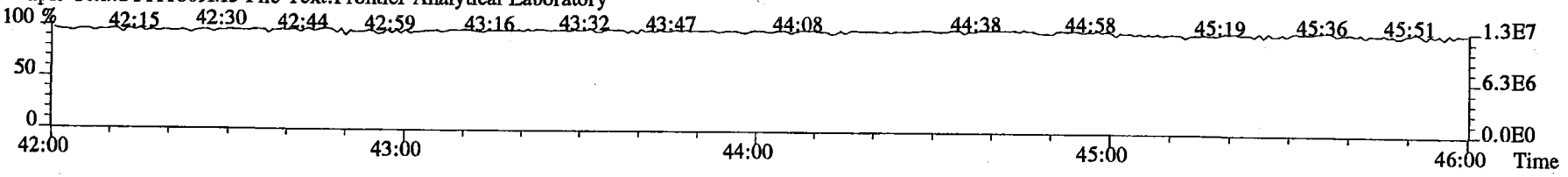
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



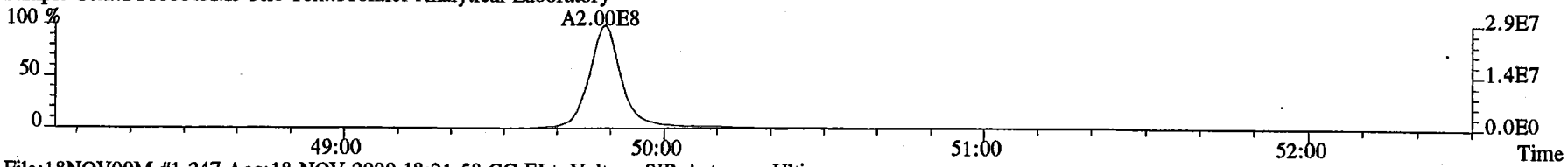
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



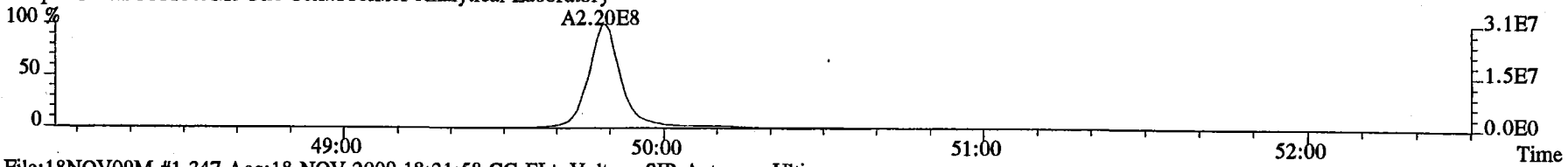
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



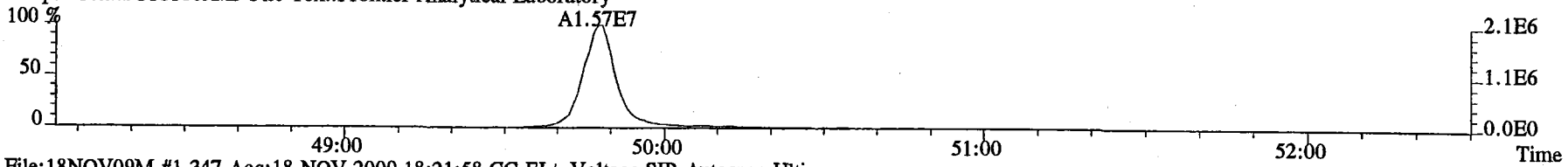
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



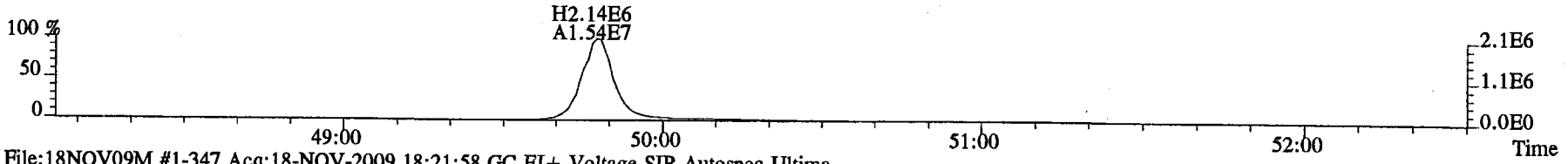
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



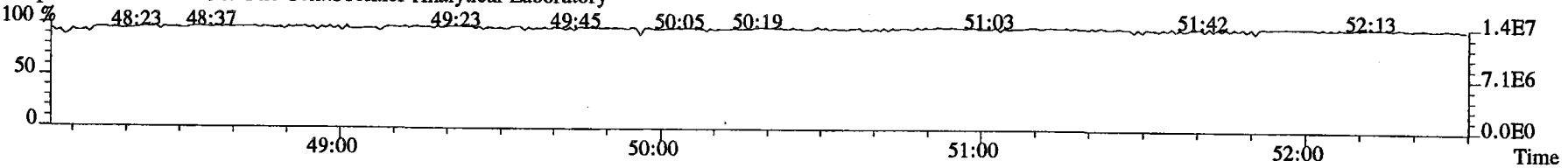
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



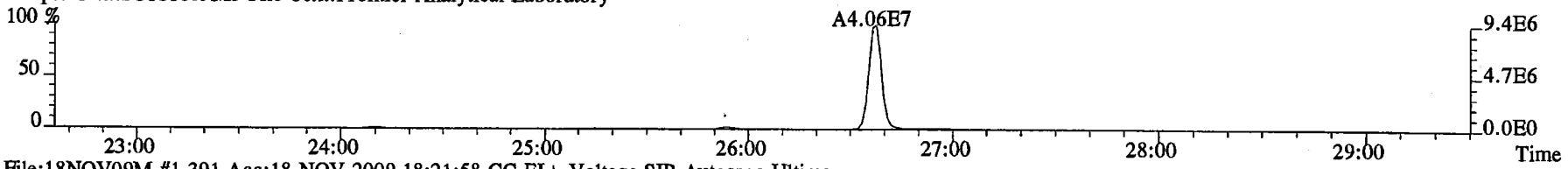
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



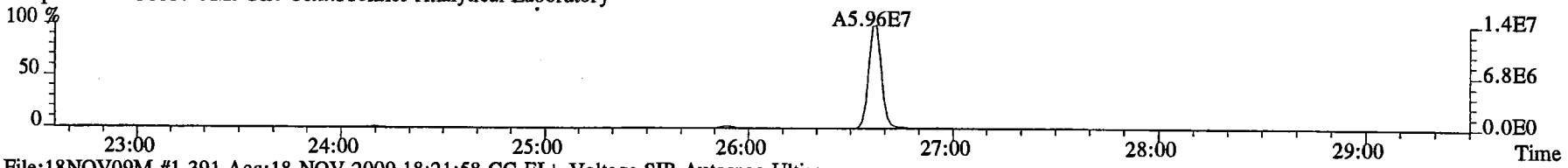
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



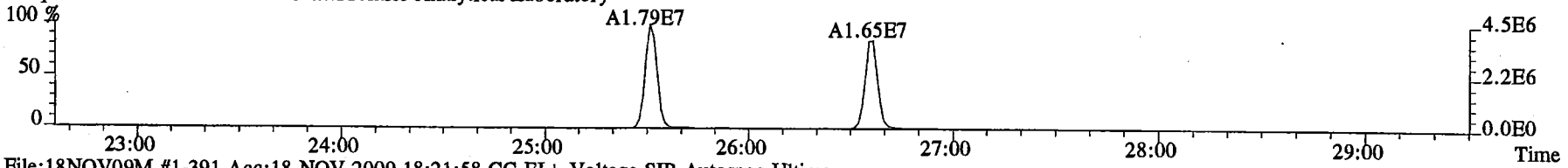
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



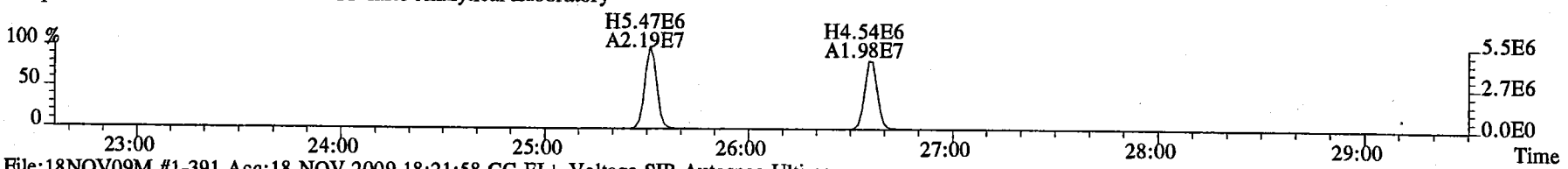
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



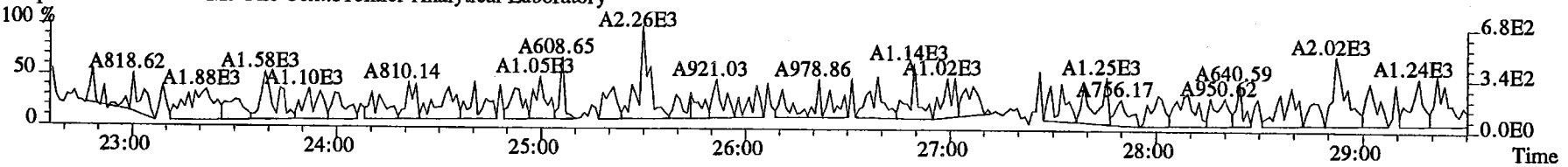
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



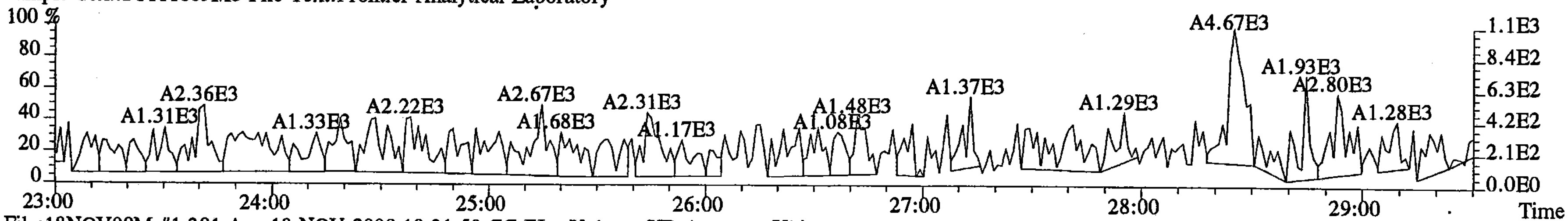
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



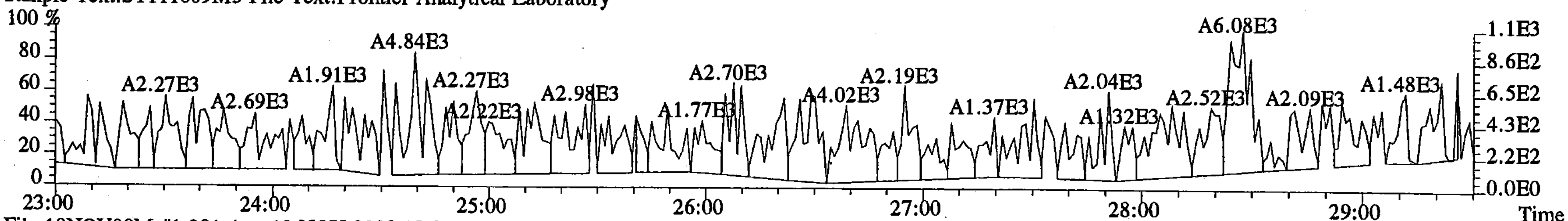
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



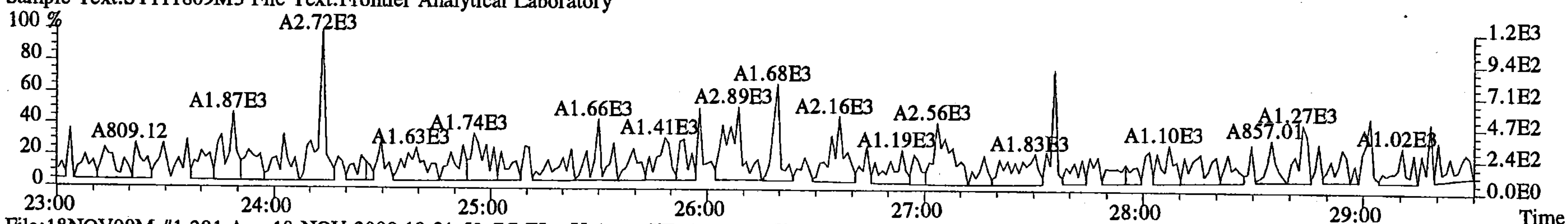
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



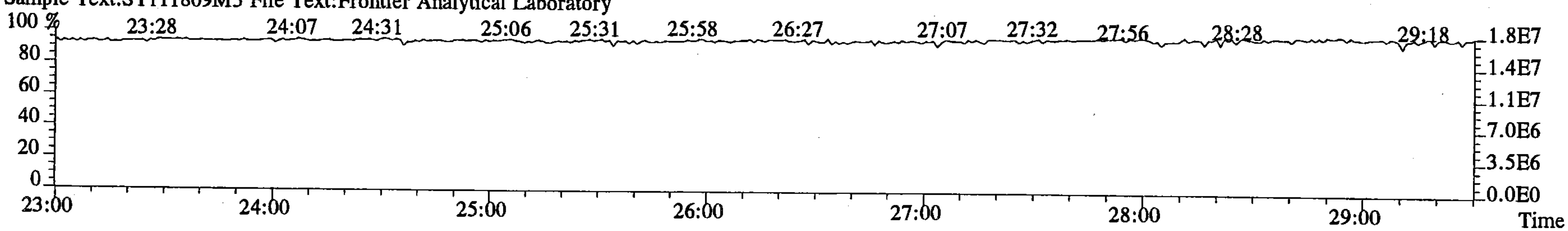
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



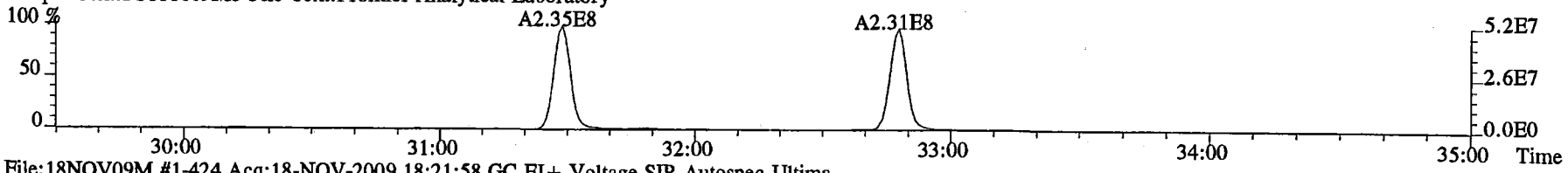
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



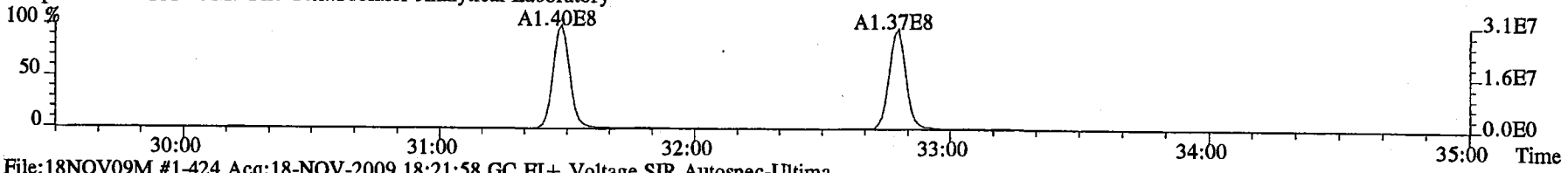
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



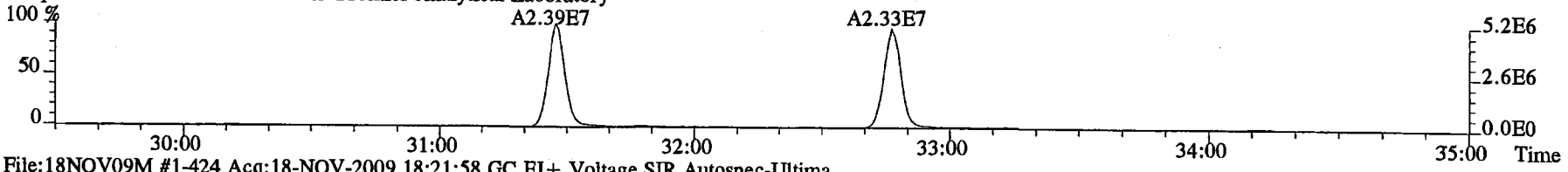
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



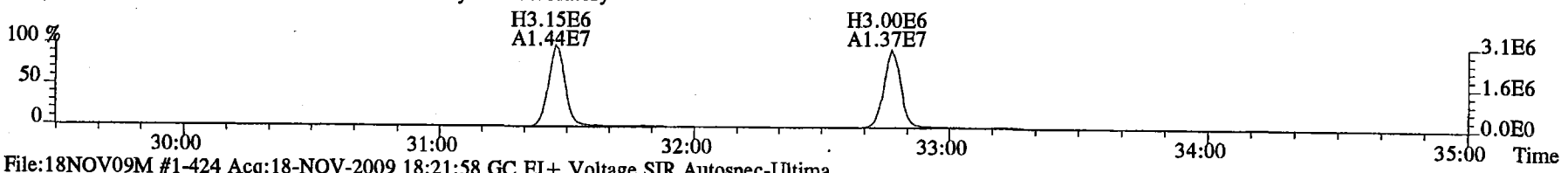
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



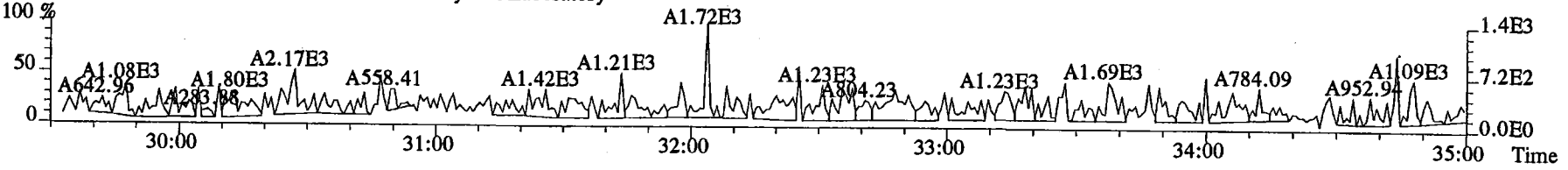
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



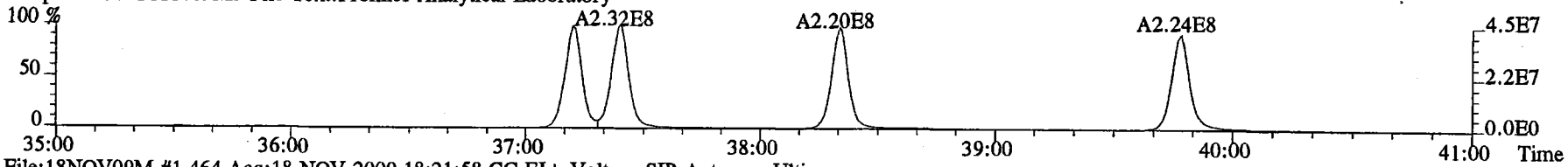
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



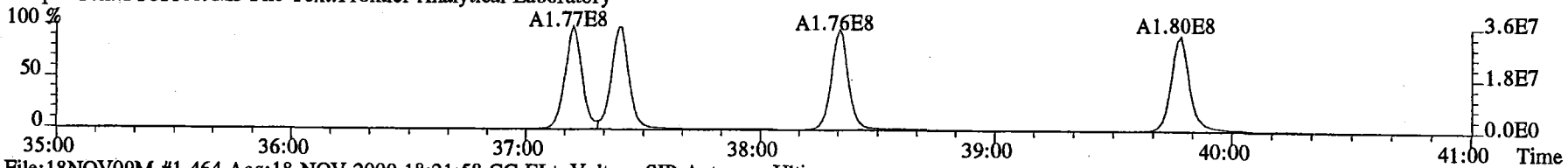
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



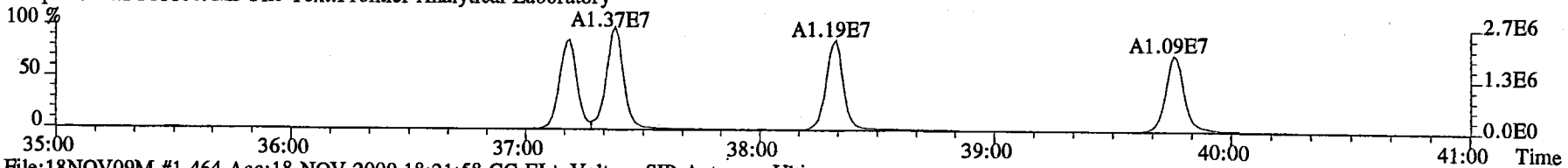
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



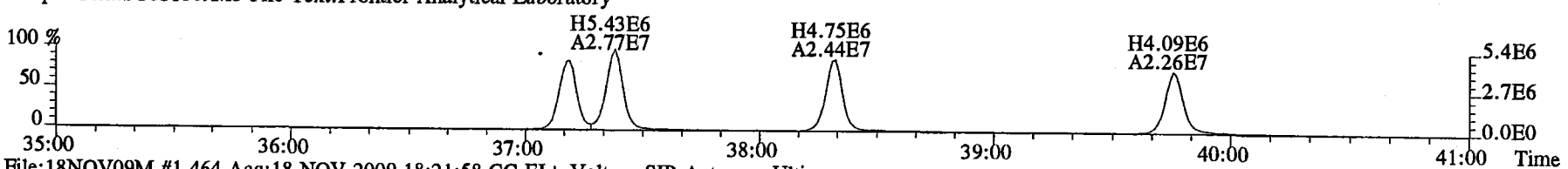
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



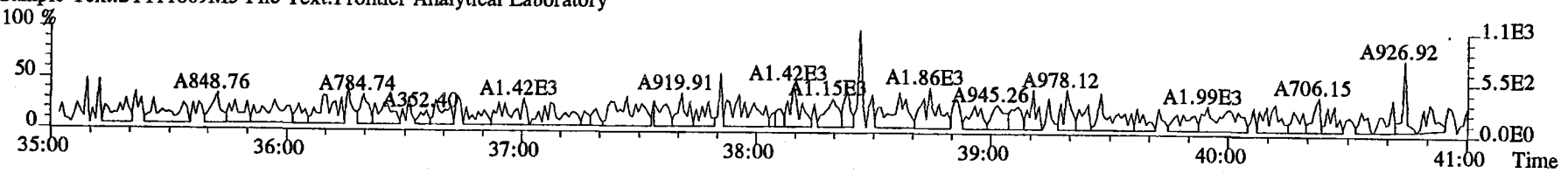
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



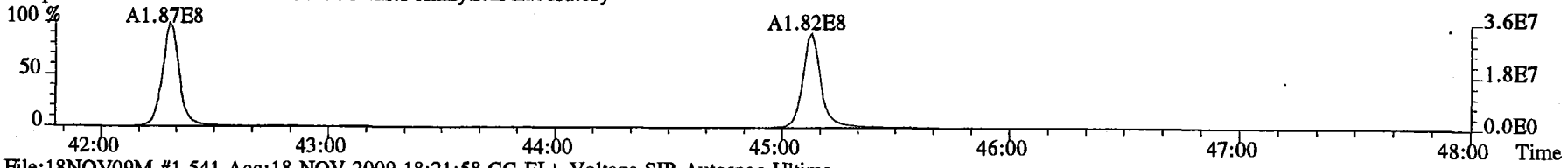
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



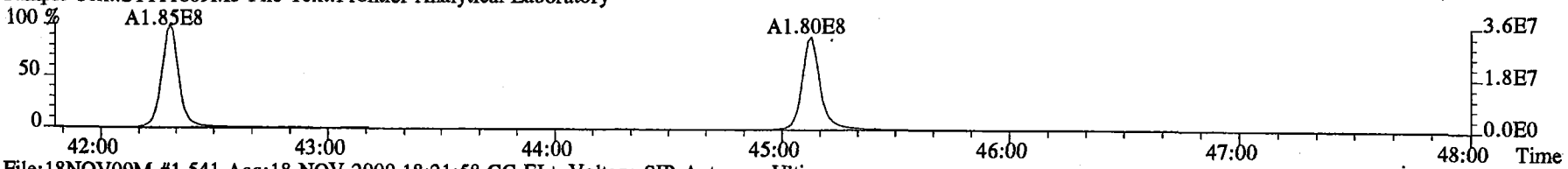
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



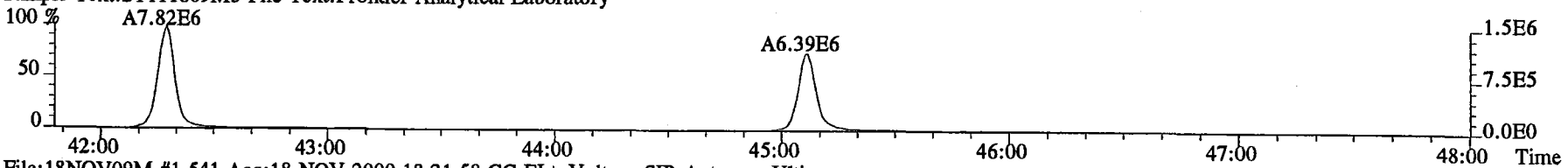
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



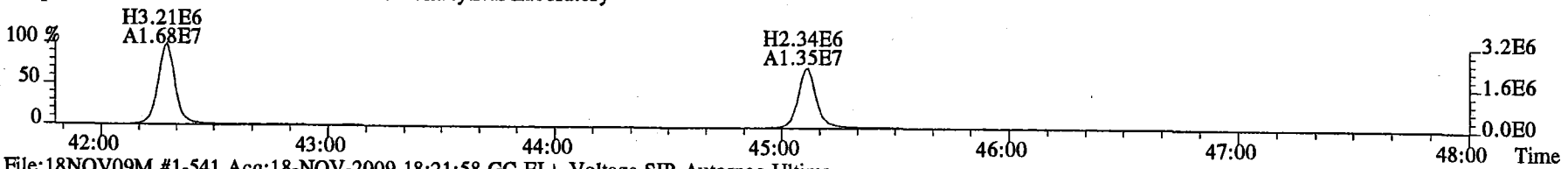
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



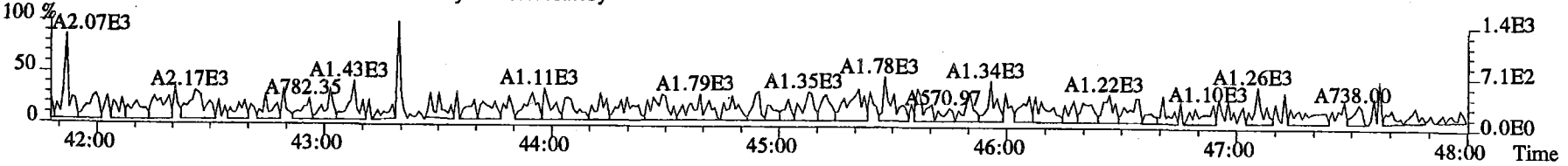
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



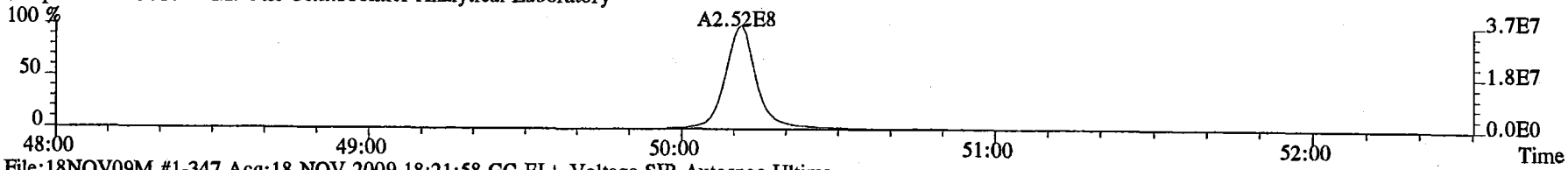
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



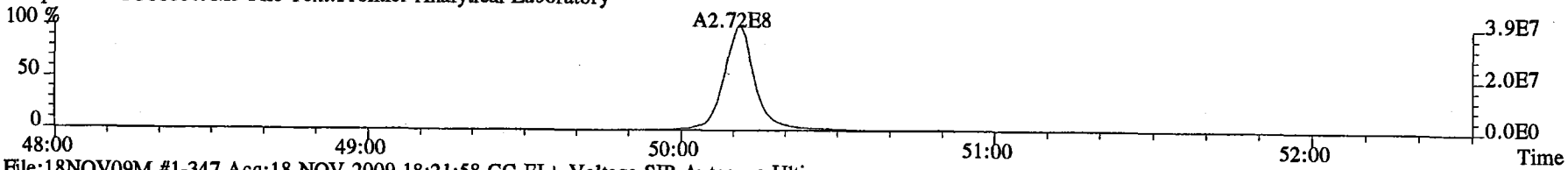
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



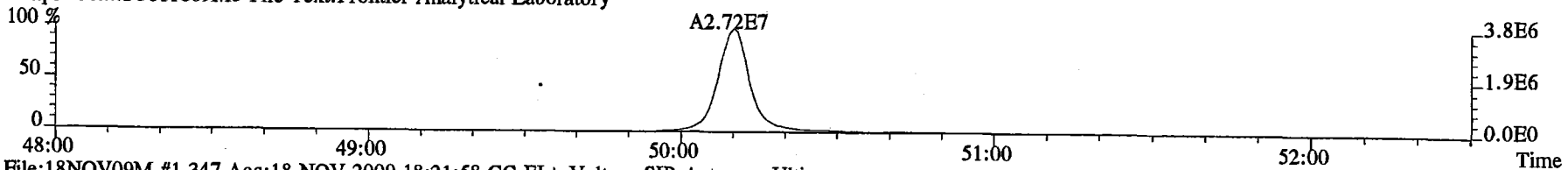
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



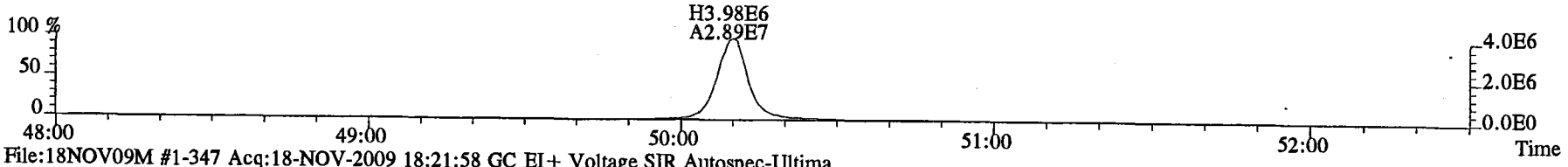
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



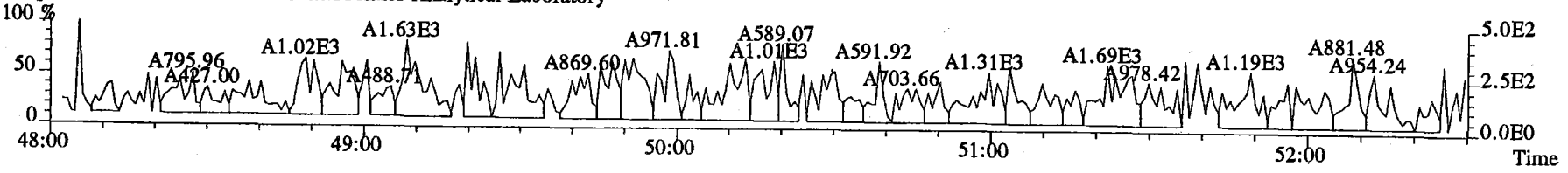
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 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:ST111809M5 File Text:Frontier Analytical Laboratory

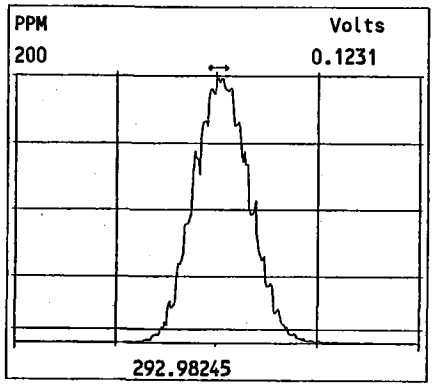


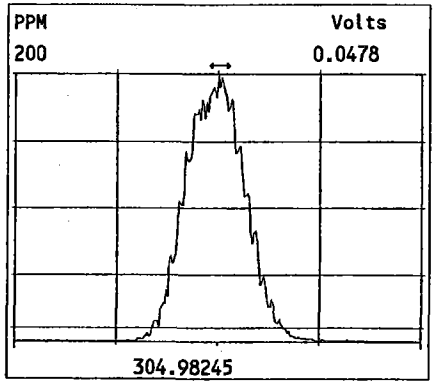
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

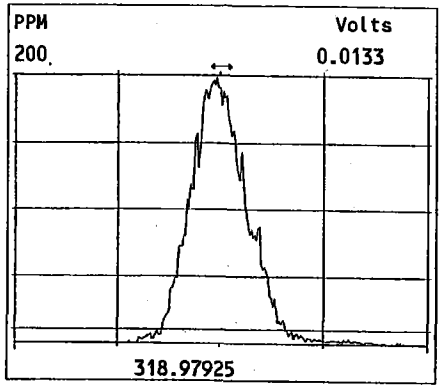


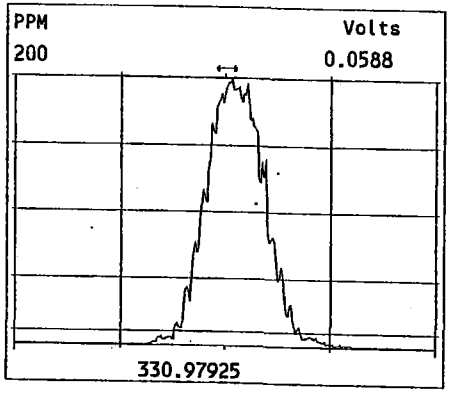
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK

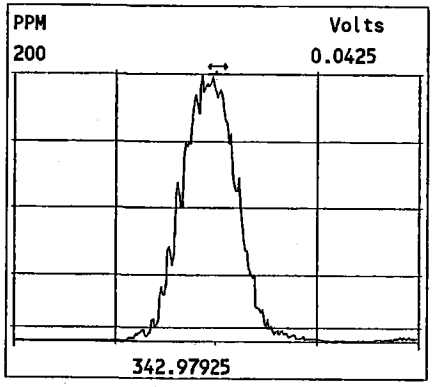
Experiment:PCDD Function:1 Reference:PFK

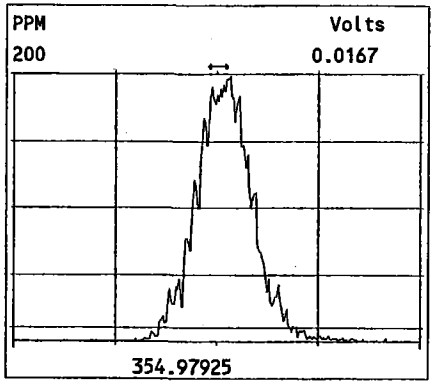


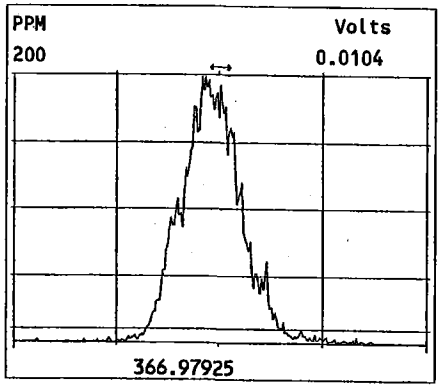


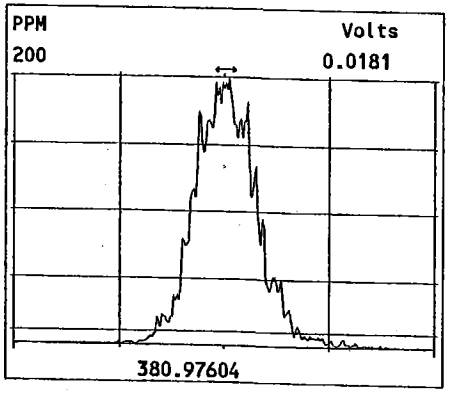


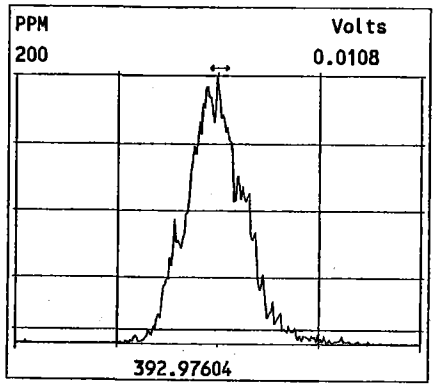


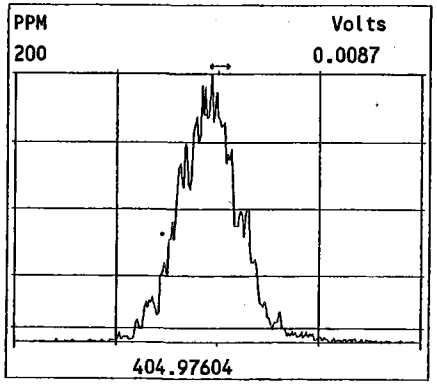


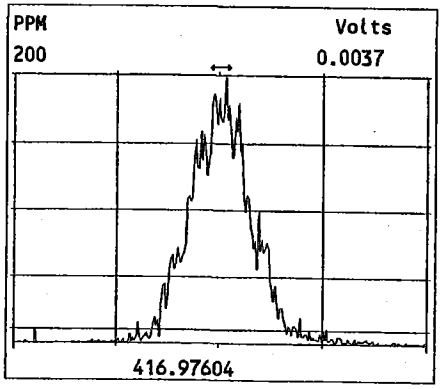






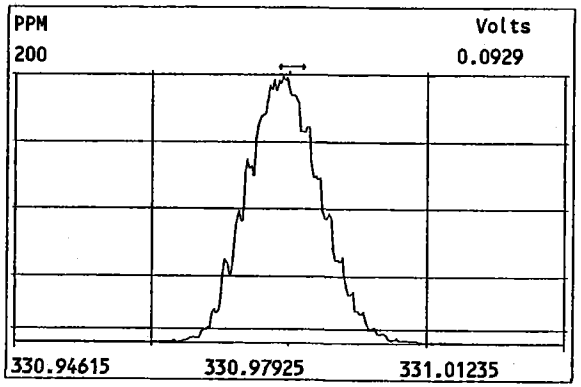


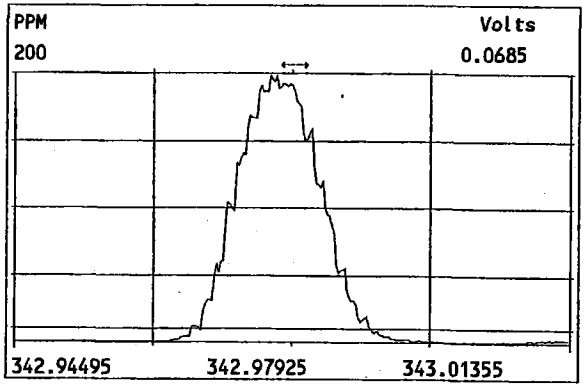


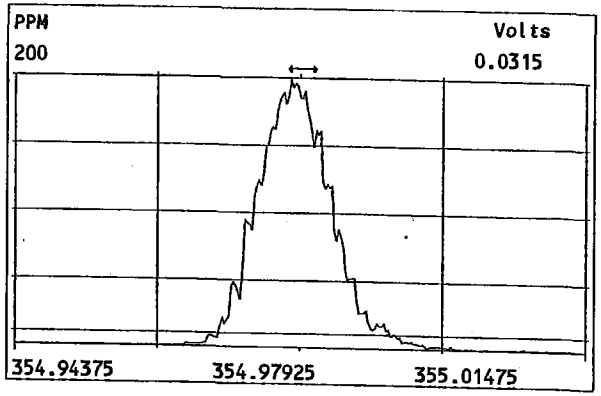


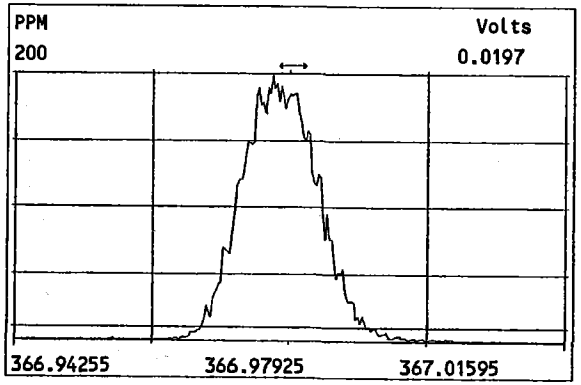
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK

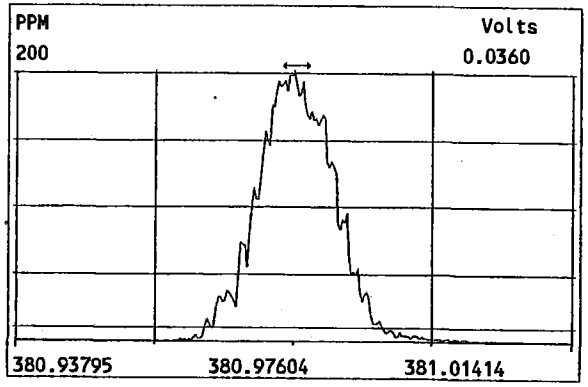
Experiment:PCDD Function:2 Reference:PFK

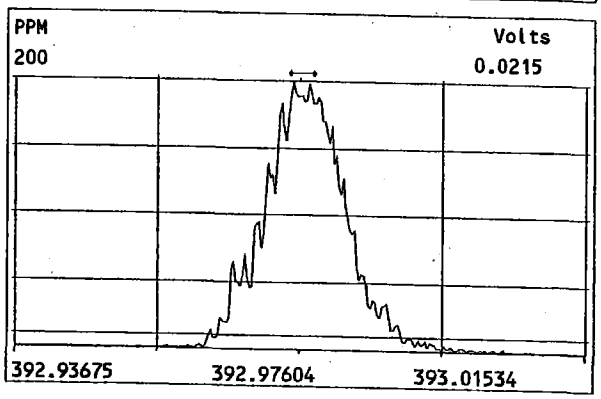


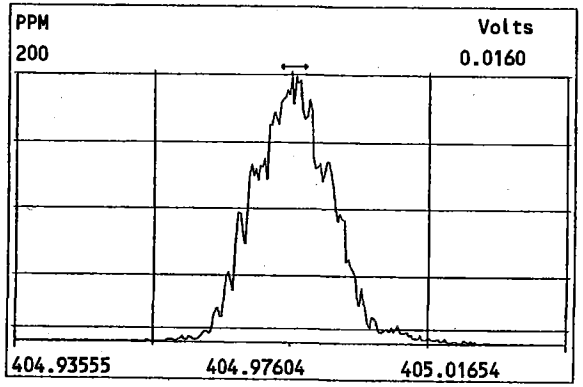


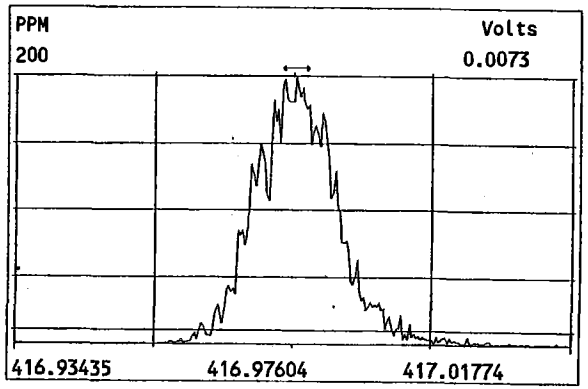




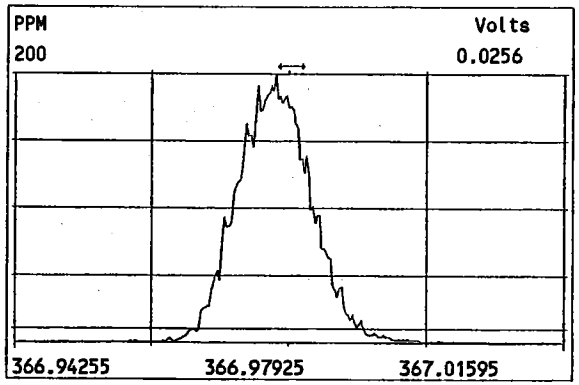


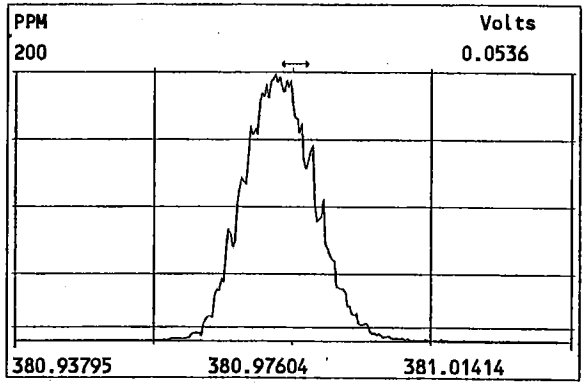


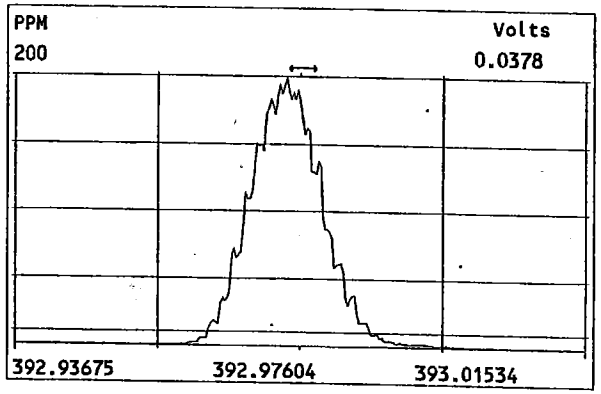


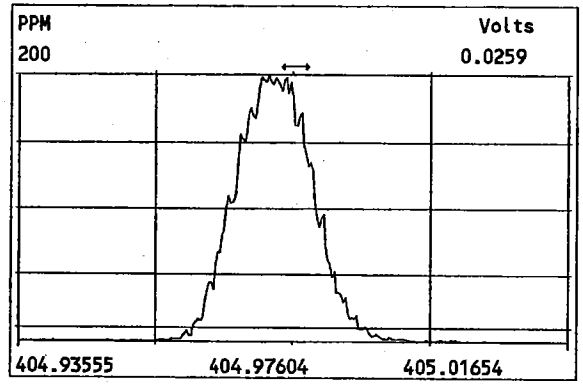


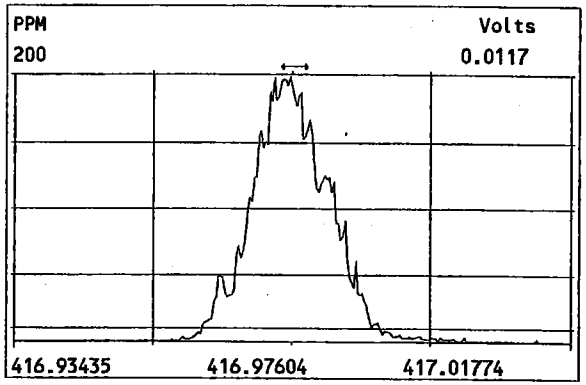
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

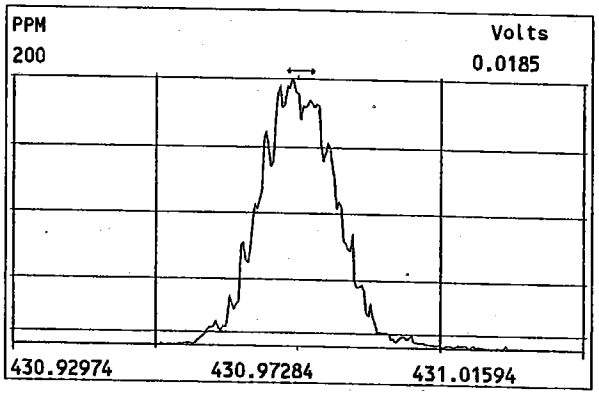


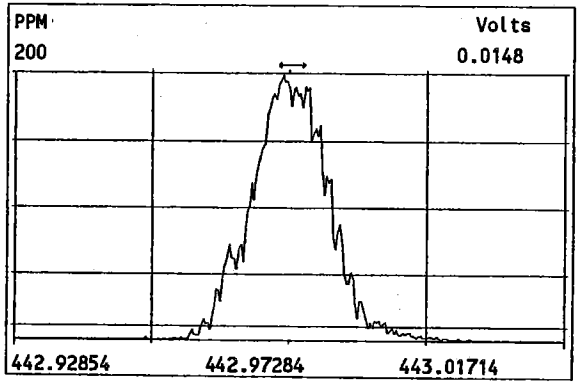


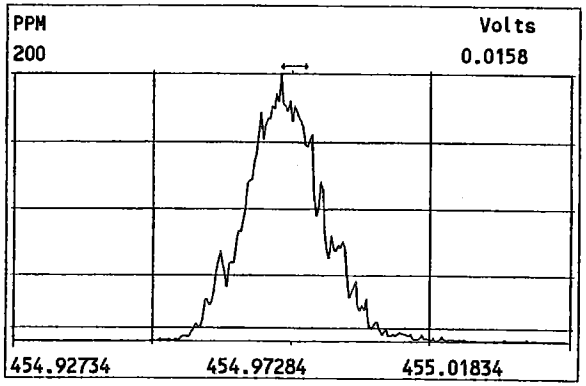




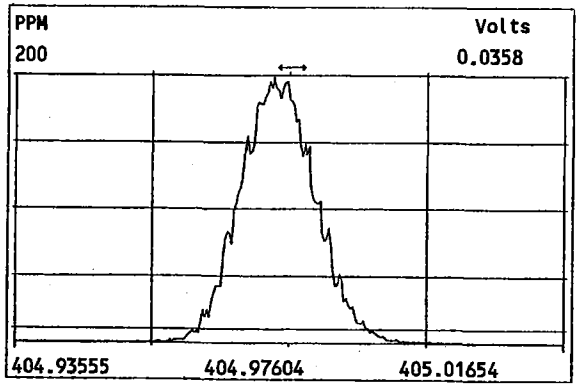


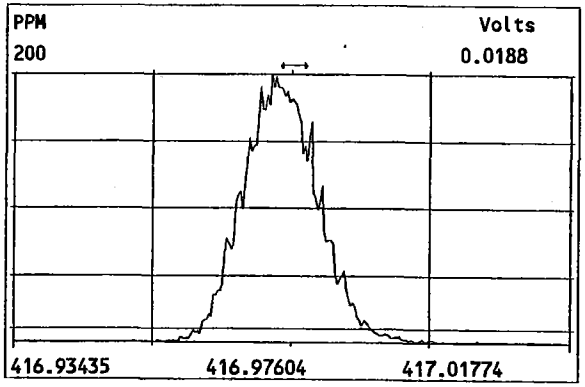


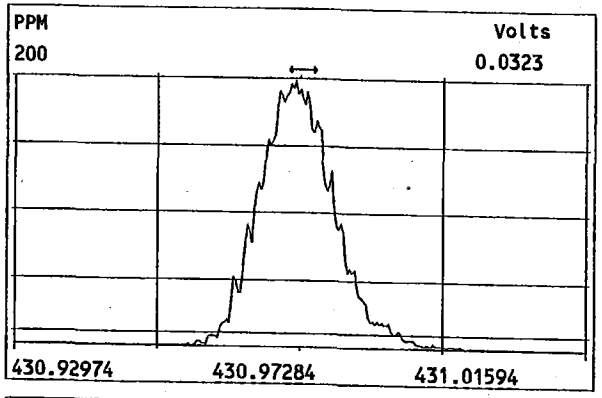


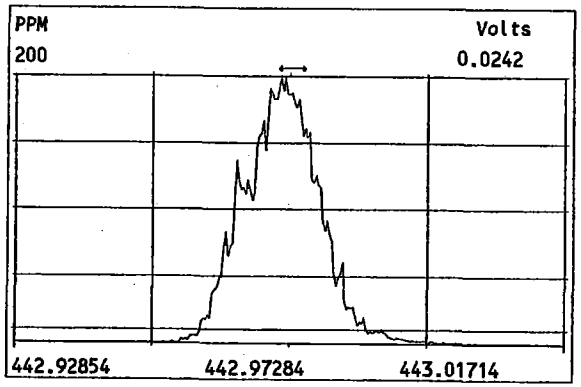


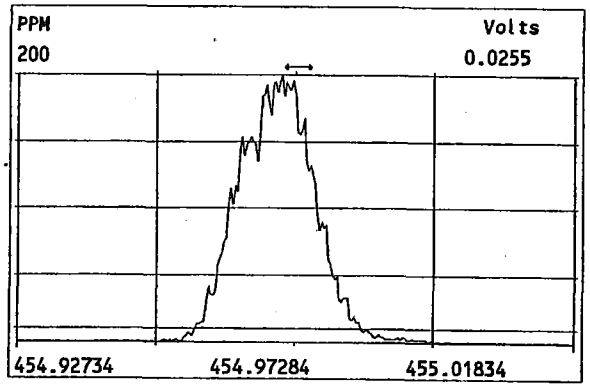
Peak Locate Examination:19-NOV-2009:14:43 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

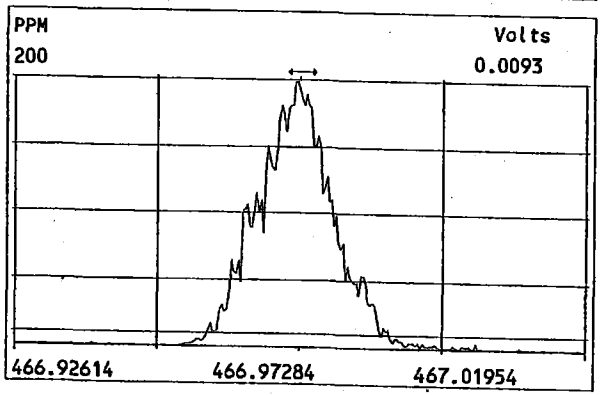


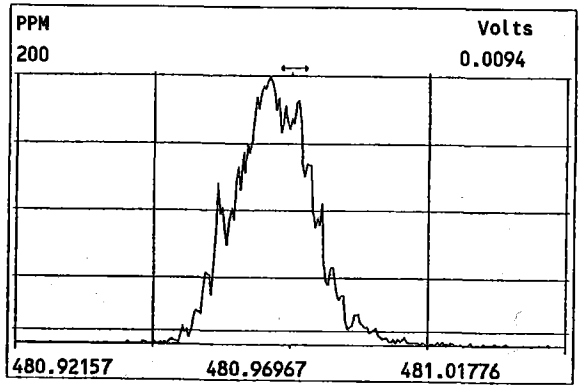




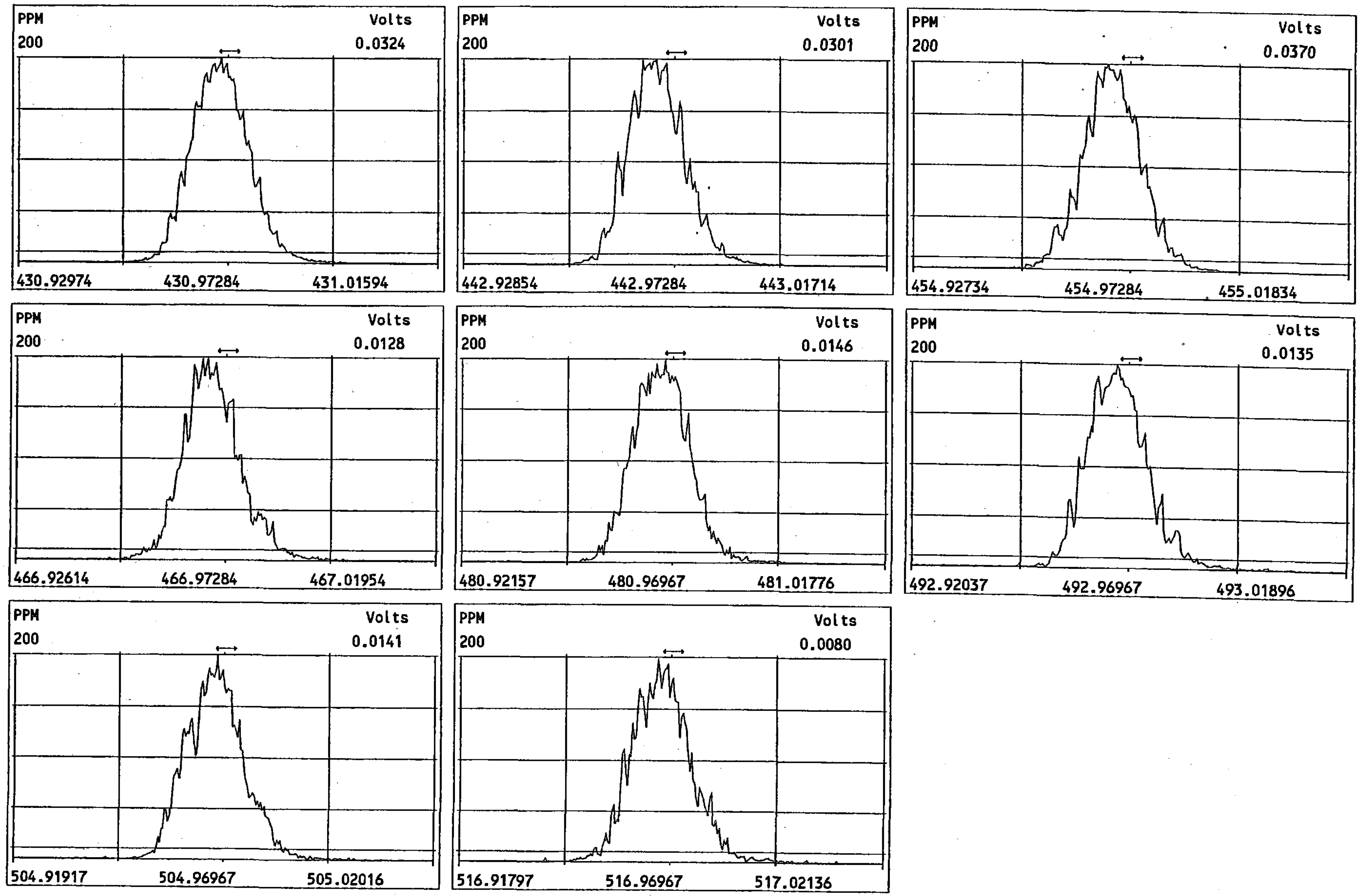








Peak Locate Examination:19-NOV-2009:14:43 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK



Continuing/Ending Calibration Results

USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 06APR10M Sam:1 Analysis Date: 6-APR-10 09:12:42

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	0.81	0.65-0.89	y	9.94	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32-1.78	y	51.2	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.1	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	48.1	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.28	1.05-1.43	y	47.3	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.97	0.88-1.20	y	47.0	43.0 - 58.0
OCDD	M+2/M+4	1.00	0.76-1.02	y	101	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.68	0.65-0.89	y	9.66	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.68	1.32-1.78	y	51.5	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.69	1.32-1.78	y	49.7	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	49.9	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	50.1	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.1	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	49.8	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	50.0	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88-1.20	y	50.4	43.0 - 58.0
OCDF	M+2/M+4	0.94	0.76-1.02	y	96.6	63.0 - 159

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

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

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

Analyst: _____ Date: 4/7/10

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 06APR10M Sam:1 Analysis Date: 6-APR-10 09:12:42

	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	0.72	0.65-0.89	y	99.1	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.74	1.32-1.78	y	88.8	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	106	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	103	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.99	0.88-1.20	y	105	72.0 - 138
13C-OCDD	M+2/M+4	1.00	0.76-1.02	y	177	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.87	0.65-0.89	y	103	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.66	1.32-1.78	y	90.7	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.67	1.32-1.78	y	84.7	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	104	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	98.5	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	96.6	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.48	0.43-0.59	y	93.4	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	95.7	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37-0.51	y	89.7	77.0 - 129
13C-OCDF	M+2/M+4	0.96	0.76-1.02	y	170	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					10.1	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: 4/7/10

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: 11/18/09

RT Window Data Filename: 06APR10M Sam:1 Analysis Date: 6-APR-10 Time: 09:12:42

DB-5 IS Data Filename: 06APR10M Sam:1 Analysis Date: 6-APR-10 Time: 09:12:42

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)	24:23	1,3,6,8-TCDF (F)	23:02
1,2,8,9-TCDD (L)	28:18	1,2,8,9-TCDF (L)	28:30
1,2,4,7,9-PeCDD (F)	30:13	1,3,4,6,8-PeCDF (F)	28:24
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)	36:06	1,2,3,4,6,8-HxCDF (F)	35:14
1,2,3,7,8,9-HxCDD (L)	39:10	1,2,3,7,8,9-HxCDF (L)	39:43
1,2,3,4,6,7,9-HpCDD (F)	42:47	1,2,3,4,6,7,8-HpCDF (F)	42:15
1,2,3,4,6,7,8-HpCDD (L)	44:10	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: _____ Date: 4/7/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 6-APR-10 09:12:42 CS3 or VER Data Filename: 06APR10M 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	1.000	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.238	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	0.923-1.203
13C-2,3,4,7,8-PeCDF		1.222	0.923-1.303

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

Analyst: _____ Date: 4/7/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 6-APR-10 09:12:42 CS3 or VER Data Filename: 06APR10M 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	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	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: 4/7/10

FAL ID: ST040610M1 Filename: 06APR10M Sam:1 Acquired: 6-APR-10 09:12:42 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 090918J ConCal: ST040610M1 EndCal: ST040610M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 100.0
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	2.70e+06	0.81 y	27:21	1.02	9.94		2.50	-	-	*
1,2,3,7,8-PeCDD	1.27e+07	1.55 y	33:11	0.96	51.2		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.16e+07	1.27 y	38:33	1.37	48.1		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.04e+07	1.28 y	38:43	1.34	48.1		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.09e+07	1.28 y	39:10	1.37	47.3		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	8.66e+06	0.97 y	44:10	1.17	47.0		2.50	-	-	*
OCDD	1.21e+07	1.00 y	49:43	1.21	101		2.50	-	-	*
2,3,7,8-TCDF	5.44e+06	0.68 y	26:36	1.29	9.66		2.50	-	-	*
1,2,3,7,8-PeCDF	1.76e+07	1.68 y	31:27	0.89	51.5		2.50	-	-	*
2,3,4,7,8-PeCDF	1.57e+07	1.69 y	32:45	0.91	49.7		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.49e+07	1.24 y	37:10	1.00	49.9		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.51e+07	1.26 y	37:22	0.92	50.1		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.38e+07	1.24 y	38:18	0.99	50.1		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.27e+07	1.24 y	39:43	1.09	49.8		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.20e+07	1.01 y	42:15	1.36	50.0		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.03e+07	1.01 y	45:04	1.61	50.4		2.50	-	-	*
OCDF	1.36e+07	0.94 y	50:05	0.84	96.6		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.67e+07	0.72 y	27:20	0.94	99.1					99.1
13C-1,2,3,7,8-PeCDD	2.58e+07	1.74 y	33:10	1.02	88.8					88.8
13C-1,2,3,4,7,8-HxCDD	1.75e+07	1.28 y	38:32	0.98	106					106
13C-1,2,3,6,7,8-HxCDD	1.61e+07	1.31 y	38:42	0.94	103					103
13C-1,2,3,4,6,7,8-HpCDD	1.58e+07	0.99 y	44:09	0.90	105					105
13C-OCDD	1.97e+07	1.00 y	49:42	0.67	177					88.4
13C-2,3,7,8-TCDF	4.38e+07	0.87 y	26:35	0.88	103					103
13C-1,2,3,7,8-PeCDF	3.85e+07	1.66 y	31:26	0.88	90.7					90.7
13C-2,3,4,7,8-PeCDF	3.48e+07	1.67 y	32:44	0.85	84.7					84.7
13C-1,2,3,4,7,8-HxCDF	2.98e+07	0.49 y	37:09	1.72	104					104
13C-1,2,3,6,7,8-HxCDF	3.30e+07	0.49 y	37:20	2.00	98.5					98.5
13C-2,3,4,6,7,8-HxCDF	2.80e+07	0.49 y	38:16	1.74	96.6					96.6
13C-1,2,3,7,8,9-HxCDF	2.35e+07	0.48 y	39:42	1.51	93.4					93.4
13C-1,2,3,4,6,7,8-HpCDF	1.76e+07	0.45 y	42:15	1.10	95.7					95.7
13C-1,2,3,4,7,8,9-HpCDF	1.27e+07	0.47 y	45:03	0.85	89.7					89.7
13C-OCDF	3.33e+07	0.96 y	50:04	1.17	170					84.9
37Cl-2,3,7,8-TCDD	2.80e+06		27:21	0.97	10.1					101
13C-1,2,3,4-TCDD	2.86e+07	0.73 y	26:47	-	109					
13C-1,2,3,4-TCDF	4.83e+07	0.88 y	25:30	-	105					
13C-1,2,3,7,8,9-HxCDD	1.67e+07	1.33 y	39:09	-	81.5					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.44e+07		24:23	1.02	53.0	2.50	-	-	*		19
Total Penta-Dioxins	2.75e+07		30:13	0.96	111	2.50	-	-	*		8
Total Hexa-Dioxins	3.77e+07		36:06	1.36	165	2.50	-	-	*		11
Total Hepta-Dioxins	1.87e+07		42:47	1.17	102	2.50	-	-	*		15
Total Tetra-Furans	2.24e+07		23:02	1.29	39.8	2.50	-	-	*		22
1st Fn. Tot Penta-Furans	1.92e+07		28:24	0.90	58.5	2.50	-	-	*	PeCDF	1
Total Penta-Furans	4.80e+07		29:59	0.90	146	2.50	-	-	*	204	15
Total Hexa-Furans	6.59e+07		35:14	0.99	233	2.50	-	-	*		17
Total Hepta-Furans	2.30e+07		42:15	1.47	104	2.50	-	-	*		4

Analyst: _____ Date: 4/7/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:06APR10M Instrument: FAL3 GC: DB5 Experiment:PCDD

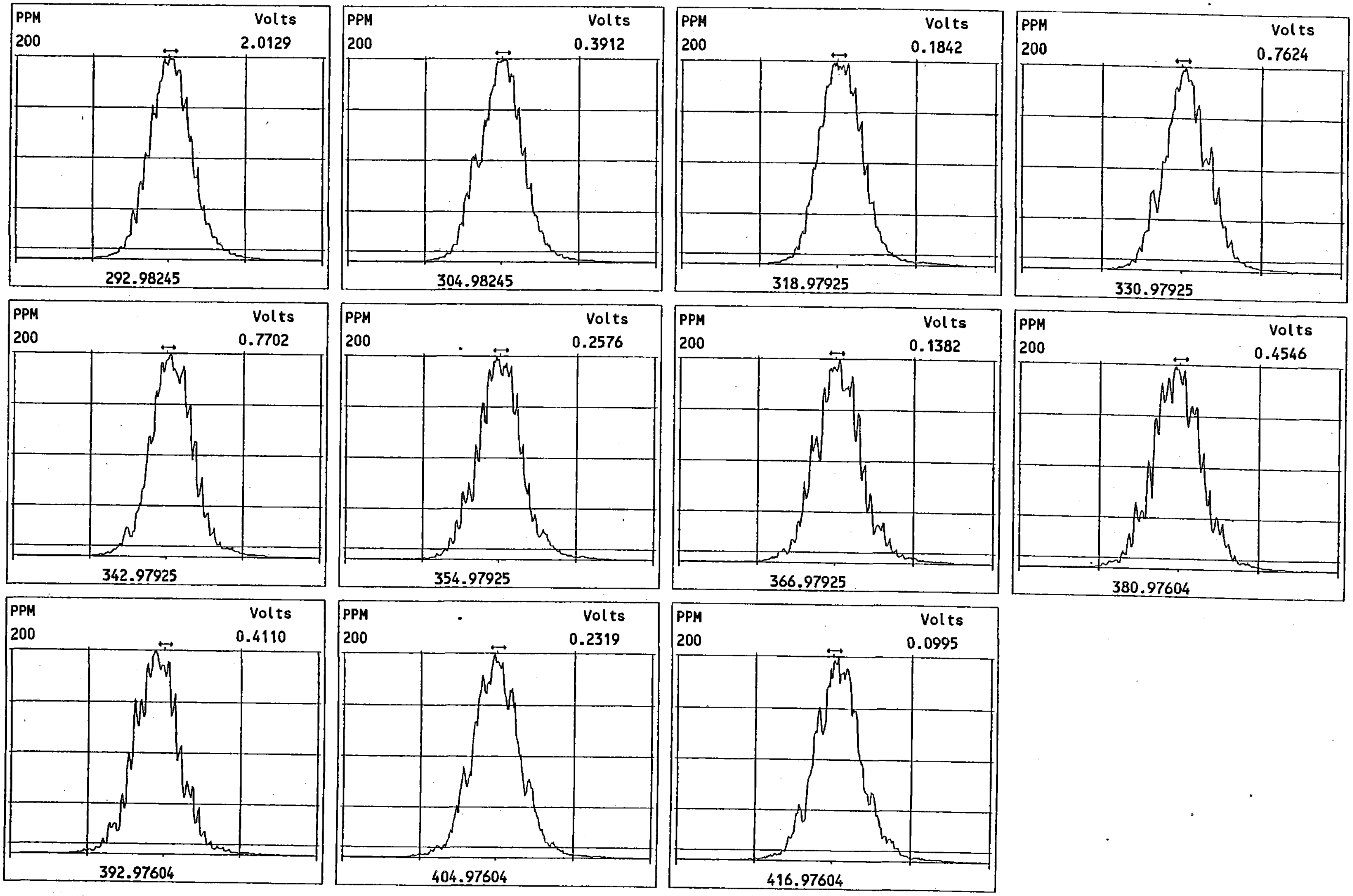
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
06APR10M	1	ST040610M1	1613 CS3 090918J	6-APR-10 09:12:42	ST040610M1	ST040610M2	BS
06APR10M	2	SB040610M1	Solvent Blank	6-APR-10 10:08:01	ST040610M1	ST040610M2	BS
06APR10M	3	1979-001-0001-MB	Method Blank	6-APR-10 11:03:24	ST040510M1	ST040510M2	TC
06APR10M	4	6062-002-0001-SA	RM #51006 LOT #818066	6-APR-10 11:58:42	ST040510M1	ST040510M2	TC
06APR10M	5	6062-005-0001-SA	RM #51034 LOT #818690	6-APR-10 12:54:07	ST040510M1	ST040510M2	TC
06APR10M	6	SB040610M2	Solvent Blank	6-APR-10 13:49:30	ST040610M1	ST040610M2	BS
06APR10M	7	6050-001-0001-SA	IN-4127	6-APR-10 14:44:49	ST040610M1	ST040610M2	BS
06APR10M	8	6052-005-0001-SA	100222-FEG-02	6-APR-10 15:40:08	ST040610M1	ST040610M2	BS
06APR10M	9	6052-006-0001-SA	100222-RAW-01	6-APR-10 16:35:30	ST040610M1	ST040610M2	BS
06APR10M	10	6054-001-0001-SA	201003220077	6-APR-10 17:30:49	ST040610M1	ST040610M2	BS
06APR10M	11	6056-001-0001-SA	Effluent	6-APR-10 18:26:08	ST040610M1	ST040610M2	BS
06APR10M	12	6070-001-0001-SA	LB67159	6-APR-10 19:21:27	ST040610M1	ST040610M2	BS
06APR10M	13	SB040610M3	Solvent Blank	6-APR-10 20:16:49	ST040610M1	ST040610M2	BS
06APR10M	14	ST040610M2	1613 CS3 090918J	6-APR-10 21:12:12	ST040610M2	ST040610M3	BS
06APR10M	15	1980-001-0001-OPR	OPR	6-APR-10 22:07:31	ST040610M2	ST040610M3	BS
06APR10M	16	1980-001-0001-MB	Method Blank	6-APR-10 23:02:52	ST040610M2	ST040610M3	BS
06APR10M	17	6069-001-0001-SA	CB31A032510COMP	6-APR-10 23:58:10	ST040610M2	ST040610M3	BS
06APR10M	18	6069-002-0001-SA	CB4857032510COMP	7-APR-10 00:53:33	ST040610M2	ST040610M3	BS
06APR10M	19	6069-003-0001-SA	CB1032510COMP	7-APR-10 01:48:52	ST040610M2	ST040610M3	BS
06APR10M	20	6069-004-0001-SA	CB101032510COMP	7-APR-10 02:44:11	ST040610M2	ST040610M3	BS
06APR10M	21	SB040610M4	Solvent Blank	7-APR-10 03:39:30	ST040610M2	ST040610M3	BS
06APR10M	22	ST040610M3	1613 CS3 090918J	7-APR-10 04:34:49	ST040610M2	ST040610M3	BS

4/7/10

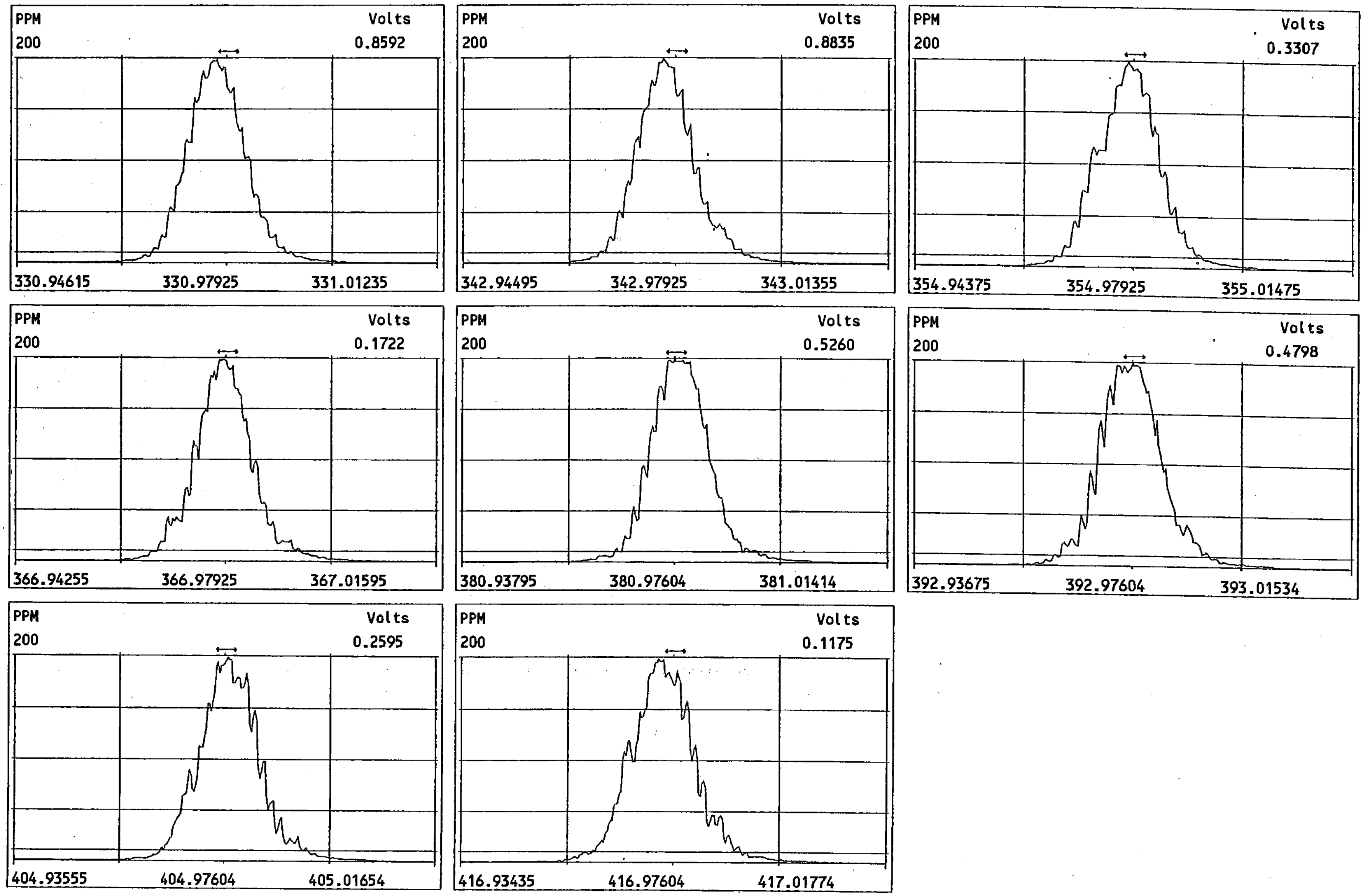
Data Backed Up:_____

Date:_____

Peak Locate Examination: 6-APR-2010:09:10 File:06APR10M
Experiment:PCDD Function:1 Reference:PFK

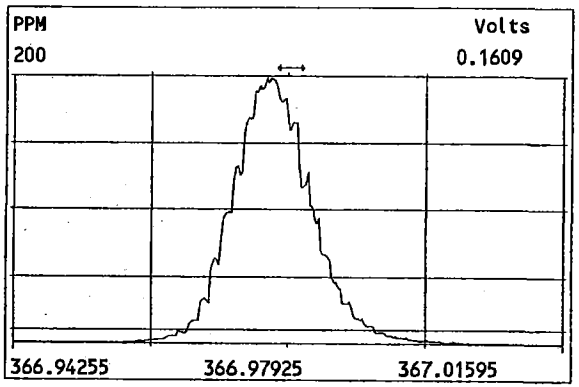


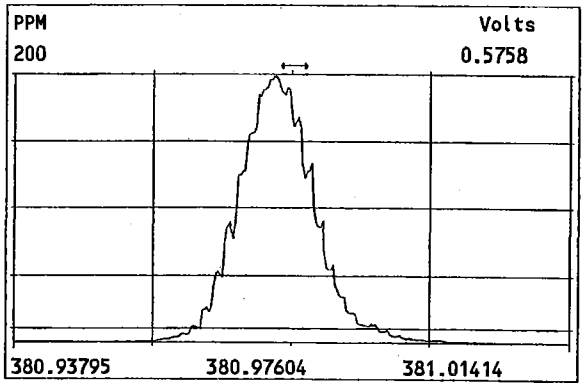
Peak Locate Examination: 6-APR-2010:09:11 File:06APR10M
Experiment:PCDD Function:2 Reference:PFK

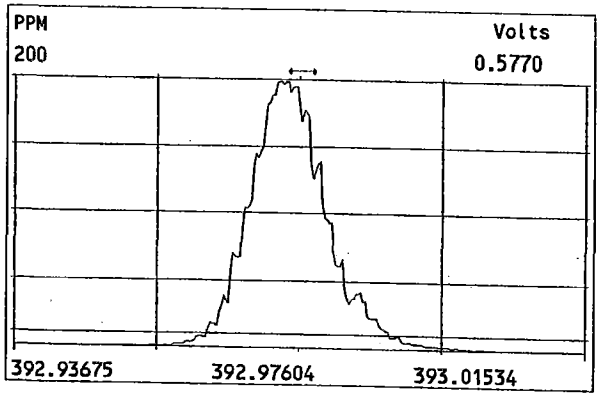


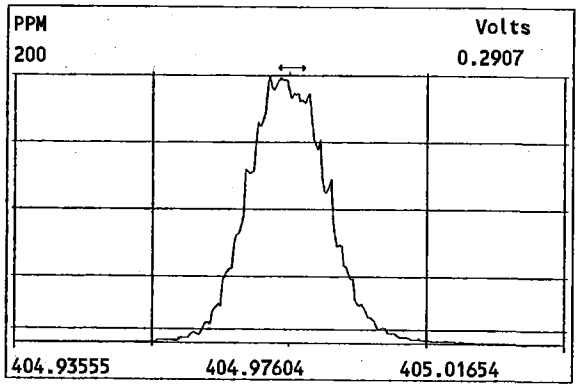
Peak Locate Examination: 6-APR-2010:09:11 File:06APR10M

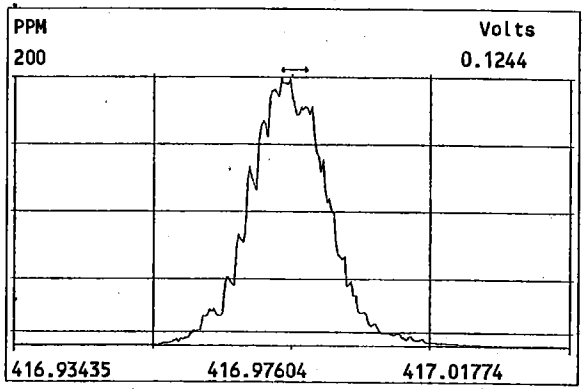
Experiment:PCDD Function:3 Reference:PFK

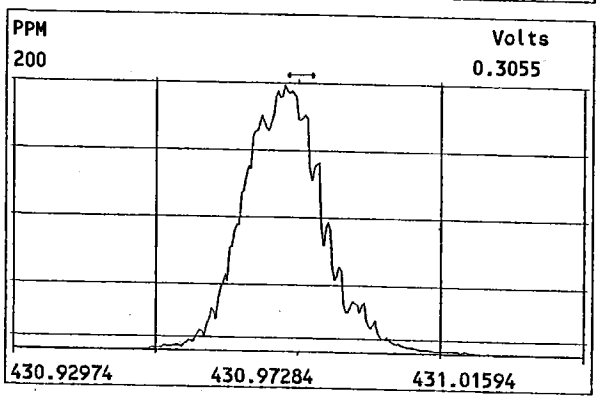


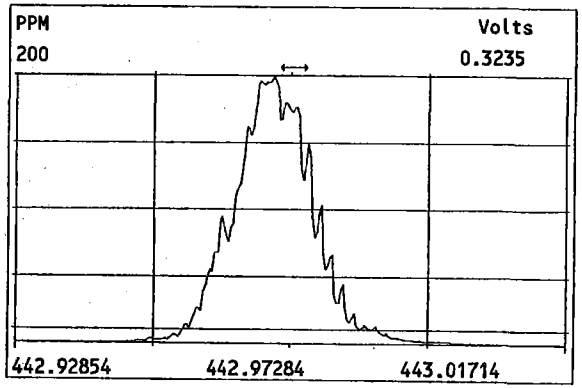


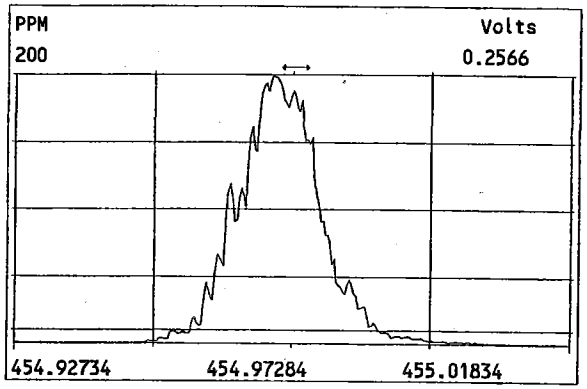




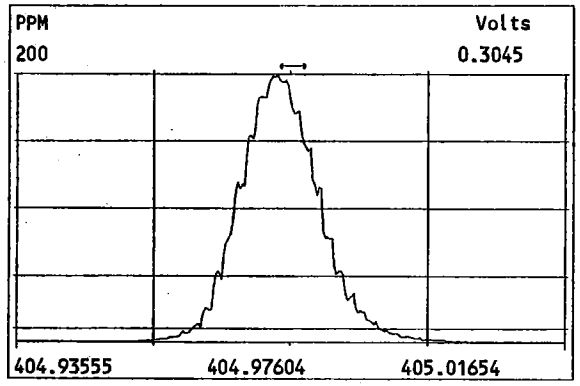


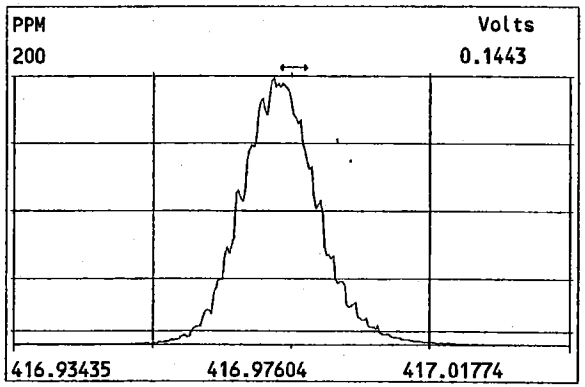


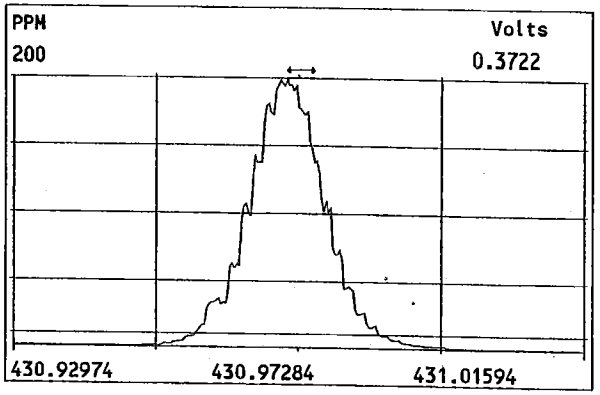


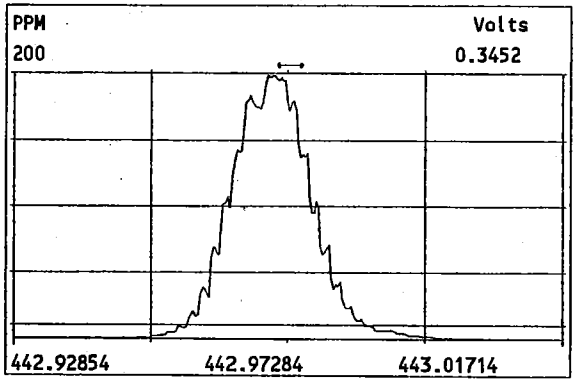


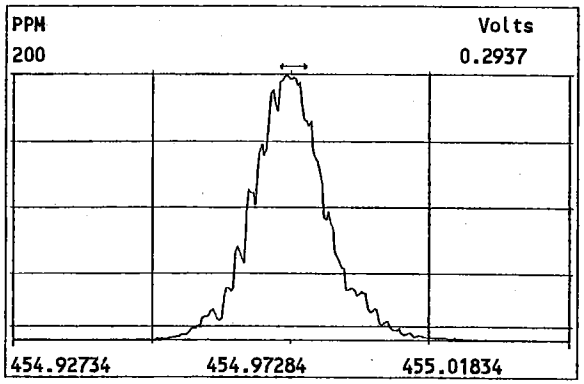
Peak Locate Examination: 6-APR-2010:09:12 File:06APR10M
Experiment:PCDD Function:4 Reference:PFK

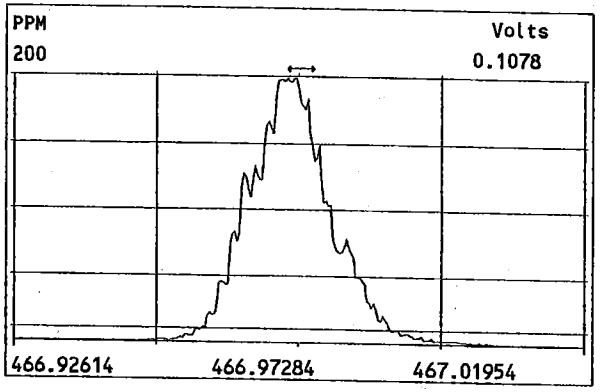


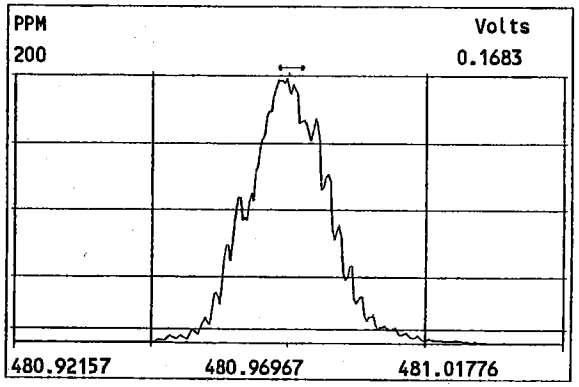




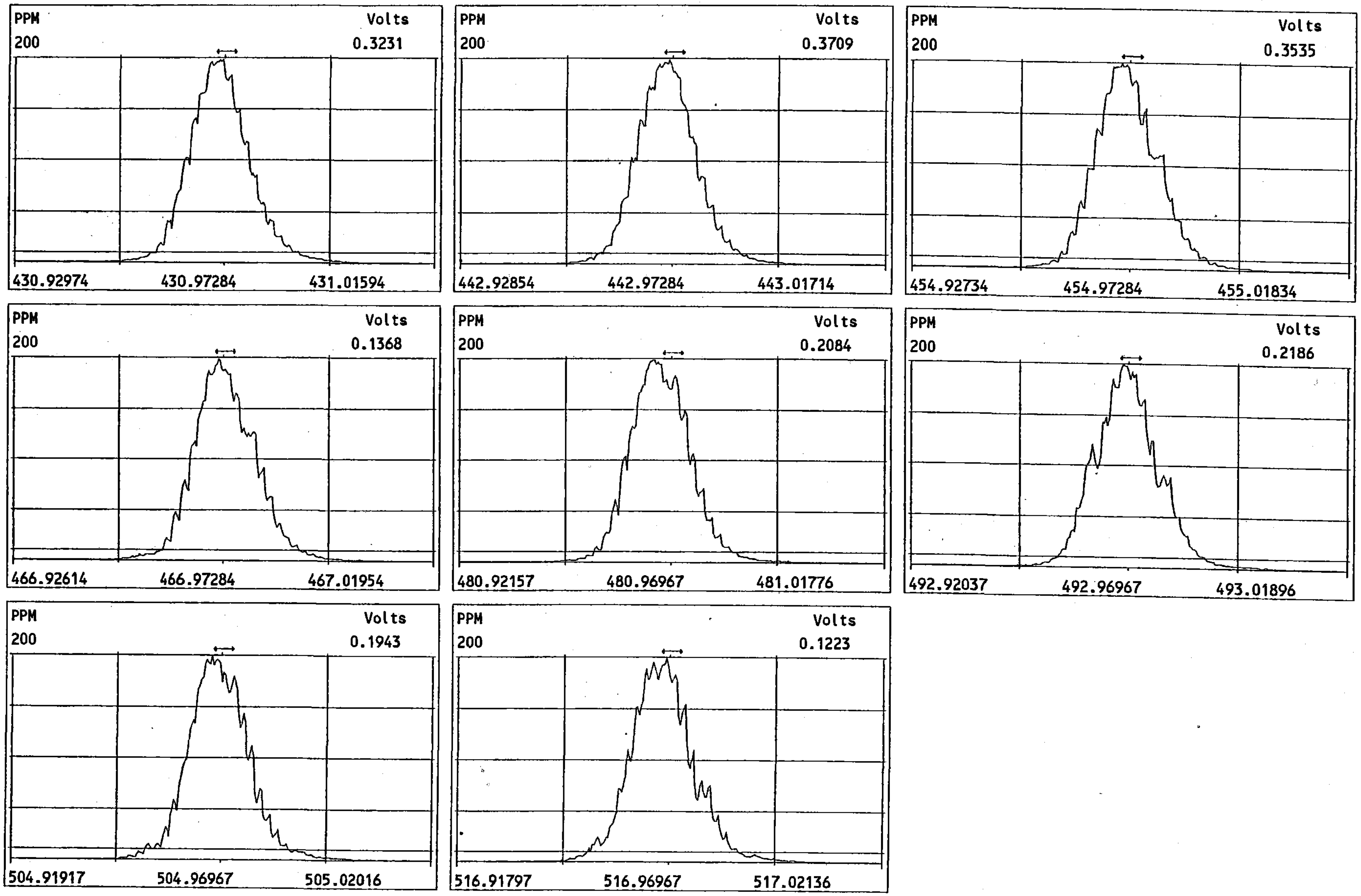




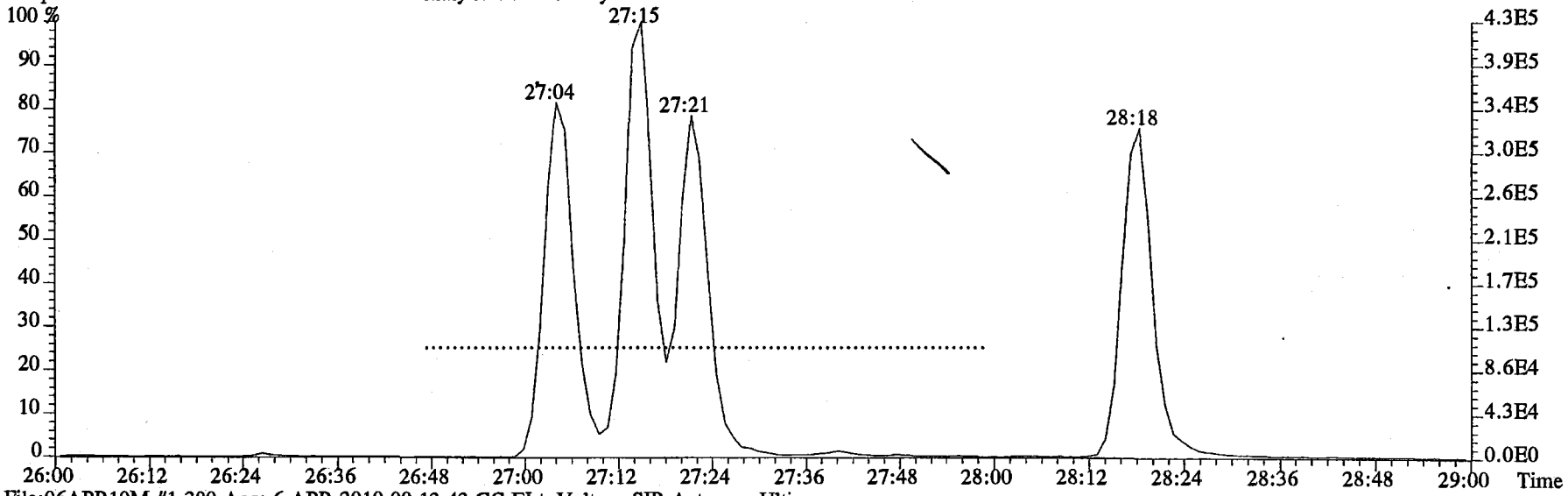




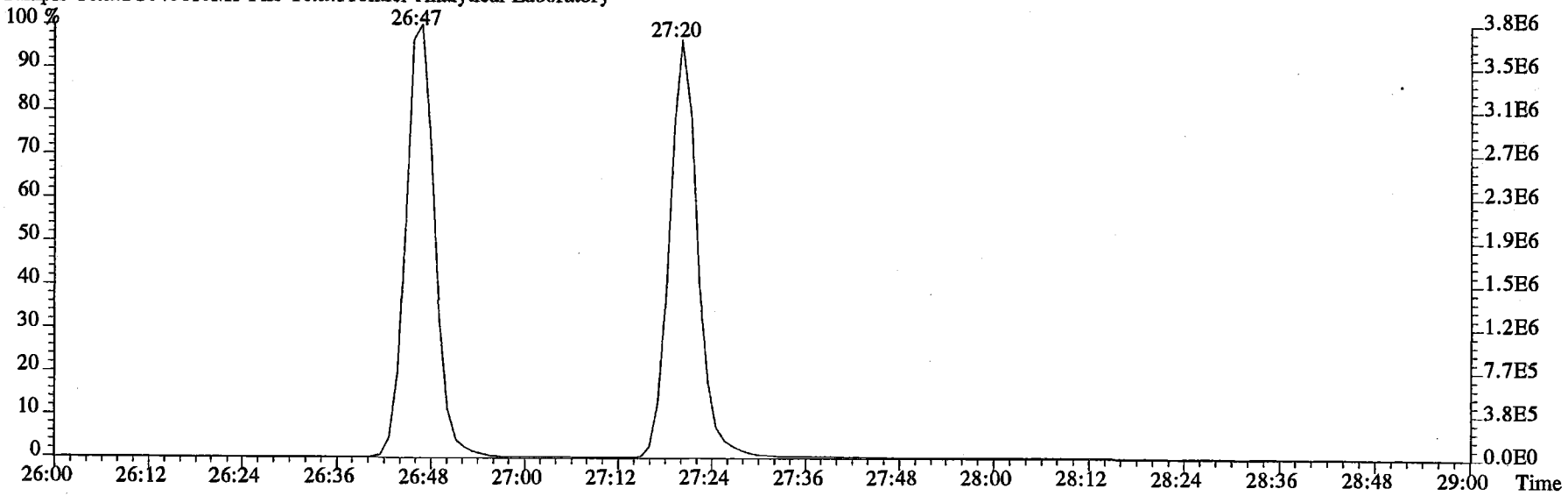
Peak Locate Examination: 6-APR-2010:09:12 File:06APR10M
Experiment:PCDD Function:5 Reference:PFK



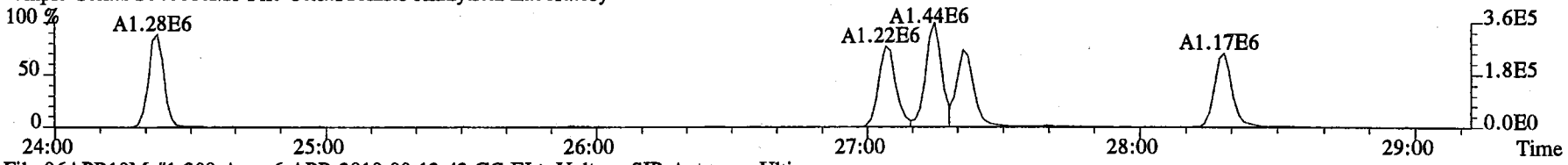
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
321.8936 Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



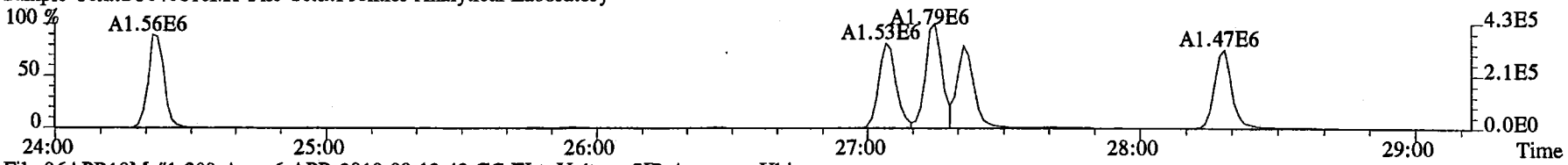
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



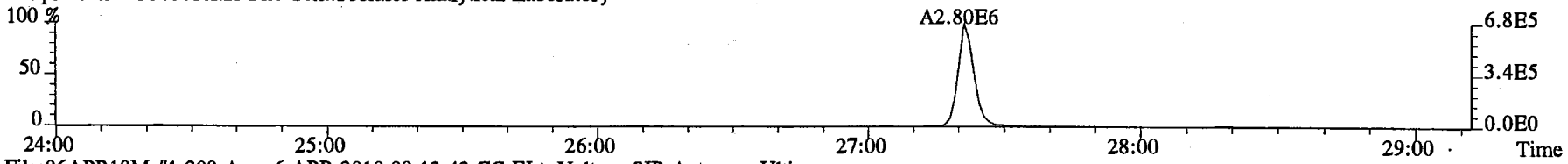
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



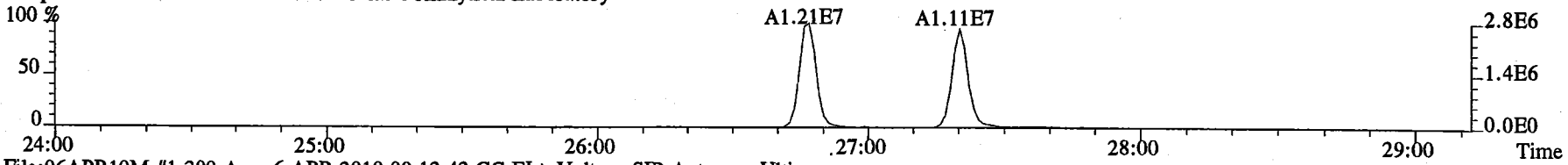
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



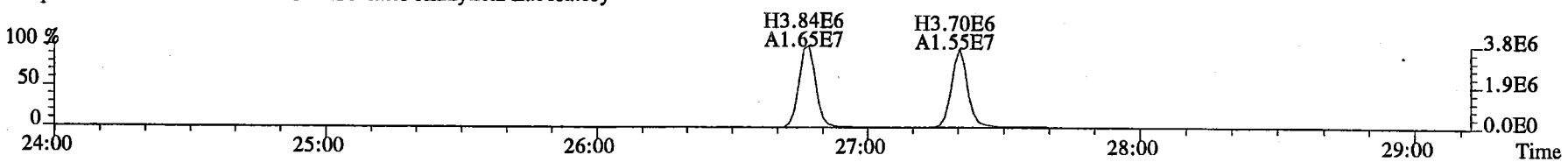
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



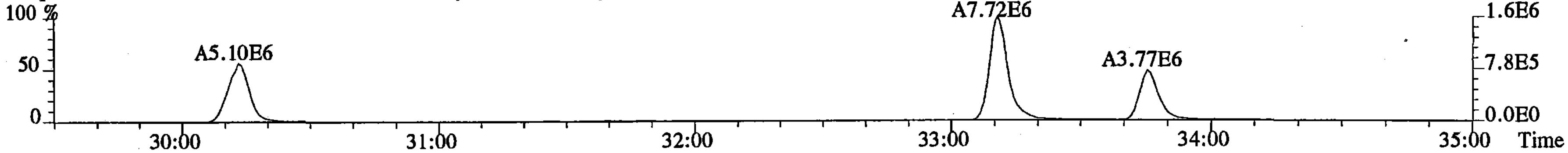
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



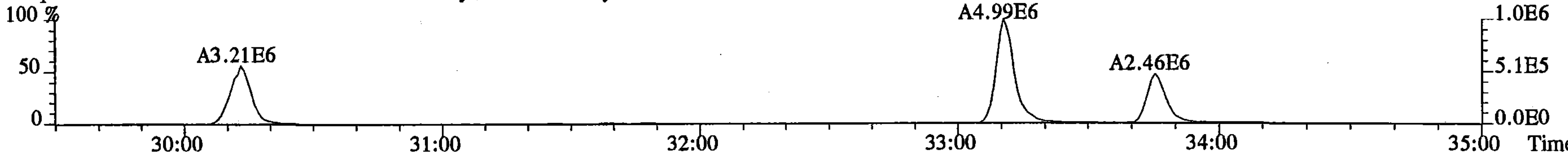
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



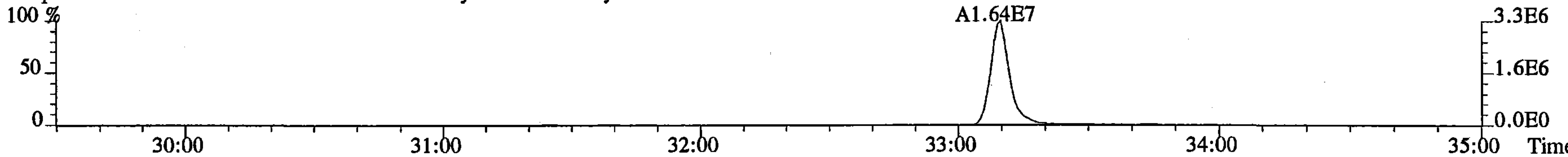
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



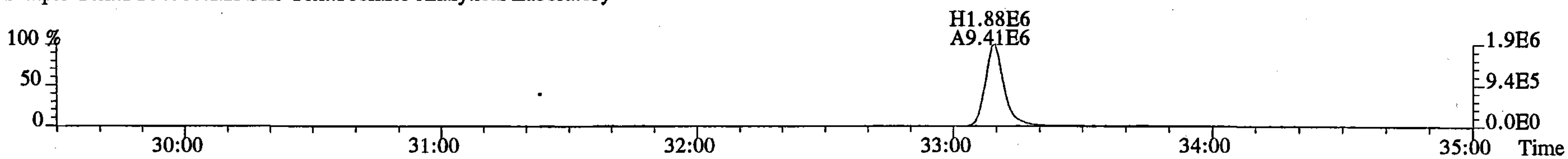
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



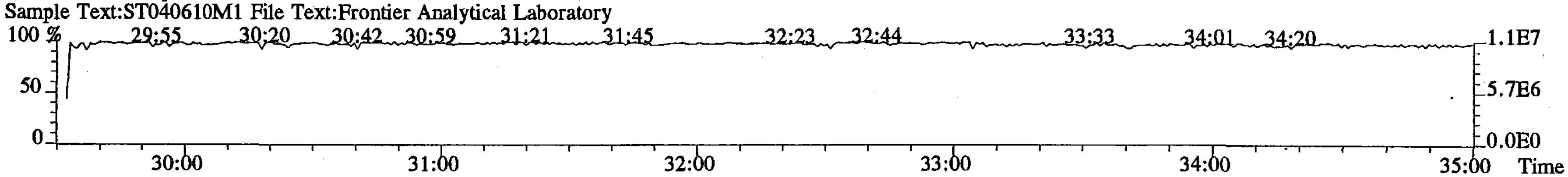
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



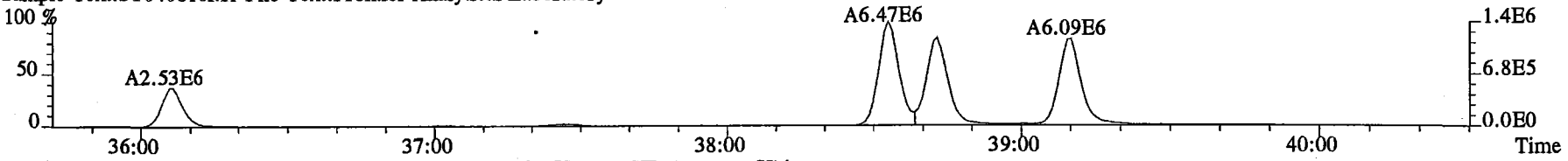
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



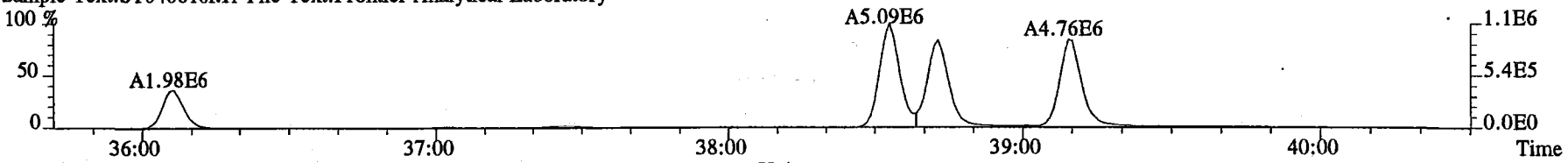
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



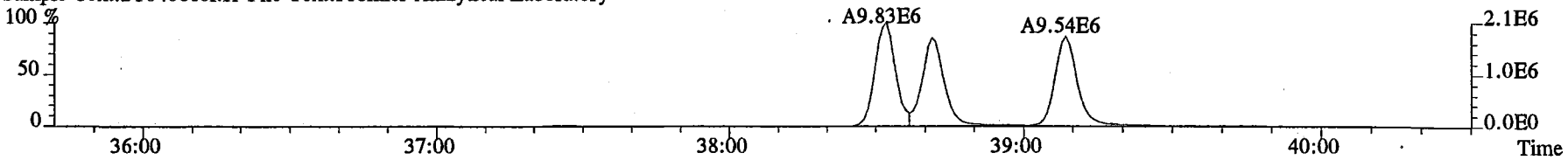
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



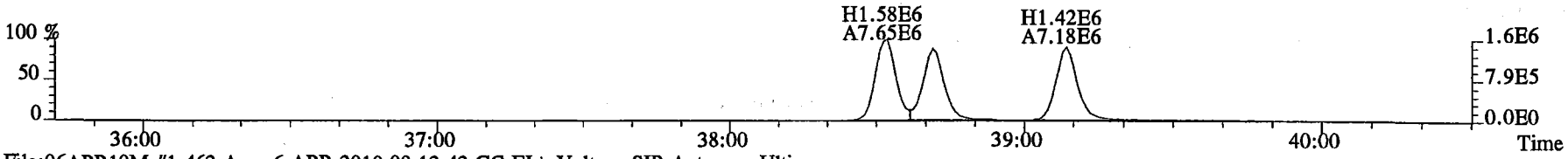
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



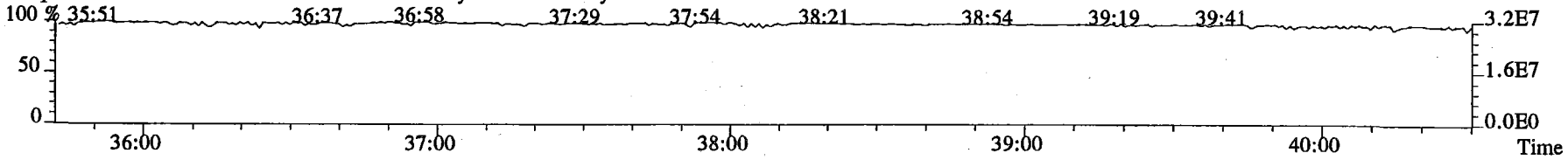
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



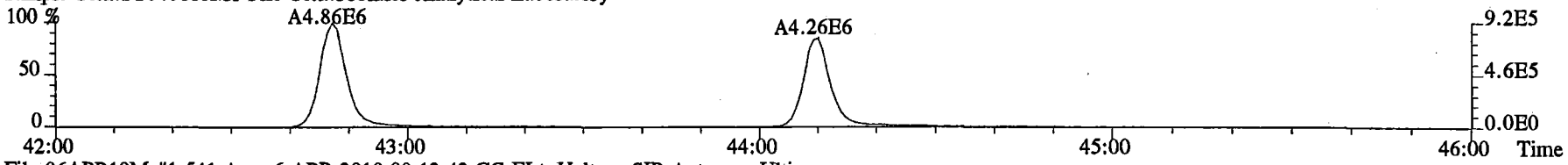
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



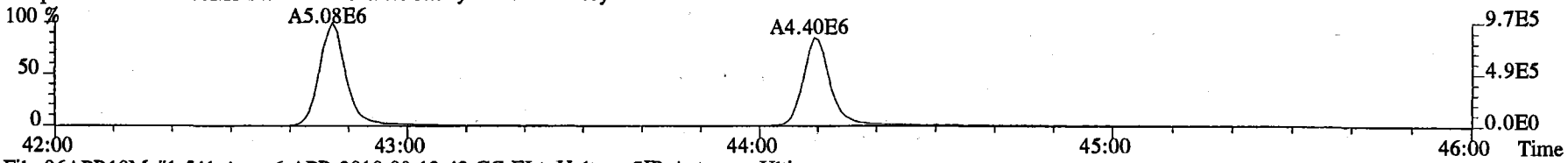
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



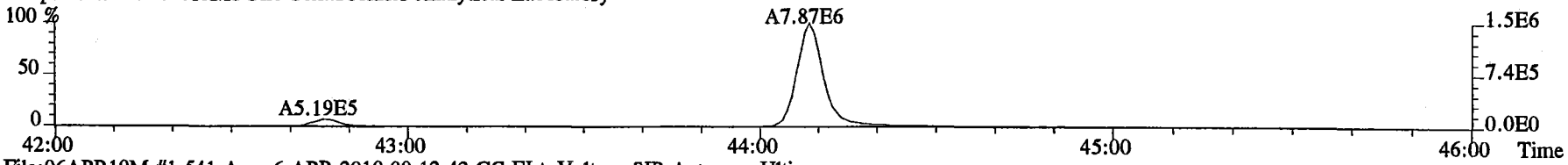
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



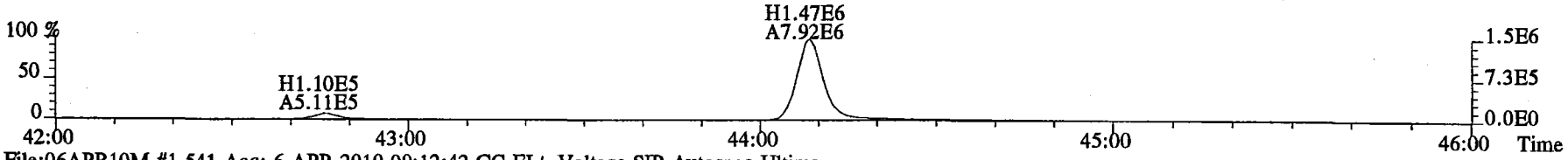
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



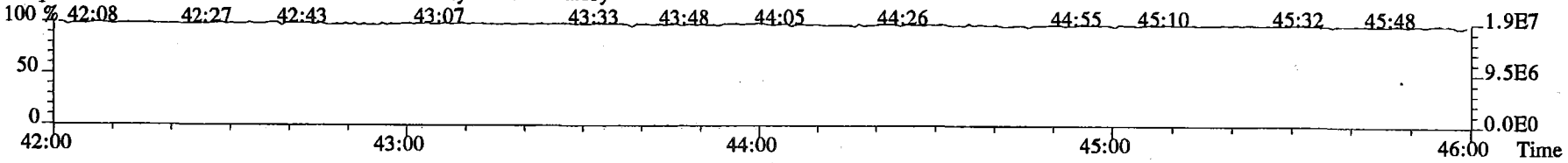
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100:0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



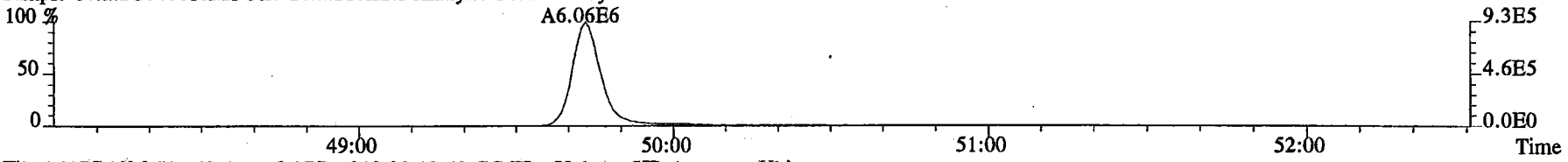
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



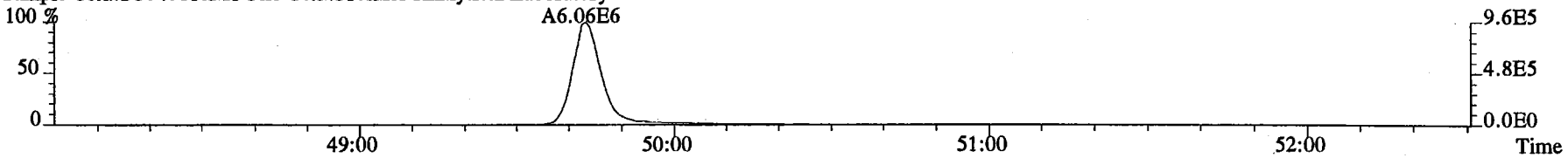
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



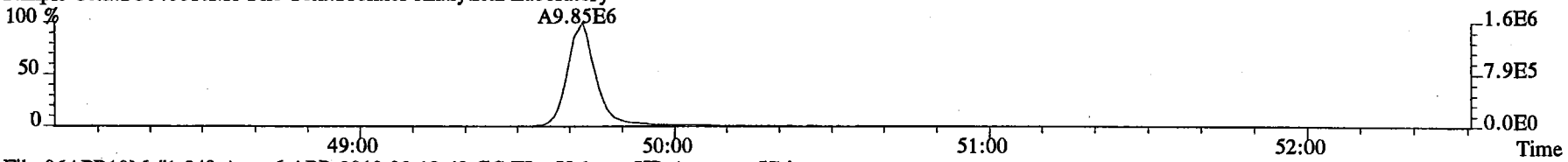
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



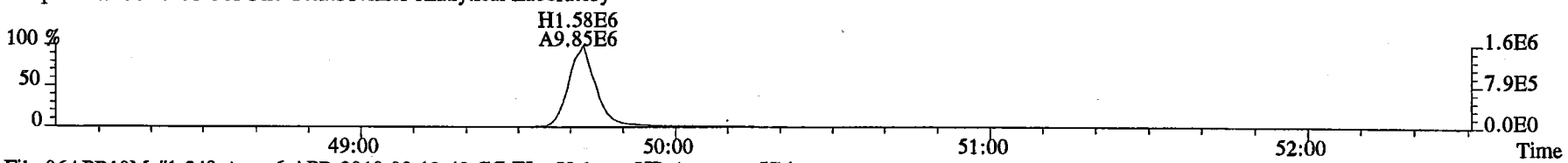
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



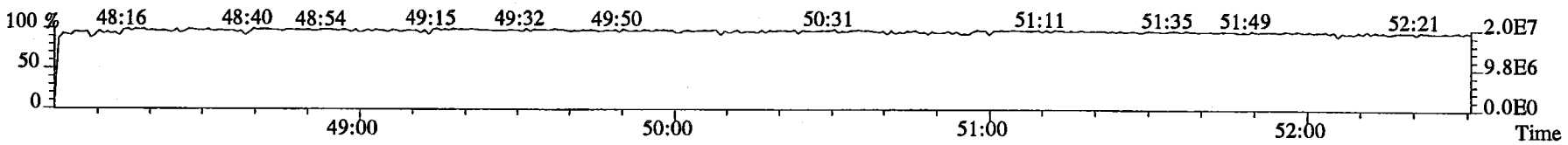
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



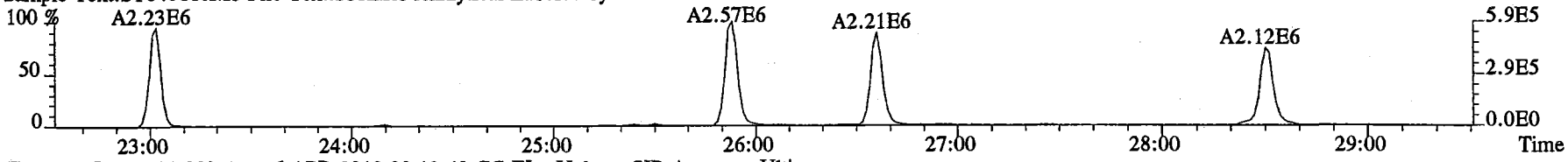
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



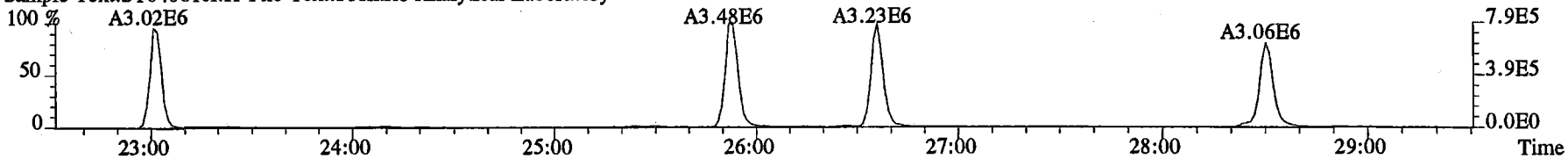
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



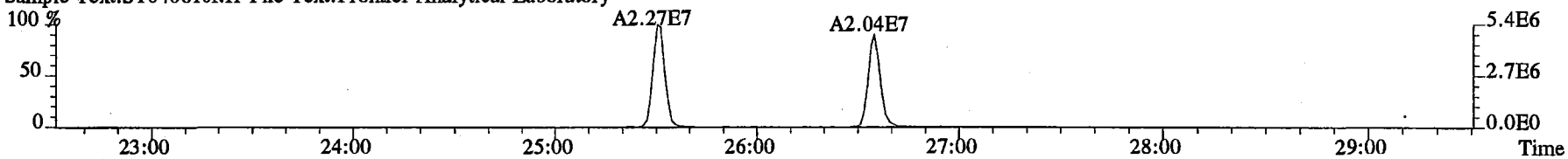
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



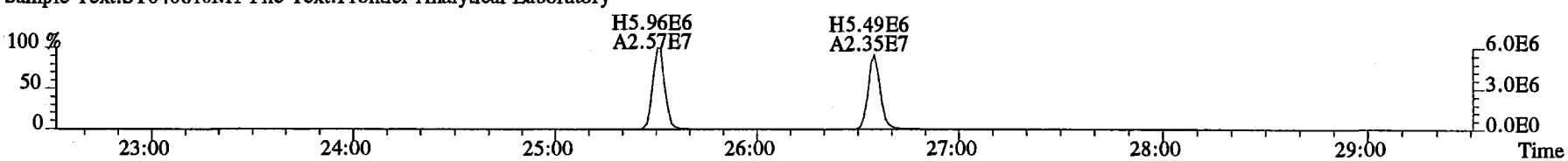
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



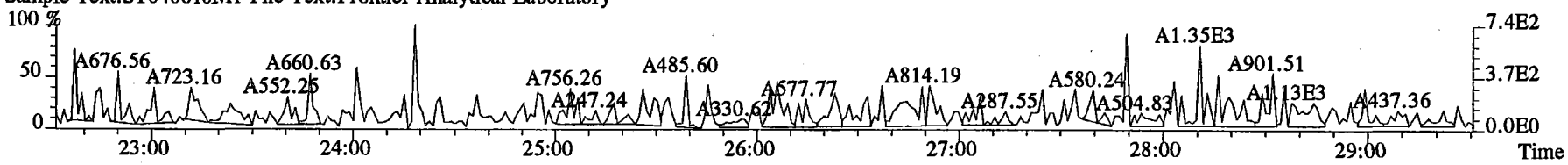
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



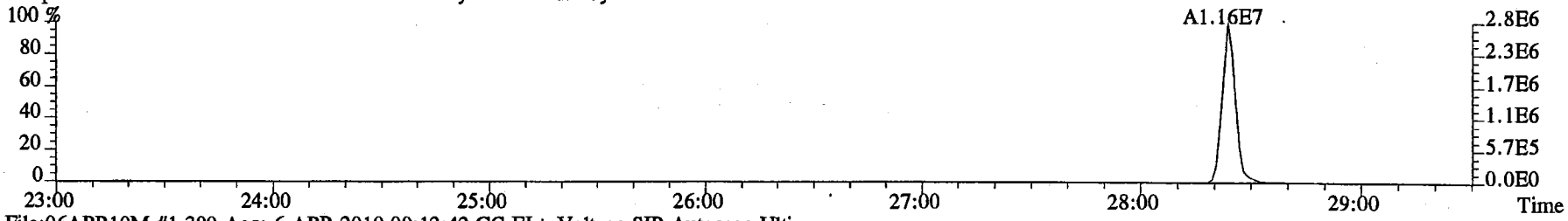
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



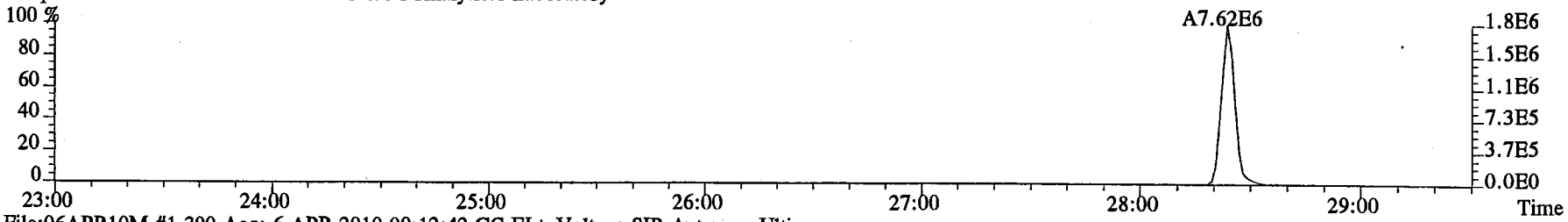
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



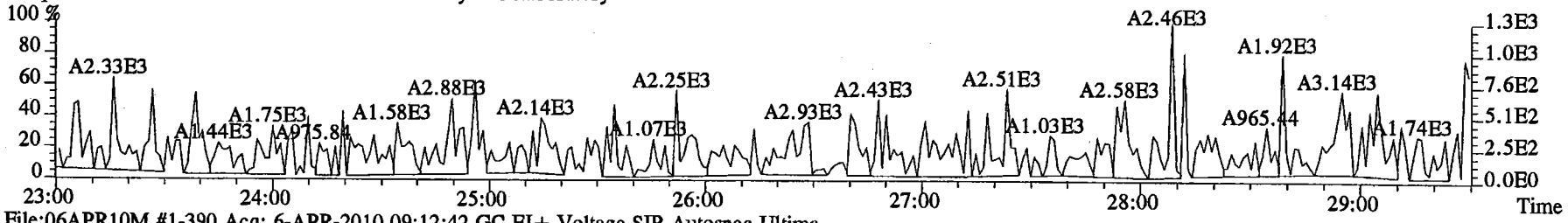
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



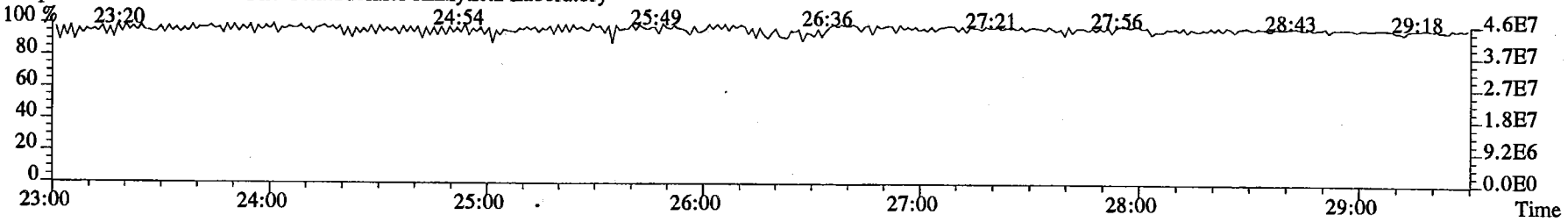
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



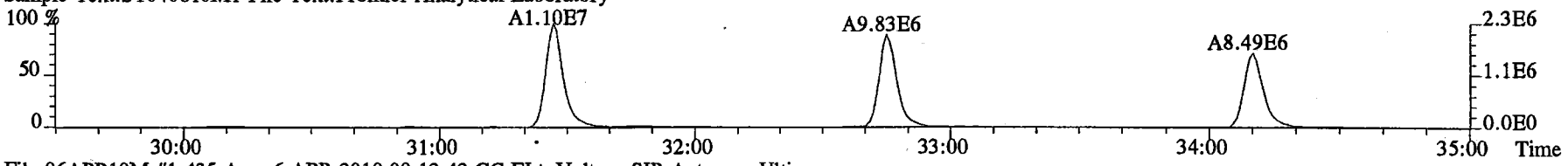
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



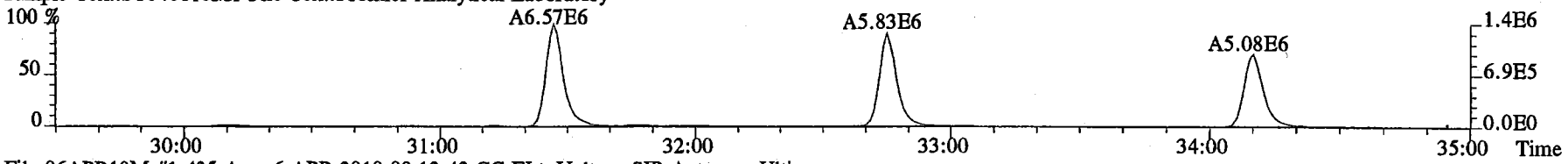
File:06APR10M #1-390 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



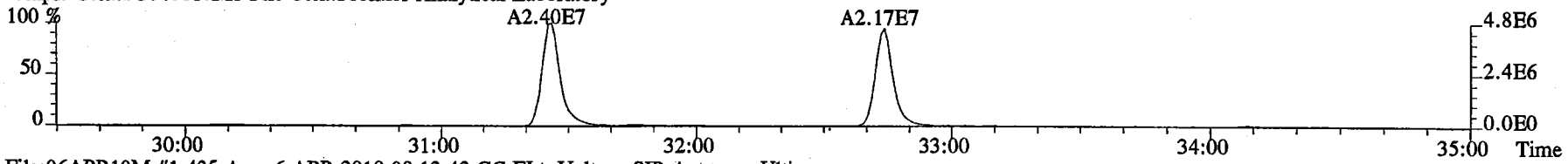
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



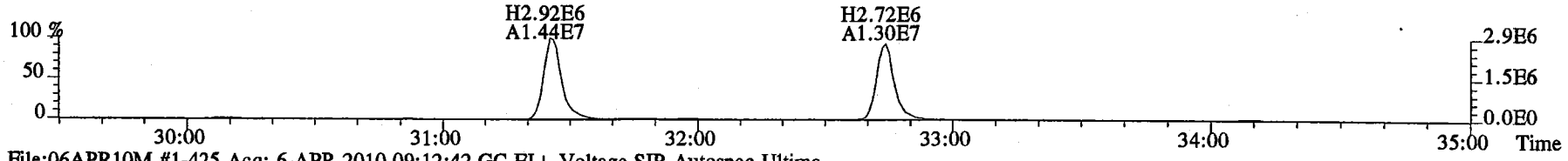
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



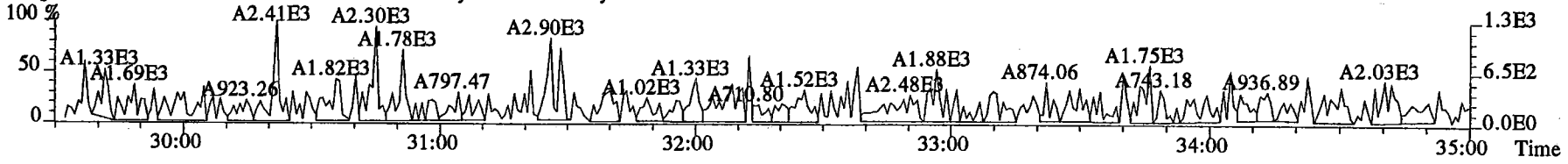
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



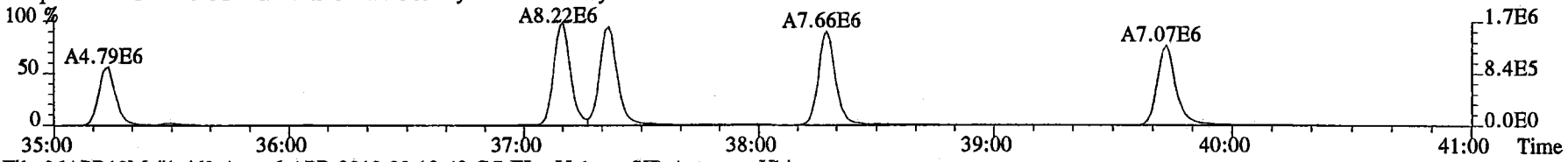
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



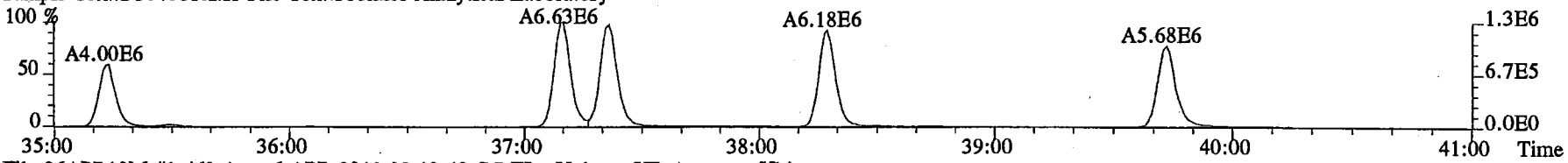
File:06APR10M #1-425 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



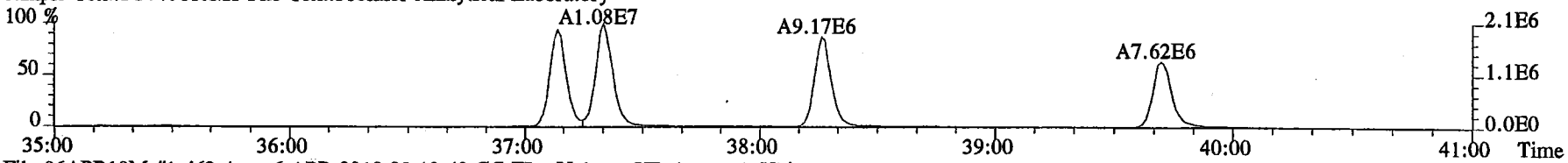
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



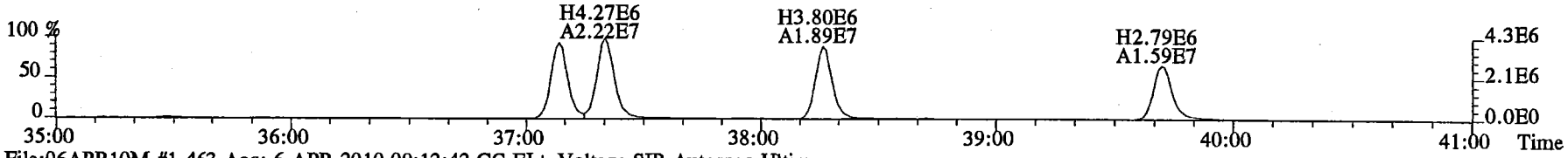
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



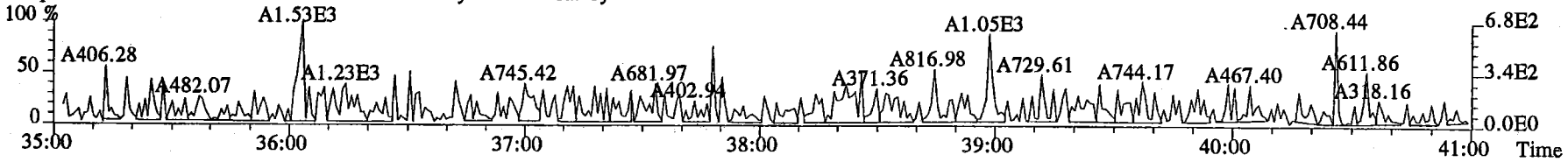
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



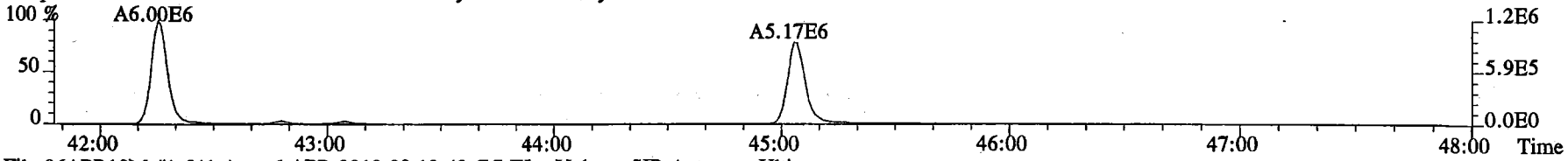
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



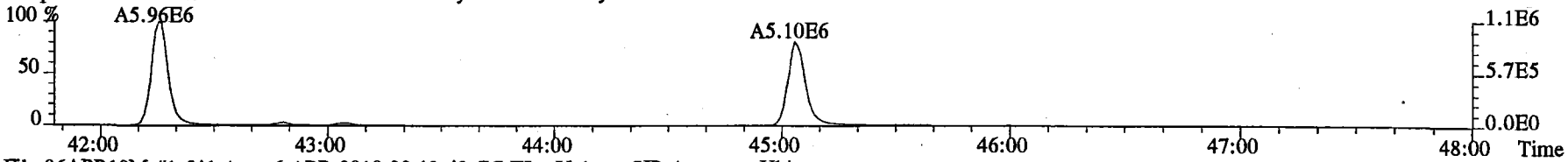
File:06APR10M #1-463 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



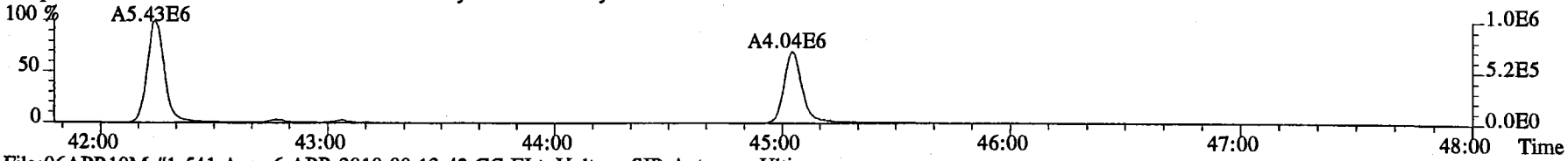
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



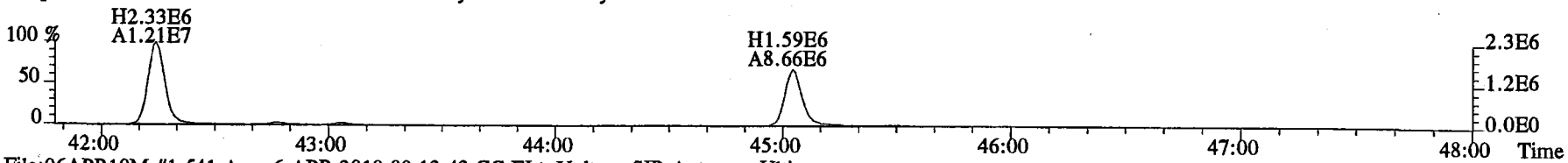
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



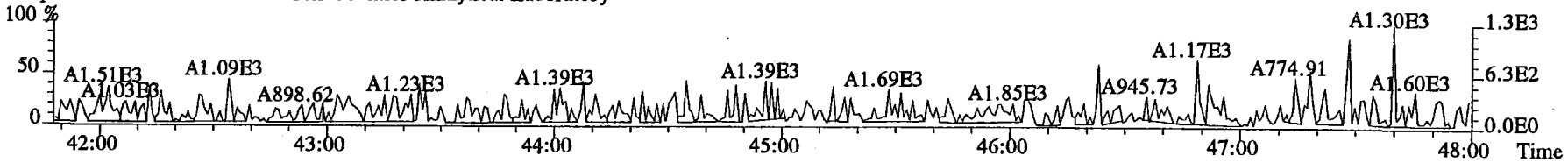
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



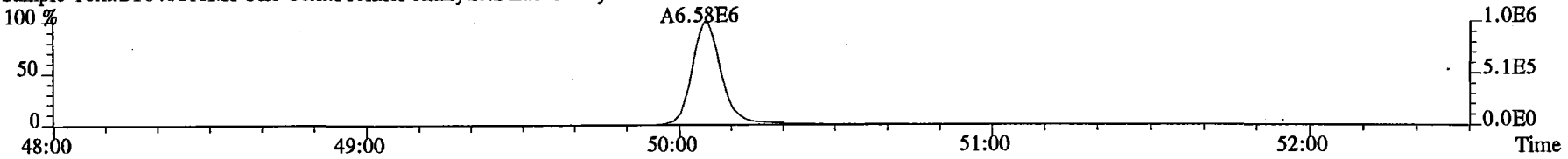
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



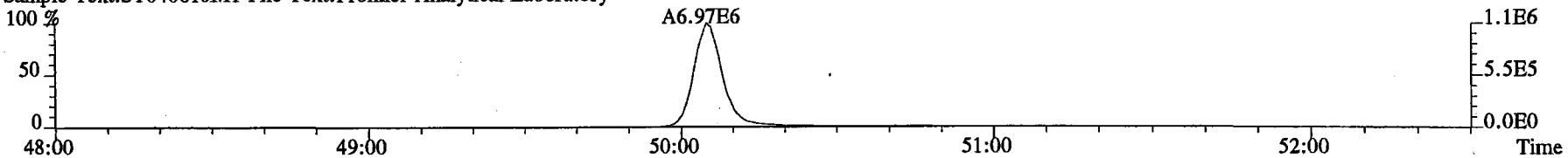
File:06APR10M #1-541 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



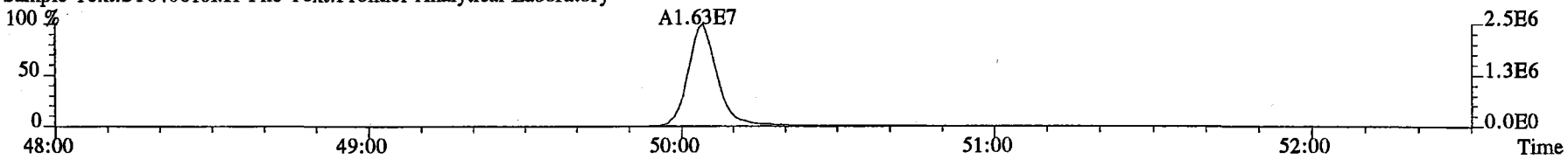
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



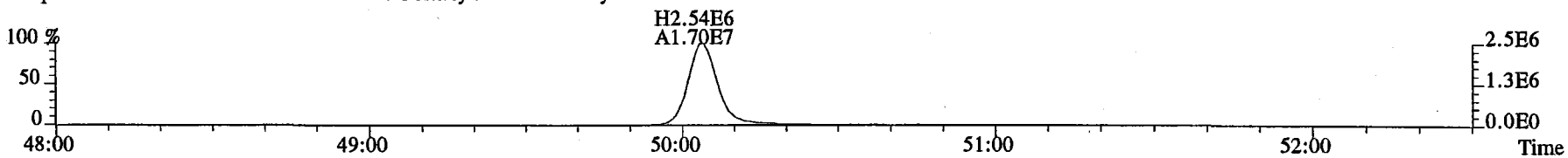
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



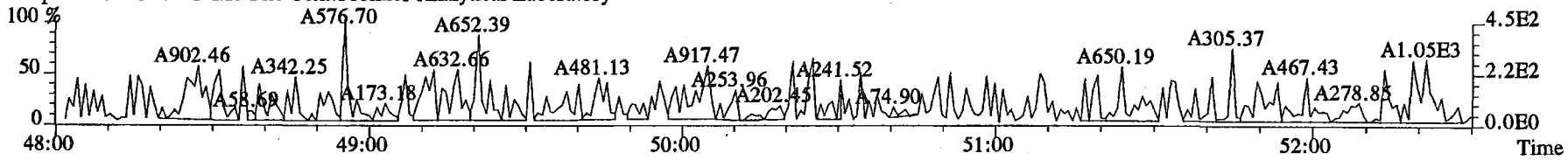
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory



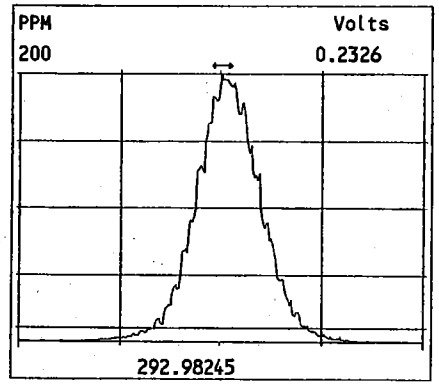
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory

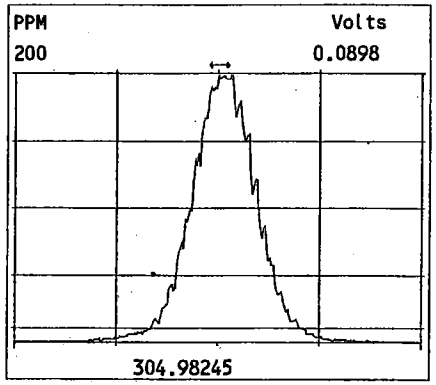


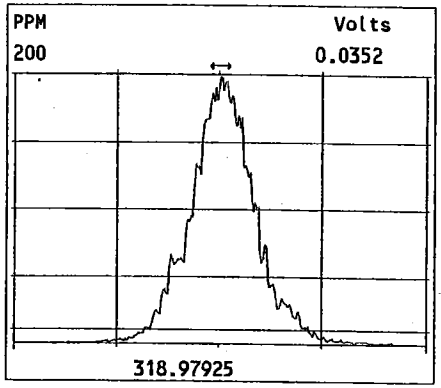
File:06APR10M #1-348 Acq: 6-APR-2010 09:12:42 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M1 File Text:Frontier Analytical Laboratory

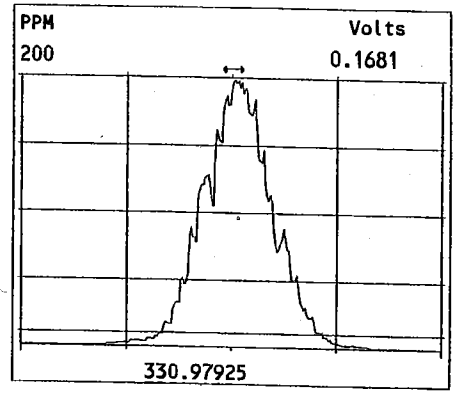


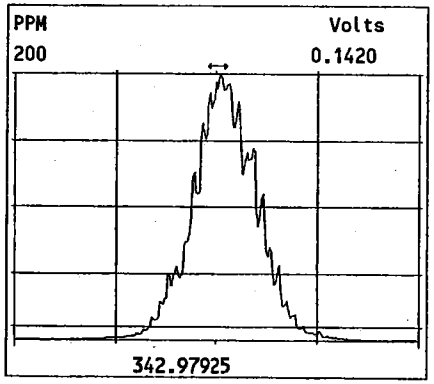
Peak Locate Examination: 7-APR-2010:05:32 File:06APR10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

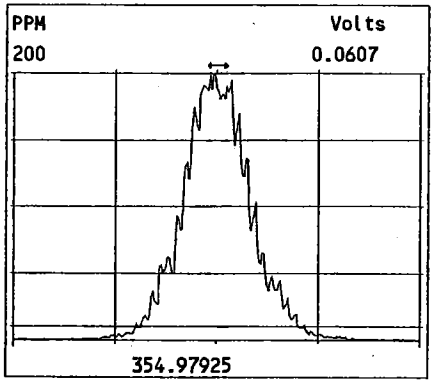


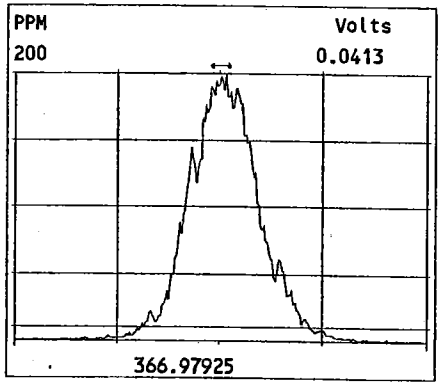


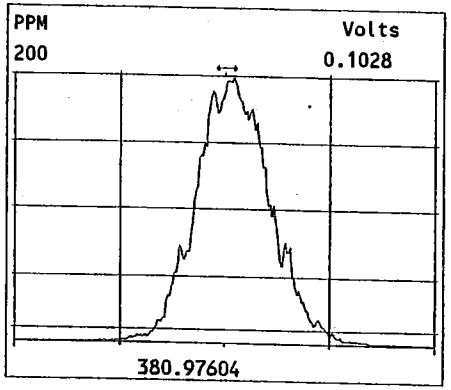


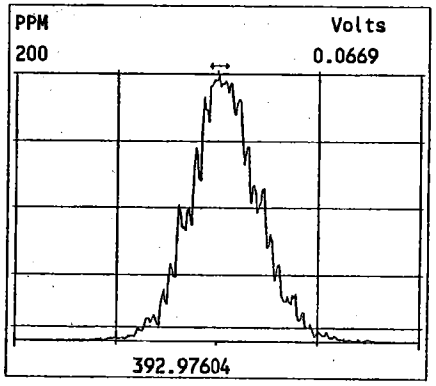


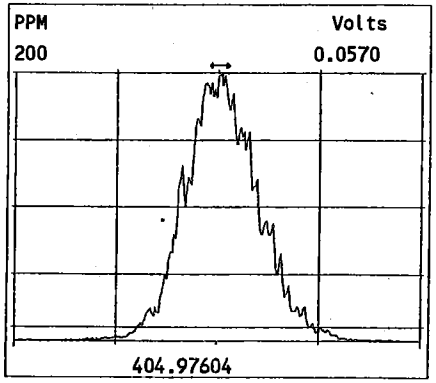


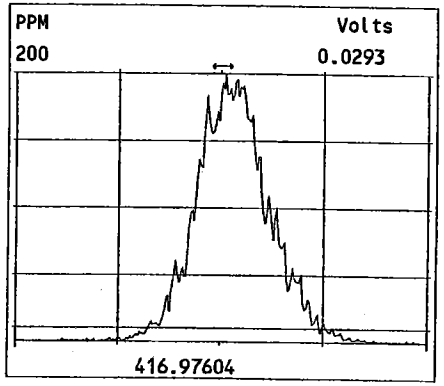




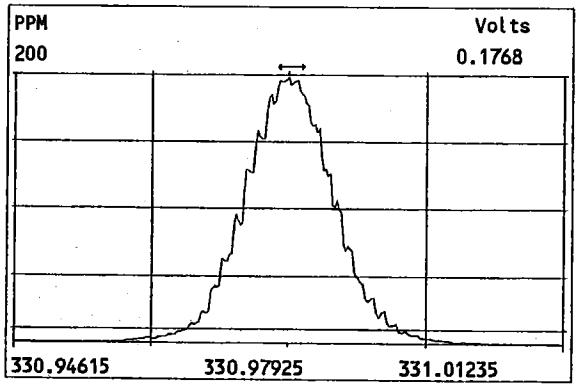


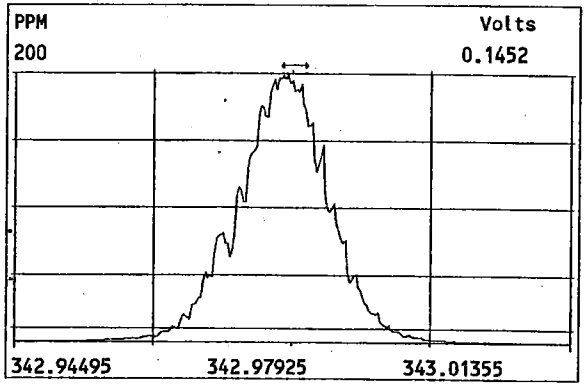


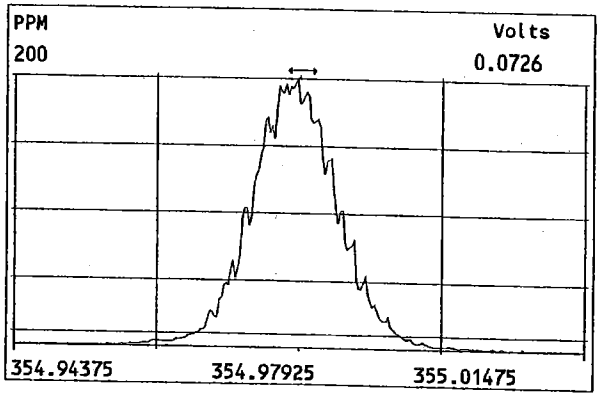


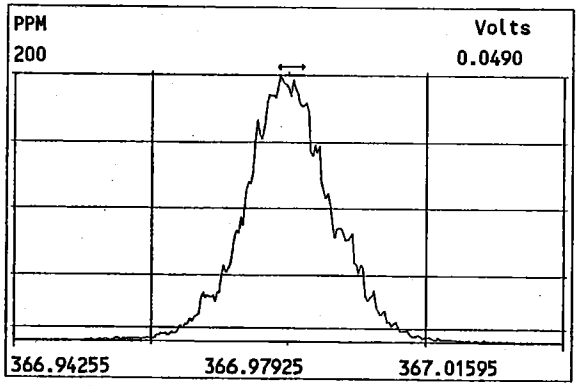


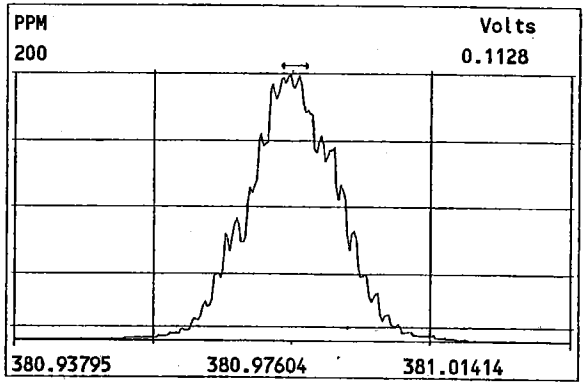
Peak Locate Examination: 7-APR-2010:05:34 File:06APR10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

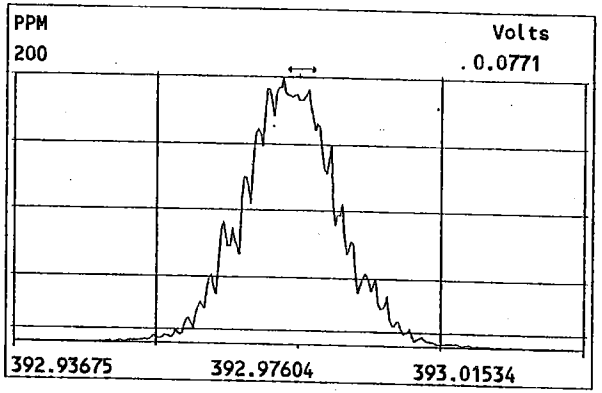


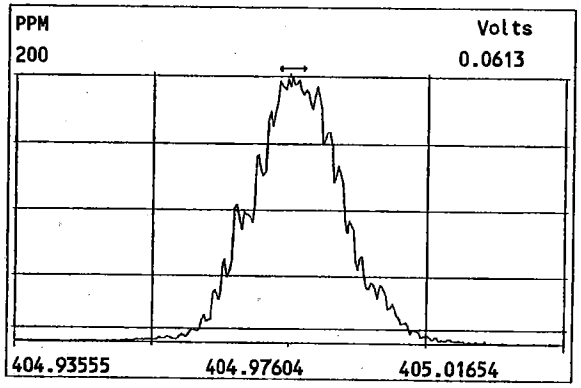


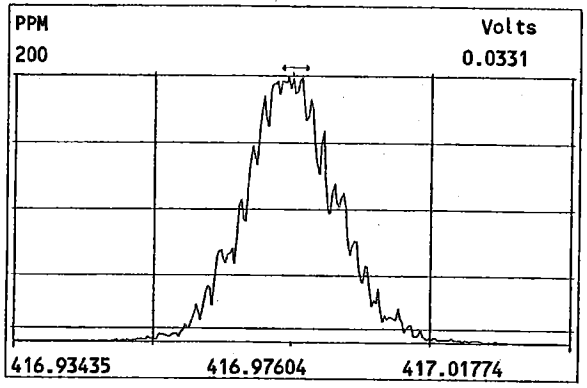




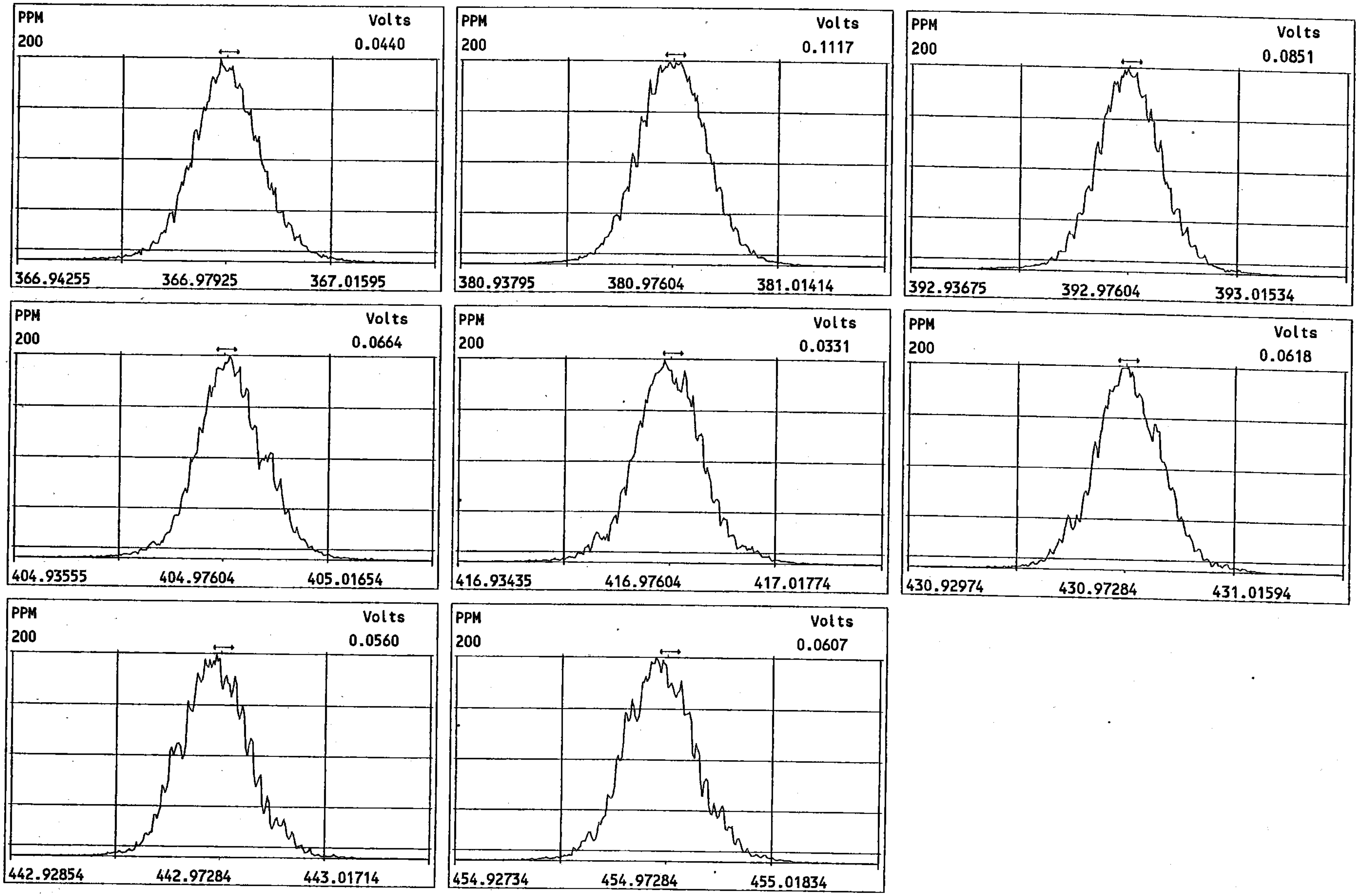




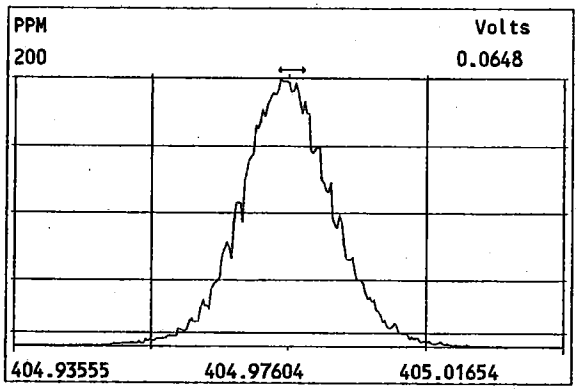


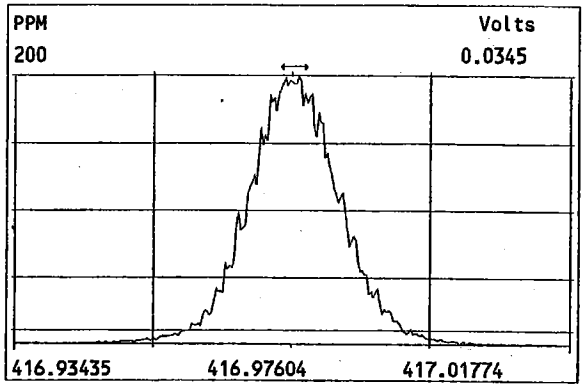


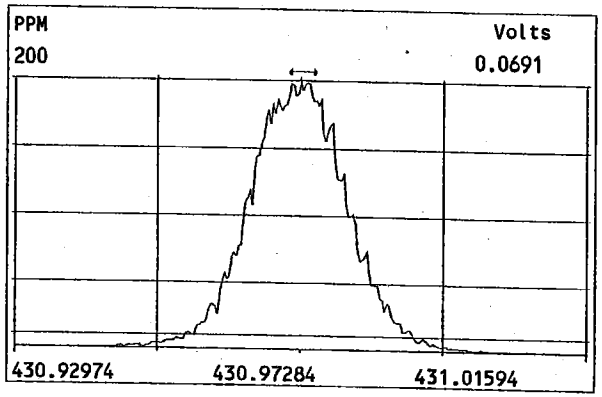
Peak Locate Examination: 7-APR-2010:05:36 File:06APR10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

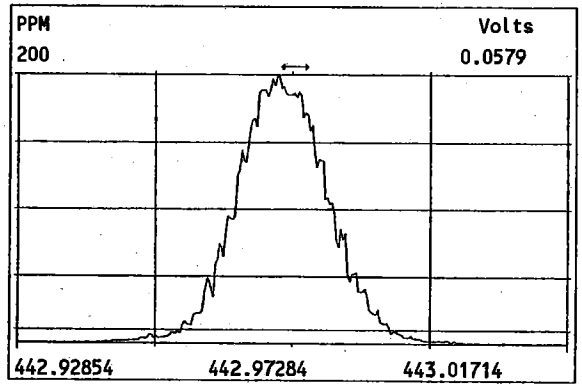


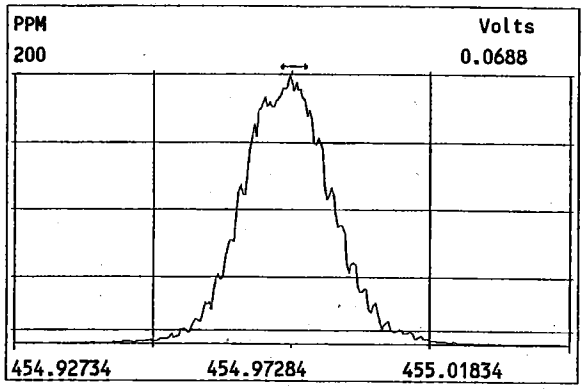
Peak Locate Examination: 7-APR-2010:05:38 File:06APR10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

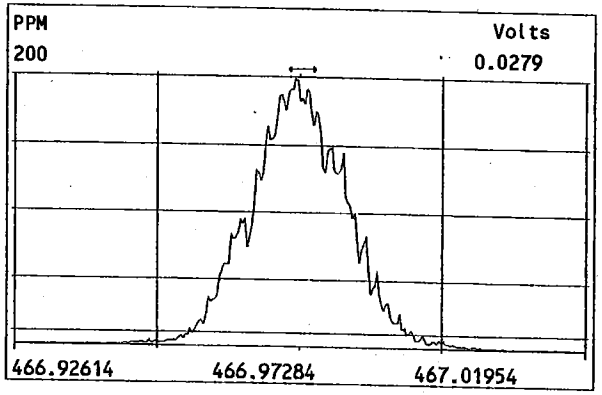


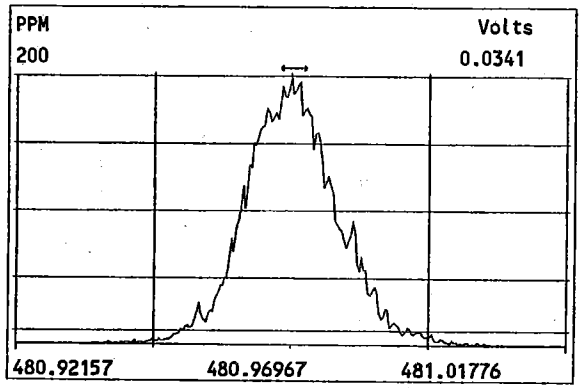




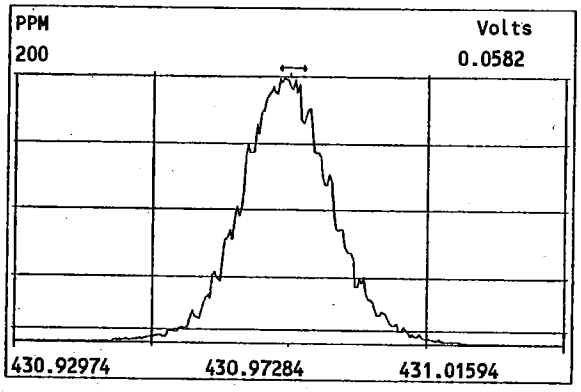


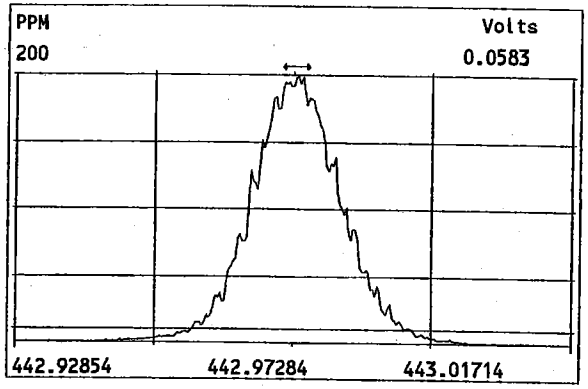


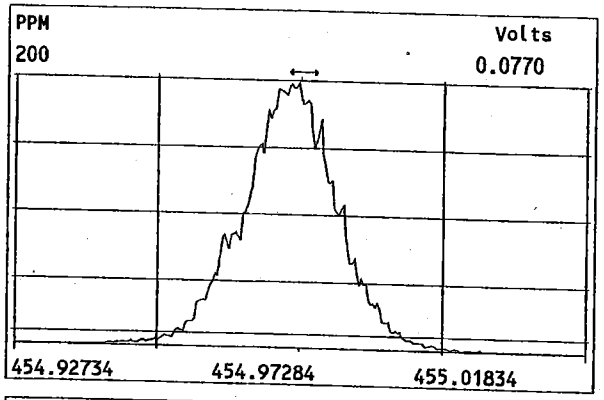


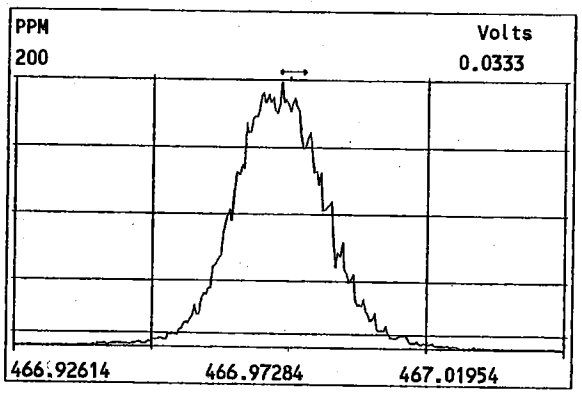


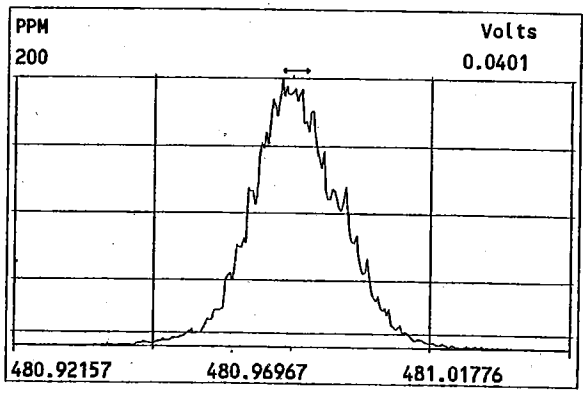
Peak Locate Examination: 7-APR-2010:05:40 File:06APR10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

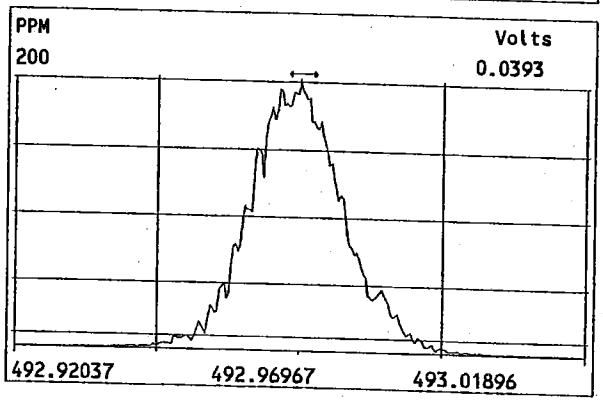


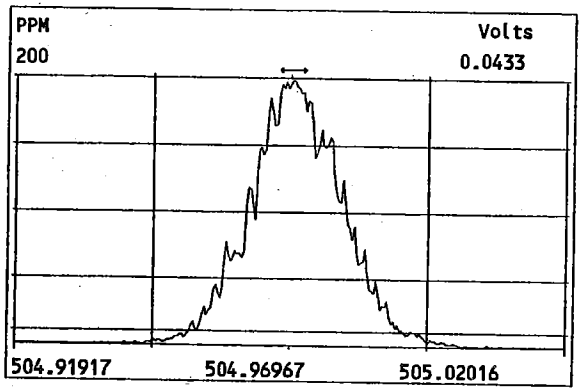


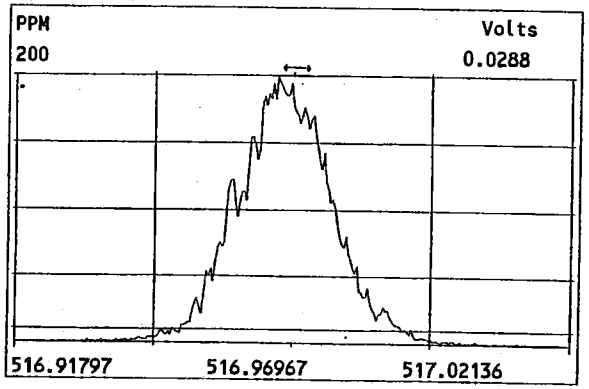












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 06APR10M Sam:14 Analysis Date: 6-APR-10 21:12:12

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	9.23	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	y	49.5	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	46.6	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	46.8	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	47.6	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.95	0.88-1.20	y	46.4	43.0 - 58.0
OCDD	M+2/M+4	0.95	0.76-1.02	y	99.8	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.67	0.65-0.89	y	9.14	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.68	1.32-1.78	y	50.2	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.69	1.32-1.78	y	49.0	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	49.7	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	49.9	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	49.7	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	49.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.00	0.88-1.20	y	49.2	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.88-1.20	y	49.2	43.0 - 58.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	98.0	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: 4/7/10

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 06APR10M Sam:14 Analysis Date: 6-APR-10 21:12:12

	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	0.71	0.65-0.89	y	102	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.70	1.32-1.78	y	87.4	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	105	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	98.5	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.01	0.88-1.20	y	98.4	72.0 - 138
13C-OCDD	M+2/M+4	1.02	0.76-1.02	y	180	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.87	0.65-0.89	y	104	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.65	1.32-1.78	y	84.7	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.66	1.32-1.78	y	82.0	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	97.8	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	92.6	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	93.0	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.48	0.43-0.59	y	91.8	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37-0.51	y	88.3	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37-0.51	y	86.8	77.0 - 129
13C-OCDF	M+2/M+4	0.92	0.76-1.02	y	167	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					10.2	7.80 - 12.8

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

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

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

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

Analyst: _____ Date: 4/7/10

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: 11/18/09

RT Window Data Filename: 06APR10M Sam:14 Analysis Date: 6-APR-10 Time: 21:12:12

DB-5 IS Data Filename: 06APR10M Sam:14 Analysis Date: 6-APR-10 Time: 21:12:12

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)	28:17	1,2,8,9-TCDF (L)	28:30
1,2,4,7,9-PeCDD (F)	30:13	1,3,4,6,8-PeCDF (F)	28:24
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)	36:06	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)	42:47	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: _____ Date: 4/7/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 6-APR-10 21:12:12 CS3 or VER Data Filename: 06APR10M 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	1.000	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	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: 4/7/11

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 6-APR-10 21:12:12 CS3 or VER Data Filename: 06APR10M 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	1.001	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	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.000	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		1.151	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: 4/7/10

FAL ID: ST040610M2 Filename: 06APR10M Sam:14 Acquired: 6-APR-10 21:12:12 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 090918J ConCal: ST040610M2 EndCal: ST040610M3
Results: 6052-05 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.6
WHO 1998 Tox: 122 WHO 2005 Tox: 111

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	3.09e+06	0.79 y	27:21	1.02	9.23		2.50	-	-	*
1,2,3,7,8-PeCDD	1.45e+07	1.54 y	33:10	0.96	49.5		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.31e+07	1.29 y	38:32	1.37	46.6		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.15e+07	1.27 y	38:42	1.34	46.8		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.26e+07	1.27 y	39:09	1.37	47.6		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	9.51e+06	0.95 y	44:09	1.17	46.4		2.50	-	-	*
OCDD	1.44e+07	0.95 y	49:43	1.21	99.8		2.50	-	-	*
2,3,7,8-TCDF	6.32e+06	0.67 y	26:35	1.29	9.14		2.50	-	-	*
1,2,3,7,8-PeCDF	1.95e+07	1.68 y	31:26	0.89	50.2		2.50	-	-	*
2,3,4,7,8-PeCDF	1.82e+07	1.69 y	32:44	0.91	49.0		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.66e+07	1.24 y	37:09	1.00	49.7		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.69e+07	1.23 y	37:21	0.92	49.9		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.57e+07	1.23 y	38:17	0.99	49.7		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.48e+07	1.24 y	39:43	1.09	49.6		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.29e+07	1.00 y	42:15	1.36	49.2		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.15e+07	1.00 y	45:04	1.61	49.2		2.50	-	-	*
OCDF	1.61e+07	0.93 y	50:05	0.84	98.0		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	3.29e+07	0.71 y	27:19	0.94	102					102
13C-1,2,3,7,8-PeCDD	3.04e+07	1.70 y	33:09	1.02	87.4					87.4
13C-1,2,3,4,7,8-HxCDD	2.05e+07	1.30 y	38:31	0.98	105					105
13C-1,2,3,6,7,8-HxCDD	1.83e+07	1.23 y	38:42	0.94	98.5					98.5
13C-1,2,3,4,6,7,8-HpCDD	1.76e+07	1.01 y	44:09	0.90	98.4					98.4
13C-OCDD	2.38e+07	1.02 y	49:42	0.67	180					89.8
13C-2,3,7,8-TCDF	5.38e+07	0.87 y	26:34	0.88	104					104
13C-1,2,3,7,8-PeCDF	4.38e+07	1.65 y	31:25	0.88	84.7					84.7
13C-2,3,4,7,8-PeCDF	4.10e+07	1.66 y	32:44	0.85	82.0					82.0
13C-1,2,3,4,7,8-HxCDF	3.34e+07	0.48 y	37:08	1.72	97.8					97.8
13C-1,2,3,6,7,8-HxCDF	3.69e+07	0.49 y	37:19	2.00	92.6					92.6
13C-2,3,4,6,7,8-HxCDF	3.21e+07	0.49 y	38:16	1.74	93.0					93.0
13C-1,2,3,7,8,9-HxCDF	2.74e+07	0.48 y	39:42	1.51	91.8					91.8
13C-1,2,3,4,6,7,8-HpCDF	1.93e+07	0.46 y	42:14	1.10	88.3					88.3
13C-1,2,3,4,7,8,9-HpCDF	1.46e+07	0.47 y	45:03	0.85	86.8					86.8
13C-OCDF	3.90e+07	0.92 y	50:03	1.17	167					83.7
37Cl-2,3,7,8-TCDD	3.40e+06		27:21	0.97	10.2					102
13C-1,2,3,4-TCDD	3.41e+07	0.72 y	26:46	-	131					
13C-1,2,3,4-TCDF	5.89e+07	0.89 y	25:31	-	127					
13C-1,2,3,7,8,9-HxCDD	1.99e+07	1.24 y	39:08	-	96.9					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.75e+07		24:23	1.02	52.3	2.50	-	-	*		19
Total Penta-Dioxins	3.14e+07		30:13	0.96	107	2.50	-	-	*		9
Total Hexa-Dioxins	4.25e+07		36:06	1.36	161	2.50	-	-	*		18
Total Hepta-Dioxins	2.02e+07		42:47	1.17	98.4	2.50	-	-	*		7
Total Tetra-Furans	2.62e+07		23:02	1.29	38.0	2.50	-	-	*		13
1st Fn. Tot Penta-Furans	2.41e+07		28:24	0.90	63.4	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.50e+07		30:08	0.90	145	2.50	-	-	*	208	13
Total Hexa-Furans	7.43e+07		35:12	0.99	231	2.50	-	-	*		13
Total Hepta-Furans	2.48e+07		42:15	1.47	99.9	2.50	-	-	*		5

Analyst: _____ Date: 4/7/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:06APR10M Instrument: FAL3 GC: DB5 Experiment:PCDD

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
06APR10M	1	ST040610M1	1613 CS3 090918J	6-APR-10 09:12:42	ST040610M1	ST040610M2	BS
06APR10M	2	SB040610M1	Solvent Blank	6-APR-10 10:08:01	ST040610M1	ST040610M2	BS
06APR10M	3	1979-001-0001-MB	Method Blank	6-APR-10 11:03:24	ST040510M1	ST040510M2	TC
06APR10M	4	6062-002-0001-SA	RM #51006 LOT #818066	6-APR-10 11:58:42	ST040510M1	ST040510M2	TC
06APR10M	5	6062-005-0001-SA	RM #51034 LOT #818690	6-APR-10 12:54:07	ST040510M1	ST040510M2	TC
06APR10M	6	SB040610M2	Solvent Blank	6-APR-10 13:49:30	ST040610M1	ST040610M2	BS
06APR10M	7	6050-001-0001-SA	IN-4127	6-APR-10 14:44:49	ST040610M1	ST040610M2	BS
06APR10M	8	6052-005-0001-SA	100222-FEG-02	6-APR-10 15:40:08	ST040610M1	ST040610M2	BS
06APR10M	9	6052-006-0001-SA	100222-RAW-01	6-APR-10 16:35:30	ST040610M1	ST040610M2	BS
06APR10M	10	6054-001-0001-SA	201003220077	6-APR-10 17:30:49	ST040610M1	ST040610M2	BS
06APR10M	11	6056-001-0001-SA	Effluent	6-APR-10 18:26:08	ST040610M1	ST040610M2	BS
06APR10M	12	6070-001-0001-SA	LB67159	6-APR-10 19:21:27	ST040610M1	ST040610M2	BS
06APR10M	13	SB040610M3	Solvent Blank	6-APR-10 20:16:49	ST040610M1	ST040610M2	BS
06APR10M	14	ST040610M2	1613 CS3 090918J	6-APR-10 21:12:12	ST040610M2	ST040610M3	BS
06APR10M	15	1980-001-0001-OPR	OPR	6-APR-10 22:07:31	ST040610M2	ST040610M3	BS
06APR10M	16	1980-001-0001-MB	Method Blank	6-APR-10 23:02:52	ST040610M2	ST040610M3	BS
06APR10M	17	6069-001-0001-SA	CB31A032510COMP	6-APR-10 23:58:10	ST040610M2	ST040610M3	BS
06APR10M	18	6069-002-0001-SA	CB4857032510COMP	7-APR-10 00:53:33	ST040610M2	ST040610M3	BS
06APR10M	19	6069-003-0001-SA	CB1032510COMP	7-APR-10 01:48:52	ST040610M2	ST040610M3	BS
06APR10M	20	6069-004-0001-SA	CB101032510COMP	7-APR-10 02:44:11	ST040610M2	ST040610M3	BS
06APR10M	21	SB040610M4	Solvent Blank	7-APR-10 03:39:30	ST040610M2	ST040610M3	BS
06APR10M	22	ST040610M3	1613 CS3 090918J	7-APR-10 04:34:49	ST040610M2	ST040610M3	BS

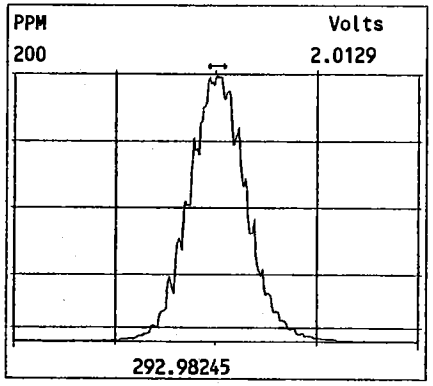
4/7/10

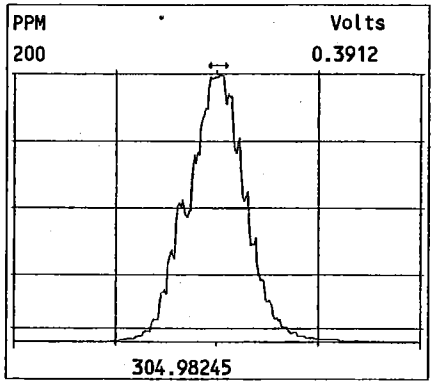
Data Backed Up:_____

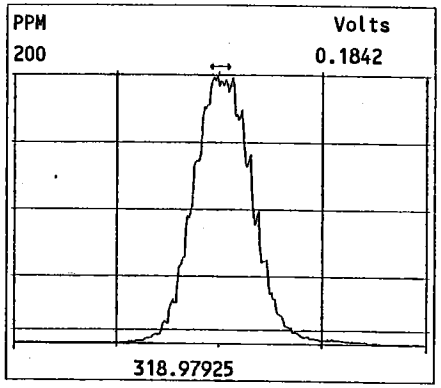
Date:_____

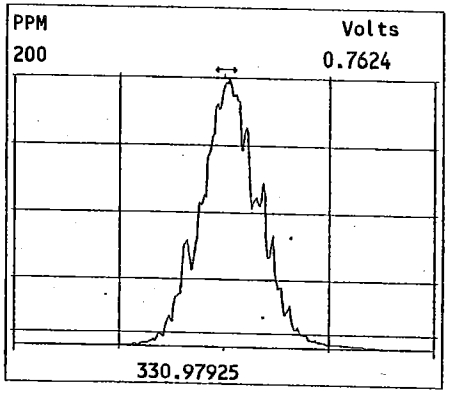
Peak Locate Examination: 6-APR-2010:09:10 File:06APR10M

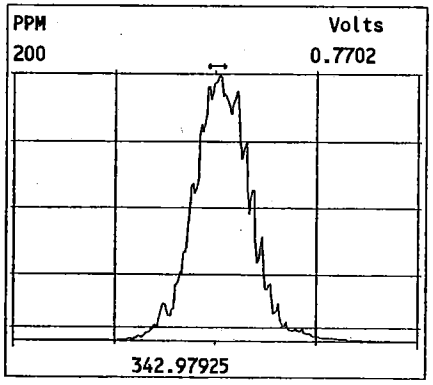
Experiment:PCDD Function:1 Reference:PFK

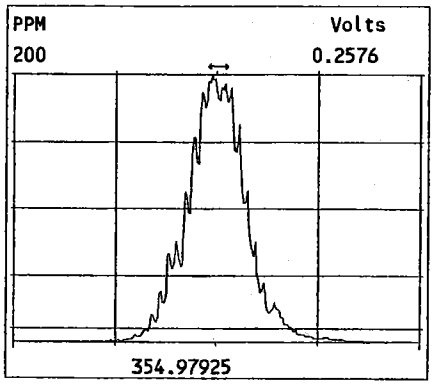


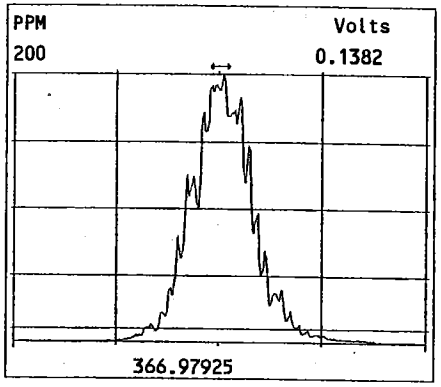


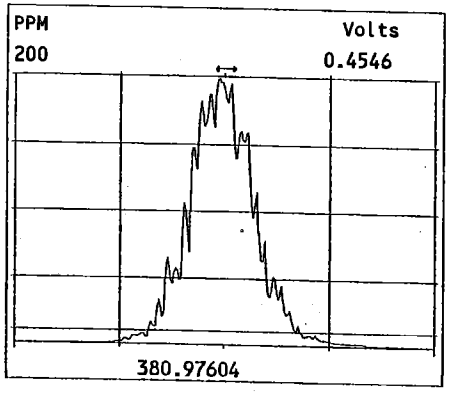


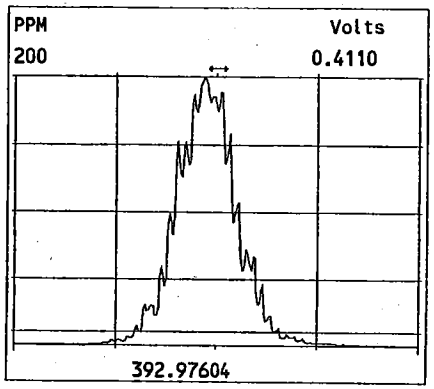


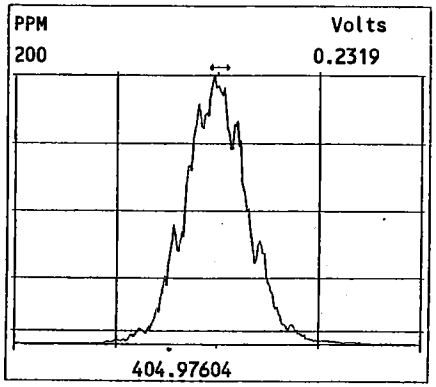


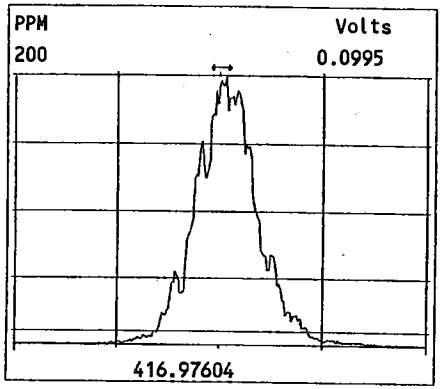






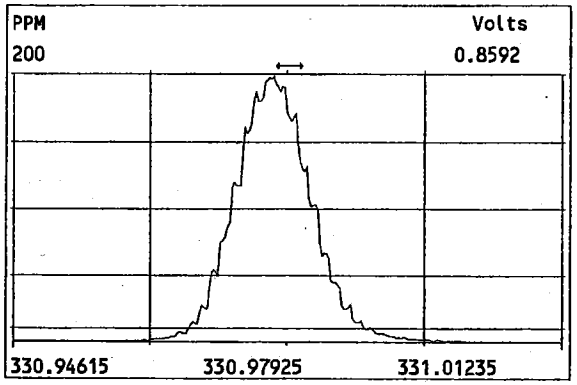


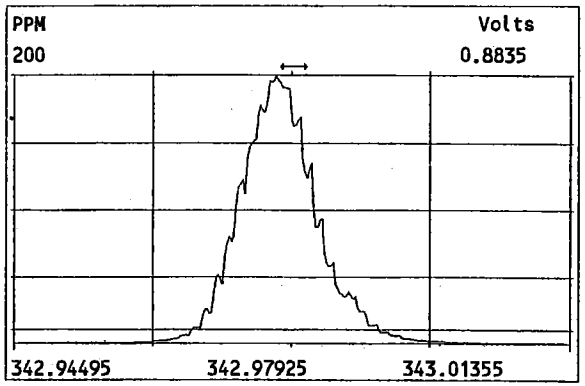


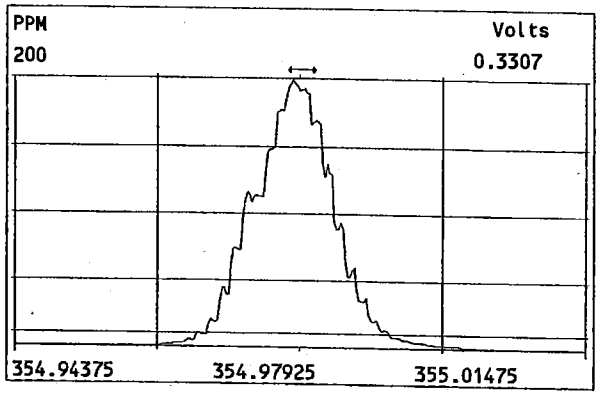


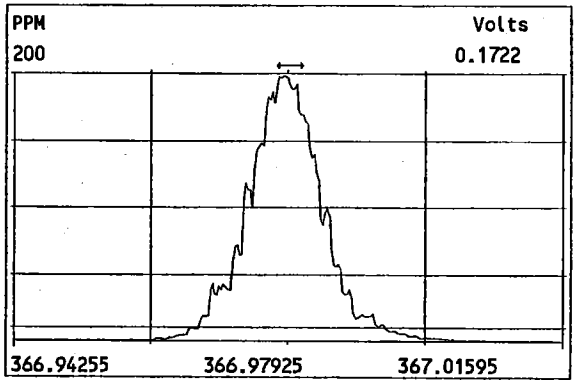
Peak Locate Examination: 6-APR-2010:09:11 File:06APR10M

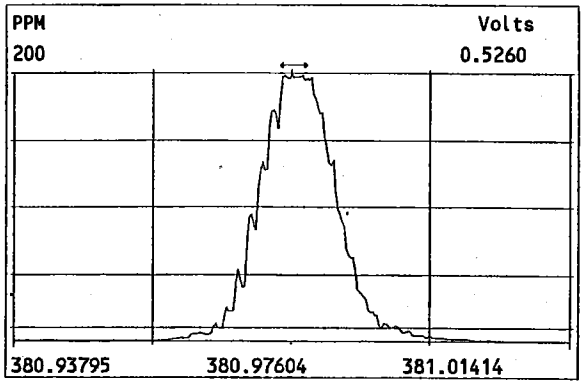
Experiment:PCDD Function:2 Reference:PFK

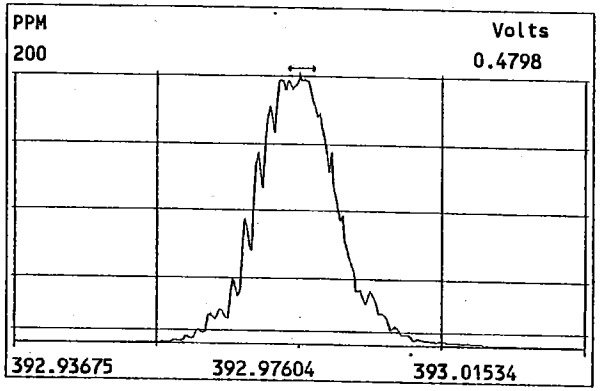


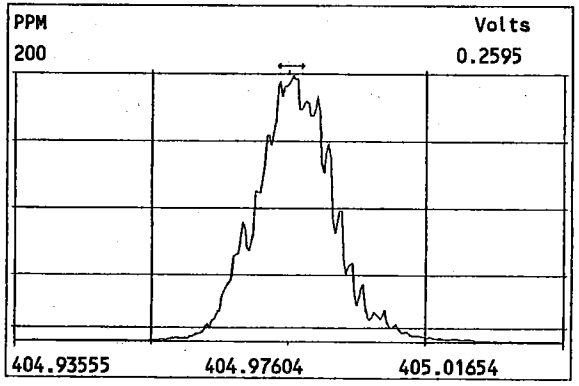


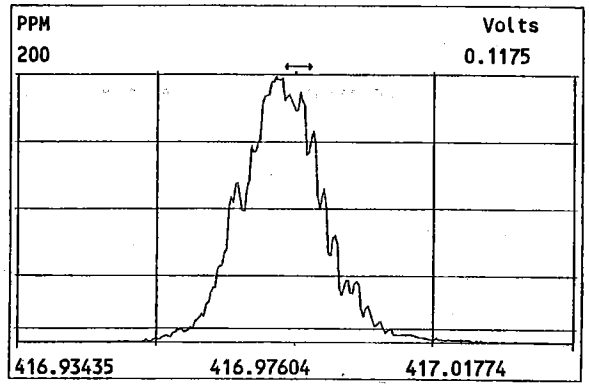






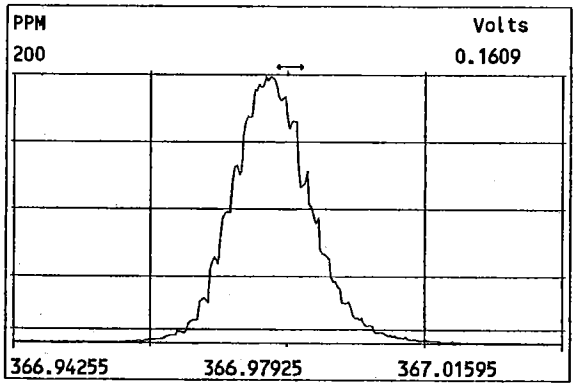


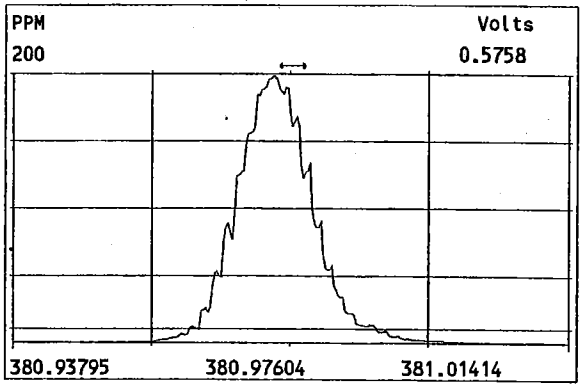


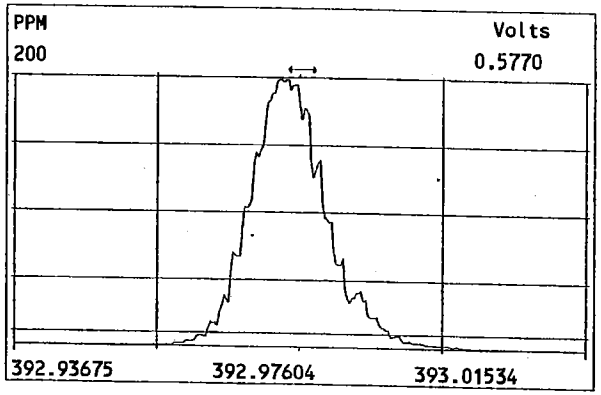


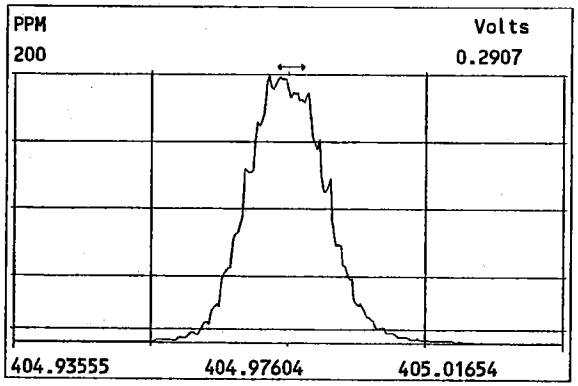
Peak Locate Examination: 6-APR-2010:09:11 File:06APR10M

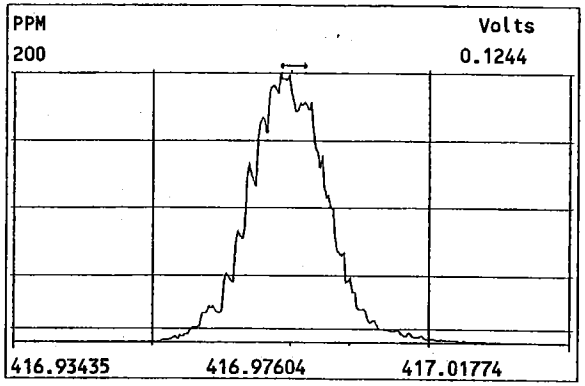
Experiment:PCDD Function:3 Reference:PFK

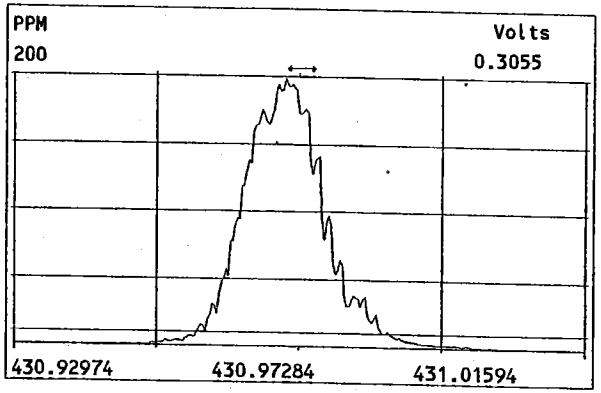


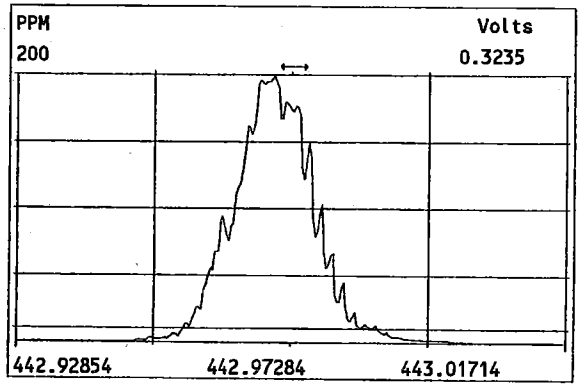


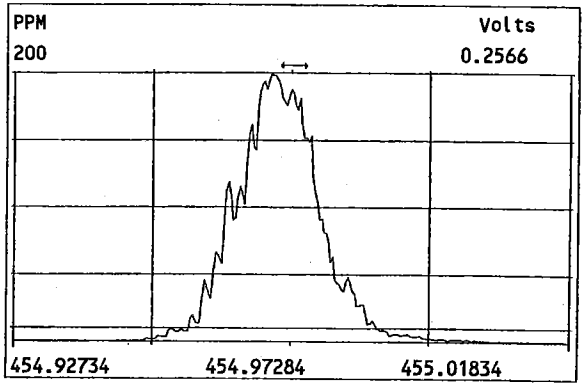




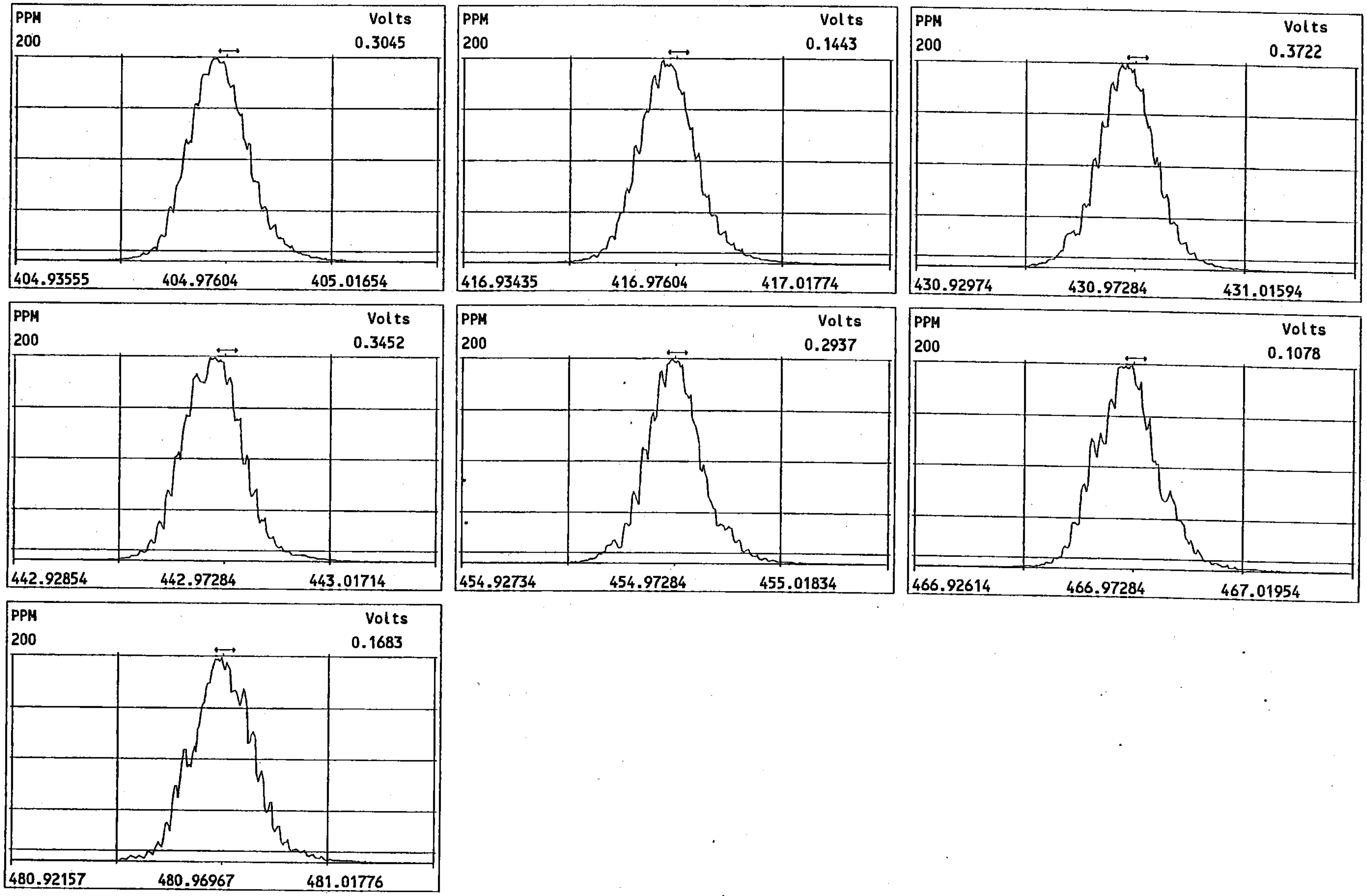




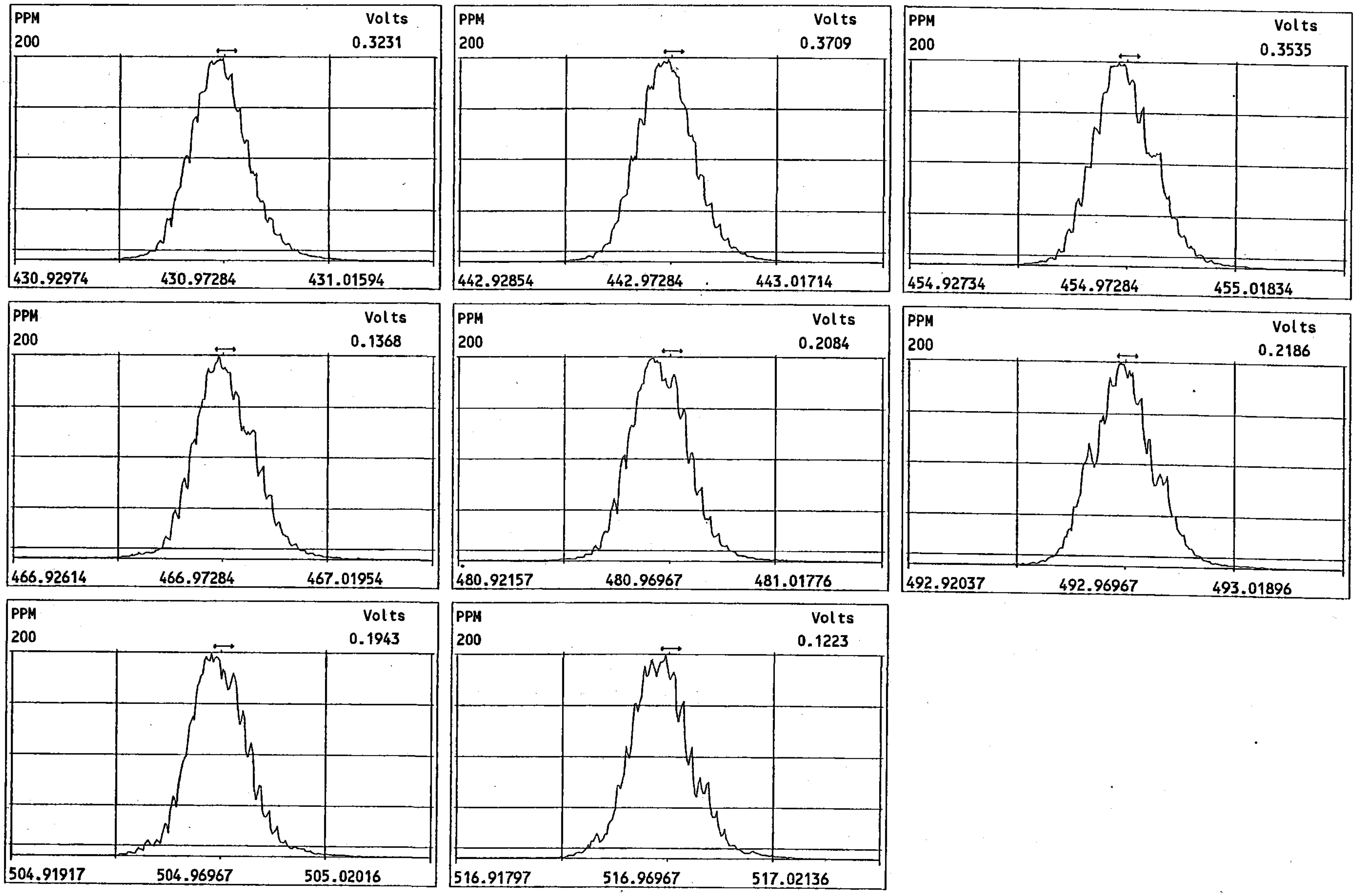




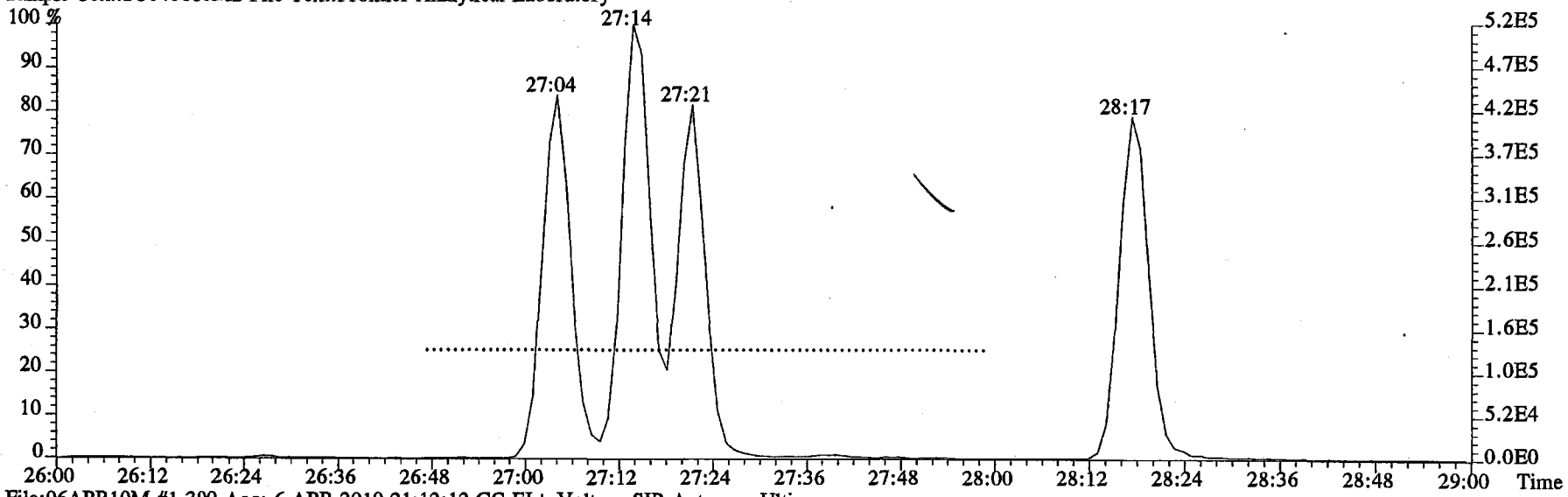
Peak Locate Examination: 6-APR-2010:09:12 File:06APR10M
Experiment:PCDD Function:4 Reference:PFK



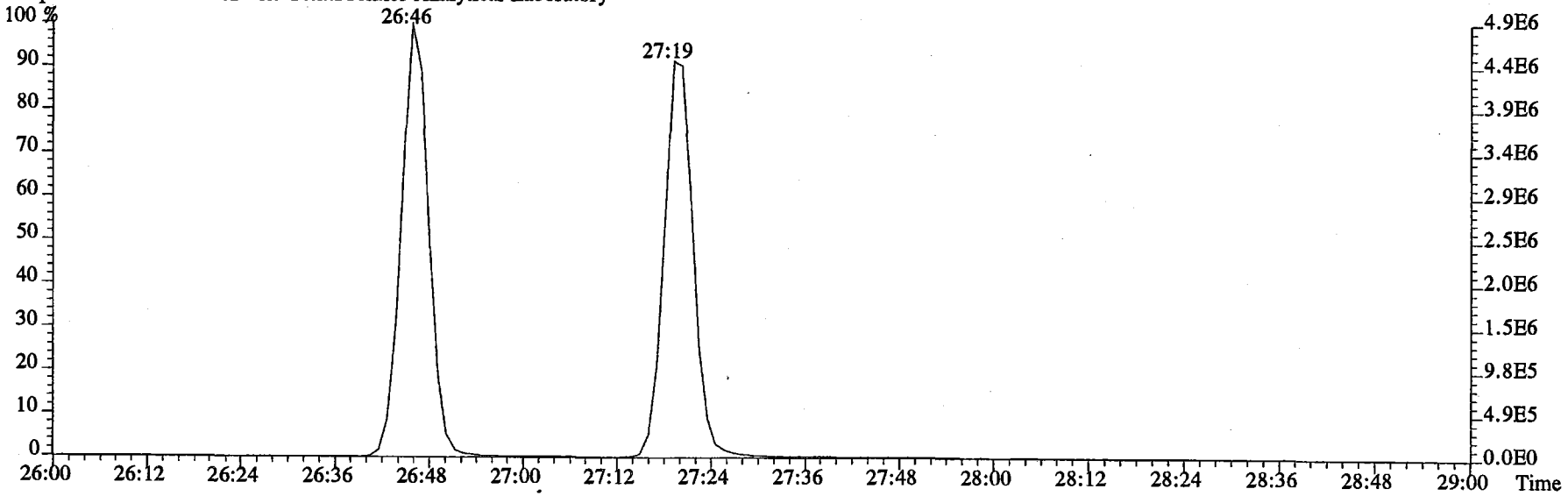
Peak Locate Examination: 6-APR-2010:09:12 File:06APR10M
Experiment:PCDD Function:5 Reference:PFK



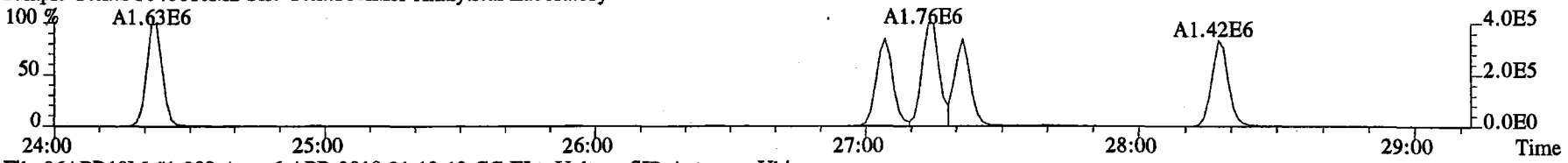
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:14 Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



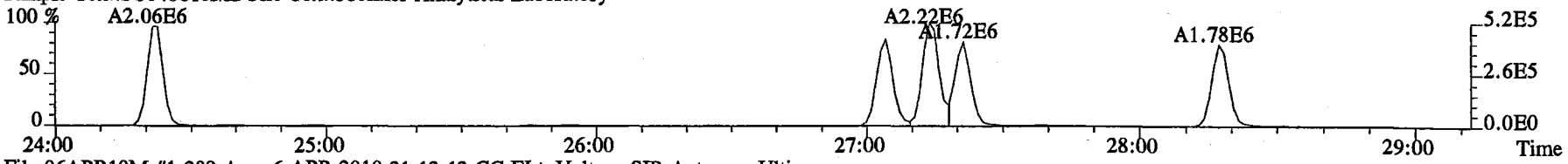
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:14 Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 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:ST040610M2 File Text:Frontier Analytical Laboratory



File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 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:ST040610M2 File Text:Frontier Analytical Laboratory



File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
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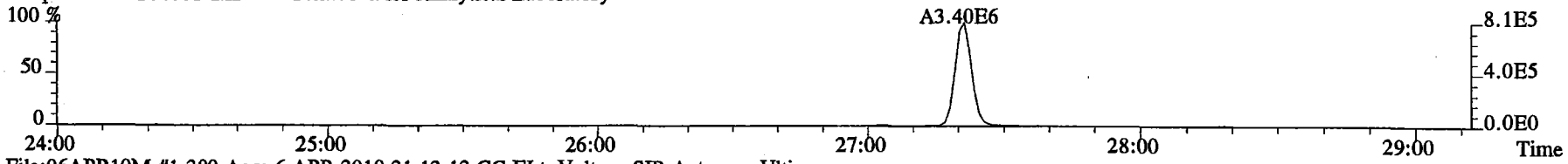

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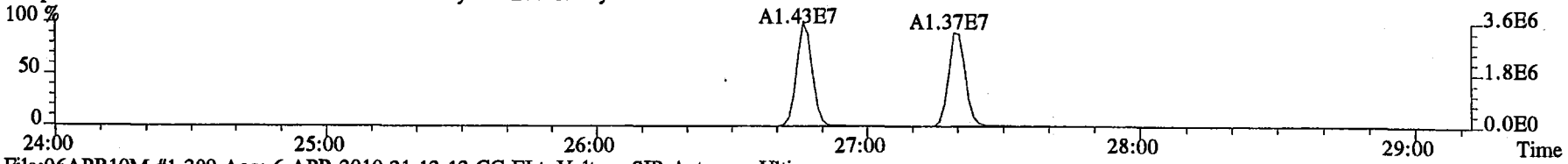
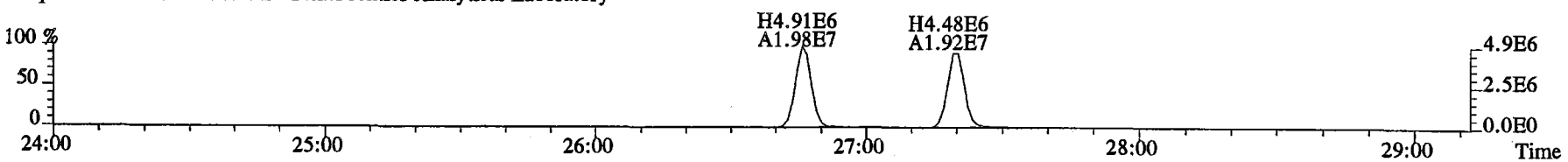
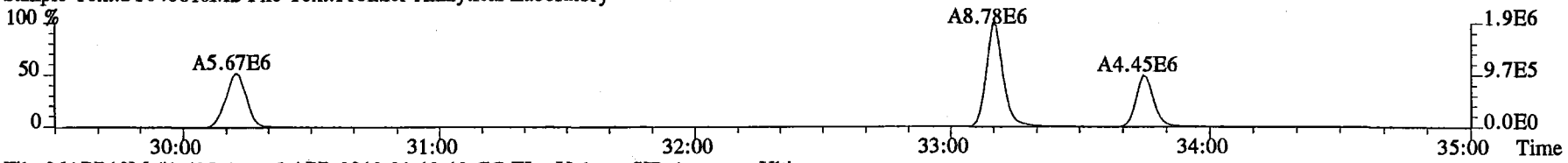


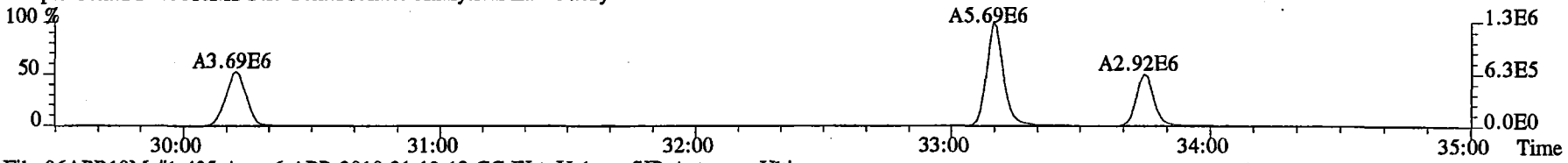
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



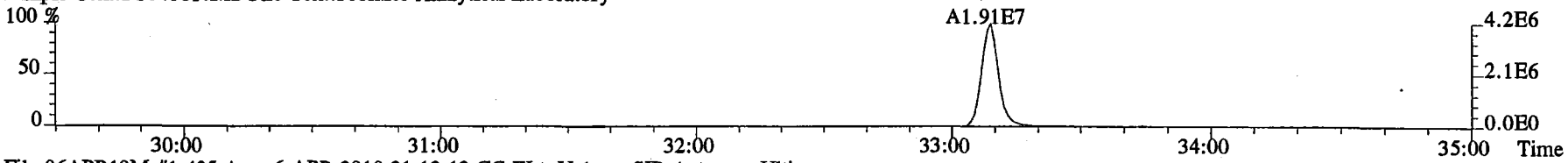
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



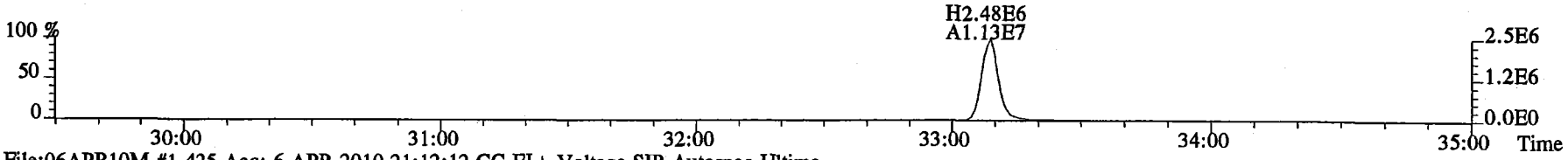
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



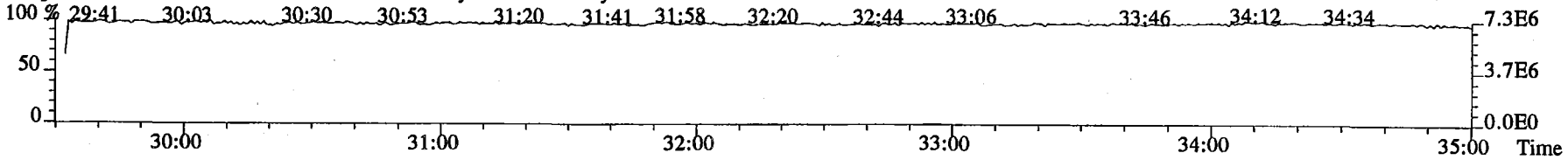
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



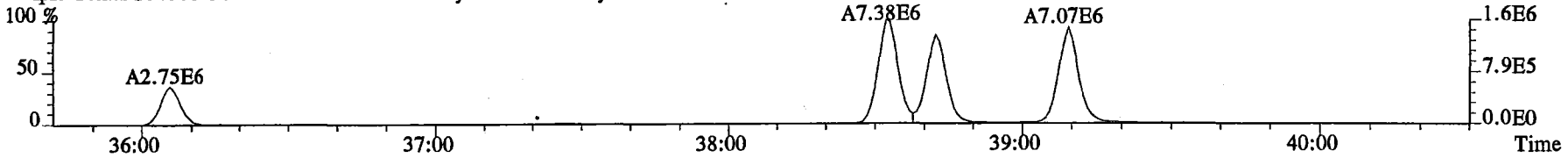
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



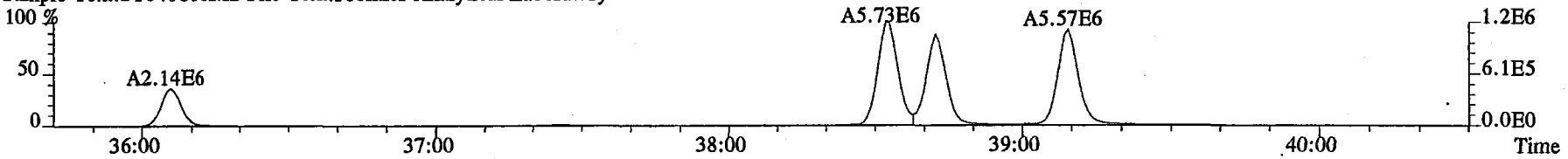
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:14 F:2 Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



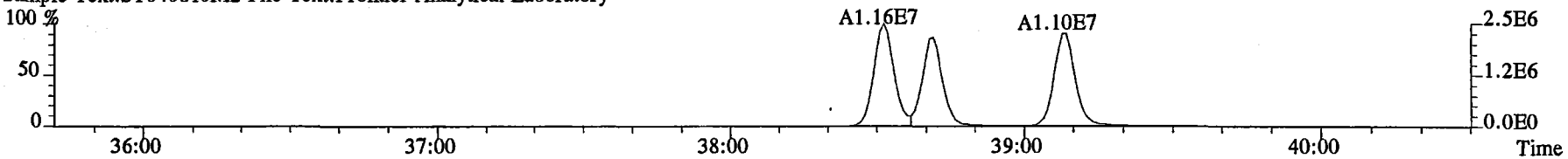
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



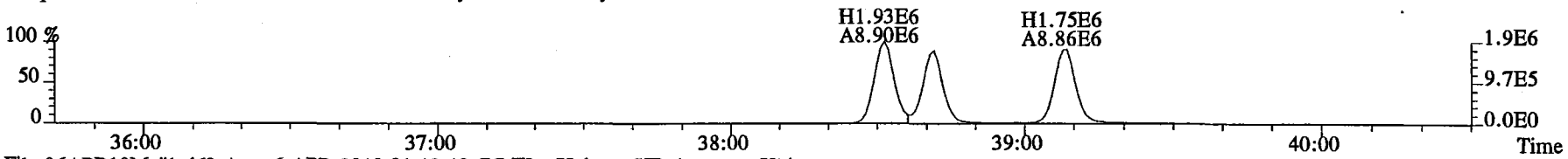
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



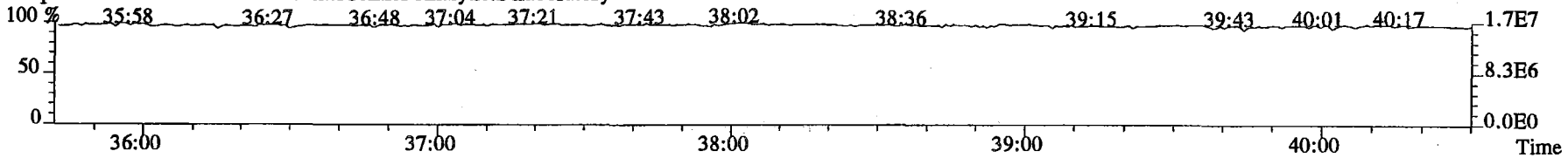
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



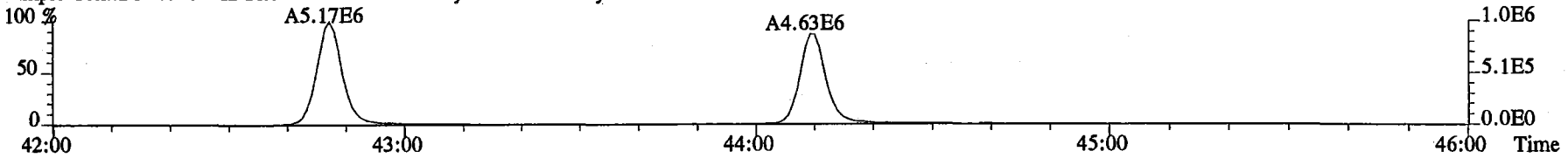
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



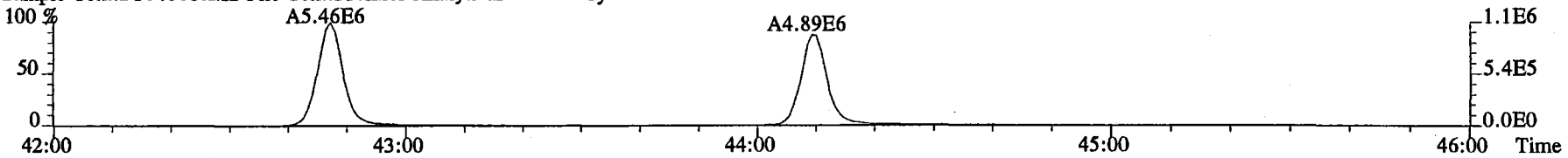
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:14 F:3 Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



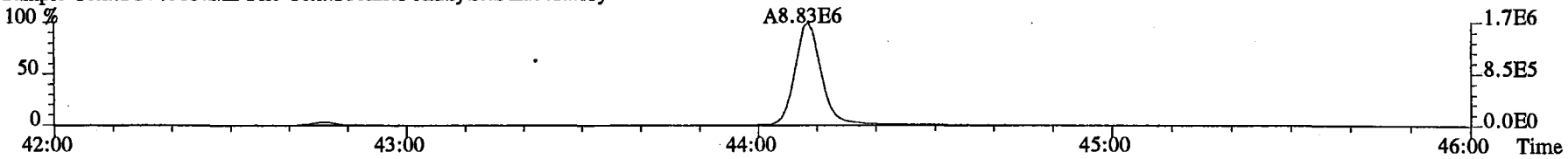
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



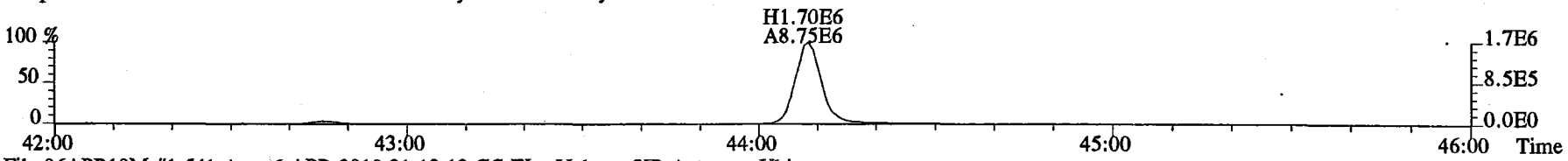
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



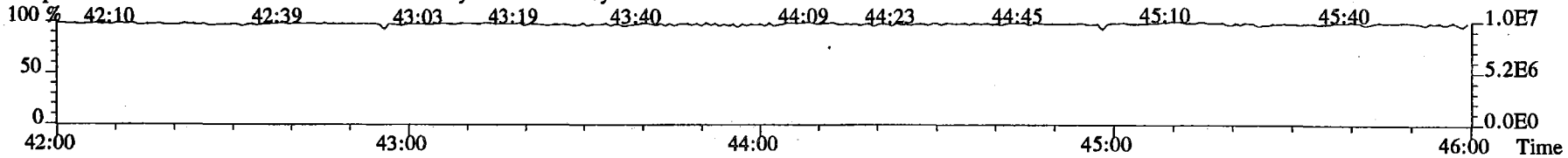
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



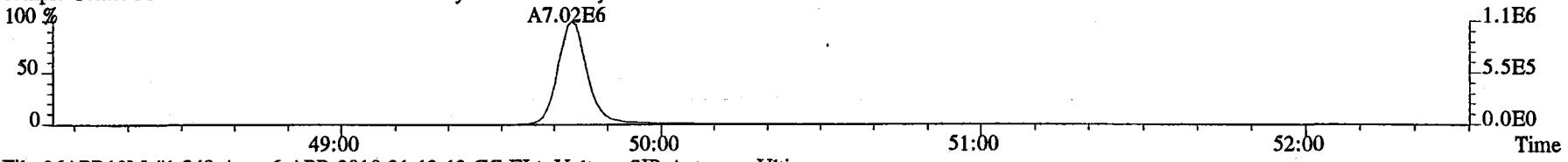
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



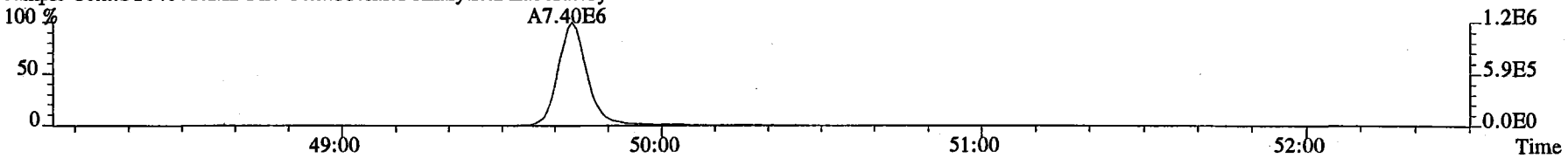
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:14 F:4 Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



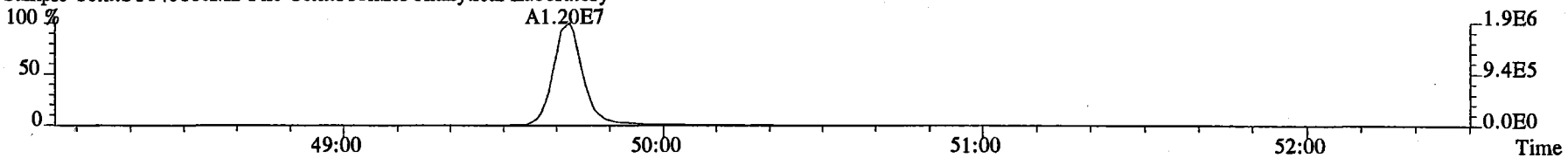
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



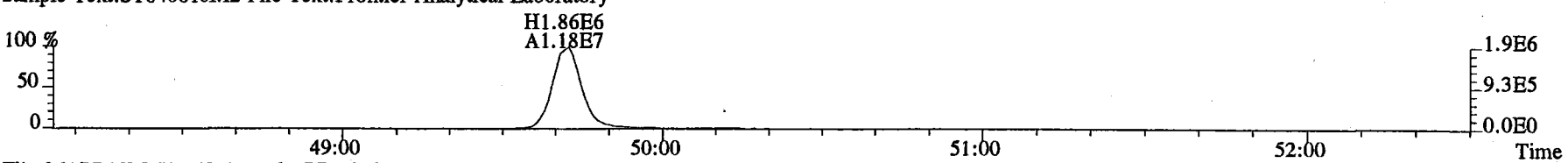
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



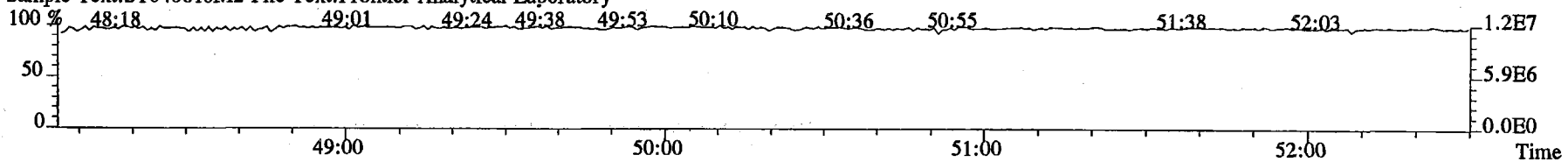
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



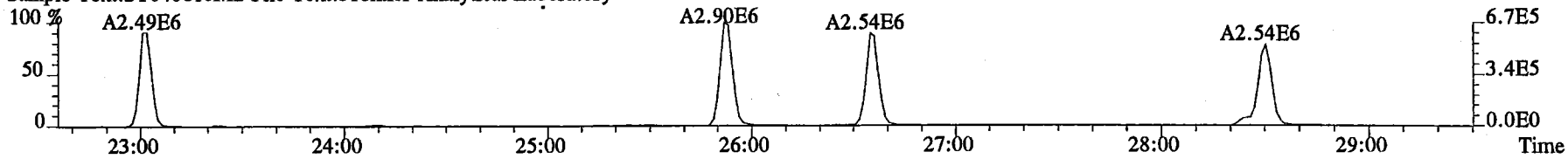
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



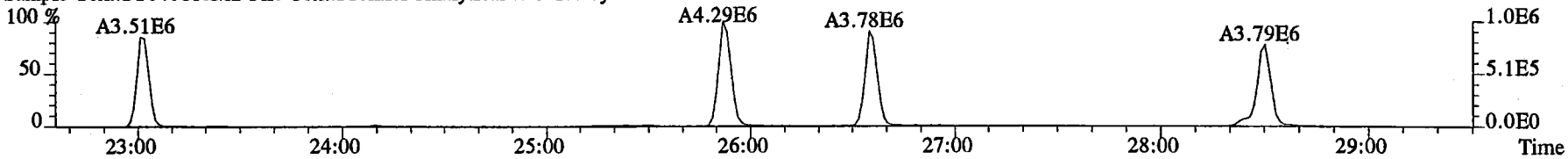
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:14 F:5 Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



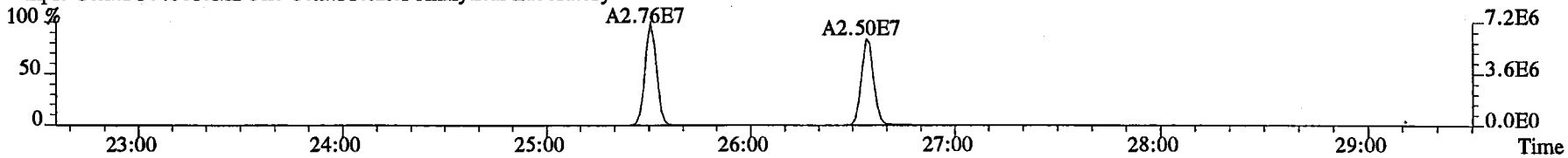
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



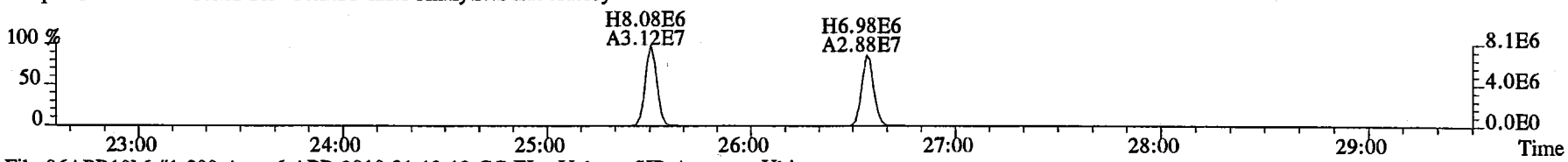
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



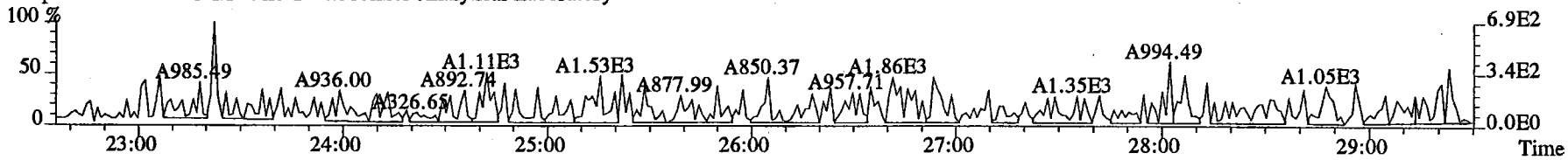
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



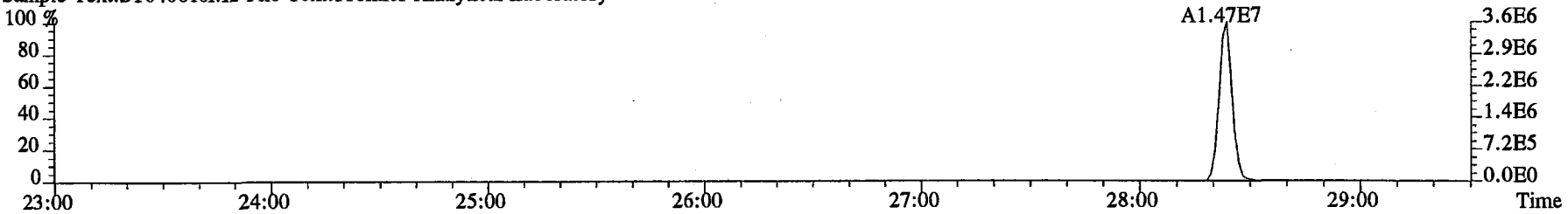
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



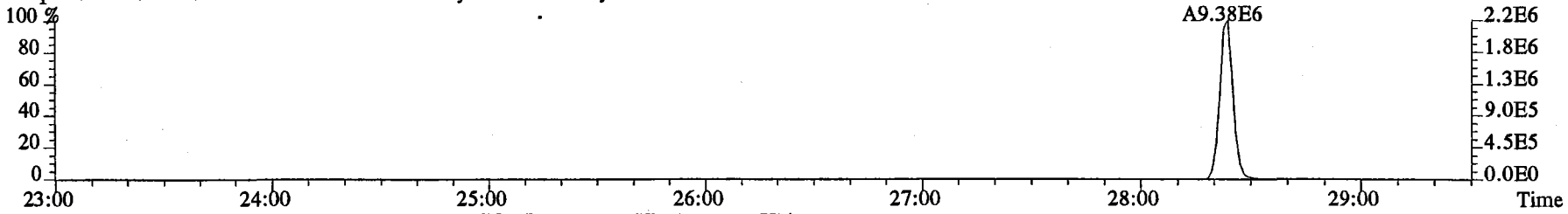
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



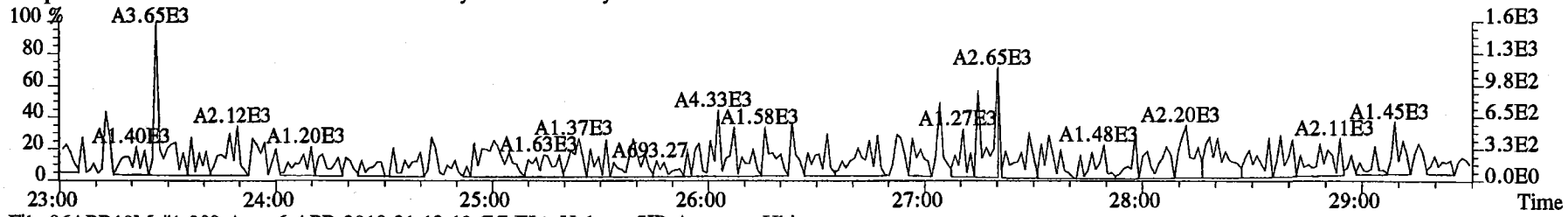
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



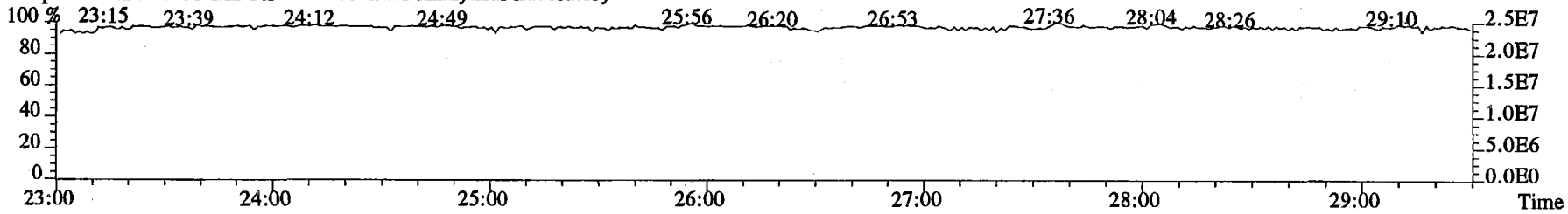
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



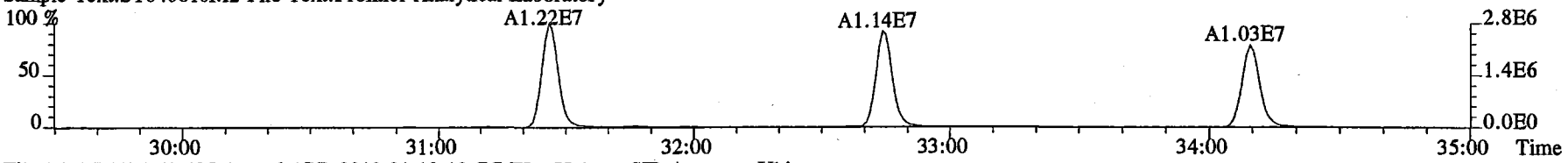
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



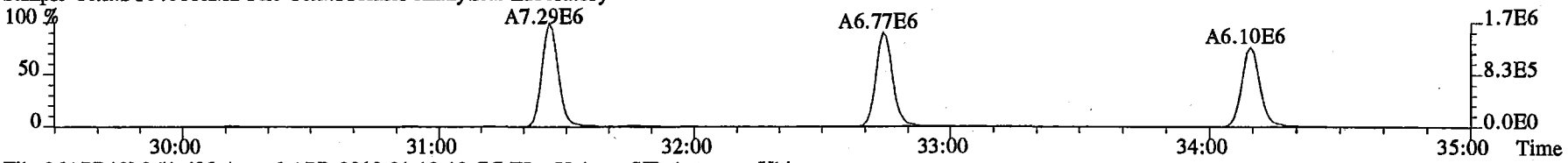
File:06APR10M #1-390 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:14 Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



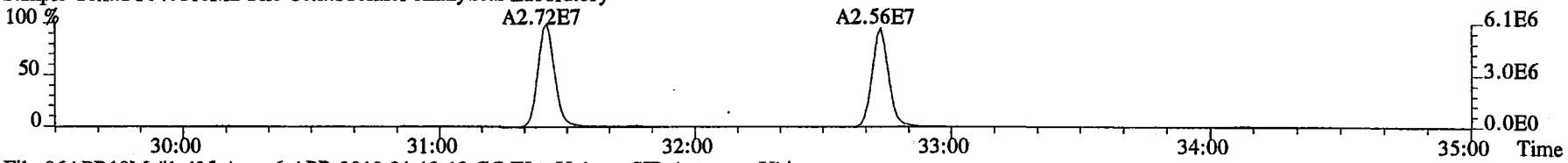
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



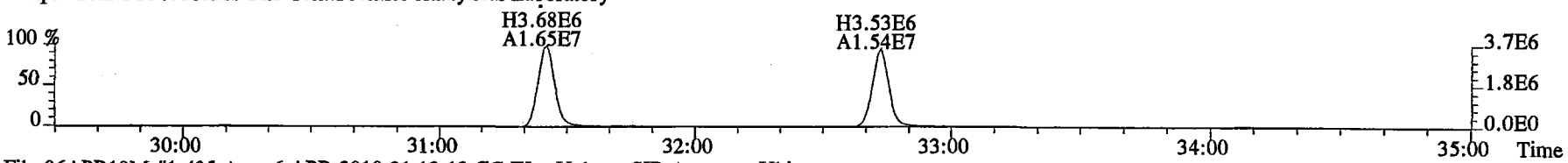
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



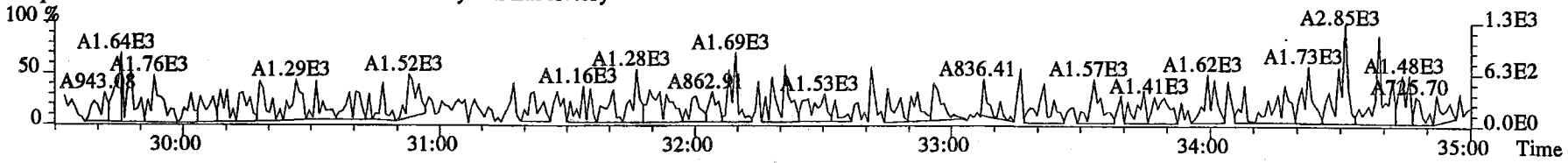
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



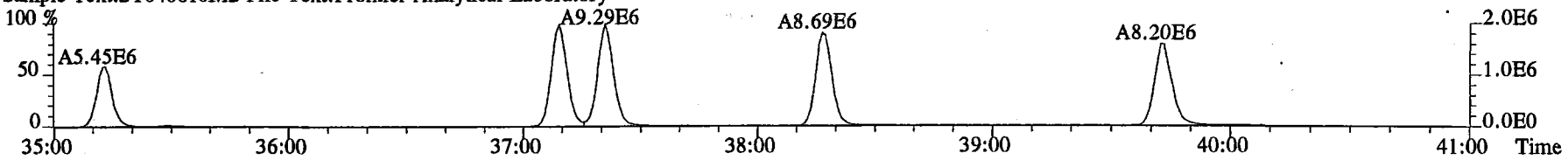
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



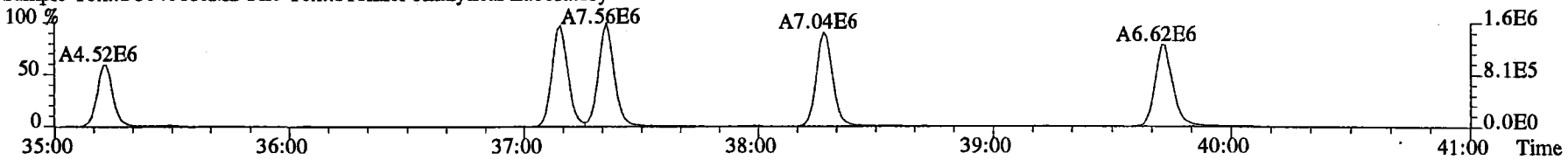
File:06APR10M #1-425 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



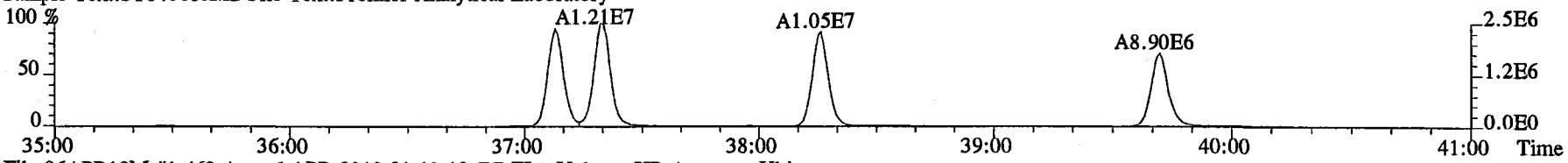
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



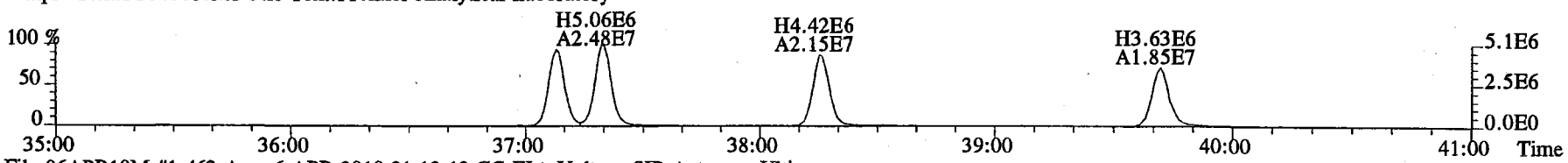
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



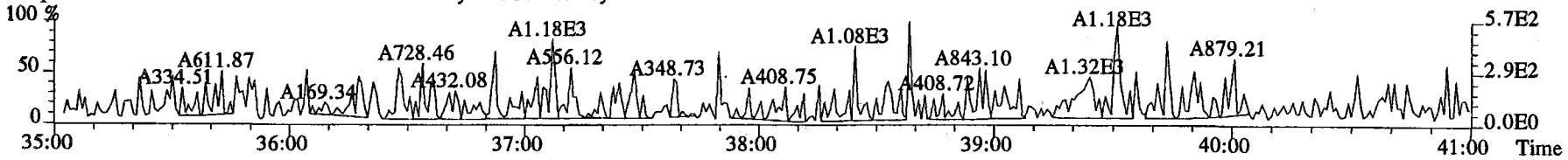
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



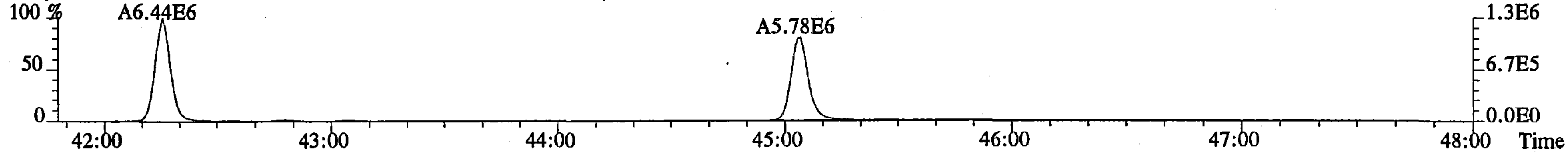
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



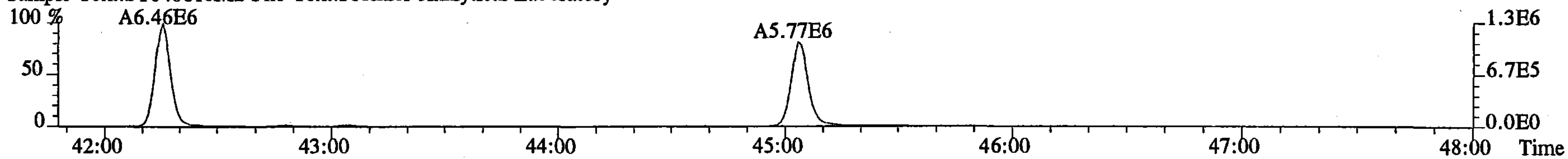
File:06APR10M #1-463 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



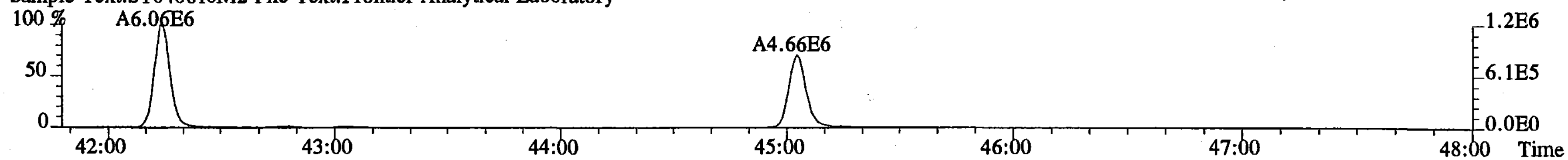
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



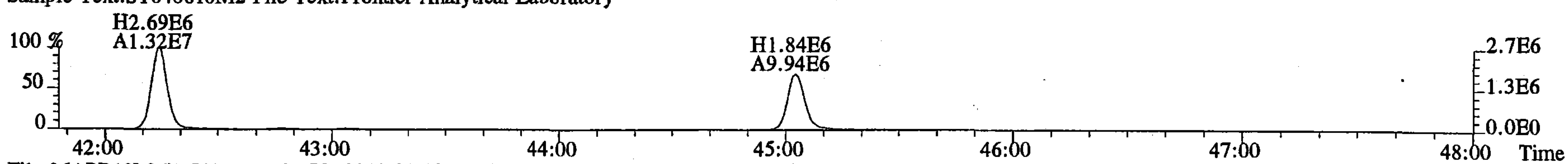
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



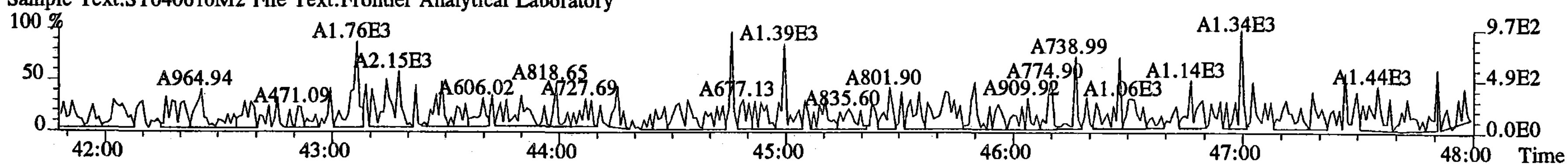
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



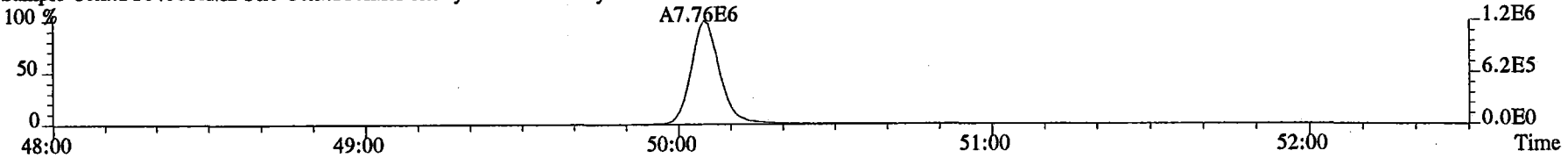
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



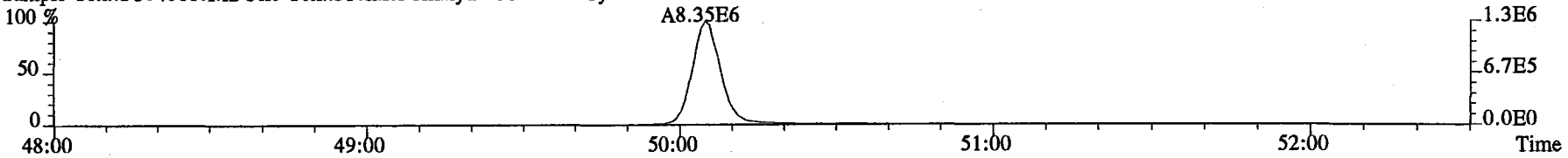
File:06APR10M #1-541 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



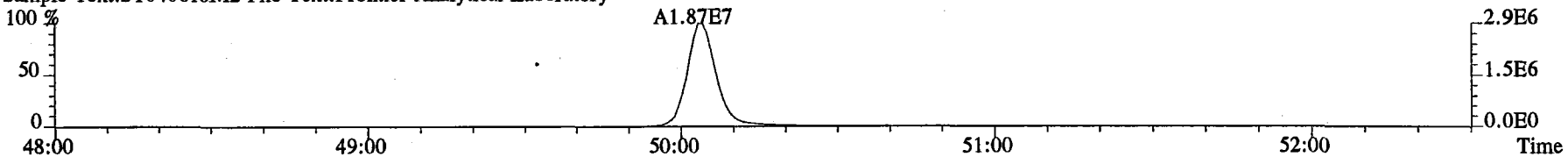
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



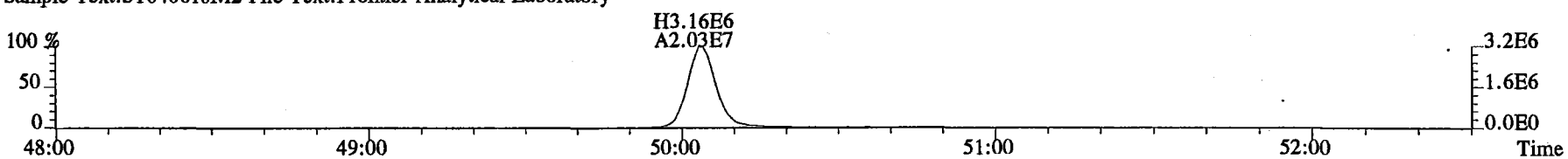
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



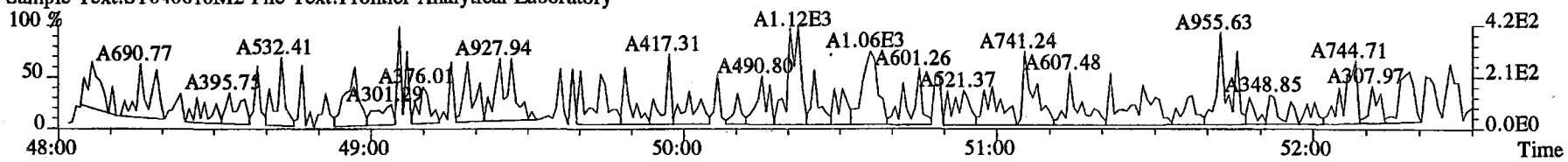
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory



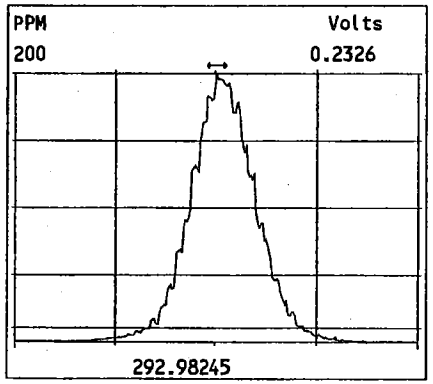
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory

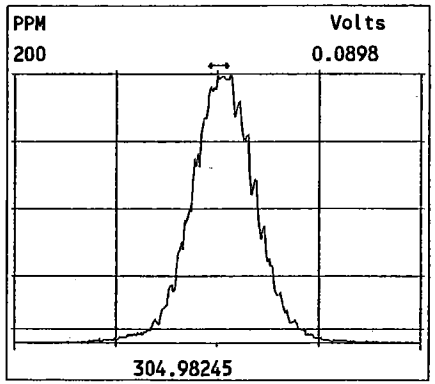


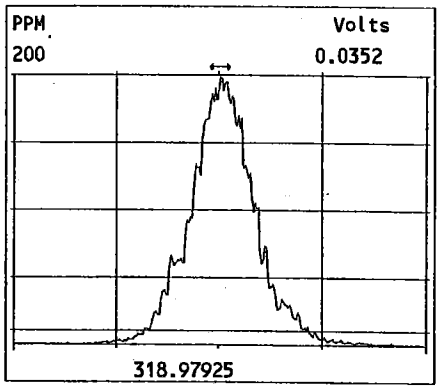
File:06APR10M #1-348 Acq: 6-APR-2010 21:12:12 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M2 File Text:Frontier Analytical Laboratory

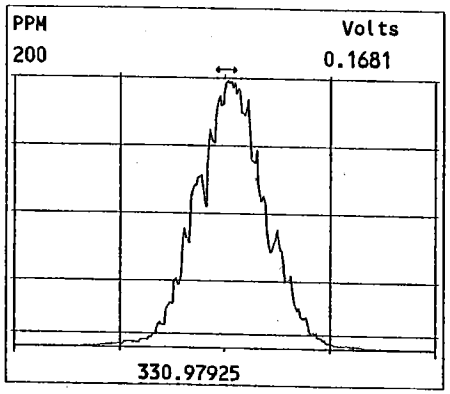


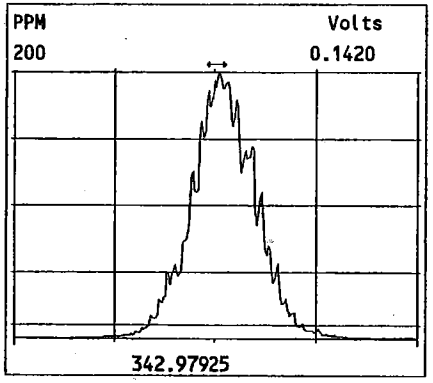
Peak Locate Examination: 7-APR-2010:05:32 File:06APR10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

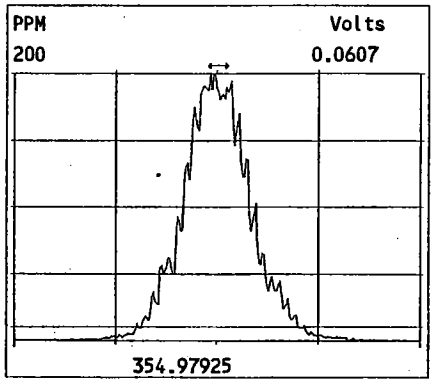


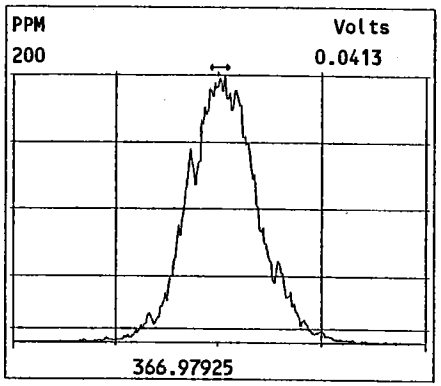


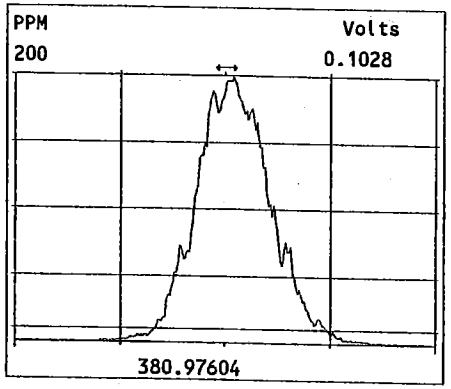


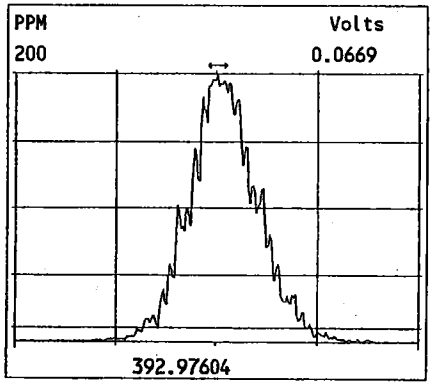


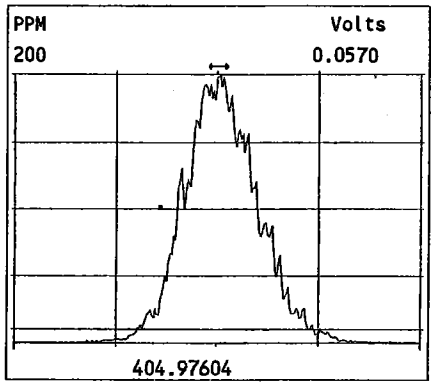


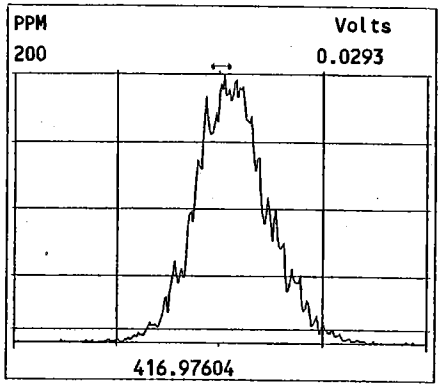






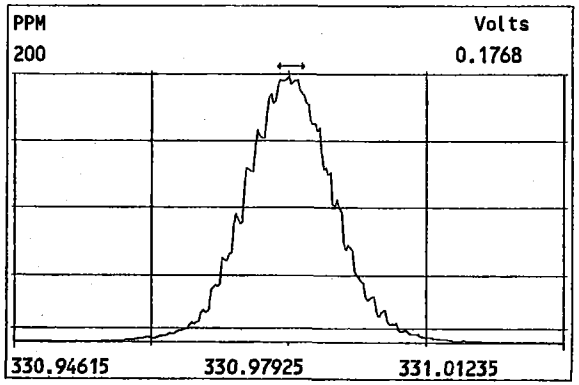


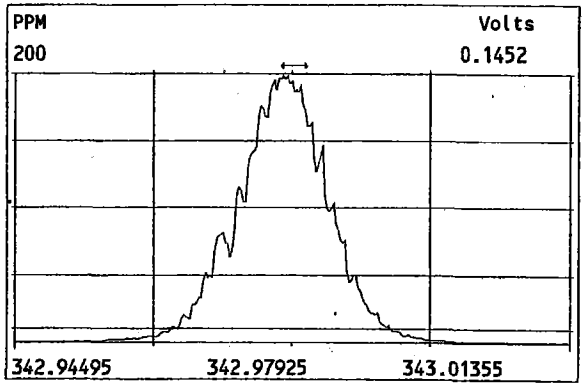


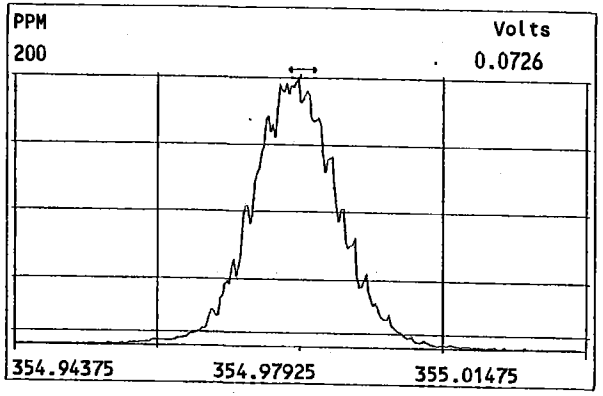


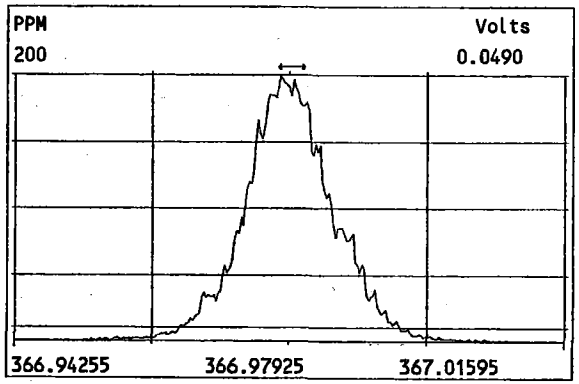
Peak Locate Examination: 7-APR-2010:05:34 File:06APR10M_RES_CHECK

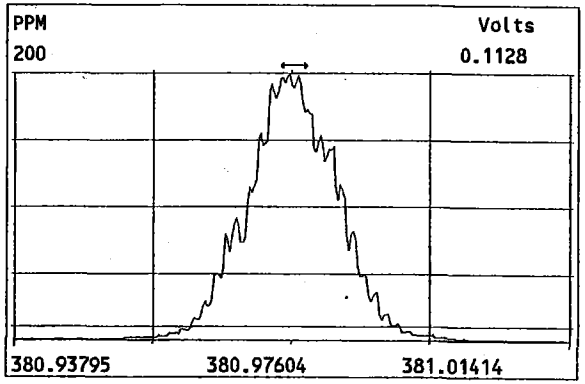
Experiment:PCDD Function:2 Reference:PFK

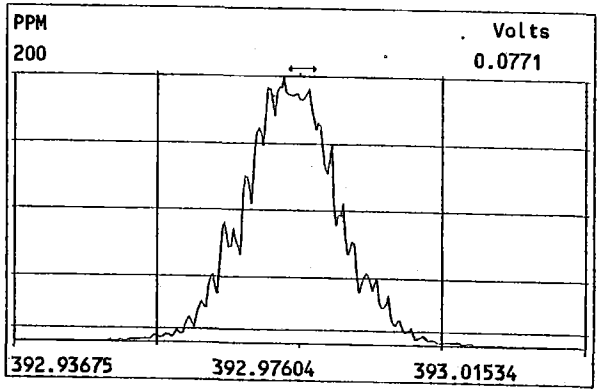


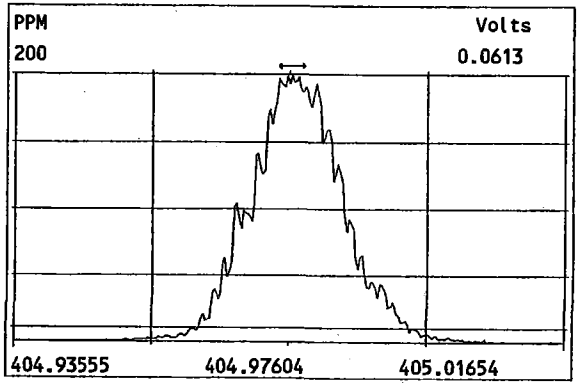


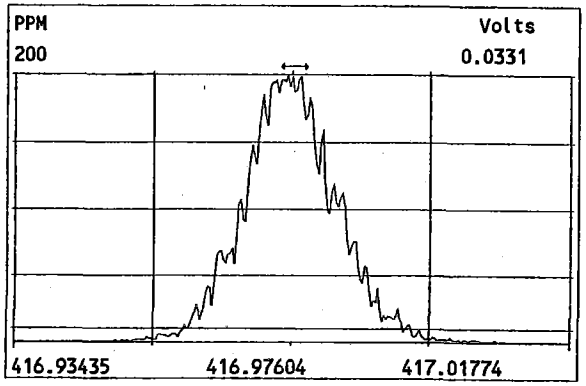




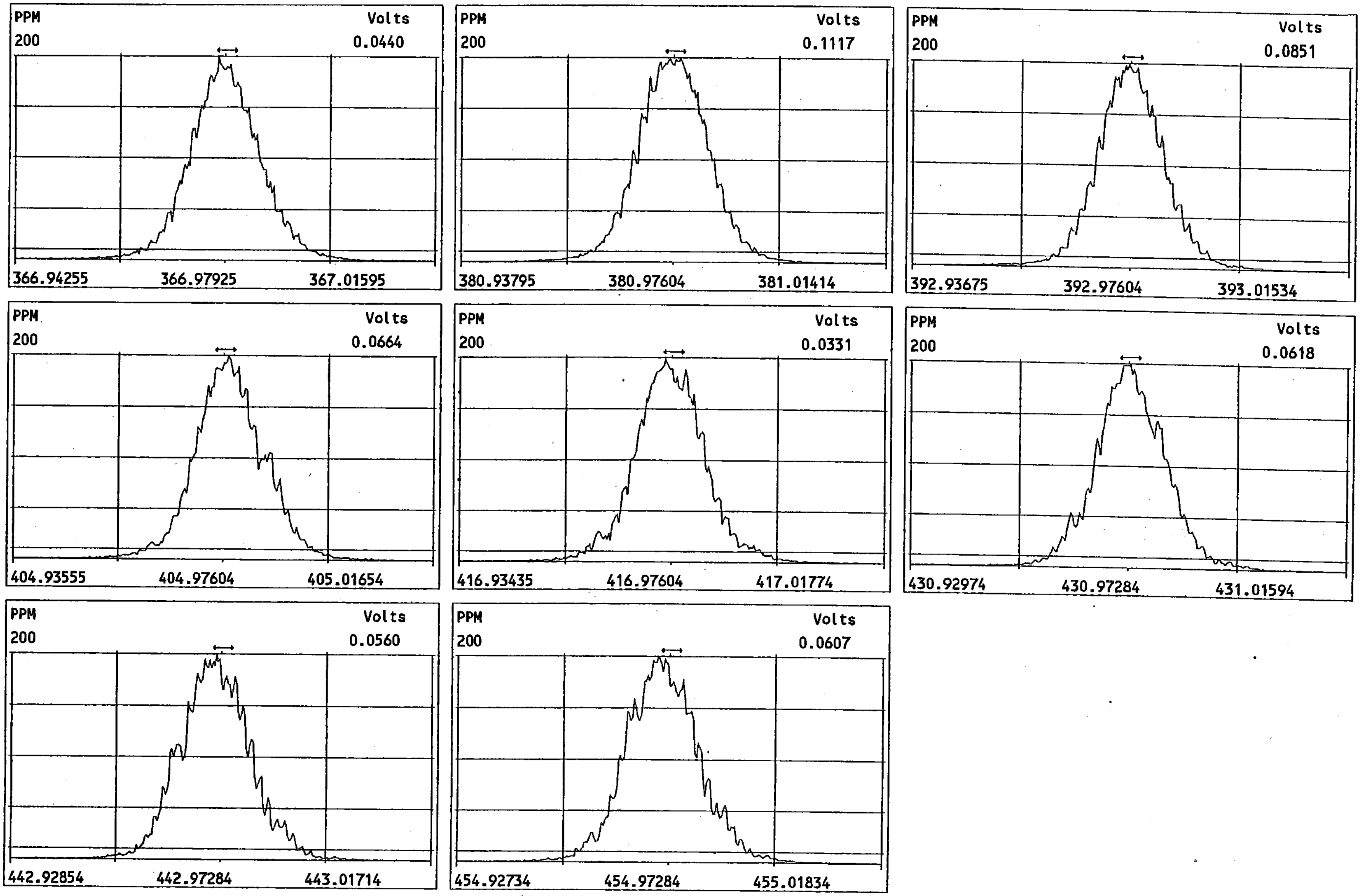




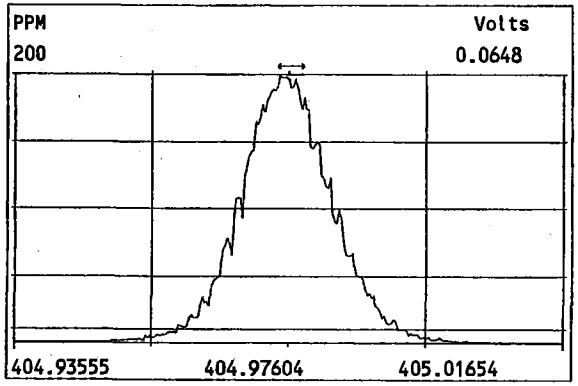


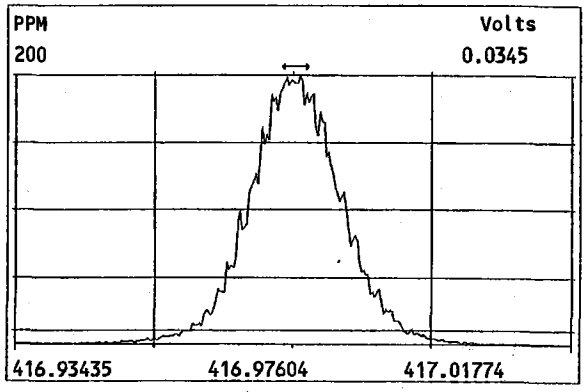


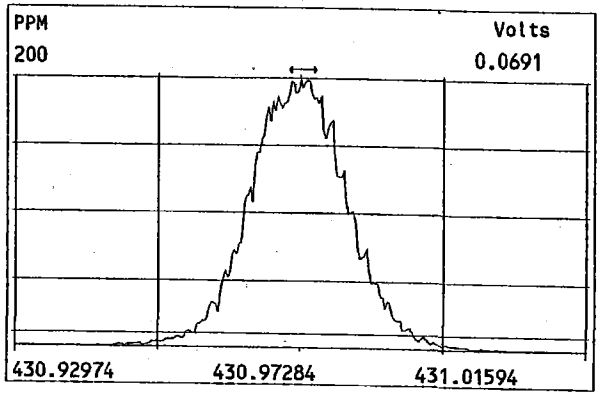
Peak Locate Examination: 7-APR-2010:05:36 File:06APR10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

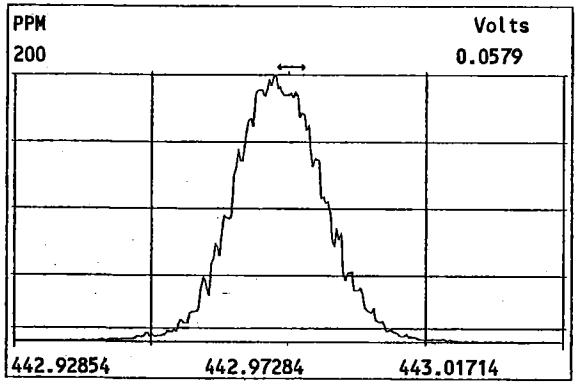


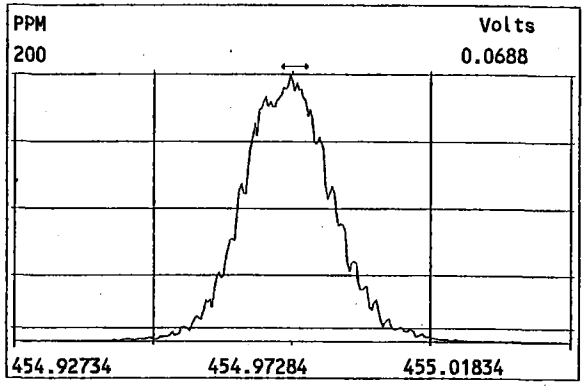
Peak Locate Examination: 7-APR-2010:05:38 File:06APR10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

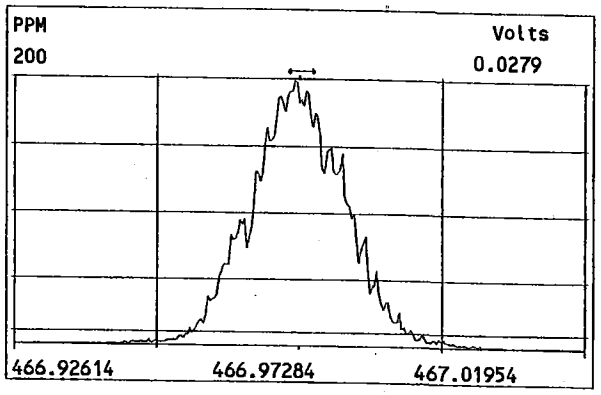


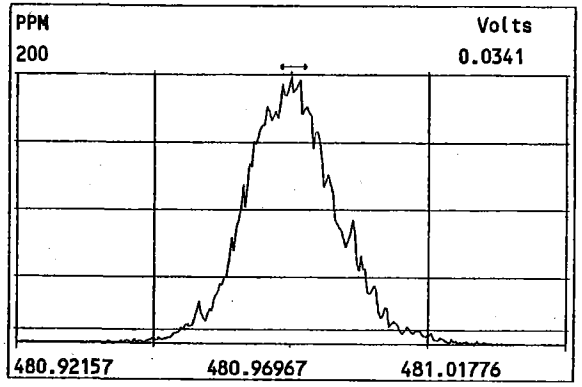




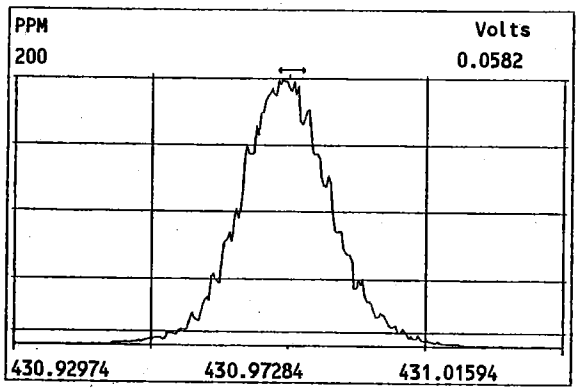


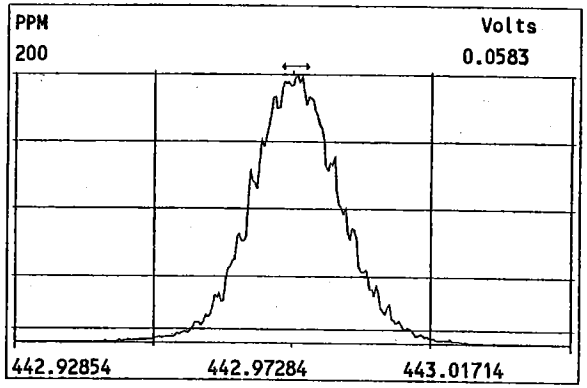


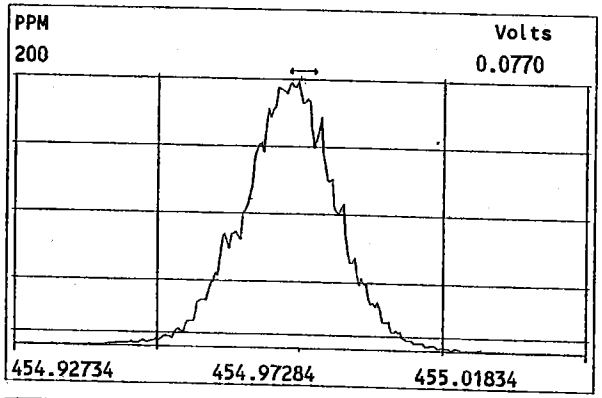


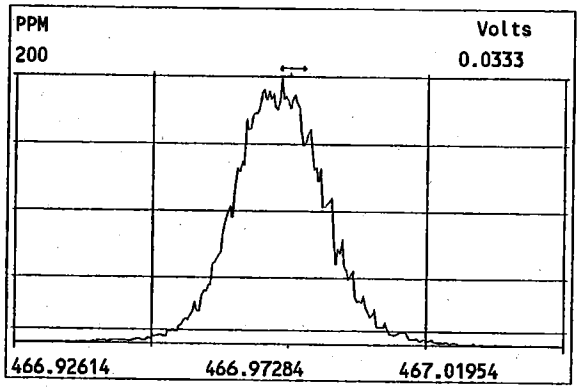


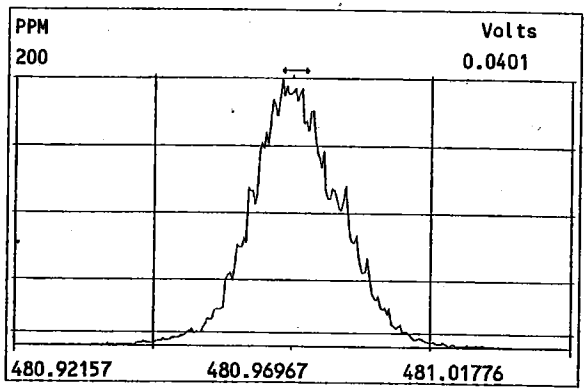
Peak Locate Examination: 7-APR-2010:05:40 File:06APR10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

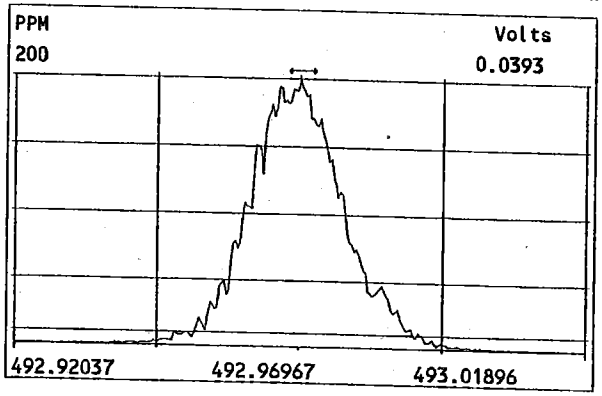


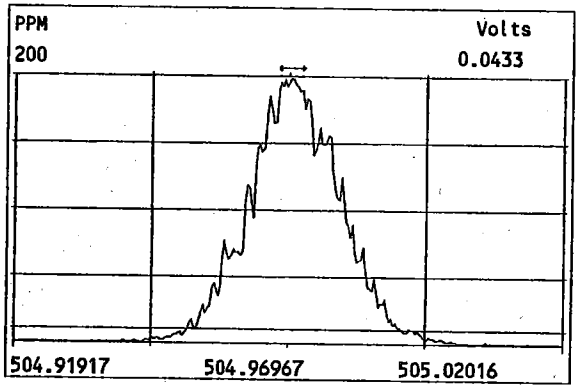


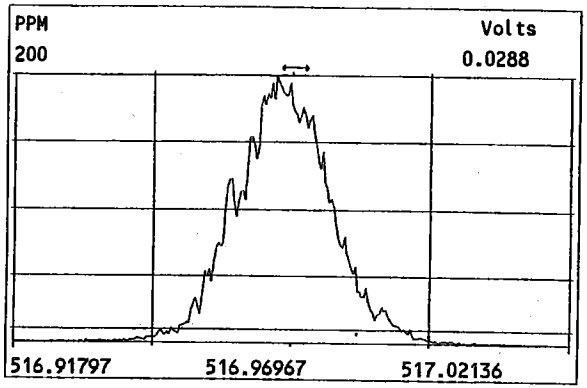












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 06APR10M Sam:22 Analysis Date: 7-APR-10 04:34:49

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	9.14	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32-1.78	y	49.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	46.5	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	47.4	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05-1.43	y	48.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.96	0.88-1.20	y	46.0	43.0 - 58.0
OCDD	M+2/M+4	0.93	0.76-1.02	y	96.3	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.67	0.65-0.89	y	9.16	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.71	1.32-1.78	y	49.8	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.70	1.32-1.78	y	48.6	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	49.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	49.9	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	49.3	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	y	49.8	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.00	0.88-1.20	y	49.5	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.88-1.20	y	49.3	43.0 - 58.0
OCDF	M+2/M+4	0.94	0.76-1.02	y	96.0	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: 4/7/10

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 06APR10M Sam:22 Analysis Date: 7-APR-10 04:34:49

	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	0.71	0.65-0.89	y	106	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.72	1.32-1.78	y	81.2	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	103	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	94.7	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.01	0.88-1.20	y	98.0	72.0 - 138
13C-OCDD	M+2/M+4	1.02	0.76-1.02	y	181	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.88	0.65-0.89	y	111	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.64	1.32-1.78	y	86.0	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.65	1.32-1.78	y	83.6	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	93.7	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	87.8	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	90.1	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.49	0.43-0.59	y	90.2	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.47	0.37-0.51	y	84.9	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37-0.51	y	85.4	77.0 - 129
13C-OCDF	M+2/M+4	0.93	0.76-1.02	y	163	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					10.5	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: 4/7/10

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: 11/18/09

RT Window Data Filename: 06APR10M Sam:22 Analysis Date: 7-APR-10 Time: 04:34:49

DB-5 IS Data Filename: 06APR10M Sam:22 Analysis Date: 7-APR-10 Time: 04:34:49

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)	28:18	1,2,8,9-TCDF (L)	28:31
1,2,4,7,9-PeCDD (F)	30:13	1,3,4,6,8-PeCDF (F)	28:24
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)	36:06	1,2,3,4,6,8-HxCDF (F)	35:14
1,2,3,7,8,9-HxCDD (L)	39:10	1,2,3,7,8,9-HxCDF (L)	39:44
1,2,3,4,6,7,9-HpCDD (F)	42:48	1,2,3,4,6,7,8-HpCDF (F)	42:16
1,2,3,4,6,7,8-HpCDD (L)	44:10	1,2,3,4,7,8,9-HpCDF (L)	45:05

(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: 4/7/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 7-APR-10 04:34:49 CS3 or VER Data Filename: 06APR10M Sam:22

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	1.000	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	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: 4/7/12

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 11/18/09

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 7-APR-10 04:34:49 CS3 or VER Data Filename: 06APR10M Sam:22

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	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	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		1.015	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		1.151	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: 4/7/10

FAL ID: ST040610M3 Filename: 06APR10M Sam:22 Acquired: 7-APR-10 04:34:49 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 090918J ConCal: ST040610M2 EndCal: ST040610M3
Results: 6052-05 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.2
WHO 1998 Tox: 122 WHO 2005 Tox: 111

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	3.18e+06	0.79 y	27:22	1.02	9.14		2.50	-	-	*
1,2,3,7,8-PeCDD	1.34e+07	1.57 y	33:10	0.96	49.3		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.26e+07	1.28 y	38:33	1.37	46.5		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.10e+07	1.29 y	38:43	1.34	47.4		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.21e+07	1.29 y	39:10	1.37	48.1		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	9.18e+06	0.96 y	44:10	1.17	46.0		2.50	-	-	*
OCDD	1.37e+07	0.93 y	49:44	1.21	96.3		2.50	-	-	*
2,3,7,8-TCDF	6.21e+06	0.67 y	26:36	1.29	9.16		2.50	-	-	*
1,2,3,7,8-PeCDF	1.81e+07	1.71 y	31:27	0.89	49.8		2.50	-	-	*
2,3,4,7,8-PeCDF	1.69e+07	1.70 y	32:45	0.91	48.6		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.54e+07	1.23 y	37:10	1.00	49.5		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.56e+07	1.23 y	37:21	0.92	49.9		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.48e+07	1.22 y	38:18	0.99	49.3		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.43e+07	1.23 y	39:44	1.09	49.8		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.22e+07	1.00 y	42:16	1.36	49.5		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.11e+07	1.00 y	45:05	1.61	49.3		2.50	-	-	*
OCDF	1.50e+07	0.94 y	50:06	0.84	96.0		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	3.42e+07	0.71 y	27:20	0.94	106					106
13C-1,2,3,7,8-PeCDD	2.83e+07	1.72 y	33:10	1.02	81.2					81.2
13C-1,2,3,4,7,8-HxCDD	1.97e+07	1.28 y	38:32	0.98	103					103
13C-1,2,3,6,7,8-HxCDD	1.72e+07	1.26 y	38:42	0.94	94.7					94.7
13C-1,2,3,4,6,7,8-HpCDD	1.71e+07	1.01 y	44:09	0.90	98.0					98.0
13C-OCDD	2.34e+07	1.02 y	49:43	0.67	181					90.5
13C-2,3,7,8-TCDF	5.27e+07	0.88 y	26:34	0.88	111					111
13C-1,2,3,7,8-PeCDF	4.08e+07	1.64 y	31:26	0.88	86.0					86.0
13C-2,3,4,7,8-PeCDF	3.84e+07	1.65 y	32:44	0.85	83.6					83.6
13C-1,2,3,4,7,8-HxCDF	3.12e+07	0.49 y	37:08	1.72	93.7					93.7
13C-1,2,3,6,7,8-HxCDF	3.41e+07	0.49 y	37:21	2.00	87.8					87.8
13C-2,3,4,6,7,8-HxCDF	3.04e+07	0.48 y	38:16	1.74	90.1					90.1
13C-1,2,3,7,8,9-HxCDF	2.63e+07	0.49 y	39:42	1.51	90.2					90.2
13C-1,2,3,4,6,7,8-HpCDF	1.81e+07	0.47 y	42:14	1.10	84.9					84.9
13C-1,2,3,4,7,8,9-HpCDF	1.40e+07	0.46 y	45:03	0.85	85.4					85.4
13C-OCDF	3.71e+07	0.93 y	50:05	1.17	163					81.5
37Cl-2,3,7,8-TCDD	3.50e+06		27:22	0.97	10.5					105
13C-1,2,3,4-TCDD	3.42e+07	0.72 y	26:46	-	131					
13C-1,2,3,4-TCDF	5.40e+07	0.88 y	25:31	-	117					
13C-1,2,3,7,8,9-HxCDD	1.94e+07	1.25 y	39:08	-	94.6					
							Fac	Noise-1	Noise-2	DL	#Hom
Total Tetra-Dioxins	1.75e+07		24:23	1.02	50.3		2.50	-	-	*	21
Total Penta-Dioxins	2.91e+07		30:13	0.96	107		2.50	-	-	*	8
Total Hexa-Dioxins	4.04e+07		36:06	1.36	161		2.50	-	-	*	8
Total Hepta-Dioxins	1.94e+07		42:48	1.17	97.0		2.50	-	-	*	8
Total Tetra-Furans	2.49e+07		23:02	1.29	36.8		2.50	-	-	*	18
1st Fn. Tot Penta-Furans	2.33e+07		28:24	0.90	65.5		2.50	-	-	* PeCDF	1
Total Penta-Furans	5.06e+07		30:10	0.90	143		2.50	-	-	* 208	11
Total Hexa-Furans	6.96e+07		35:14	0.99	230		2.50	-	-	*	13
Total Hepta-Furans	2.36e+07		42:16	1.47	99.9		2.50	-	-	*	12

Analyst: _____ Date: 4/7/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:06APR10M Instrument: FAL3 GC: DB5 Experiment:PCDD

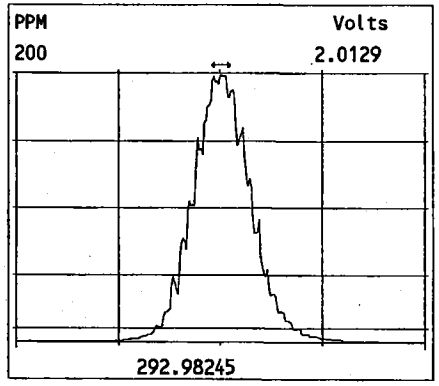
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
06APR10M	1	ST040610M1	1613 CS3 090918J	6-APR-10 09:12:42	ST040610M1	ST040610M2	BS
06APR10M	2	SB040610M1	Solvent Blank	6-APR-10 10:08:01	ST040610M1	ST040610M2	BS
06APR10M	3	1979-001-0001-MB	Method Blank	6-APR-10 11:03:24	ST040510M1	ST040510M2	TC
06APR10M	4	6062-002-0001-SA	RM #51006 LOT #818066	6-APR-10 11:58:42	ST040510M1	ST040510M2	TC
06APR10M	5	6062-005-0001-SA	RM #51034 LOT #818690	6-APR-10 12:54:07	ST040510M1	ST040510M2	TC
06APR10M	6	SB040610M2	Solvent Blank	6-APR-10 13:49:30	ST040610M1	ST040610M2	BS
06APR10M	7	6050-001-0001-SA	IN-4127	6-APR-10 14:44:49	ST040610M1	ST040610M2	BS
06APR10M	8	6052-005-0001-SA	100222-FEG-02	6-APR-10 15:40:08	ST040610M1	ST040610M2	BS
06APR10M	9	6052-006-0001-SA	100222-RAW-01	6-APR-10 16:35:30	ST040610M1	ST040610M2	BS
06APR10M	10	6054-001-0001-SA	201003220077	6-APR-10 17:30:49	ST040610M1	ST040610M2	BS
06APR10M	11	6056-001-0001-SA	Effluent	6-APR-10 18:26:08	ST040610M1	ST040610M2	BS
06APR10M	12	6070-001-0001-SA	LB67159	6-APR-10 19:21:27	ST040610M1	ST040610M2	BS
06APR10M	13	SB040610M3	Solvent Blank	6-APR-10 20:16:49	ST040610M1	ST040610M2	BS
06APR10M	14	ST040610M2	1613 CS3 090918J	6-APR-10 21:12:12	ST040610M2	ST040610M3	BS
06APR10M	15	1980-001-0001-OPR	OPR	6-APR-10 22:07:31	ST040610M2	ST040610M3	BS
06APR10M	16	1980-001-0001-MB	Method Blank	6-APR-10 23:02:52	ST040610M2	ST040610M3	BS
06APR10M	17	6069-001-0001-SA	CB31A032510COMP	6-APR-10 23:58:10	ST040610M2	ST040610M3	BS
06APR10M	18	6069-002-0001-SA	CB4857032510COMP	7-APR-10 00:53:33	ST040610M2	ST040610M3	BS
06APR10M	19	6069-003-0001-SA	CB1032510COMP	7-APR-10 01:48:52	ST040610M2	ST040610M3	BS
06APR10M	20	6069-004-0001-SA	CB101032510COMP	7-APR-10 02:44:11	ST040610M2	ST040610M3	BS
06APR10M	21	SB040610M4	Solvent Blank	7-APR-10 03:39:30	ST040610M2	ST040610M3	BS
06APR10M	22	ST040610M3	1613 CS3 090918J	7-APR-10 04:34:49	ST040610M2	ST040610M3	BS

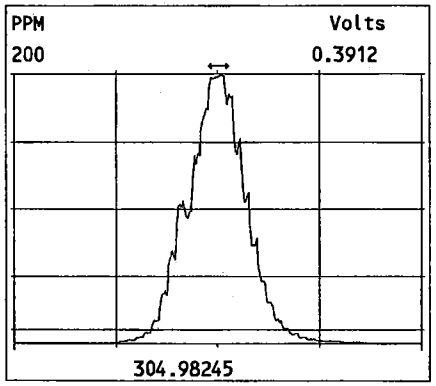
4/7/10

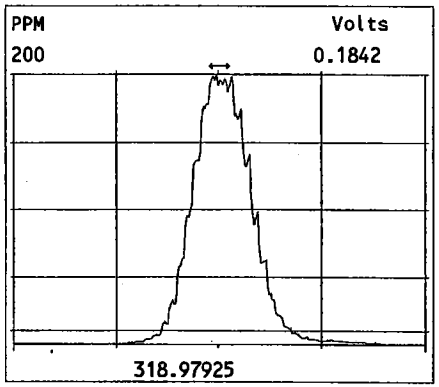
Data Backed Up:_____

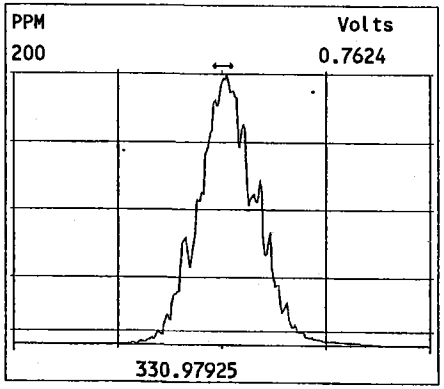
Date:_____

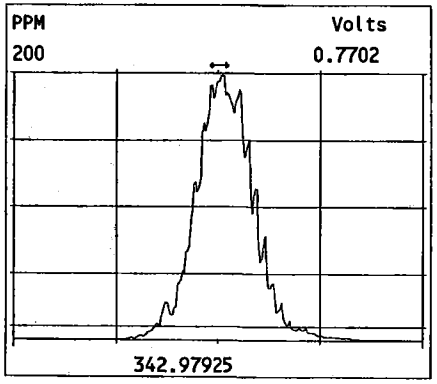
Peak Locate Examination: 6-APR-2010:09:10 File:06APR10M
Experiment:PCDD Function:1 Reference:PFK

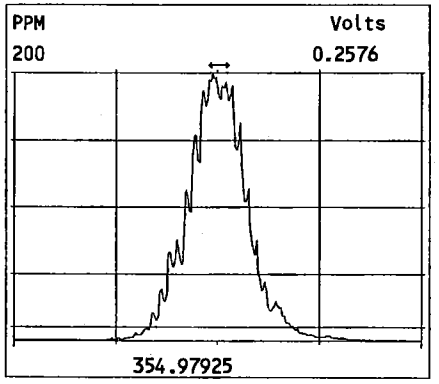


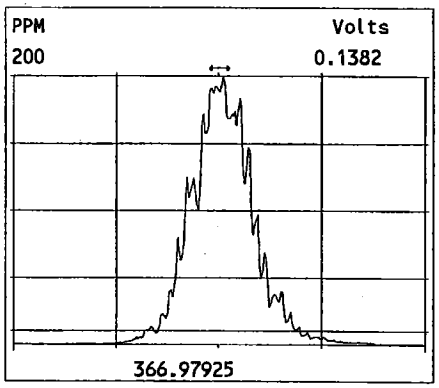


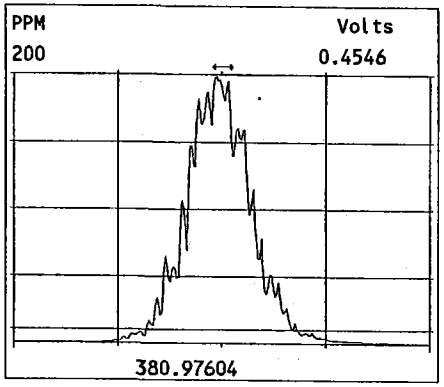


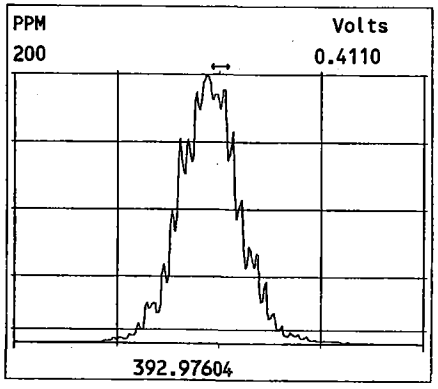


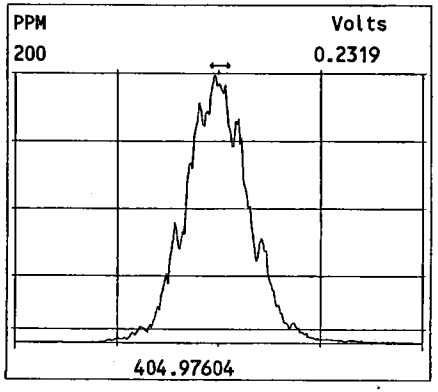


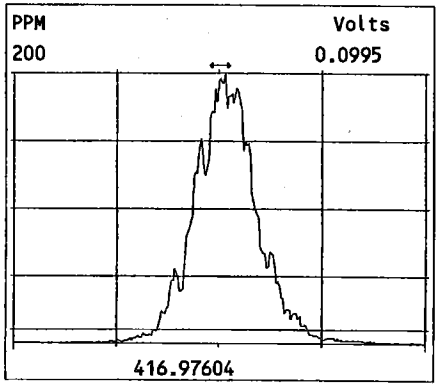




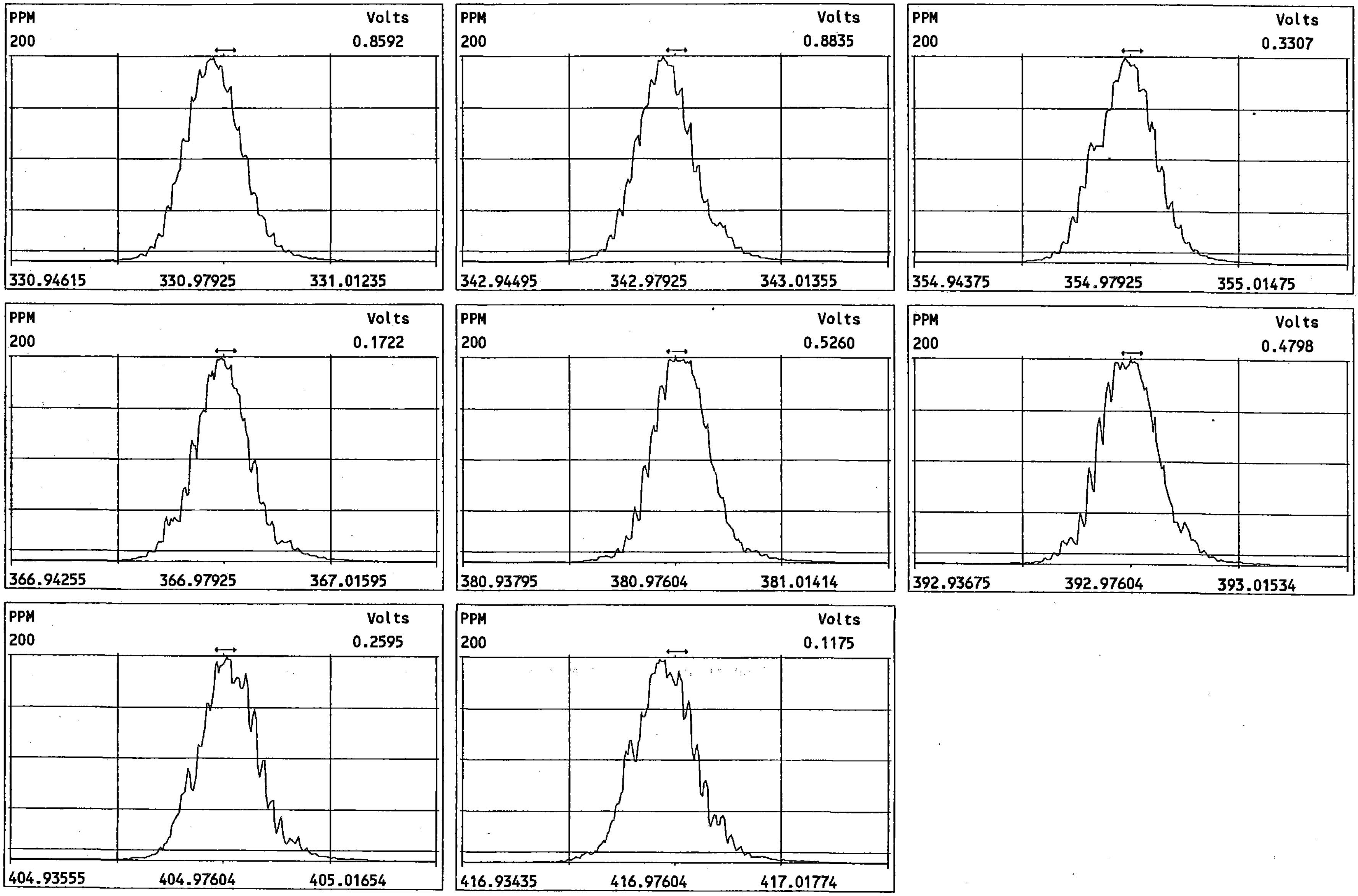




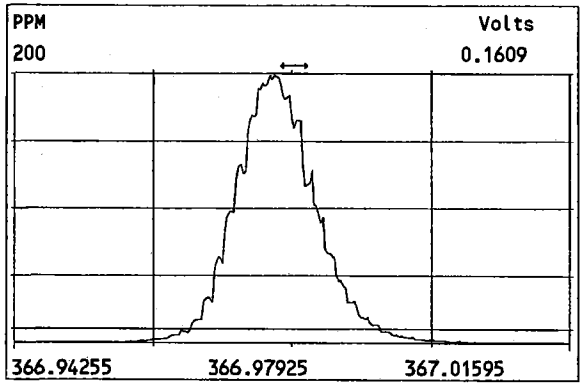


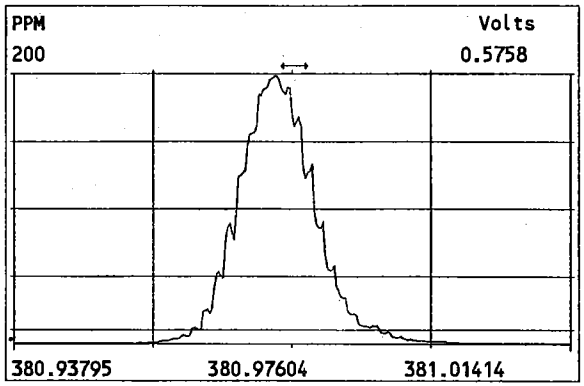


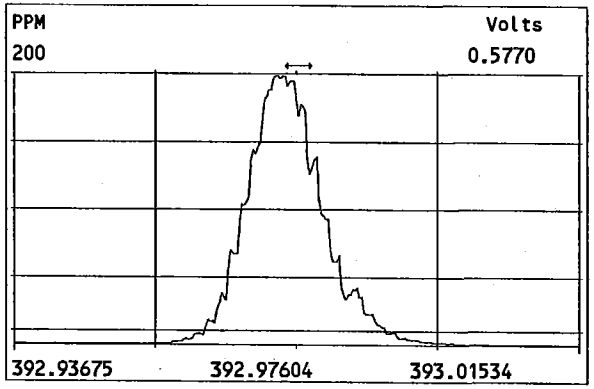
Peak Locate Examination: 6-APR-2010:09:11 File:06APR10M
Experiment:PCDD Function:2 Reference:PFK

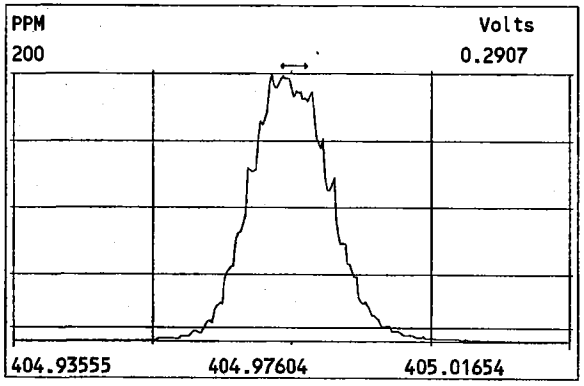


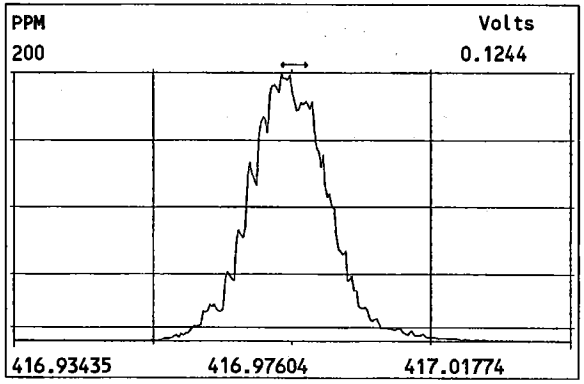
Peak Locate Examination: 6-APR-2010:09:11 File:06APR10M
Experiment:PCDD Function:3 Reference:PFK

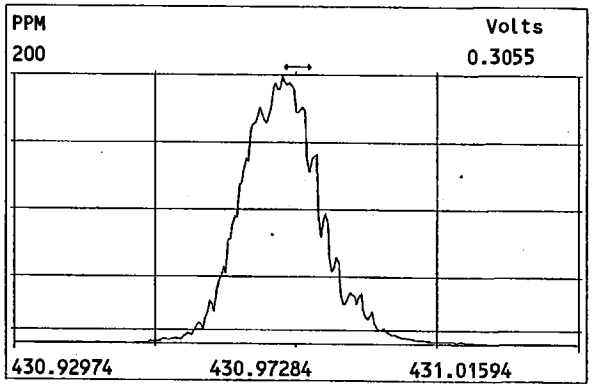


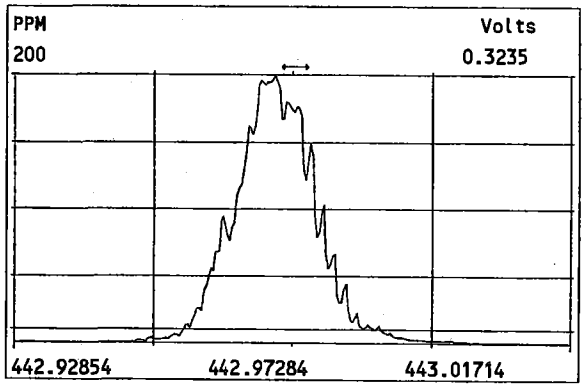


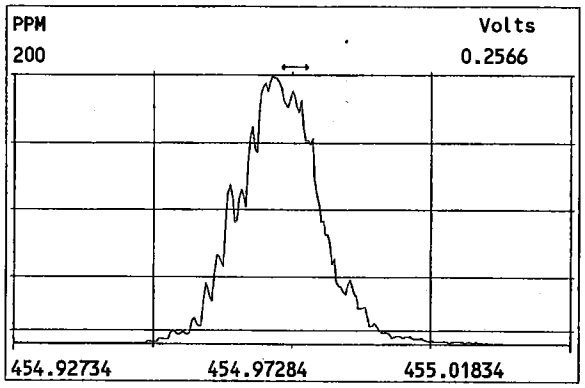




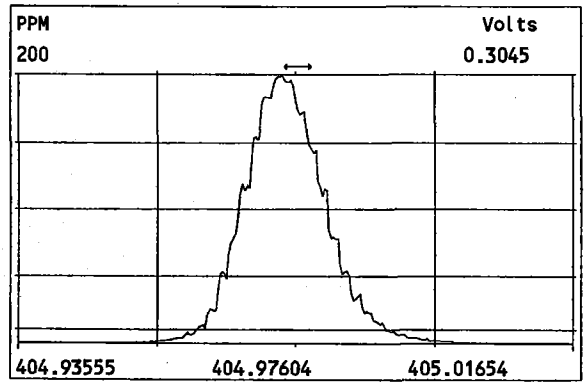


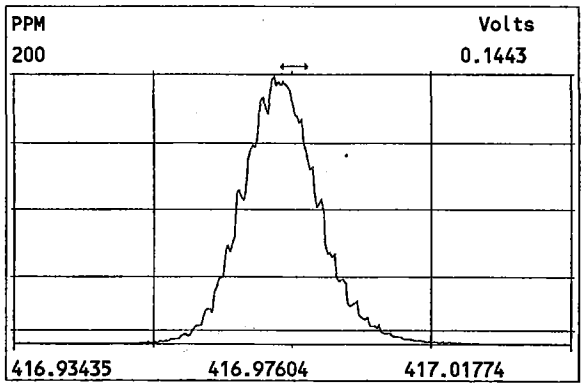


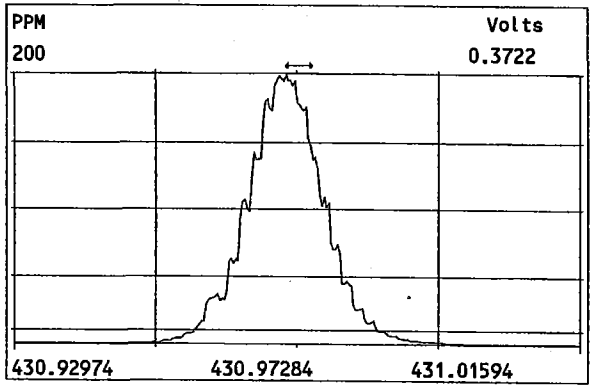


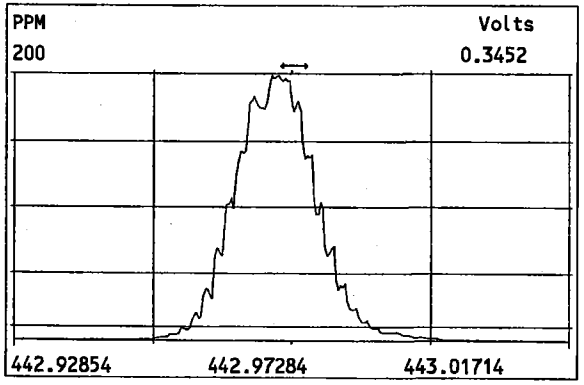


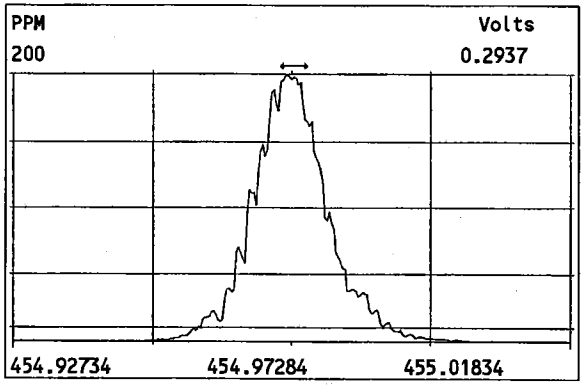
Peak Locate Examination: 6-APR-2010:09:12 File:06APR10M
Experiment:PCDD Function:4 Reference:PFK

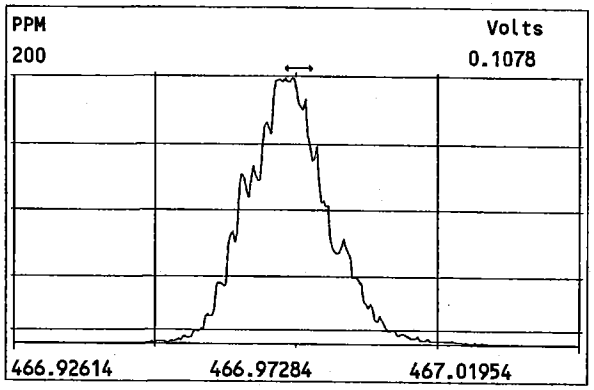


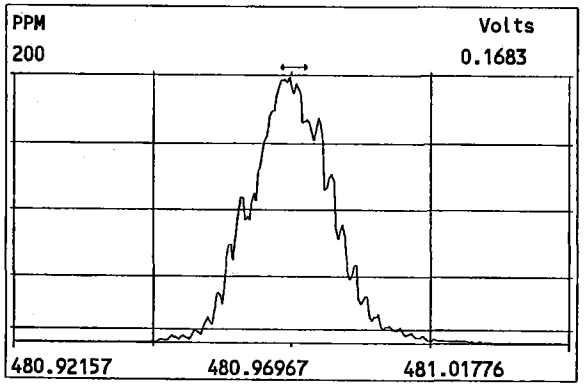




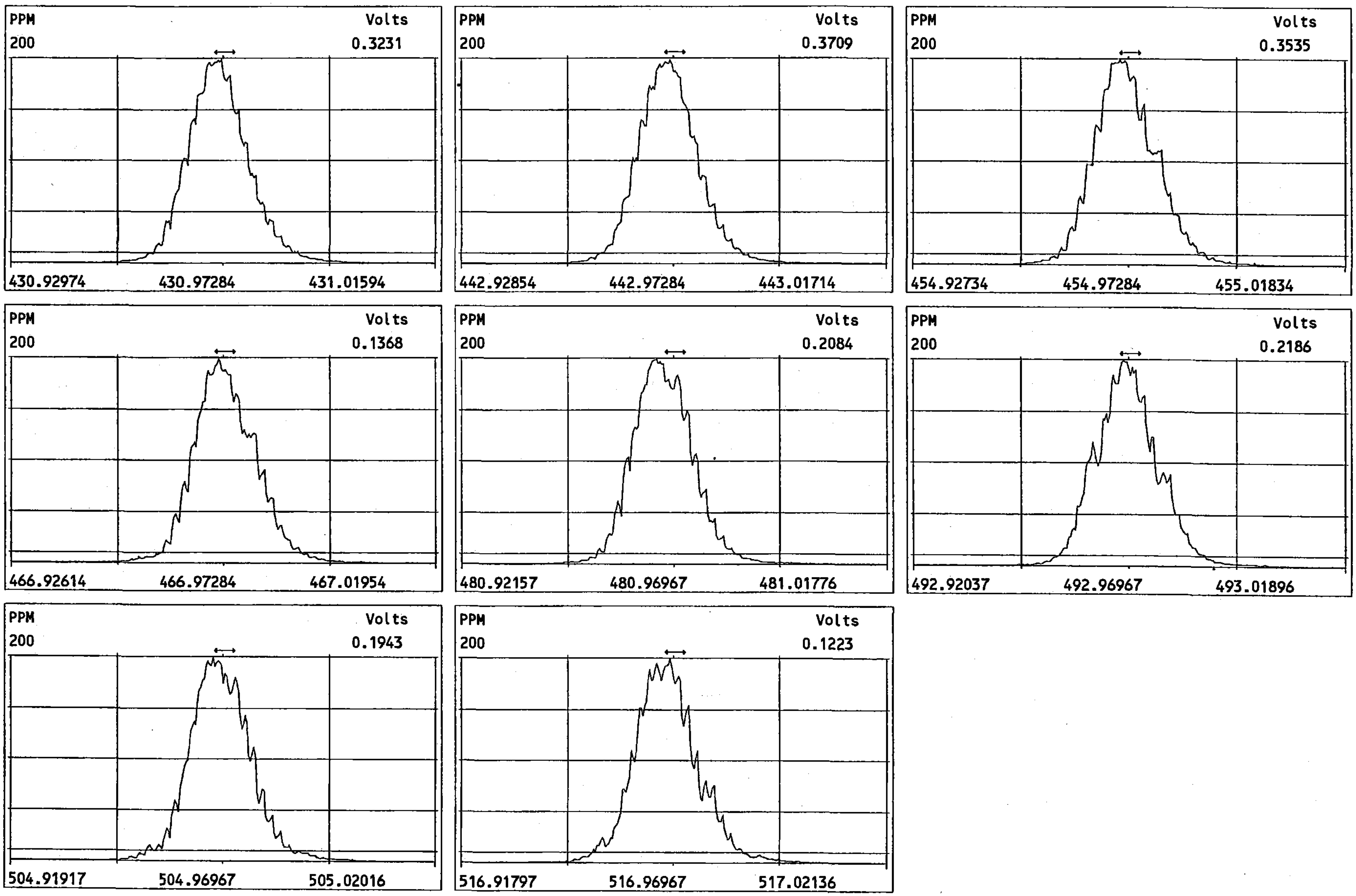




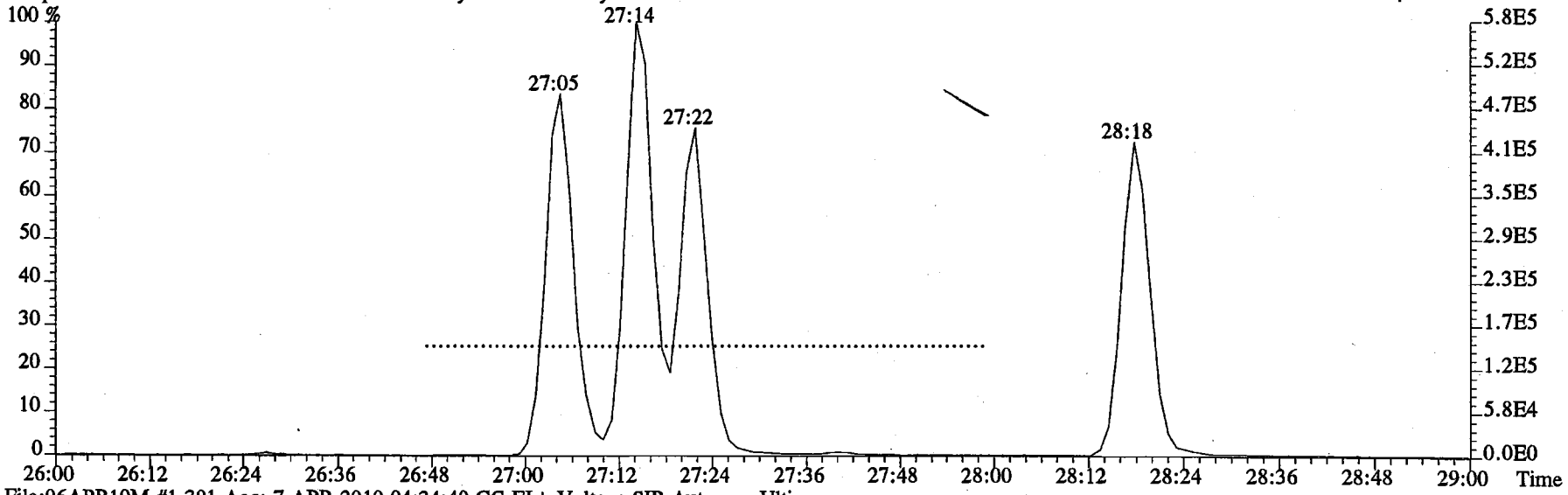




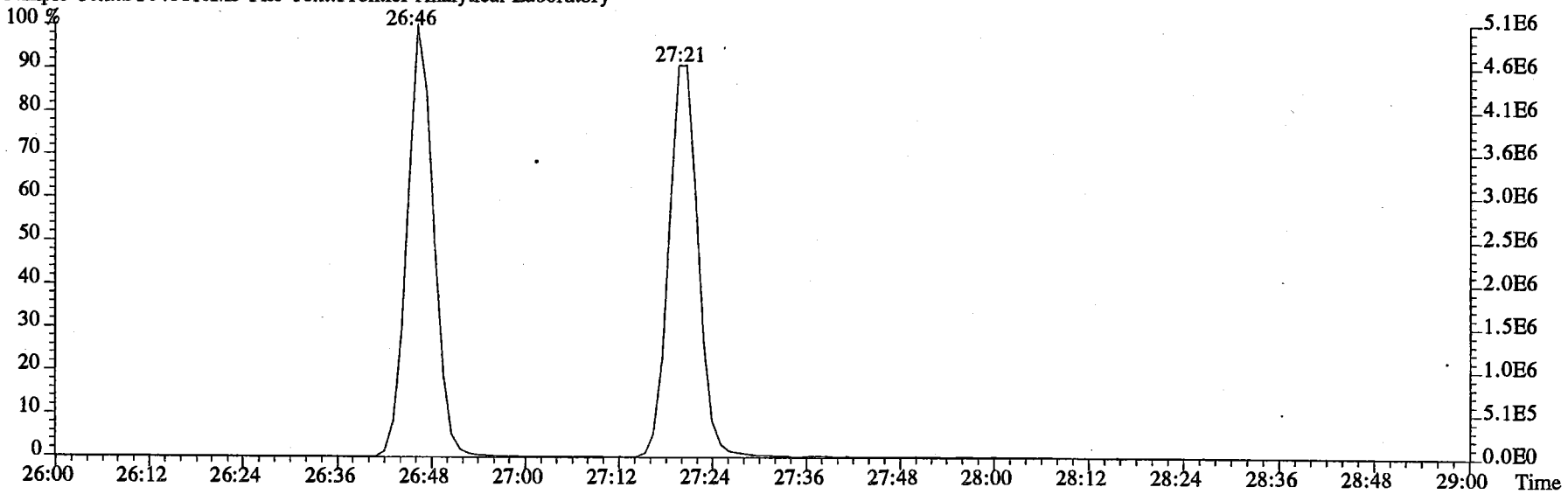
Peak Locate Examination: 6-APR-2010:09:12 File:06APR10M
Experiment:PCDD Function:5 Reference:PFK



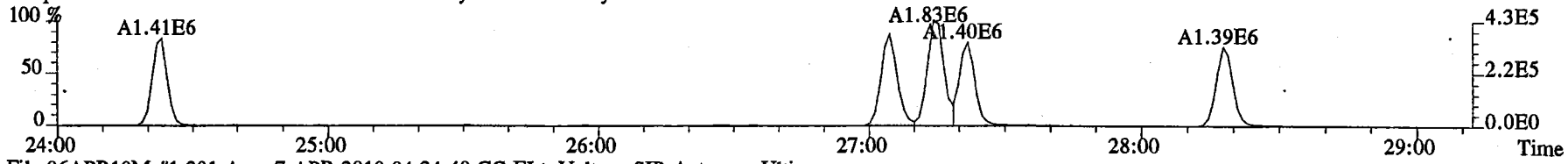
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:22 Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



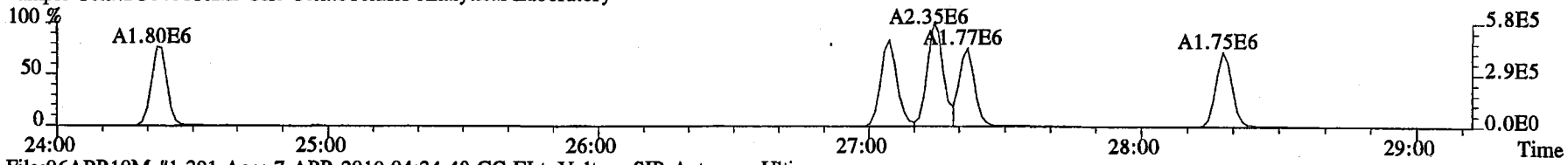
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:22 Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



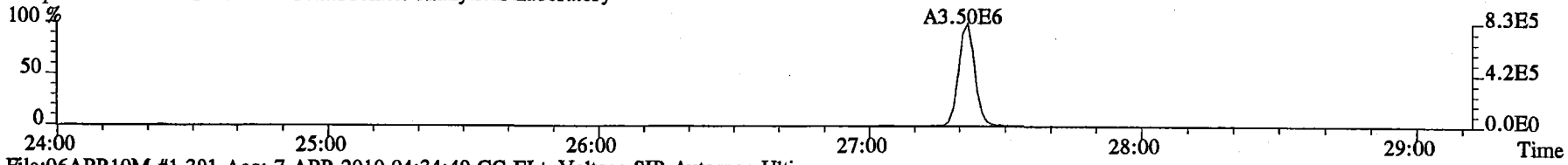
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



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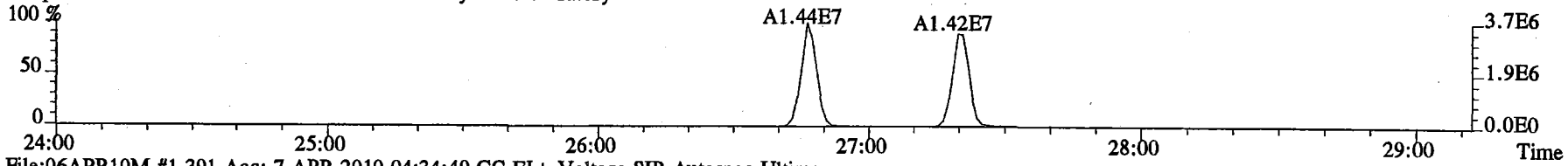
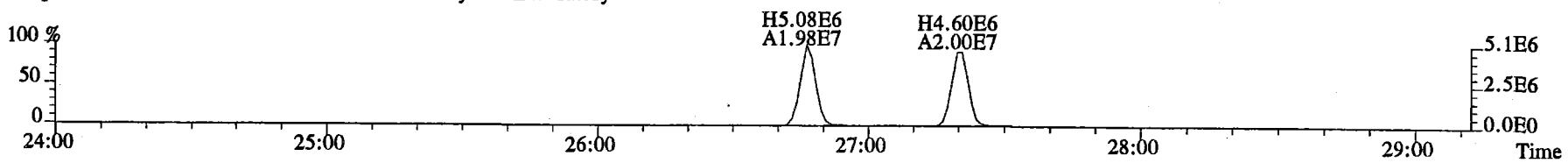
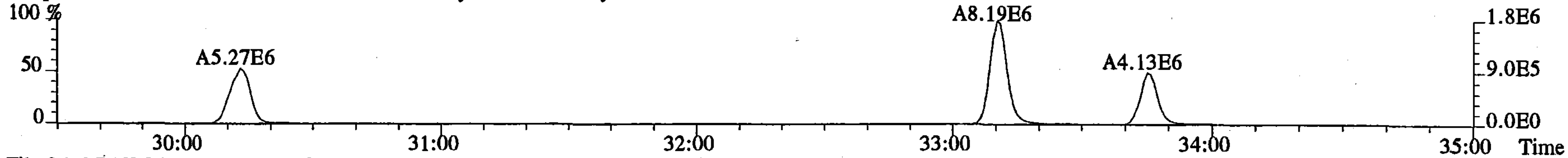
331.9368 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



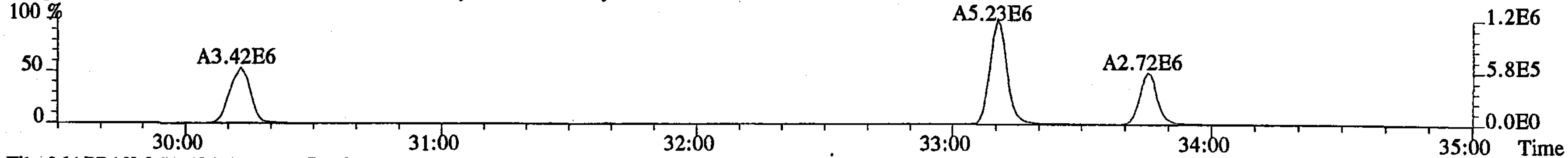
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



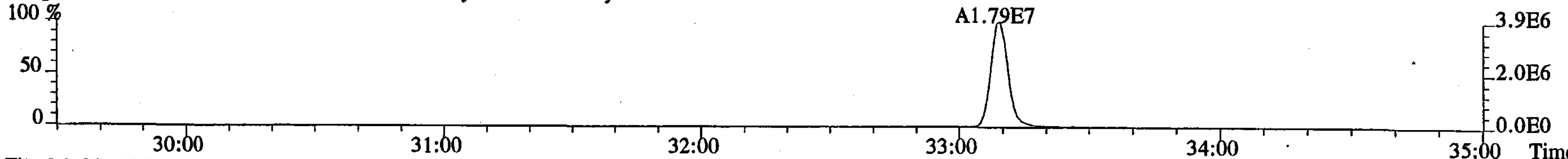
File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



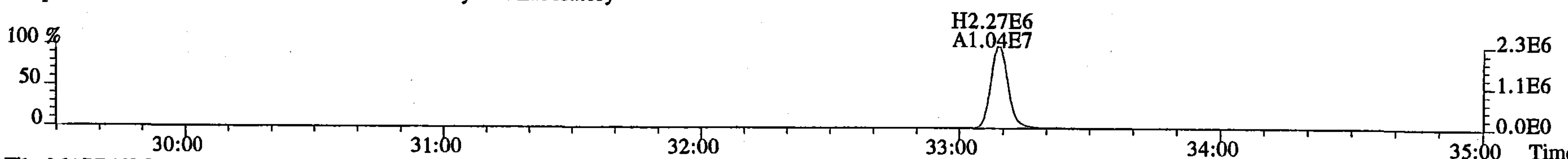
File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



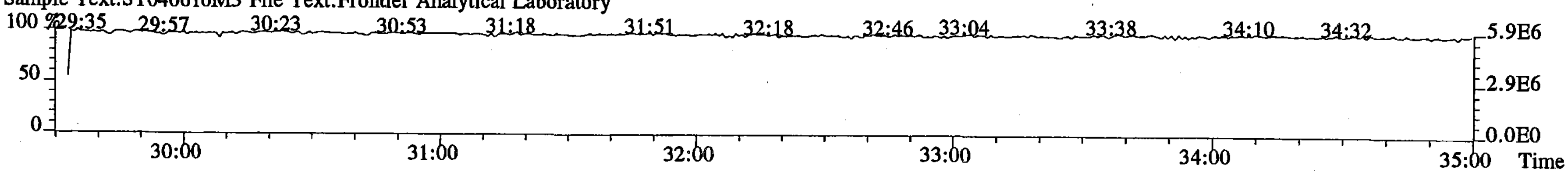
File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



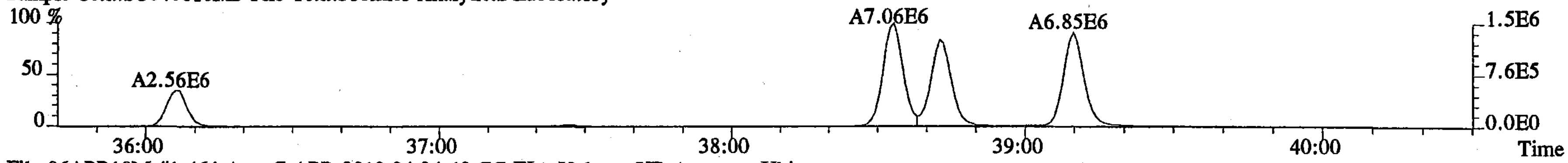
File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



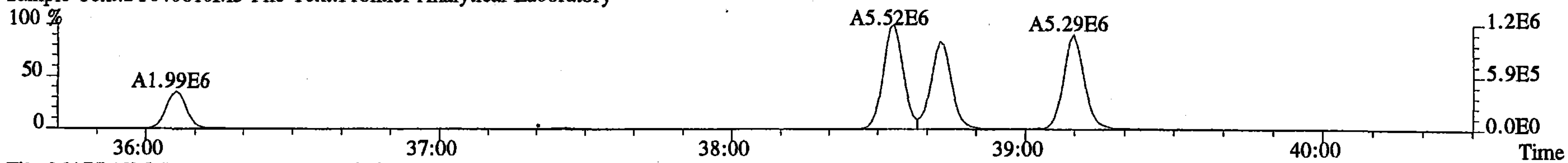
File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:22 F:2 Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



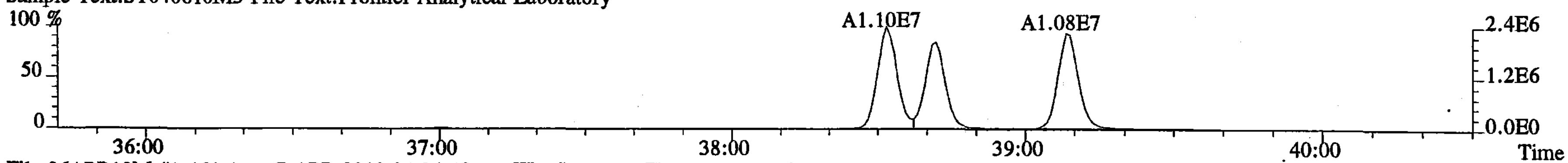
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



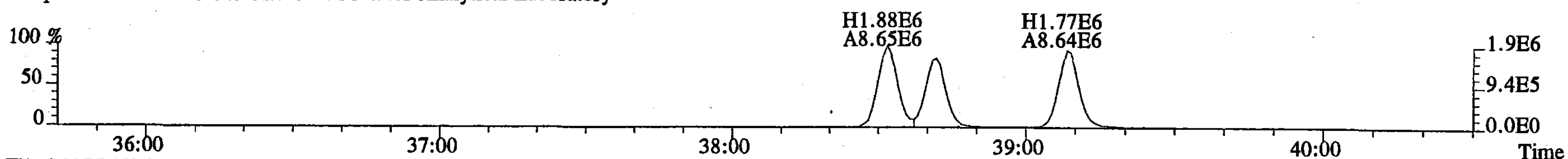
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



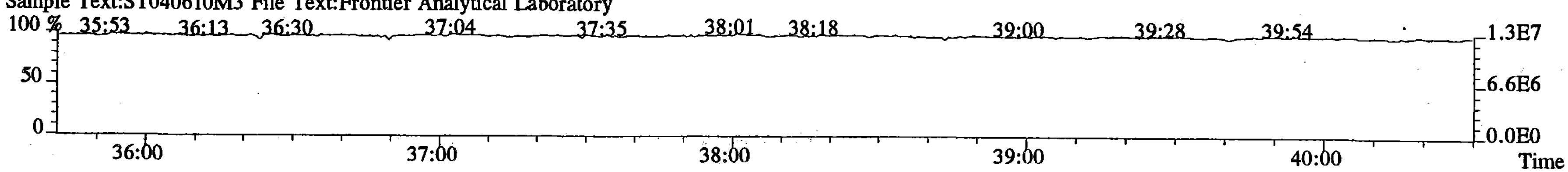
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



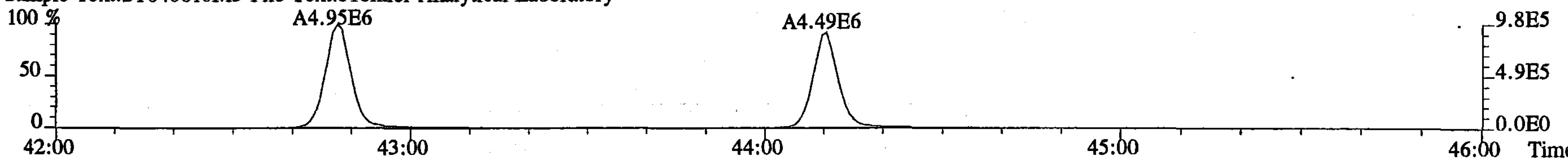
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



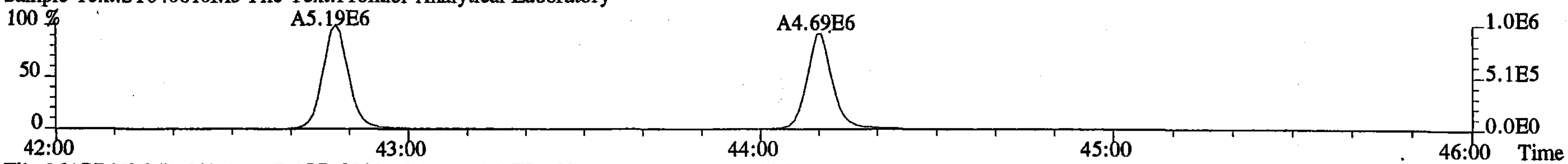
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:22 F:3 Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



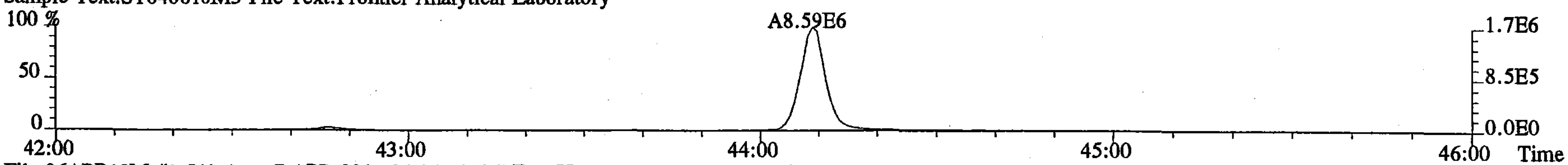
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



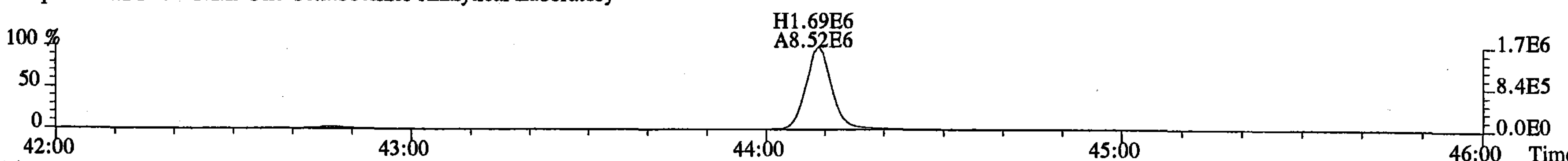
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



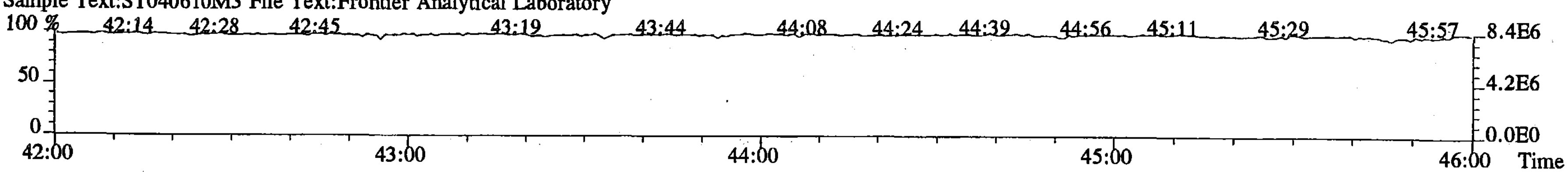
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



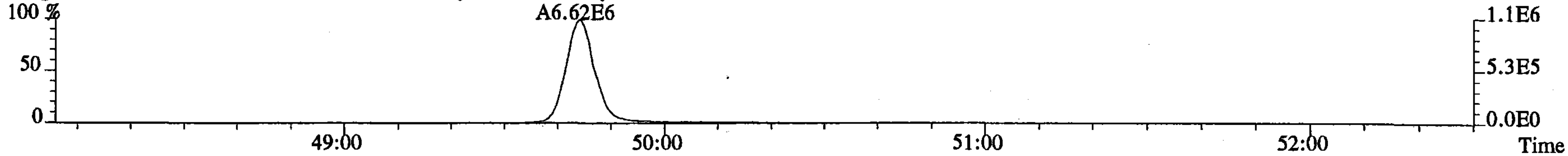
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



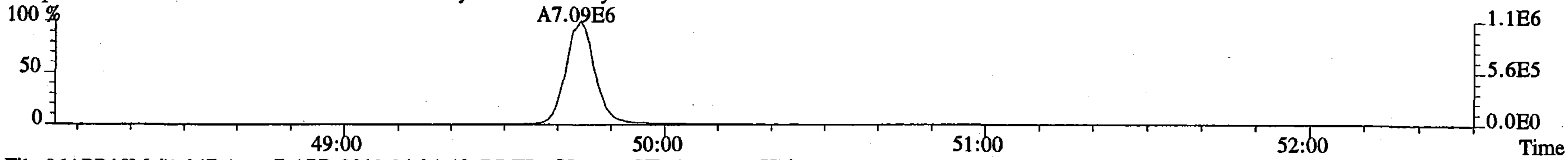
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:22 F:4 Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



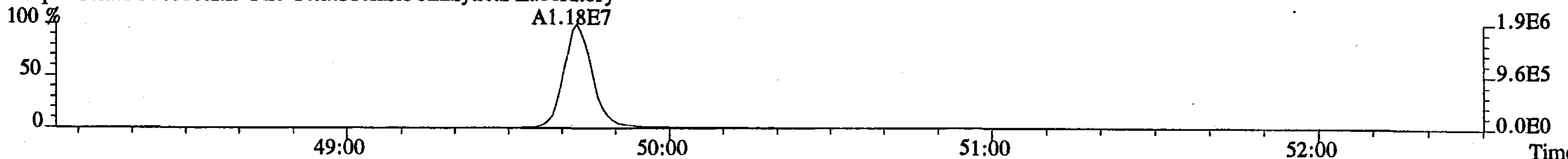
File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



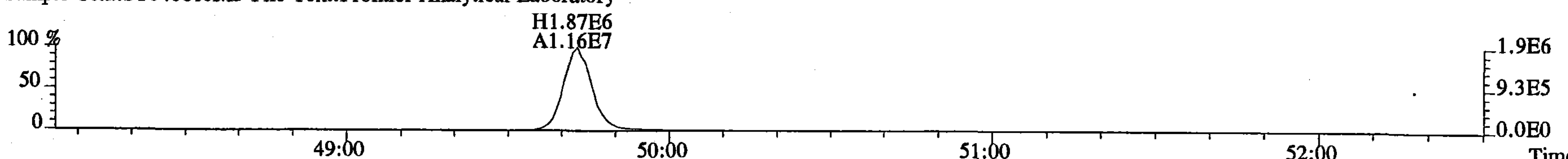
File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



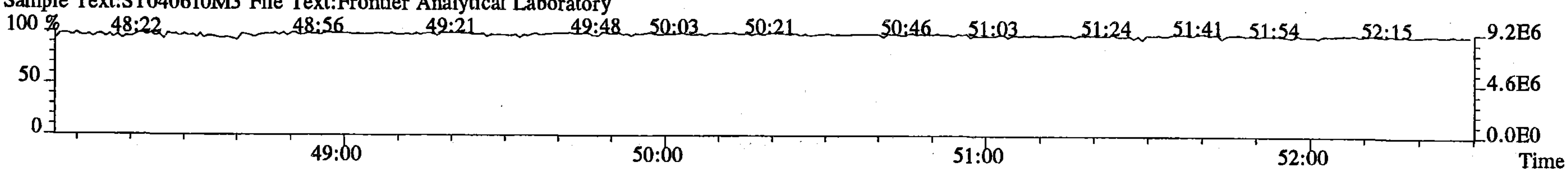
File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory

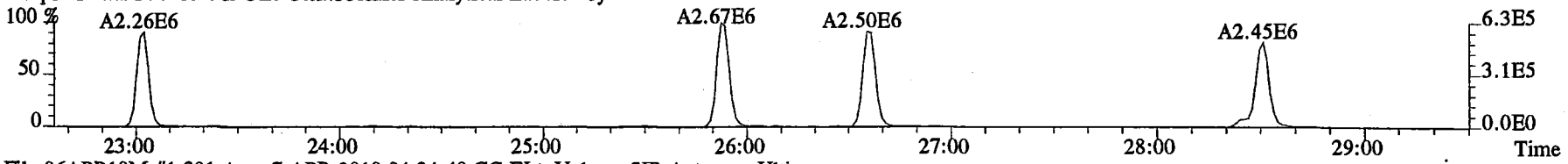


File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:22 F:5 Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory

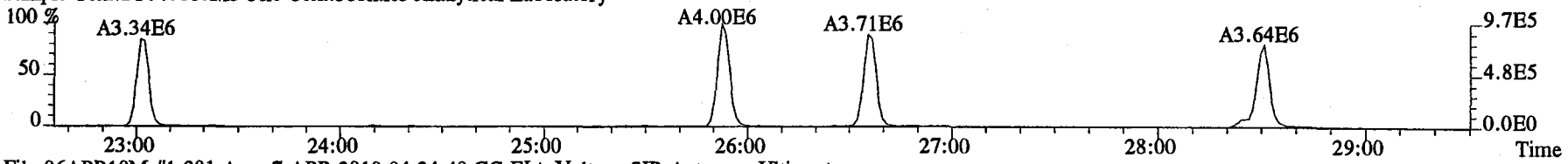


QQ20 : 01060

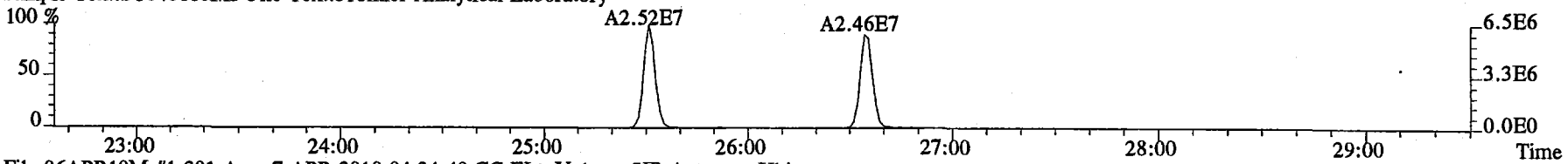
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



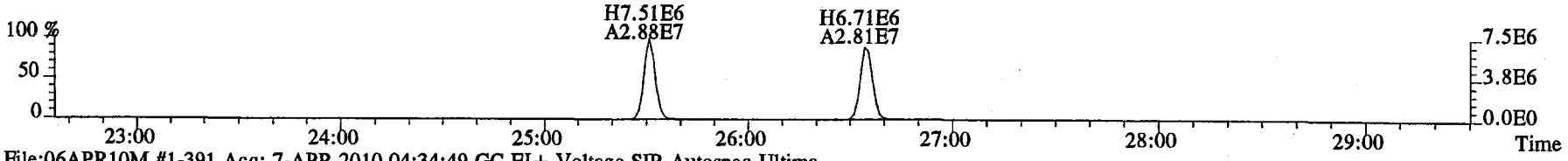
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



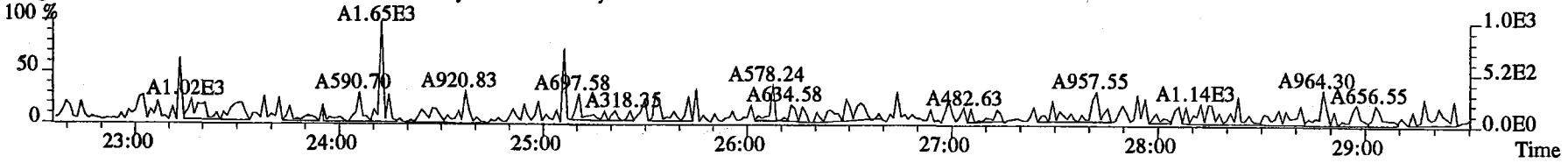
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



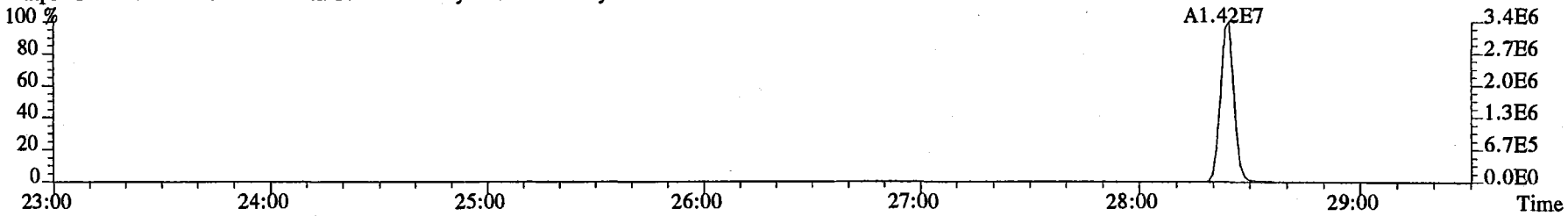
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



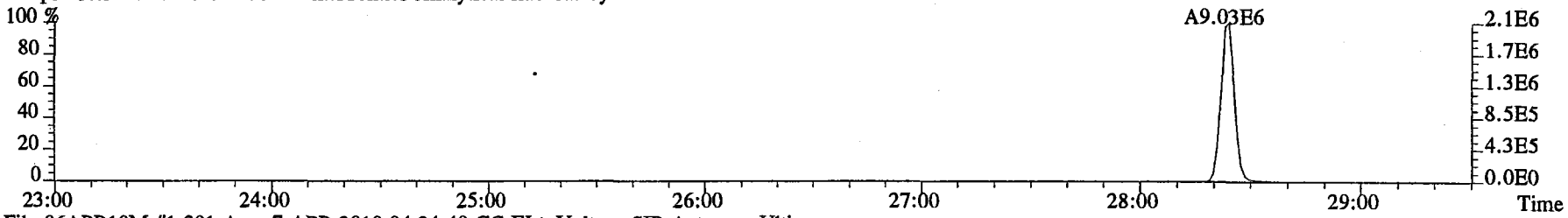
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



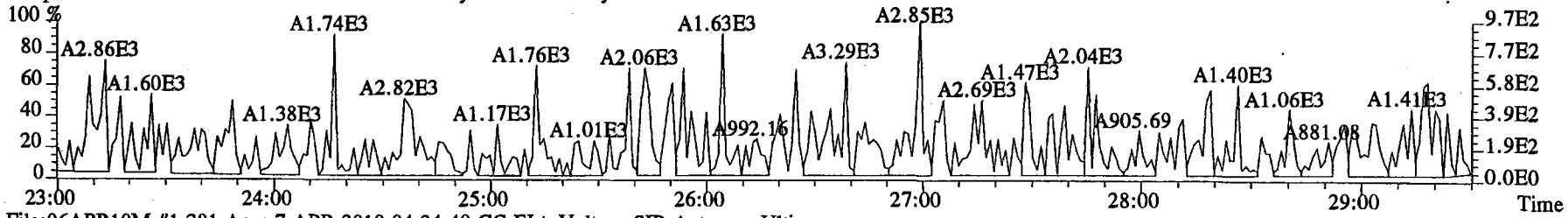
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



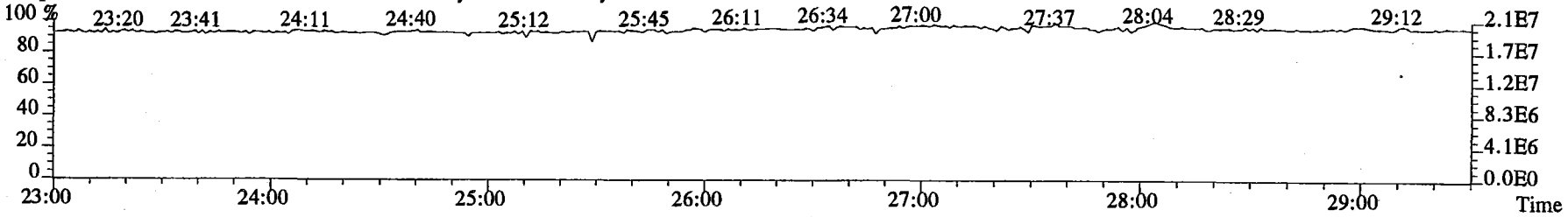
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



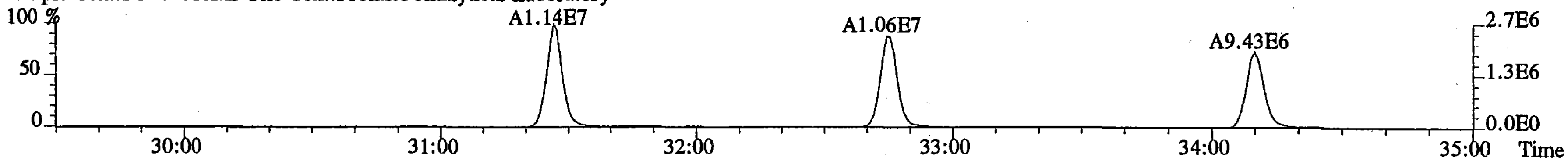
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:22 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



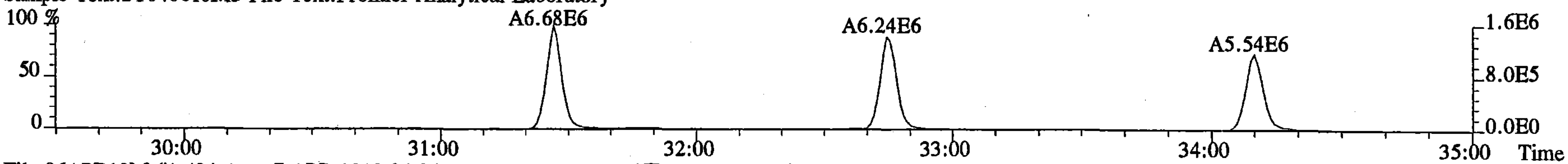
File:06APR10M #1-391 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:22 Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



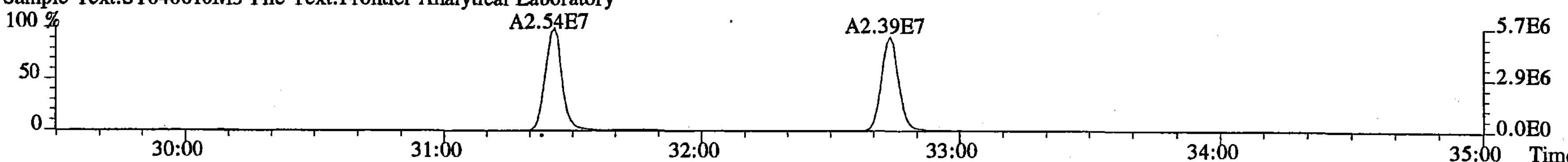
File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



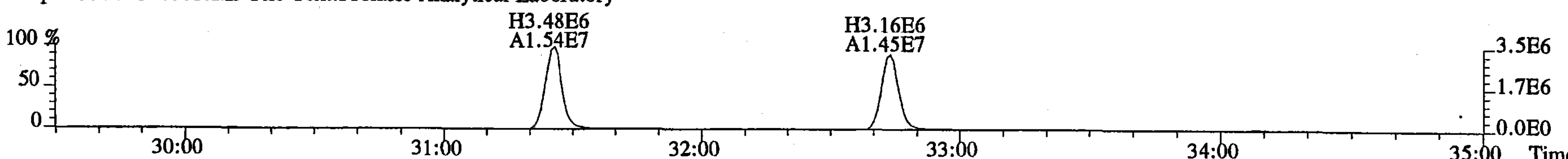
File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



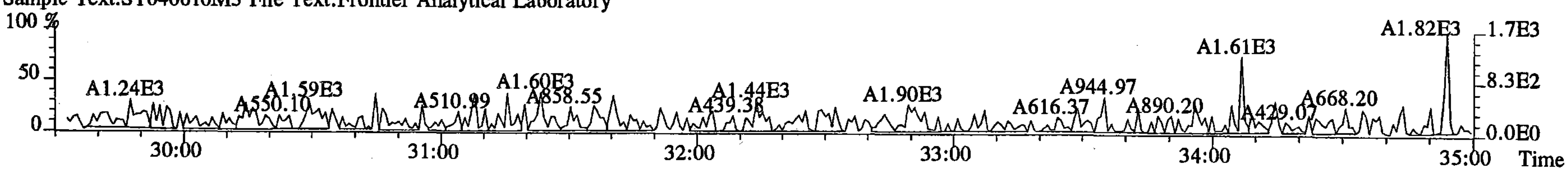
File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory

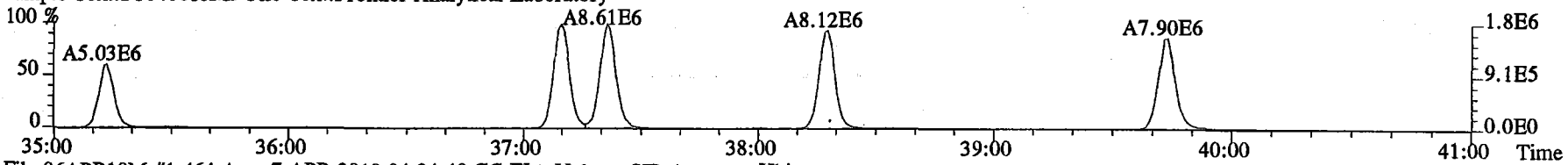


File:06APR10M #1-424 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:22 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory

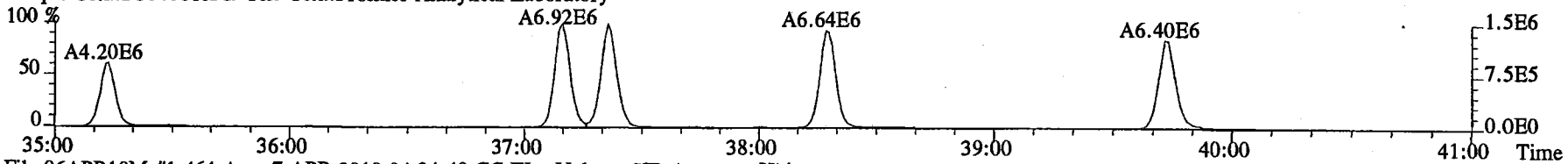


QQ20 : 01063

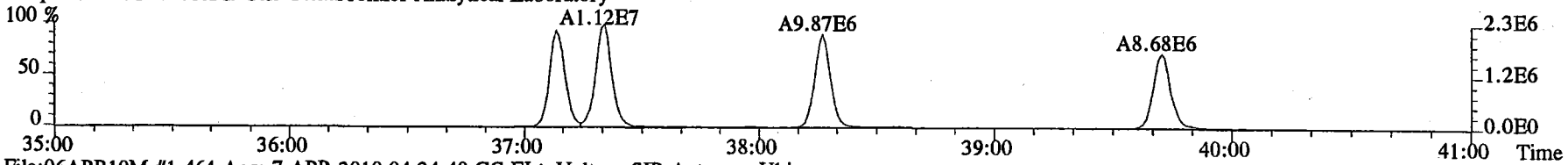
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



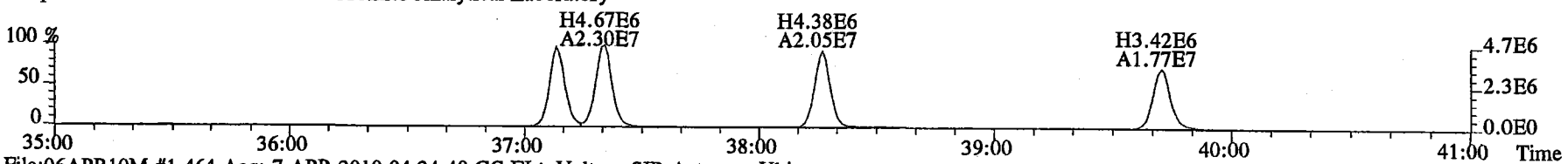
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



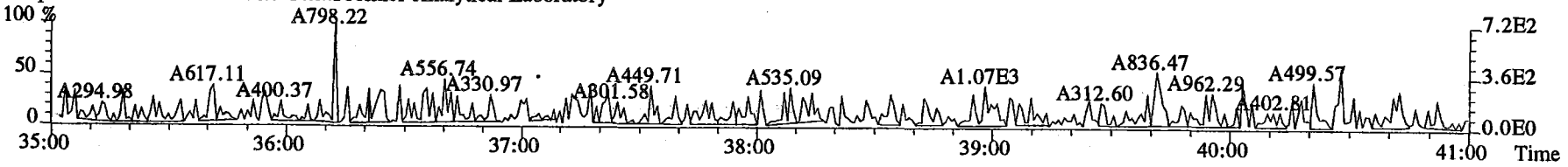
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



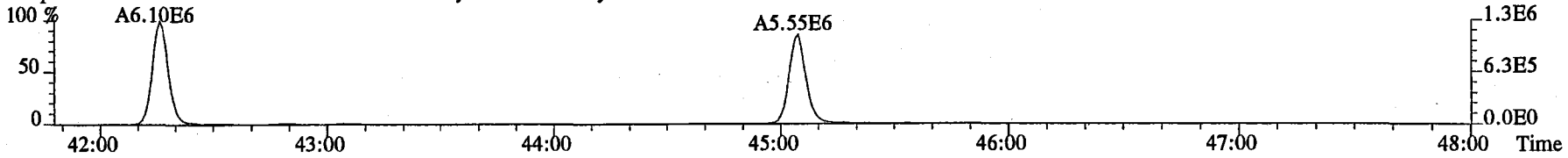
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



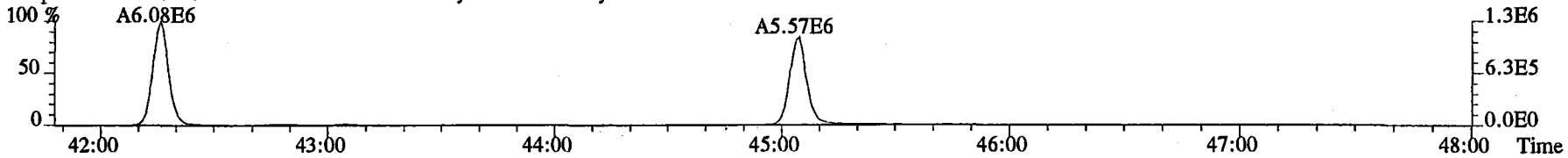
File:06APR10M #1-464 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:22 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



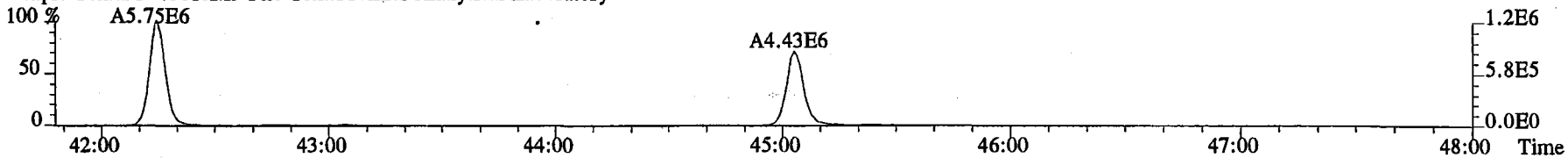
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



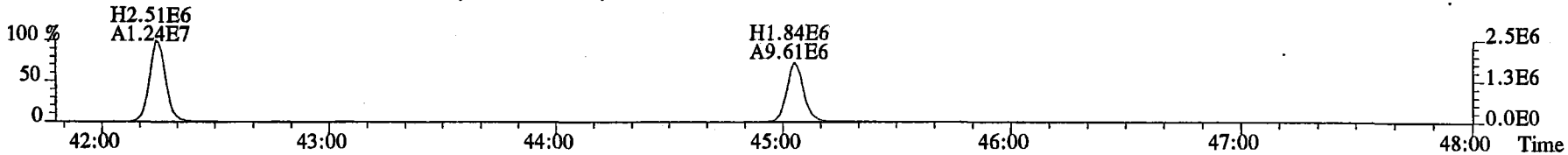
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



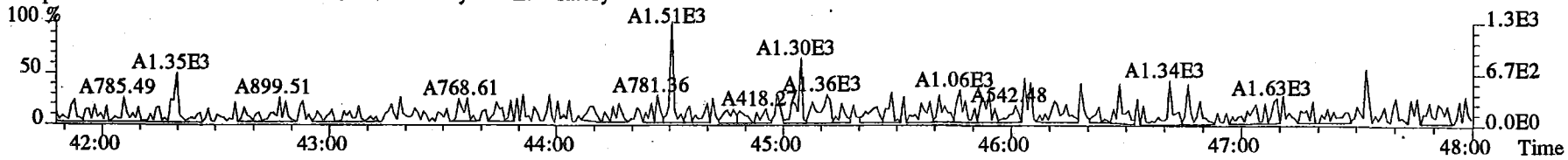
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



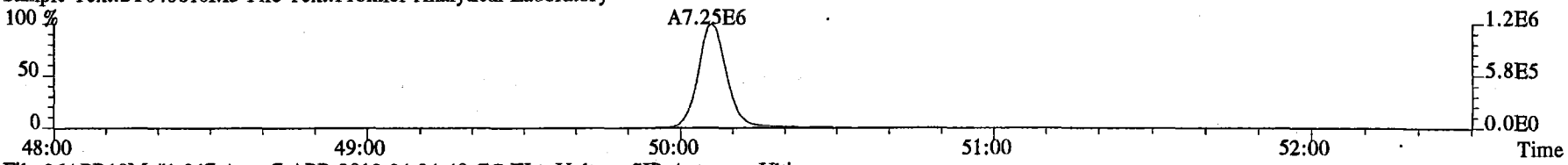
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



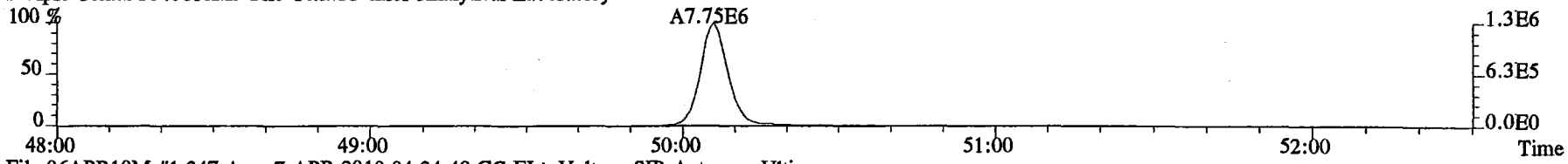
File:06APR10M #1-541 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:22 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



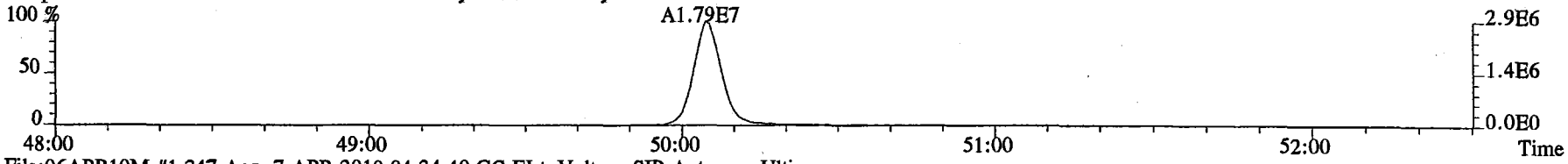
File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



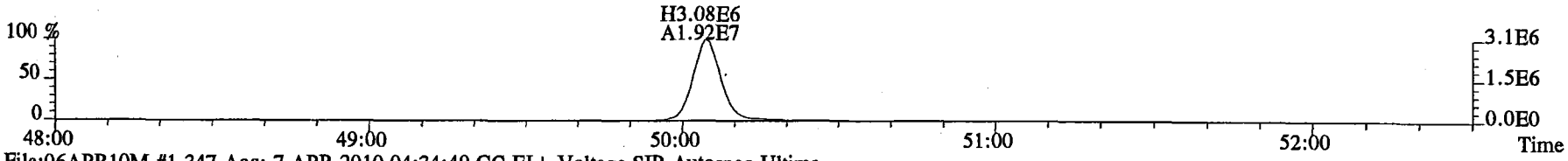
File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



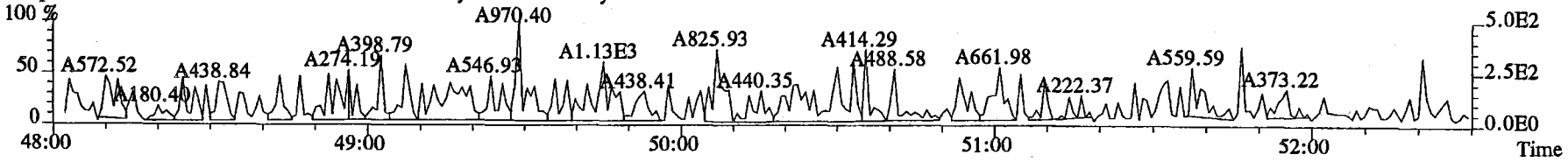
File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory



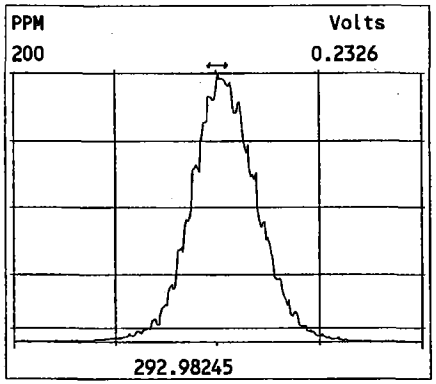
File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory

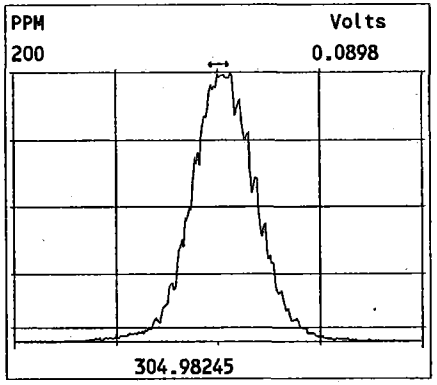


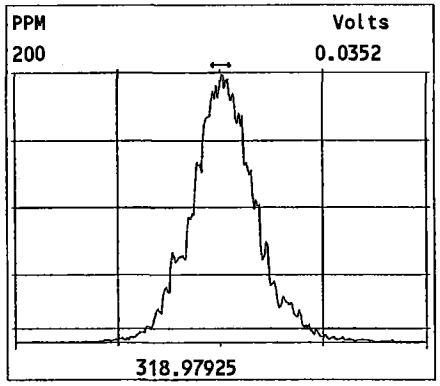
File:06APR10M #1-347 Acq: 7-APR-2010 04:34:49 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:22 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST040610M3 File Text:Frontier Analytical Laboratory

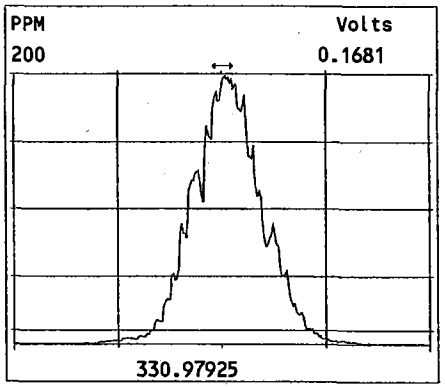


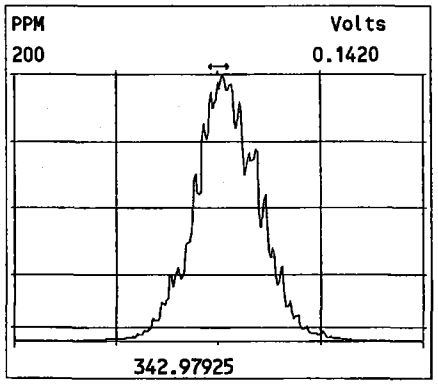
Peak Locate Examination: 7-APR-2010:05:32 File:06APR10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

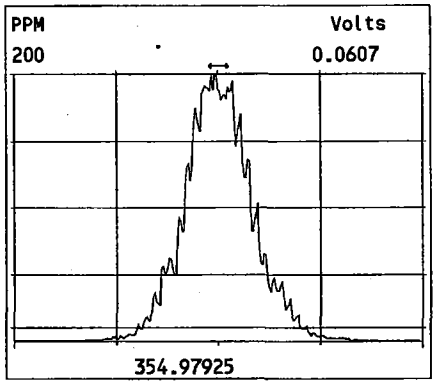


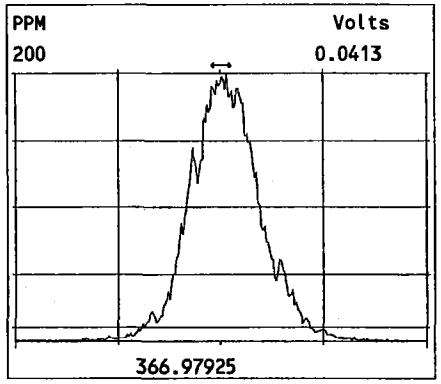


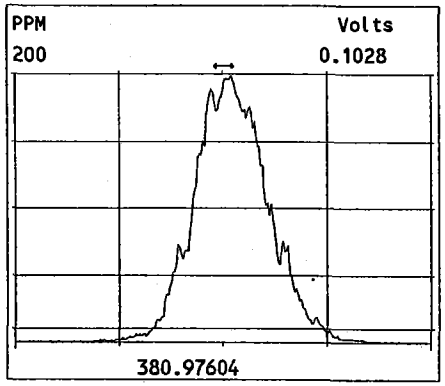


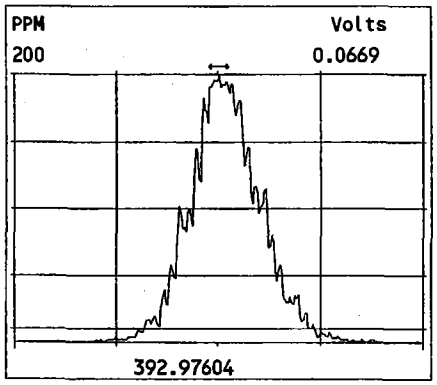


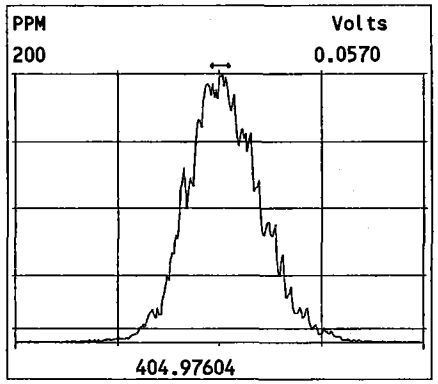


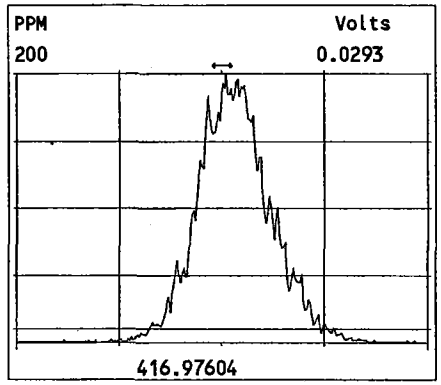




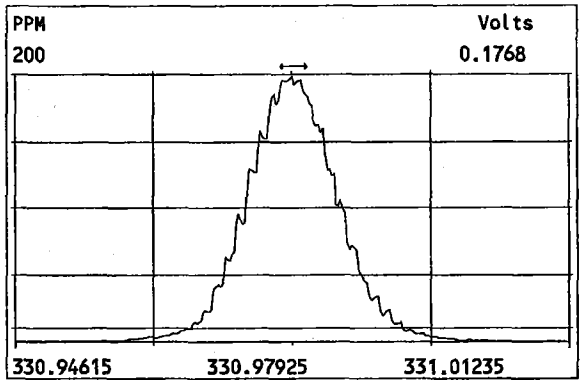


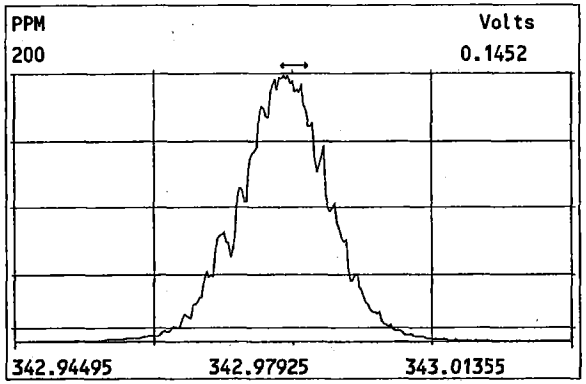


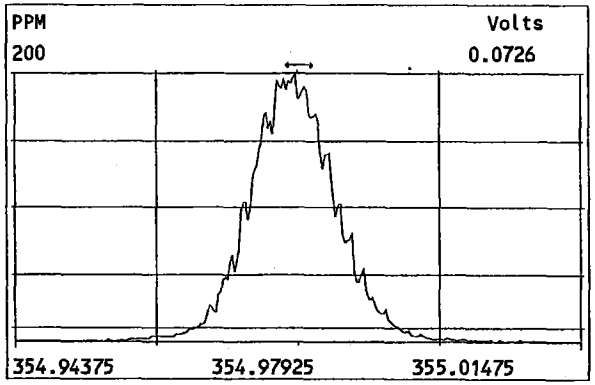


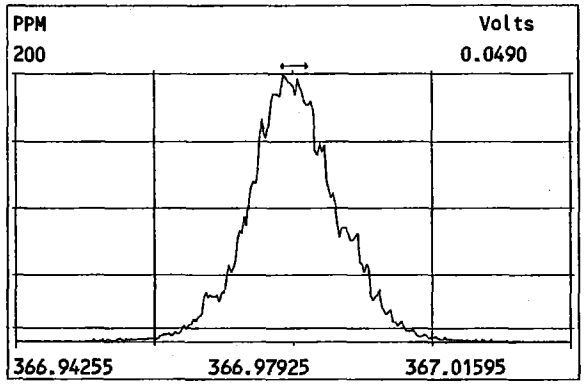


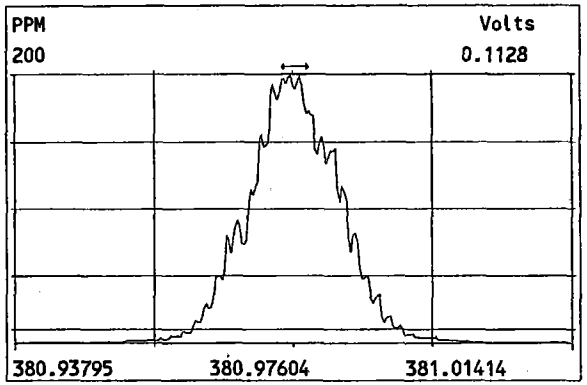
Peak Locate Examination: 7-APR-2010:05:34 File:06APR10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

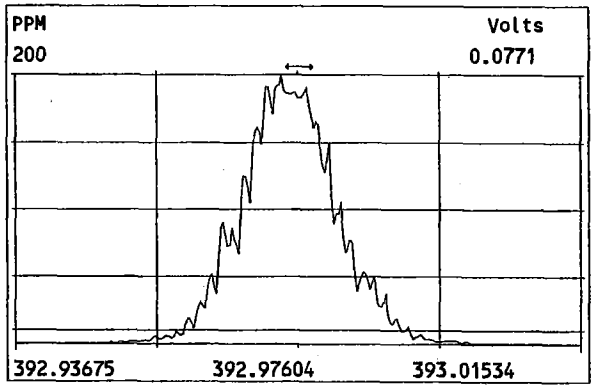


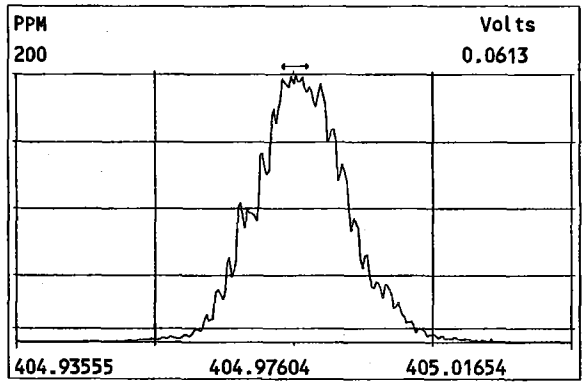


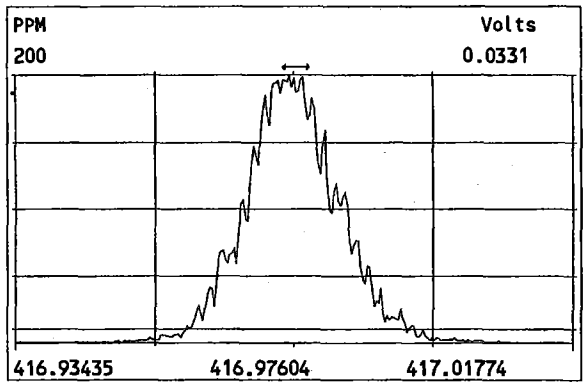




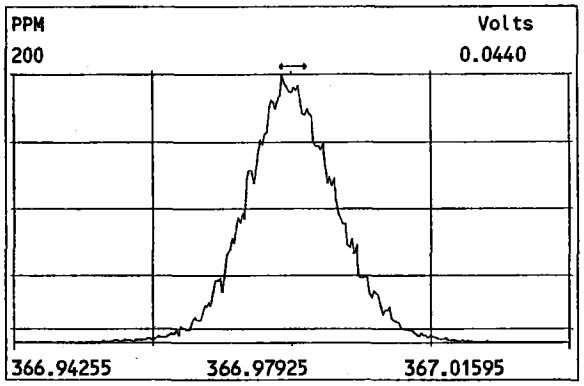


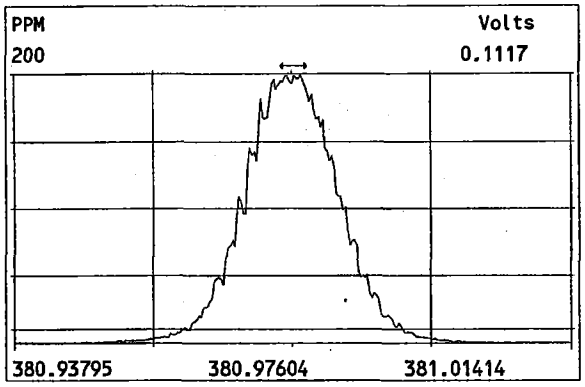


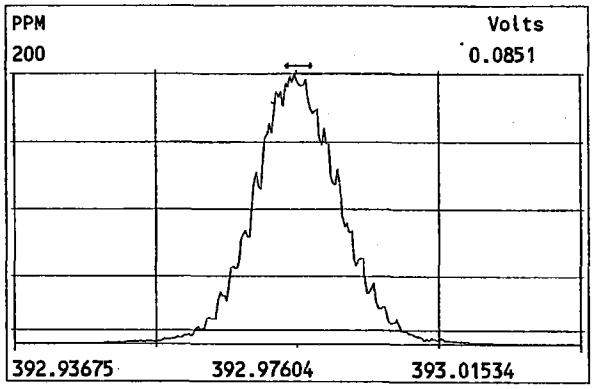


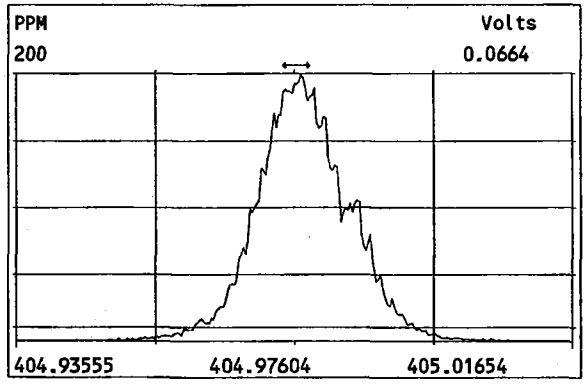


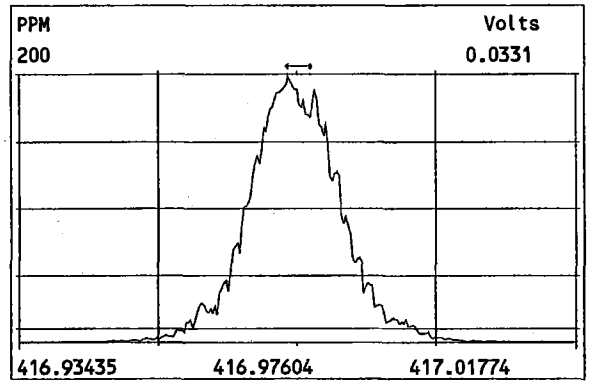
Peak Locate Examination: 7-APR-2010:05:36 File:06APR10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

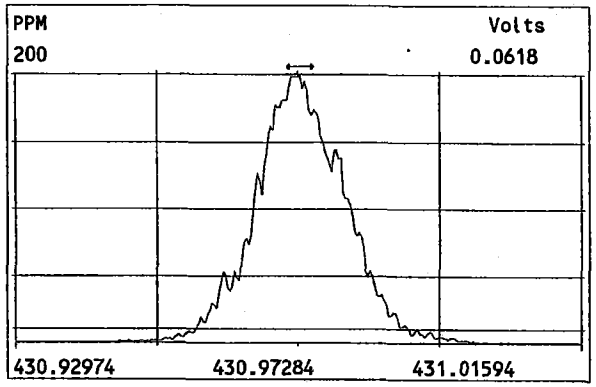


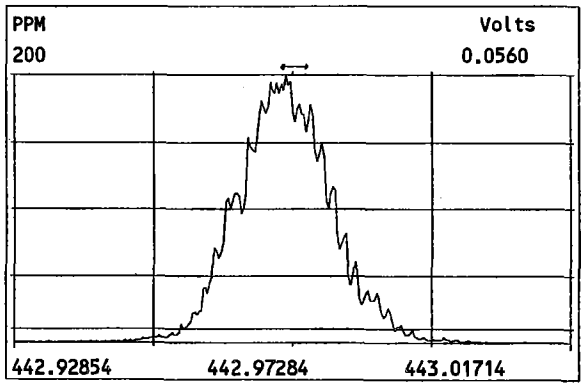


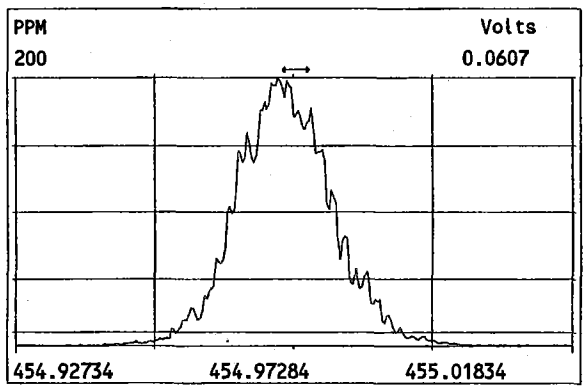




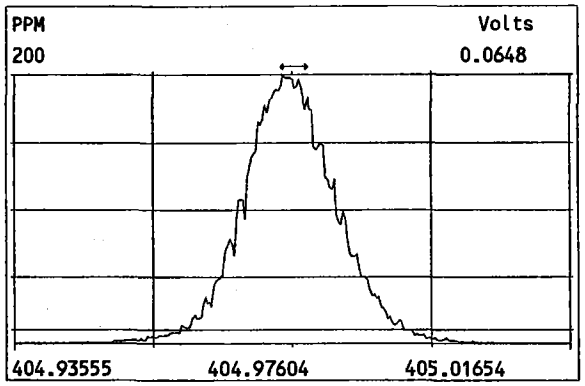


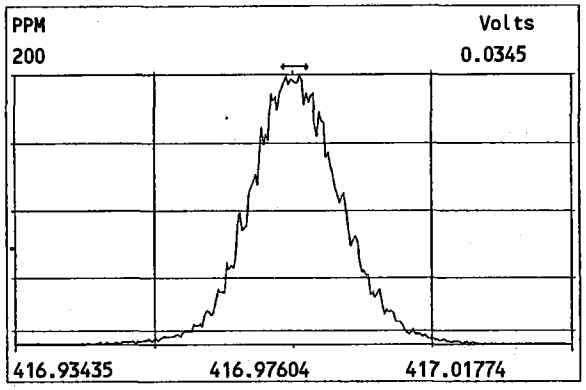


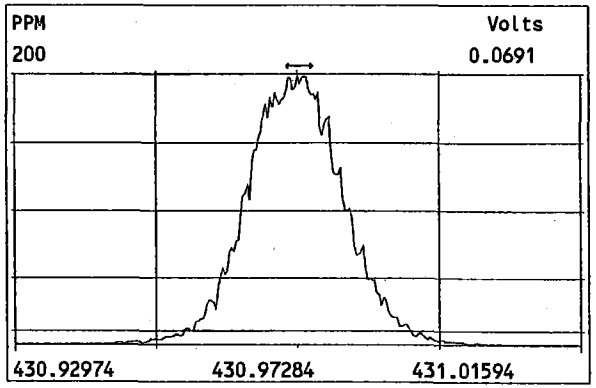


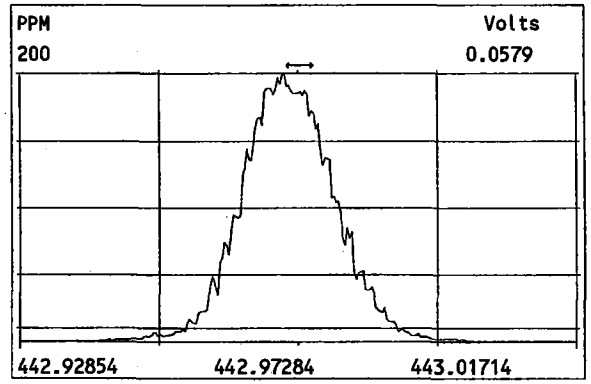


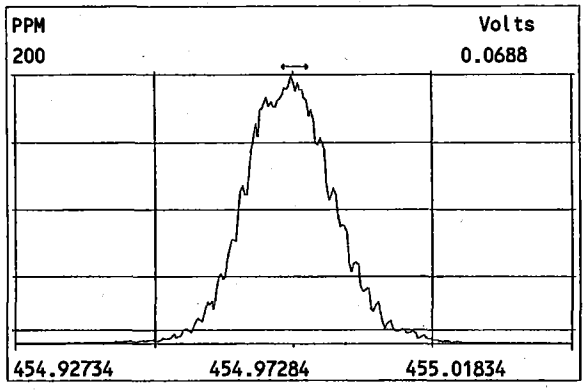
Peak Locate Examination: 7-APR-2010:05:38 File:06APR10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

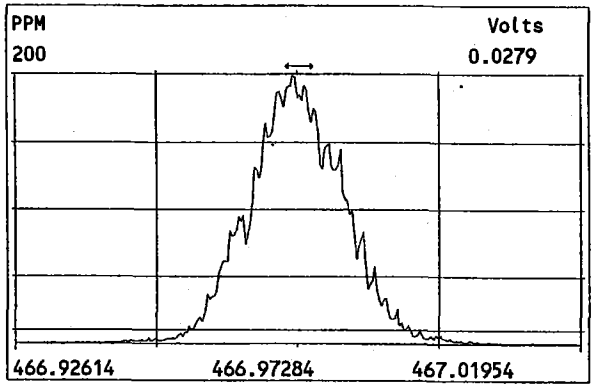


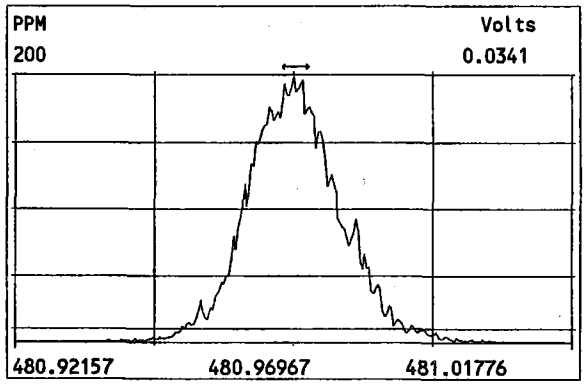




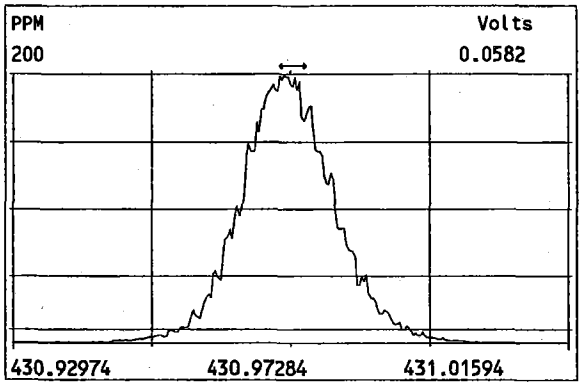


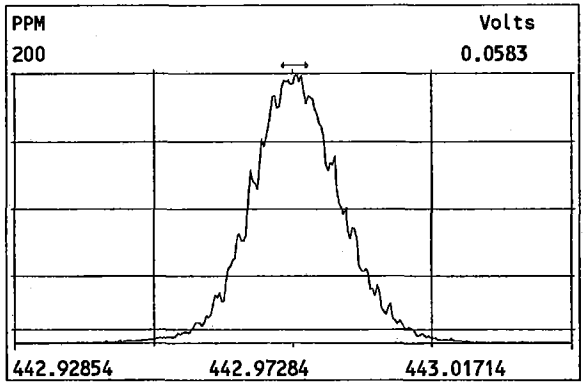


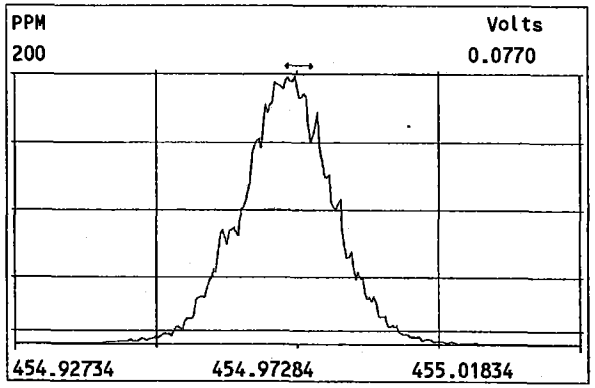


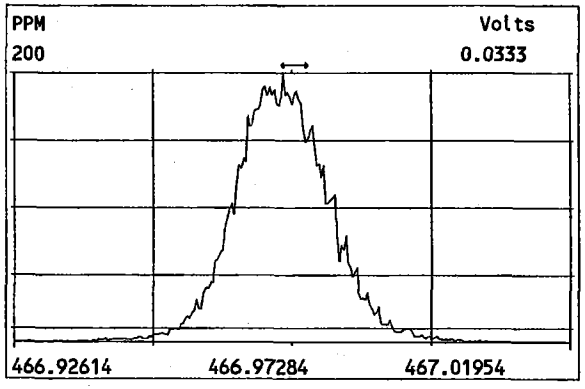


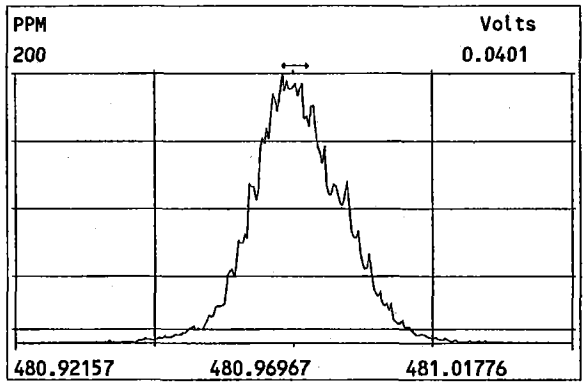
Peak Locate Examination: 7-APR-2010:05:40 File:06APR10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

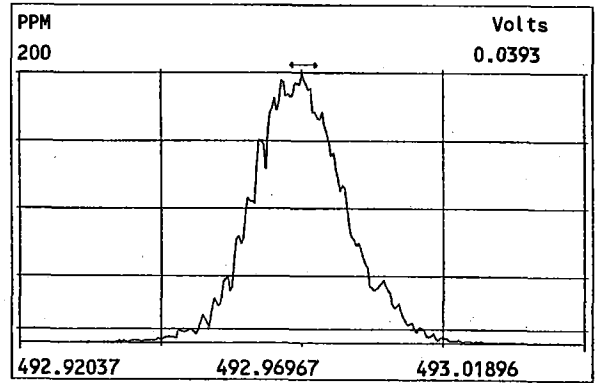


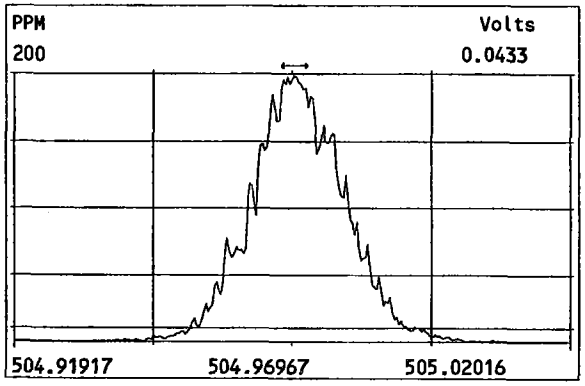


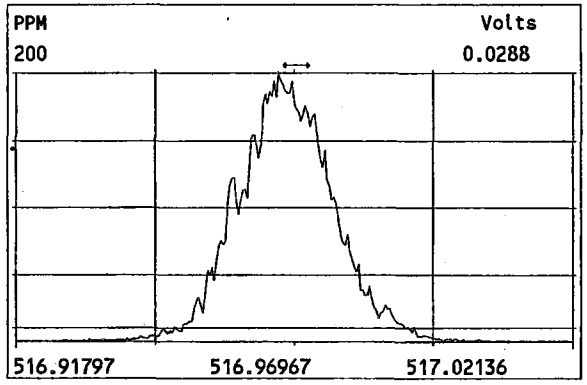












Analytical Resources, Incorporated
Analytical Chemists and Consultants
April 5, 2010

Jessi Massingale
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Client Project: Lora Lake Apartments, POS-LLA
ARI Job No: QM04

Dear Ms. Massingale:

Please find enclosed the original Chain-of-Custody (COC) record, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and detail of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan D. Dunnihoo
Director, Client Services
sue@arilabs.com
206-695-6207

Enclosures

cc: eFile QM04

SD/sdrd

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody
Documentation

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

Chain of Custody Record & Laboratory Analysis Request

Port of Seattle

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

ARI Assigned Number: QM04
Turn-around Requested: Standard
Date: 3-1-2010
Page: 1 of 1
ARI Client Company: Floyd/Snider
Phone: 206-292-2078
No. of Coolers: 2
Cooler Temps: 3.8, 2.1
Client Contact: Matt Woltman / Jessi Massingale
Client Project Name: Lora Lake Apartments
Client Project #: POS-LLA
Samplers: D. Metallo, P. Hettzel

Sample ID	Date	Time	Matrix	No. Containers	PAH 8270D-SIM low level	PCP 8041	Arsenic Tot+Diss 200.8	Dioxin/Furan 1613	TSS SM2540D				Notes/Comments: pH measured at POS Storm Lab - see attached sheet	pH
CB31A022710COMP	2.27.10	0111	W	1	X	X	X	X	X				Run MS/MSD ①	6.54
CB485T022710COMP	2.27.10	0100	W	1	X	X	X	X	X					6.72
CB1022710COMP	2.27.10	0105	W	1	X	X	X	X	X					6.35
CB102022710COMP	2.27.10	0205	W	1	X	X	X	X	X					6.38

Comments/Special Instructions: ① Extra vol. collected for MS/MSD analysis (No extra vol. for Dioxin/Furan analysis)

	Relinquished by	Received by	Relinquished by	Received by
(Signature)	[signature]	[signature]		
Printed Name	Dave Metallo	A. Volgardsen		
Company	Taylor Assoc.	ARI		
Date & Time	3-1-10 (1503)	3/1/10 1503		

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release 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 Client.*

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider
COC No(s): _____ (NA)
Assigned ARI Job No: QM04

Project Name: Lora Lake Apartments
Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____
Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 3.8 2.1 ___ ___ ___ ___

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 90941619

Cooler Accepted by: AV Date: 3/1/10 Time: 1503

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: N/A			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	NA	(YES)	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

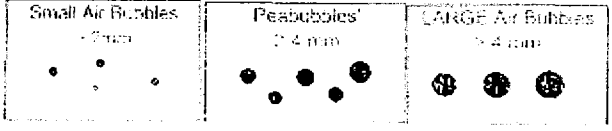
Samples Logged by: JP Date: 3/1/10 Time: 1715

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

PRESERVATION VERIFICATION 03/01/10
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **QM04**

PC: Sue D.
VTSR: 03/01/10

Inquiry Number: NONE
Analysis Requested: 03/01/10
Contact: Woltman, Matt
Client: Floyd/Snider
Logged by: JP
Sample Set Used: Yes-~~481~~
Validatable Package: NO
Deliverables:

Project #: POS-LLA
Project: Lora Lake Apartments
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
10-5087 **QM04A**	CB31A022710COMP						TOT PASS															
10-5088 **QM04B**	CB4857022710COMP						TOT															
10-5089 **QM04C**	CB1022710COMP						TOT															
10-5090 **QM04D**	CB102022710COMP						TOT PASS															
10-5091 **QM04E**	CB31A022710COMP						DIS									N						
10-5092 **QM04F**	CB4857022710COMP						DIS									N						
10-5093 **QM04G**	CB1022710COMP						DIS									N						
10-5094 **QM04H**	CB102022710COMP						DIS									N						

Dissolved metals are not preserved

Checked By JP Date 3/1/10

Case Narrative

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

ANALYTICAL
RESOURCES
INCORPORATED

Case Narrative

Client: Floyd Snider
Project: Lora Lake Apartments, POS-LLA
Matrix: Water
ARI Job No.: QM04

Sample receipt

Analytical Resources, Inc. (ARI) accepted four water samples on March 1, 2010 under ARI job QM04. The cooler temperatures measured by IR thermometer following ARI SOP were 2.1 and 3.8°C. For details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

Samples were split for each laboratory using a Teflon churn splitter. The churn splitter was cleaned between each sample using the QAPP protocol. Limited sample volumes were available, insufficient for matrix QC for organic parameters.

Dioxin/Furan analyses were subcontracted to Frontier Analytical Laboratory in El Dorado Hills, CA. The Frontier report is included here in its entirety.

SIM Semivolatiles by SW8270

The samples were extracted and analyzed within the method recommended holding times.

Initial calibrations and continuing calibrations were within limits. Internal standards were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit, with hits between the MDL and the RL. Results were "J"-flagged and associated sample results have been "B"-flagged. The LCS percent recoveries were within control limits.

The matrix spike/matrix spike duplicate had recoveries and RPD within limits.

Pentachlorophenol by SW8041

The samples were extracted and analyzed within the method recommended holding times.

Initial calibrations and continuing calibrations were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS percent recoveries were within control limits.

The matrix spike/matrix spike duplicate had recoveries and RPD within limits.

Total and Dissolved Arsenic by EPA 200.8

The samples were digested and analyzed within the method recommended holding time.

The method blanks were clean at the reporting limit. The LCS percent recoveries were within control limits.

The matrix spike percent recoveries and duplicate RPDs were within control limits.

General Chemistry (TSS)

The samples were prepared and analyzed within the method recommended holding time.

The method blank was clean at the reporting limit. The LCS percent recovery was within control limits.

The replicate RPD was within the control limit.

Data Reporting Qualifiers

Effective 7/10/2009

Inorganic Data

U Indicates that the target analyte was not detected at the reported concentration

* Duplicate RPD is not within established control limits

B Reported value is less than the CRDL but ≥ the Reporting Limit

N Matrix Spike recovery not within established control limits

NA Not Applicable, analyte not spiked

H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U Indicates that the target analyte was not detected at the reported concentration

* Flagged value is not within established control limits

B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J Estimated concentration when the value is less than ARI's established reporting limits

D The spiked compound was not detected due to sample extract dilution

E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

LCS SOLUTIONS

2/2/2010

LABL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
1	1686-1	PCB 1660	20	ACETONE	09/01/10
2#	1472-3	BCOC PEST	10	ACETONE	NA
3	1620-4	PEST	02/04/20	ACETONE	06/26/10
4	1667-1	LOW PEST	0.2/0.4/2	ACETONE	06/26/10
5	1677-1	EPH	1500	MECL2	11/12/10
6	1655-3	PCP	12.5/125	ACETONE	09/24/10
7	1697-2	ABN	100	ACETONE	01/27/11
8	1681-4	TBT	2.5	MECL2	12/01/10
9	1682-2	PORE TBT	.125/.25	MECL2	12/01/10
10	1698-2	ABN ACID	100/200	MECL2	07/14/10
11	1642-2	TPHD	15000	ACETONE	09/07/10
12	1698-1	ABN BASE	200	MEOH	07/24/10
13	1613-1	LOW PCB	2	ACETONE	06/08/10
14*	1547-1	LOW ABN ACID	10/20	MEOH	04/10/10
15*	1591-3	SIM PNA	15/75	MEOH	08/28/10
16	1602-3	DIOXANE	100	MEOH	03/20/10
17	1644-1	1248 PCB	10	ACETONE	09/10/10
18*	1591-4	LOW SIM PNA	1.5	ACETONE	08/28/10
19	1685-3	AK103	7500	ACETONE	09/03/10
20	1682-4	PNA	100	ACETONE	12/04/10
21	1593-3	SKY/BHT	100	MEOH	03/31/10
22	1675-1	HERB	12.5/12500	MEOH	02/19/10
23*	1505-1	LW ABN BASE	20	MEOH	03/20/10
24	1696-1	LOW ABN	10	ACETONE	01/13/11
25#	1481-1	DIPHENYL	100	MEOH	NA
26*	1545-2	OP-PEST	25	MEOH	02/16/10
27	1668-3	STEROLS	200	MEOH	10/30/10
28#	1684-1	ADD. PEST	4	ACETONE	03/25/10
29#	1496-3	DECANES	100	MEOH	NA
30	1620-1	EDB/DBCP	0.2	MEOH	06/22/10

LCS SOLUTIONS

2/2/2010

31	1596-1	TERPINEOL	100	MEOH	04/03/10
32	1619-3	GUAIACOL	50-200	ACETONE	04/30/10
33	1639-3	RETENE	100	MEOH	09/03/10
34	1633-1	CONGENERS	2.5	ACETONE	08/11/10
35	1674-3	ALKYL PNA A	10	MEOH	10/28/10
36	1601-3	ALKYL PNA B	10	MEOH	05/13/10
50	1617-1	FULL RESIN	250	ACETONE	06/17/10
51	1696-3	DDTS	2.5	ACETONE	06/03/10
52	1613-5	1232 PCB	20	ACETONE	06/16/10
	*=REVERIFIED SOLUTION				
	#=PROJECT SPECIFIC SOLUTION				

SURR SOLUTIONS

2/2/2010

LABEL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
A	1662-3	ABN	100/150	MEOH	10/08/10
B	1633-3	SIM PNA	15/75	MEOH	08/12/10
C*	1559-1	SIM ABN	25/37.5	MEOH	03/13/10
D	1689-2	LOW PCB	0.2	ACETONE	12/29/10
E	1661-2	HERB	62.5	MEOH	10/02/10
F	1683-3	PCP	12.5	ACETONE	12/09/10
G*	1534-1	1,4DIOXANE	100	MEOH	02/20/10
H	1594-1	OP-PEST	25	MEOH	04/01/10
I	1634-1	LOW S. PNA	1.5	MEOH	08/12/10
J	1681-2	TBT-PORE	0.125	MECL2	12/01/10
K	1689-1	MED PCB	20	ACETONE	12/29/10
L	1681-1	TBT	2.5	MECL2	12/01/10
M	1682-1	EPH	1500	MECL2	09/17/10
N	1689-3	PCB	2	ACETONE	12/29/10
O	1699-1	TPH	450	MECL2	07/02/10
P	1666-3	HCID	2250	MECL2	05/06/10
Q	1620-2	EDB	1	MEOH	06/22/10
R	1615-1	RESIN ACID	250	ACETONE	06/17/10
S#	1568-5	PBDE	.25	MEOH	NA
T	1674-2	ALKYL PNA	10	MEOH	07/30/10
U	1633-1	CONGENER	2.5	ACETONE	08/11/10
V					
*reverified solution					
#project specific					
Y					
Z					

Spike Recovery Control Limits for Polycyclic Aromatic Hydrocarbons Selected Ion Monitoring (SIM) EPA Method SW-846-8270D-Modified Low Level Aqueous Samples[1,7]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Sample Volume / Final Volume	500 mL to 0.5 mL	
	Control Limits	ME Limits [2]
LCS Spike Recovery [6]		
Napthalene	41 - 101	31 - 111
2-Methylnapthalene	47 - **100**	39 - 103
1-Methylnapthalene	30 - 160 [3]	30 - 160 [3]
Acenaphthylene	35 - **100**	25 - 104
Acenapthene	43 - 104	33 - 114
Dibenzofuran	37 - **100**	27 - 108
Fluorene	51 - 103	42 - 112
Phenanthrene	55 - 109	46 - 118
Anthracene	30 - 101	18 - 113
Fluoranthene	49 - 123	37 - 135
Pyrene	48 - 120	36 - 132
Benz(a)anthracene	43 - 113	31 - 125
Chrysene	59 - 112	50 - 121
Benzo(b)fluoranthene	44 - 121	31 - 134
Benzo(k)fluoranthene	50 - 117	39 - 128
Benzo(a)pyrene	**10** - **100**	**10** - 109
Indeno(1,2,3-cd)pyrene	43 - 112	32 - 124
Dibenzo(a,h)anthracene	42 - 114	30 - 126
Benzo(g,h,i)perylene	31 - 118	17 - 133
MB / LCS Surrogate Recovery		
d10-2-Methylnaphthalene	42 - **100**	(4)
d14-Dibenzo(a,h)anthracene	40 - 125	(4)
Sample Surrogate Recovery		
d10-2-Methylnaphthalene	31 - 109	(4)
d14-Dibenzo(a,h)anthracene	**10** - 133	(4)

(1) ARI's Control limits calculated using all available spike recovery data from 1/1/08 through 12/1/08.
(2) **ME** = A **marginal exceedance** defined in the NELAC Standard [5] as beyond the LCS-CL but still within the ME limits. ME limits are between 3 and 4 standard deviations around the mean. A maximum of one marginal exceedance is acceptable. Two or more marginal exceedances require corrective action.
(3) 30 – 160 are default, advisory control limits used when there is insufficient data to calculate historic control limits. **DO NOT** use these limits as the sole reason to reject the data from a batch of analyses.
(4) Marginal Exceedances not allowed for surrogate standards.
(5) **2003 NELAC Standard (EPA/600/R-04/003), July 2003**, Chapter 5, pages 251-252.
(6)Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.
(7) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Chlorinated Phenols
EPA Method SW-846-8041[1,2]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Calculated Control Limits	
Sample Matrix:	Water	Soil / Sediment
Sample Amount / Final Volume:	500 / 50 mL	10 g / 25 mL
LCS Spike Recovery [3]		
Pentachlorophenol	27 - 115	**10** - 162
Method Blank/LCS Surrogate Recovery		
2,4,6-Tribromophenol	40 - 130	50 - 115
Sample Surrogate Recovery		
2,4,6-Tribromophenol	11 - 156	**10** - 146

(1) ARI's Control limits calculated using all available spike recovery data from 1/1/08 through 12/1/08.
(2) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10.
(3) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

Summary of Laboratory Control Limits Metals Analyses (All Methods & Sample Matrices)

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Element	Matrix Spike Recovery	LCS Recovery	Replicate RPD
Aluminum	75 - 125	80 - 120	≤ 20%
Antimony	75 - 125	80 - 120	≤ 20%
Arsenic	75 - 125	80 - 120	≤ 20%
Barium	75 - 125	80 - 120	≤ 20%
Beryllium	75 - 125	80 - 120	≤ 20%
Boron	75 - 125	80 - 120	≤ 20%
Cadmium	75 - 125	80 - 120	≤ 20%
Calcium	75 - 125	80 - 120	≤ 20%
Chromium	75 - 125	80 - 120	≤ 20%
Cobalt	75 - 125	80 - 120	≤ 20%
Copper	75 - 125	80 - 120	≤ 20%
Iron	75 - 125	80 - 120	≤ 20%
Lead	75 - 125	80 - 120	≤ 20%
Magnesium	75 - 125	80 - 120	≤ 20%
Manganese	75 - 125	80 - 120	≤ 20%
Mercury	75 - 125	80 - 120	≤ 20%
Nickel	75 - 125	80 - 120	≤ 20%
Potassium	75 - 125	80 - 120	≤ 20%
Selenium	75 - 125	80 - 120	≤ 20%
Silica	75 - 125	80 - 120	≤ 20%
Silver	75 - 125	80 - 120	≤ 20%
Sodium	75 - 125	80 - 120	≤ 20%
Strontium	75 - 125	80 - 120	≤ 20%
Thallium	75 - 125	80 - 120	≤ 20%
Vanadium	75 - 125	80 - 120	≤ 20%
Zinc	75 - 125	80 - 120	≤ 20%

Spike Recovery Control Limits for Conventional Wet Chemistry

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 125	75 - 125
Chloride	75 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

Data Summary Package

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

SIM SEMIVOLATILE ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: CB31A022710COMP**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 12:19
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.014**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.033 B**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.058 B**
129-00-0	**Pyrene**	**0.010**	**0.071 B**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.013 B**
218-01-9	**Chrysene**	**0.010**	**0.036 B**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.016 B**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.016 B**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.014 B**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.011 B**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.022 B**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	49.0%
d14-Dibenzo(a,h)anthracene	44.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: CB4857022710COMP**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QM04B
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 13:33
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.013**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.026 B**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.046 B**
129-00-0	**Pyrene**	**0.010**	**0.055 B**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.012 B**
218-01-9	**Chrysene**	**0.010**	**0.030 B**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.020 B**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.012 B**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.012 B**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.010 B**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.017 B**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.0%
d14-Dibenzo(a,h)anthracene	49.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: CB1022710COMP**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QM04C
LIMS ID: 10-5089
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 13:58
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.014**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.011 B**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	Fluoranthene	0.010	< 0.010 U
129-00-0	Pyrene	0.010	< 0.010 U
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
205-99-2	Benzo(b)fluoranthene	0.010	< 0.010 U
207-08-9	Benzo(k)fluoranthene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	Benzo(g,h,i)perylene	0.010	< 0.010 U
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	63.7%
d14-Dibenzo(a,h)anthracene	71.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB102022710COMP
SAMPLE

Lab Sample ID: QM04D
LIMS ID: 10-5090
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 14:22
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.016**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	Phenanthrene	0.010	< 0.010 U
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	Fluoranthene	0.010	< 0.010 U
129-00-0	Pyrene	0.010	< 0.010 U
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
205-99-2	Benzo(b)fluoranthene	0.010	< 0.010 U
207-08-9	Benzo(k)fluoranthene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	Benzo(g,h,i)perylene	0.010	< 0.010 U
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	63.3%
d14-Dibenzo(a,h)anthracene	52.7%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	MNP	DBA	TOT OUT
MB-030310	71.0%	64.7%	0
LCS-030310	71.0%	73.3%	0
CB31A022710COMP	49.0%	44.3%	0
CB31A022710COMP MS	59.7%	48.3%	0
CB31A022710COMP MSD	57.0%	58.7%	0
CB4857022710COMP	57.0%	49.7%	0
CB1022710COMP	63.7%	71.3%	0
CB102022710COMP	63.3%	52.7%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(42-100)	(31-109)
(DBA) = d14-Dibenzo(a,h)anthracene	(40-125)	(10-133)

Prep Method: SW3520C
Log Number Range: 10-5087 to 10-5090

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted MS/MSD: 03/03/10

Date Analyzed MS: 03/05/10 12:44
MSD: 03/05/10 13:08
Instrument/Analyst MS: NT2/PK
MSD: NT2/PK

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 0.50 mL
MSD: 0.50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Naphthalene	0.0136	0.171	0.300	52.5%	0.169	0.300	51.8%	1.2%
2-Methylnaphthalene	< 0.0100 U	0.178	0.300	59.3%	0.174	0.300	58.0%	2.3%
1-Methylnaphthalene	< 0.0100 U	0.174	0.300	58.0%	0.166	0.300	55.3%	4.7%
Acenaphthylene	< 0.0100 U	0.196	0.300	65.3%	0.199	0.300	66.3%	1.5%
Acenaphthene	< 0.0100 U	0.194	0.300	64.7%	0.198	0.300	66.0%	2.0%
Fluorene	< 0.0100 U	0.216	0.300	72.0%	0.223	0.300	74.3%	3.2%
Phenanthrene	0.0330 B	0.276 B	0.300	81.0%	0.266 B	0.300	77.7%	3.7%
Anthracene	< 0.0100 U	0.220	0.300	73.3%	0.219	0.300	73.0%	0.5%
Fluoranthene	0.0576 B	0.308 B	0.300	83.5%	0.304 B	0.300	82.1%	1.3%
Pyrene	0.0706 B	0.325 B	0.300	84.8%	0.324 B	0.300	84.5%	0.3%
Benzo(a)anthracene	0.0130 B	0.220 B	0.300	69.0%	0.235 B	0.300	74.0%	6.6%
Chrysene	0.0359 B	0.241 B	0.300	68.4%	0.256 B	0.300	73.4%	6.0%
Benzo(b)fluoranthene	0.0160 B	0.218 B	0.300	67.3%	0.196 B	0.300	60.0%	10.6%
Benzo(k)fluoranthene	0.0160 B	0.169 B	0.300	51.0%	0.227 B	0.300	70.3%	29.3%
Benzo(a)pyrene	0.0139 B	0.195 B	0.300	60.4%	0.212 B	0.300	66.0%	8.4%
Indeno(1,2,3-cd)pyrene	0.0109 B	0.160 B	0.300	49.7%	0.181 B	0.300	56.7%	12.3%
Dibenz(a,h)anthracene	< 0.0100 U	0.163 B	0.300	54.3%	0.180 B	0.300	60.0%	9.9%
Benzo(g,h,i)perylene	0.0220 B	0.170 B	0.300	49.3%	0.194 B	0.300	57.3%	13.2%
Dibenzofuran	< 0.0100 U	0.230 B	0.300	76.7%	0.236 B	0.300	78.7%	2.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: CB31A022710COMP**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 12:44
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	---
91-57-6	2-Methylnaphthalene	0.010	---
90-12-0	1-Methylnaphthalene	0.010	---
208-96-8	Acenaphthylene	0.010	---
83-32-9	Acenaphthene	0.010	---
86-73-7	Fluorene	0.010	---
85-01-8	Phenanthrene	0.010	---
120-12-7	Anthracene	0.010	---
206-44-0	Fluoranthene	0.010	---
129-00-0	Pyrene	0.010	---
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
205-99-2	Benzo(b)fluoranthene	0.010	---
207-08-9	Benzo(k)fluoranthene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
191-24-2	Benzo(g,h,i)perylene	0.010	---
132-64-9	Dibenzofuran	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	59.7%
d14-Dibenzo(a,h)anthracene	48.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE DUPLICATE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 13:08
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	---
91-57-6	2-Methylnaphthalene	0.010	---
90-12-0	1-Methylnaphthalene	0.010	---
208-96-8	Acenaphthylene	0.010	---
83-32-9	Acenaphthene	0.010	---
86-73-7	Fluorene	0.010	---
85-01-8	Phenanthrene	0.010	---
120-12-7	Anthracene	0.010	---
206-44-0	Fluoranthene	0.010	---
129-00-0	Pyrene	0.010	---
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
205-99-2	Benzo(b)fluoranthene	0.010	---
207-08-9	Benzo(k)fluoranthene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
191-24-2	Benzo(g,h,i)perylene	0.010	---
132-64-9	Dibenzofuran	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.0%
d14-Dibenzo(a,h)anthracene	58.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-030310
LAB CONTROL SAMPLE

Lab Sample ID: LCS-030310
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 03/03/10
Date Analyzed LCS: 03/05/10 11:54
Instrument/Analyst LCS: NT2/PK

Sample Amount LCS: 500 mL
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS		Spike Added	Recovery
Naphthalene	0.194		0.300	64.7%
2-Methylnaphthalene	0.202		0.300	67.3%
1-Methylnaphthalene	0.203		0.300	67.7%
Acenaphthylene	0.204		0.300	68.0%
Acenaphthene	0.221		0.300	73.7%
Fluorene	0.245		0.300	81.7%
Phenanthrene	0.269	B	0.300	89.7%
Anthracene	0.227		0.300	75.7%
Fluoranthene	0.281	B	0.300	93.7%
Pyrene	0.284	B	0.300	94.7%
Benzo(a)anthracene	0.255	B	0.300	85.0%
Chrysene	0.272	B	0.300	90.7%
Benzo(b)fluoranthene	0.231	B	0.300	77.0%
Benzo(k)fluoranthene	0.278	B	0.300	92.7%
Benzo(a)pyrene	0.192	B	0.300	64.0%
Indeno(1,2,3-cd)pyrene	0.201	B	0.300	67.0%
Dibenz(a,h)anthracene	0.222	B	0.300	74.0%
Benzo(g,h,i)perylene	0.188	B	0.300	62.7%
Dibenzofuran	0.261	B	0.300	87.0%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	71.0%
d14-Dibenzo(a,h)anthracene	73.3%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

QM04MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QM04 Project: LORA LAKE APARTMENTS

Lab File ID: 030501 Date Extracted: 03/03/10

Instrument ID: NT2 Date Analyzed: 03/05/10

Matrix: LIQUID Time Analyzed: 1130

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	QM04LCSW1	QM04LCSW1	030502	03/05/10
02	CB31A022710COMP	QM04A	030503	03/05/10
03	CB31A022710COMP	QM04AMS	030504	03/05/10
04	CB31A022710COMP	QM04AMSD	030505	03/05/10
05	CB4857022710COMP	QM04B	030506	03/05/10
06	CB1022710COMP	QM04C	030507	03/05/10
07	CB102022710COMP	QM04D	030508	03/05/10
08				
09				
10				
11				
12				
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14				
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30				

COMMENTS:

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MB-030310**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-030310
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 11:30
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	< 0.010 U
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.0060 J**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.0064 J**
129-00-0	**Pyrene**	**0.010**	**0.0070 J**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.0064 J**
218-01-9	**Chrysene**	**0.010**	**0.0070 J**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.0062 J**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.0063 J**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.0063 J**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.0051 J**
53-70-3	**Dibenz(a,h)anthracene**	**0.010**	**0.0058 J**
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.0052 J**
132-64-9	**Dibenzofuran**	**0.010**	**0.0067 J**

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	71.0%
d14-Dibenzo(a,h)anthracene	64.7%

PCP/CHLOROPHENOLS ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A022710COMP
SAMPLE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 12:51
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	0.56

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	57.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB4857022710COMP
SAMPLE

Lab Sample ID: QM04B
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 13:51
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	0.45

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	60.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB1022710COMP
SAMPLE

Lab Sample ID: QM04C
LIMS ID: 10-5089
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 14:11
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	64.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB102022710COMP
SAMPLE

Lab Sample ID: QM04D
LIMS ID: 10-5090
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 14:31
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	66.8%

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	TBP	TOT OUT
MB-030310	53.6%	0
LCS-030310	61.4%	0
CB31A022710COMP	57.2%	0
CB31A022710COMP MS	63.6%	0
CB31A022710COMP MSD	61.6%	0
CB4857022710COMP	60.8%	0
CB1022710COMP	64.4%	0
CB102022710COMP	66.8%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 10-5087 to 10-5090

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A022710COMP
MS/MSD

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted MS/MSD: 03/03/10

Date Analyzed MS: 03/09/10 13:11
MSD: 03/09/10 13:31
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 50 mL
MSD: 50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	0.56	2.38	2.50	72.8%	2.29	2.50	69.2%	3.9%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 13:11
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	63.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE DUP

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 13:31
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	61.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-030310
LAB CONTROL

Lab Sample ID: LCS-030310
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 12:31
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	1.92	2.50	76.8%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	61.4%

Results reported in µg/L

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

QM04MBW1

Lab Name: ANALYTICAL RESOURCES, INC
Client: FLOYD/SNIDER

ARI Job No.: QM04
Project: LORA LAKES APARTMENTS

Lab Sample ID: QM04MBW1
Lab File ID: 0309A005

Matrix (soil/water) LIQUID
Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y
Date Extracted: 03/03/10

Date Analyzed (1): 03/09/10
Date Analyzed (2): 03/09/10

Time Analyzed (1): 1211
Time Analyzed (2): 1211

Instrument ID (1): ECD1
Instrument ID (2): ECD1

GC Column (1): ZB5 ID: 0.53(mm)
GC Column (2): ZB35 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QM04LCSW1	QM04LCSW1	03/09/10	03/09/10
02	CB31A022710C	QM04A	03/09/10	03/09/10
03	CB31A022710C	QM04AMS	03/09/10	03/09/10
04	CB31A022710C	QM04AMSD	03/09/10	03/09/10
05	CB4857022710	QM04B	03/09/10	03/09/10
06	CB1022710COM	QM04C	03/09/10	03/09/10
07	CB102022710C	QM04D	03/09/10	03/09/10

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-030310
METHOD BLANK

Lab Sample ID: MB-030310
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 12:11
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	53.6%

FORM I

METALS ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A022710COMP
SAMPLE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	**7440-38-2**	**Arsenic**	0.2	**0.7**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A022710COMP
DUPLICATE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.7	0.7	0.0%	+/- 0.2	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.680	27.7	25.0	108%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB4857022710COMP
SAMPLE

Lab Sample ID: QM04B
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	**7440-38-2**	**Arsenic**	0.2	**0.5**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB1022710COMP
SAMPLE

Lab Sample ID: QM04C
LIMS ID: 10-5089
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	**7440-38-2**	**Arsenic**	0.2	**0.5**	

U-Analyte undetected at given RL
RL-Reporting Limit

FORM-I

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: CB102022710COMP
SAMPLE

Lab Sample ID: QM04D
LIMS ID: 10-5090
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	**7440-38-2**	**Arsenic**	0.2	**0.4**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: QM04LCS
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	26.9	25.0	108%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: QM04MB
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A022710COMP
SAMPLE

Lab Sample ID: QM04E
LIMS ID: 10-5091
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	**7440-38-2**	**Arsenic**	0.2	**0.4**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A022710COMP
DUPLICATE

Lab Sample ID: QM04E
LIMS ID: 10-5091
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.4	0.4	0.0%	+/- 0.2	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04E
LIMS ID: 10-5091
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.350	27.0	25.0	107%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB4857022710COMP
SAMPLE

Lab Sample ID: QM04F
LIMS ID: 10-5092
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	**7440-38-2**	**Arsenic**	0.2	**0.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB1022710COMP
SAMPLE

Lab Sample ID: QM04G
LIMS ID: 10-5093
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	**7440-38-2**	**Arsenic**	0.2	**0.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

FORM-I

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB102022710COMP
SAMPLE

Lab Sample ID: QM04H
LIMS ID: 10-5094
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	**7440-38-2**	**Arsenic**	0.2	**0.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

FORM-I

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: QM04MB
LIMS ID: 10-5092
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

FORM-I

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: QM04LCS
LIMS ID: 10-5092
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	26.8	25.0	107%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

GENERAL CHEMISTRY ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
Total Suspended Solids by Method EPA 160.2

Data Release Authorized:
Reported: 03/03/10
Date Received: 03/01/10
Page 1 of 1

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
CB31A022710COMP QM04A 10-5087	02/27/10	Water	03/02/10 14:01 030210#1	1.2	24.1
CB4857022710COMP QM04B 10-5088	02/27/10	Water	03/02/10 14:01 030210#1	1.2	17.0
CB1022710COMP QM04C 10-5089	02/27/10	Water	03/02/10 14:01 030210#1	1.0	7.7
CB102022710COMP QM04D 10-5090	02/27/10	Water	03/02/10 14:01 030210#1	1.0	8.2

Reported in mg/L

RL-Analytical reporting limit
U-Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
QM04-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/03/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: QM04A Client ID: CB31A022710COMP					
Total Suspended Solids	03/02/10	mg/L	24.1	22.6	6.4%

LAB CONTROL RESULTS-CONVENTIONALS
QM04-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/03/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
Total Suspended Solids	03/02/10 14:01	mg/L	49.6	50.0	99.2%

METHOD BLANK RESULTS-CONVENTIONALS
QM04-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 03/03/10

Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Total Suspended Solids	03/02/10 14:01	mg/L	< 1.0 U

SUBCONTRACTED ANALYSIS

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **6012**

Received on: **03/04/2010** Project Due: **03/26/2010** Storage: **R2**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
6012-001-SA	0	QM04	CB31A022710COMP	EPA 1613 D/F	Aqueous	02/27/2010	01:11 am	02/27/2011
6012-002-SA	0	QM04	CB4857022710COMP	EPA 1613 D/F	Aqueous	02/27/2010	01:00 am	02/27/2011
6012-003-SA	0	QM04	CB1022710COMP	EPA 1613 D/F	Aqueous	02/27/2010	01:05 am	02/27/2011
6012-004-SA	0	QM04	CB102022710COMP	EPA 1613 D/F	Aqueous	02/27/2010	02:05 am	02/27/2011

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6012-001-MB
Client ID: Method Blank
Matrix: Aqueous
Batch No: X1959

Date Extracted: 03-09-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 03-10-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.80		-	0.212				
1,2,3,7,8-PeCDD	ND	1.62		-	0.302				
1,2,3,4,7,8-HxCDD	ND	1.69		-	0.328				
1,2,3,6,7,8-HxCDD	ND	2.02		-	0.381	Total TCDD	ND	1.80	
1,2,3,7,8,9-HxCDD	ND	1.84		-	0.351	Total PeCDD	ND	1.62	
1,2,3,4,6,7,8-HpCDD	ND	3.25		-	0.495	Total HxCDD	ND	2.02	
OCDD	ND	4.91		-	1.02	Total HpCDD	ND	3.25	
* 2,3,7,8-TCDF	ND	0.763		-	0.112				
1,2,3,7,8-PeCDF	ND	1.18		-	0.219				
2,3,4,7,8-PeCDF	ND	1.24		-	0.232				
1,2,3,4,7,8-HxCDF	ND	1.01		-	0.162				
1,2,3,6,7,8-HxCDF	ND	1.03		-	0.167				
2,3,4,6,7,8-HxCDF	ND	1.05		-	0.167				
1,2,3,7,8,9-HxCDF	ND	1.36		-	0.185	Total TCDF	ND	0.763	
1,2,3,4,6,7,8-HpCDF	ND	1.38		-	0.251	Total PeCDF	ND	1.24	
1,2,3,4,7,8,9-HpCDF	ND	1.64		-	0.280	Total HxCDF	ND	1.36	
OCDF	ND	3.25		-	0.451	Total HpCDF	ND	1.64	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	81.5	25.0 - 164	
13C-1,2,3,7,8-PeCDD	68.6	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	74.3	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	76.6	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	68.3	23.0 - 140	
13C-OCDD	69.4	17.0 - 157	
13C-2,3,7,8-TCDF	77.1	24.0 - 169	
13C-1,2,3,7,8-PeCDF	63.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	62.4	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	73.5	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	75.6	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	75.2	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	72.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	69.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	71.7	26.0 - 138	
13C-OCDF	66.1	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	101	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 3/11/10

Reviewed By: _____
Date: 3/11/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6012-001-OPR
Client ID: OPR
Matrix: Aqueous
Batch No: X1959

Date Extracted: 03-09-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: ng/ml

Acquired: 03-10-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	10.3	6.70 - 15.8	
1,2,3,7,8-PeCDD	49.9	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	50.1	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	49.0	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	48.1	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	49.2	35.0 - 70.0	
OCDD	101	78.0 - 144	
2,3,7,8-TCDF	9.56	7.50 - 15.8	
1,2,3,7,8-PeCDF	50.6	40.0 - 67.0	
2,3,4,7,8-PeCDF	50.2	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	49.8	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	50.7	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	48.9	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	49.8	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	49.3	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	47.1	39.0 - 69.0	
OCDF	97.0	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	64.5	20.0 - 175	
13C-1,2,3,7,8-PeCDD	49.6	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	53.0	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	55.4	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	54.4	26.0 - 166	
13C-OCDD	57.7	13.0 - 198	
13C-2,3,7,8-TCDF	65.7	22.0 - 152	
13C-1,2,3,7,8-PeCDF	50.3	21.0 - 192	
13C-2,3,4,7,8-PeCDF	51.2	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	51.3	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	52.4	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	52.5	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	51.2	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	52.1	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	55.9	20.0 - 186	
13C-OCDF	55.4	13.0 - 198	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	82.0	31.0 - 191

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

Analyst: _____
Date: 3/11/10

Reviewed By: _____
Date: 3/11/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6012-001-SA
Client ID: CB31A022710COMP
Matrix: Aqueous
Batch No: X1959

Date Extracted: 03-09-2010
Date Received: 03-04-2010
Amount: 1.037 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 03-10-2010
2005 WHO TEQ: 15.4

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.67		-	0.212				
1,2,3,7,8-PeCDD	ND	2.66		-	0.302				
1,2,3,4,7,8-HxCDD	6.12	-	J	0.612	0.328				
1,2,3,6,7,8-HxCDD	15.0	-	J	1.50	0.381	Total TCDD	ND	1.67	
1,2,3,7,8,9-HxCDD	10.3	-	J	1.03	0.351	Total PeCDD	ND	2.66	
1,2,3,4,6,7,8-HpCDD	500	-		5.00	0.495	Total HxCDD	82.9	-	
OCDD	4270	-		1.28	1.02	Total HpCDD	844	-	
2,3,7,8-TCDF	ND	0.678		-	0.112				
1,2,3,7,8-PeCDF	ND	1.18		-	0.219				
2,3,4,7,8-PeCDF	2.71	-	J	0.813	0.232				
1,2,3,4,7,8-HxCDF	21.7	-	J	2.17	0.162				
1,2,3,6,7,8-HxCDF	6.94	-	J	0.694	0.167				
2,3,4,6,7,8-HxCDF	7.26	-	J	0.726	0.167				
1,2,3,7,8,9-HxCDF	2.49	-	J	0.249	0.185	Total TCDF	7.53	-	D,M
1,2,3,4,6,7,8-HpCDF	108	-		1.08	0.251	Total PeCDF	34.4	-	D,M
1,2,3,4,7,8,9-HpCDF	13.0	-	J	0.130	0.280	Total HxCDF	196	-	D,M
OCDF	328	-		0.0984	0.451	Total HpCDF	373	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	87.8	25.0 - 164	
13C-1,2,3,7,8-PeCDD	77.0	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	82.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	85.3	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	87.9	23.0 - 140	
13C-OCDD	91.2	17.0 - 157	
13C-2,3,7,8-TCDF	87.6	24.0 - 169	
13C-1,2,3,7,8-PeCDF	71.6	24.0 - 185	
13C-2,3,4,7,8-PeCDF	74.9	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	80.6	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	80.1	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	80.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	83.3	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	82.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	91.0	26.0 - 138	
13C-OCDF	84.6	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	105	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 3/11/10

Reviewed By: DAJ
Date: 3/11/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6012-002-SA
Client ID: CB4857022710COMP
Matrix: Aqueous
Batch No: X1959

Date Extracted: 03-09-2010
Date Received: 03-04-2010
Amount: 1.035 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 03-10-2010
2005 WHO TEQ: 10.7

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.47		-	0.212				
1,2,3,7,8-PeCDD	ND	1.99		-	0.302				
1,2,3,4,7,8-HxCDD	4.35	-	J	0.435	0.328				
1,2,3,6,7,8-HxCDD	11.4	-	J	1.14	0.381	Total TCDD	ND	1.47	
1,2,3,7,8,9-HxCDD	8.11	-	J	0.811	0.351	Total PeCDD	ND	1.99	
1,2,3,4,6,7,8-HpCDD	348	-		3.48	0.495	Total HxCDD	60.9	-	
OCDD	3020	-		0.906	1.02	Total HpCDD	591	-	
2,3,7,8-TCDF	ND	0.760		-	0.112				
1,2,3,7,8-PeCDF	ND	2.00		-	0.219				
2,3,4,7,8-PeCDF	ND	1.93		-	0.232				
1,2,3,4,7,8-HxCDF	16.0	-	J	1.60	0.162				
1,2,3,6,7,8-HxCDF	6.46	-	J	0.646	0.167				
2,3,4,6,7,8-HxCDF	5.55	-	J	0.555	0.167				
1,2,3,7,8,9-HxCDF	1.87	-	J	0.187	0.185	Total TCDF	10.1	-	D,M
1,2,3,4,6,7,8-HpCDF	80.6	-		0.806	0.251	Total PeCDF	39.6	-	D,M
1,2,3,4,7,8,9-HpCDF	9.26	-	J	0.0926	0.280	Total HxCDF	173	-	D,M
OCDF	234	-		0.0702	0.451	Total HpCDF	266	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	84.7	25.0 - 164	
13C-1,2,3,7,8-PeCDD	76.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	80.4	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	82.8	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	89.6	23.0 - 140	
13C-OCDD	91.3	17.0 - 157	
13C-2,3,7,8-TCDF	85.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	69.2	24.0 - 185	
13C-2,3,4,7,8-PeCDF	72.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	78.5	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	78.9	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	78.6	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	81.3	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	83.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	90.4	26.0 - 138	
13C-OCDF	85.5	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	92.4	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 3/11/10

Reviewed By: DN
Date: 3/11/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6012-003-SA
Client ID: CB1022710COMP
Matrix: Aqueous
Batch No: X1959

Date Extracted: 03-09-2010
Date Received: 03-04-2010
Amount: 1.027 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 03-11-2010
2005 WHO TEQ: 0.220

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.62		-	0.212				
1,2,3,7,8-PeCDD	ND	1.38		-	0.302				
1,2,3,4,7,8-HxCDD	ND	2.23		-	0.328				
1,2,3,6,7,8-HxCDD	ND	2.75		-	0.381	Total TCDD	ND	1.62	
1,2,3,7,8,9-HxCDD	ND	2.47		-	0.351	Total PeCDD	ND	1.38	
1,2,3,4,6,7,8-HpCDD	15.0	-	J	0.150	0.495	Total HxCDD	ND	2.75	
OCDD	96.7	-		0.0290	1.02	Total HpCDD	29.8	-	
2,3,7,8-TCDF	ND	0.939		-	0.112				
1,2,3,7,8-PeCDF	ND	1.58		-	0.219				
2,3,4,7,8-PeCDF	ND	1.53		-	0.232				
1,2,3,4,7,8-HxCDF	ND	0.888		-	0.162				
1,2,3,6,7,8-HxCDF	ND	0.888		-	0.167				
2,3,4,6,7,8-HxCDF	ND	0.941		-	0.167				
1,2,3,7,8,9-HxCDF	ND	1.03		-	0.185	Total TCDF	ND	0.939	
1,2,3,4,6,7,8-HpCDF	3.79	-	J	0.0379	0.251	Total PeCDF	ND	1.58	
1,2,3,4,7,8,9-HpCDF	ND	1.35		-	0.280	Total HxCDF	3.84	-	J
OCDF	9.46	-	J	0.00284	0.451	Total HpCDF	8.47	-	J

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	87.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	69.6	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	79.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	77.8	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	81.8	23.0 - 140	
13C-OCDD	84.7	17.0 - 157	
13C-2,3,7,8-TCDF	85.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	66.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	70.6	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	77.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	76.6	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	75.3	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	77.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	77.4	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	83.9	26.0 - 138	
13C-OCDF	78.0	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	103	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
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____
Date: 3/11/10

Reviewed By: DN
Date: 3/11/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 6012-004-SA
Client ID: CB102022710COMP
Matrix: Aqueous
Batch No: X1959

Date Extracted: 03-09-2010
Date Received: 03-04-2010
Amount: 1.007 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 03-11-2010
2005 WHO TEQ: 0.223

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.27		-	0.212				
1,2,3,7,8-PeCDD	ND	1.33		-	0.302				
1,2,3,4,7,8-HxCDD	ND	2.57		-	0.328				
1,2,3,6,7,8-HxCDD	ND	2.90		-	0.381	Total TCDD	ND	1.27	
1,2,3,7,8,9-HxCDD	ND	2.71		-	0.351	Total PeCDD	ND	1.33	
1,2,3,4,6,7,8-HpCDD	15.6	-	J	0.156	0.495	Total HxCDD	ND	2.90	
OCDD	98.5	-		0.0296	1.02	Total HpCDD	30.5	-	
2,3,7,8-TCDF	ND	0.800		-	0.112				
1,2,3,7,8-PeCDF	ND	1.36		-	0.219				
2,3,4,7,8-PeCDF	ND	1.36		-	0.232				
1,2,3,4,7,8-HxCDF	ND	1.86		-	0.162				
1,2,3,6,7,8-HxCDF	ND	1.96		-	0.167				
2,3,4,6,7,8-HxCDF	ND	2.20		-	0.167				
1,2,3,7,8,9-HxCDF	ND	2.32		-	0.185	Total TCDF	ND	0.800	
1,2,3,4,6,7,8-HpCDF	3.47	-	J	0.0347	0.251	Total PeCDF	ND	1.36	
1,2,3,4,7,8,9-HpCDF	ND	1.53		-	0.280	Total HxCDF	ND	2.32	
OCDF	7.52	-	J	0.00226	0.451	Total HpCDF	7.76	-	J

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	93.8	25.0 - 164	
13C-1,2,3,7,8-PeCDD	78.1	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	88.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	89.6	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	92.4	23.0 - 140	
13C-OCDD	93.0	17.0 - 157	
13C-2,3,7,8-TCDF	96.6	24.0 - 169	
13C-1,2,3,7,8-PeCDF	71.2	24.0 - 185	
13C-2,3,4,7,8-PeCDF	71.7	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	88.0	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	86.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	83.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	84.9	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	86.3	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	90.8	26.0 - 138	
13C-OCDF	86.0	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	86.3	35.0 - 197

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

Analyst: _____
Date: 3/11/10

Reviewed By: DRJ
Date: 3/11/10

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Laboratory Data Package

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

SIM Semivolatile Analysis
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	MNP	DBA	TOT OUT
MB-030310	71.0%	64.7%	0
LCS-030310	71.0%	73.3%	0
CB31A022710COMP	49.0%	44.3%	0
CB31A022710COMP MS	59.7%	48.3%	0
CB31A022710COMP MSD	57.0%	58.7%	0
CB4857022710COMP	57.0%	49.7%	0
CB1022710COMP	63.7%	71.3%	0
CB102022710COMP	63.3%	52.7%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(42-100)	(31-109)
(DBA) = d14-Dibenzo(a,h)anthracene	(40-125)	(10-133)

Prep Method: SW3520C
Log Number Range: 10-5087 to 10-5090

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted MS/MSD: 03/03/10

Date Analyzed MS: 03/05/10 12:44
MSD: 03/05/10 13:08
Instrument/Analyst MS: NT2/PK
MSD: NT2/PK

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 0.50 mL
MSD: 0.50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Naphthalene	0.0136	0.171	0.300	52.5%	0.169	0.300	51.8%	1.2%
2-Methylnaphthalene	< 0.0100 U	0.178	0.300	59.3%	0.174	0.300	58.0%	2.3%
1-Methylnaphthalene	< 0.0100 U	0.174	0.300	58.0%	0.166	0.300	55.3%	4.7%
Acenaphthylene	< 0.0100 U	0.196	0.300	65.3%	0.199	0.300	66.3%	1.5%
Acenaphthene	< 0.0100 U	0.194	0.300	64.7%	0.198	0.300	66.0%	2.0%
Fluorene	< 0.0100 U	0.216	0.300	72.0%	0.223	0.300	74.3%	3.2%
Phenanthrene	0.0330 B	0.276 B	0.300	81.0%	0.266 B	0.300	77.7%	3.7%
Anthracene	< 0.0100 U	0.220	0.300	73.3%	0.219	0.300	73.0%	0.5%
Fluoranthene	0.0576 B	0.308 B	0.300	83.5%	0.304 B	0.300	82.1%	1.3%
Pyrene	0.0706 B	0.325 B	0.300	84.8%	0.324 B	0.300	84.5%	0.3%
Benzo(a)anthracene	0.0130 B	0.220 B	0.300	69.0%	0.235 B	0.300	74.0%	6.6%
Chrysene	0.0359 B	0.241 B	0.300	68.4%	0.256 B	0.300	73.4%	6.0%
Benzo(b)fluoranthene	0.0160 B	0.218 B	0.300	67.3%	0.196 B	0.300	60.0%	10.6%
Benzo(k)fluoranthene	0.0160 B	0.169 B	0.300	51.0%	0.227 B	0.300	70.3%	29.3%
Benzo(a)pyrene	0.0139 B	0.195 B	0.300	60.4%	0.212 B	0.300	66.0%	8.4%
Indeno(1,2,3-cd)pyrene	0.0109 B	0.160 B	0.300	49.7%	0.181 B	0.300	56.7%	12.3%
Dibenz(a,h)anthracene	< 0.0100 U	0.163 B	0.300	54.3%	0.180 B	0.300	60.0%	9.9%
Benzo(g,h,i)perylene	0.0220 B	0.170 B	0.300	49.3%	0.194 B	0.300	57.3%	13.2%
Dibenzofuran	< 0.0100 U	0.230 B	0.300	76.7%	0.236 B	0.300	78.7%	2.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-030310
LAB CONTROL SAMPLE

Lab Sample ID: LCS-030310
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 03/03/10
Date Analyzed LCS: 03/05/10 11:54
Instrument/Analyst LCS: NT2/PK

Sample Amount LCS: 500 mL
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS		Spike Added	Recovery
Naphthalene	0.194		0.300	64.7%
2-Methylnaphthalene	0.202		0.300	67.3%
1-Methylnaphthalene	0.203		0.300	67.7%
Acenaphthylene	0.204		0.300	68.0%
Acenaphthene	0.221		0.300	73.7%
Fluorene	0.245		0.300	81.7%
Phenanthrene	0.269	B	0.300	89.7%
Anthracene	0.227		0.300	75.7%
Fluoranthene	0.281	B	0.300	93.7%
Pyrene	0.284	B	0.300	94.7%
Benzo(a)anthracene	0.255	B	0.300	85.0%
Chrysene	0.272	B	0.300	90.7%
Benzo(b)fluoranthene	0.231	B	0.300	77.0%
Benzo(k)fluoranthene	0.278	B	0.300	92.7%
Benzo(a)pyrene	0.192	B	0.300	64.0%
Indeno(1,2,3-cd)pyrene	0.201	B	0.300	67.0%
Dibenz(a,h)anthracene	0.222	B	0.300	74.0%
Benzo(g,h,i)perylene	0.188	B	0.300	62.7%
Dibenzofuran	0.261	B	0.300	87.0%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	71.0%
d14-Dibenzo(a,h)anthracene	73.3%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

QM04MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QM04 Project: LORA LAKE APARTMENTS

Lab File ID: 030501 Date Extracted: 03/03/10

Instrument ID: NT2 Date Analyzed: 03/05/10

Matrix: LIQUID Time Analyzed: 1130

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	QM04LCSW1	QM04LCSW1	030502	03/05/10
02	CB31A022710COMP	QM04A	030503	03/05/10
03	CB31A022710COMP	QM04AMS	030504	03/05/10
04	CB31A022710COMP	QM04AMSD	030505	03/05/10
05	CB4857022710COMP	QM04B	030506	03/05/10
06	CB1022710COMP	QM04C	030507	03/05/10
07	CB102022710COMP	QM04D	030508	03/05/10
08				
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COMMENTS:

FORM IV SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

Instrument ID: NT2 Project: LORA LAKE APARTMENTS

DFTPP Injection Date: 10/21/09 DFTPP Injection Time: 1055

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	61.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	75.3
70	Less than 2.0% of mass 69	0.2 (0.2)1
127	25.0 - 75.0% of mass 198	61.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	20.6
365	Greater than 0.75% of mass 198	3.13
441	Present, but less than mass 443	8.4
442	40.0 - 110.0% of mass 198	59.0
443	15.0 - 24.0% of mass 442	11.6 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		PNA 250	IC102101	10/21/09	1137
02		PNA 1000	IC102102	10/21/09	1200
03		PNA 10	IC102103	10/21/09	1222
04		PNA 500	IC102104	10/21/09	1245
05		PNA 50	IC102105	10/21/09	1307
06		PNA 100	IC102106	10/21/09	1330
07					
08					
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FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

Instrument ID: NT2 Project: LORA LAKE APARTMENTS

DFTPP Injection Date: 03/05/10 DFTPP Injection Time: 0958

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	66.9
68	Less than 2.0% of mass 69	0.4 (0.5)1
69	Mass 69 relative abundance	81.6
70	Less than 2.0% of mass 69	0.7 (0.8)1
127	10.0 - 80.0% of mass 198	65.9
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	22.0
365	Greater than 1.0% of mass 198	4.20
441	0.0 - 24.0% of mass 442	8.7 (13.4)2
442	50.0 - 200.0% of mass 198	64.8
443	15.0 - 24.0% of mass 442	13.0 (20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		PNA 250	CC0305	03/05/10	1033
02	QM04MBW1	QM04MBW1	030501	03/05/10	1130
03	QM04LCSW1	QM04LCSW1	030502	03/05/10	1154
04	CB31A022710COMP	QM04A	030503	03/05/10	1219
05	CB31A022710COMP	QM04AMS	030504	03/05/10	1244
06	CB31A022710COMP	QM04AMSD	030505	03/05/10	1308
07	CB4857022710COMP	QM04B	030506	03/05/10	1333
08	CB1022710COMP	QM04C	030507	03/05/10	1358
09	CB102022710COMP	QM04D	030508	03/05/10	1422
10					
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21					
22					

FORM V SV

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QM04 Project: LORA LAKE APARTMENTS

Ical Midpoint ID: IC102101 Ical Date: 10/21/09

Instrument ID: NT2 Cont. Cal Date: 03/05/10

		IS1(NPT) AREA #	RT #	IS2(ANT) AREA #	RT #	IS3(PHN) AREA #	RT #
	ICAL MIDPT	173109	6.23	96677	8.42	147750	10.21
	UPPER LIMIT	346218		193354		295500	
	LOWER LIMIT	86554		48338		73875	
	CCAL	185725	6.97	87858	9.18	131061	11.00
	UPPER LIMIT		7.47		9.68		11.50
	LOWER LIMIT		6.47		8.68		10.50
01	QM04MBW1	193103	6.97	94604	9.17	144207	11.00
02	QM04LCSW1	194658	6.97	96565	9.16	137584	11.00
03	CB31A022710C	194491	6.96	93651	9.16	137003	11.00
04	CB31A022710C	196703	6.97	96306	9.16	138057	11.00
05	CB31A022710C	199245	6.97	94124	9.16	140622	11.00
06	CB4857022710	200304	6.96	98440	9.18	139682	11.00
07	CB1022710COM	194192	6.97	96979	9.17	137429	11.00
08	CB102022710C	190565	6.97	97253	9.17	135411	11.00
09							
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25							

IS1 = Naphthalene-d8
IS2 = Acenaphthene-d10
IS3 = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QM04 Project: LORA LAKE APARTMENTS

Ical Midpoint ID: IC102101 Ical Date: 10/21/09

Instrument ID: NT2 Cont. Cal Date: 03/05/10

		IS4(CRY) AREA #	RT #	IS5(PRY) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	135219	13.47	125815	15.11		
	UPPER LIMIT	270438		251630			
	LOWER LIMIT	67610		62908			
	CCAL	125215	14.29	118026	16.09		
	UPPER LIMIT		14.79		16.59		
	LOWER LIMIT		13.79		15.59		
01	QM04MBW1	139461	14.29	133752	16.09		
02	QM04LCSW1	137114	14.28	137347	16.09		
03	CB31A022710C	141208	14.28	149311	16.09		
04	CB31A022710C	145288	14.29	154046	16.09		
05	CB31A022710C	146335	14.29	154933	16.09		
06	CB4857022710	144871	14.28	153806	16.09		
07	CB1022710COM	142155	14.28	146822	16.09		
08	CB102022710C	137694	14.28	143609	16.09		
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IS4 = Chrysene-d12
IS5 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

SIM Semivolatile Analysis
Sample Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A022710COMP
SAMPLE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 12:19
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.014**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.033 B**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.058 B**
129-00-0	**Pyrene**	**0.010**	**0.071 B**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.013 B**
218-01-9	**Chrysene**	**0.010**	**0.036 B**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.016 B**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.016 B**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.014 B**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.011 B**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.022 B**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	49.0%
d14-Dibenzo(a,h)anthracene	44.3%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/030503.d
Lab Smp Id: QM04A Client Smp ID: CB31A022710COMP
Inj Date : 05-MAR-2010 12:19
Operator : VTS Inst ID: nt2.i
Smp Info : QM04A
Misc Info : 10-5087
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 08-Mar-2010 12:19 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

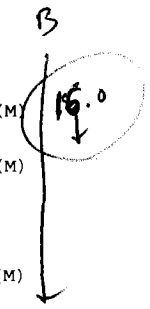
Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	6.965	6.967	(1.000)	194491	200.000	
	5 Naphthalene	128	6.980	6.982	(1.002)	12788	13.6546	13.7
$	6 2-Methylnaphthalene-d10	152	7.811	7.813	(1.121)	73630	146.984	147
	7 2-Methylnaphthalene	142	7.842	7.844	(1.126)	5009	9.17140	9.17
	8 1-Methylnaphthalene	142	7.980	7.982	(1.146)	3380	5.94606	5.95
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	9.163	9.175	(1.000)	93651	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	9.407	9.407	(1.027)	3527	5.88657	5.89
	15 Fluorene	166	9.817	9.817	(1.071)	3418	6.90071	6.90
*	18 Phenanthrene-d10	188	11.002	11.002	(1.000)	137003	200.000	
	19 Phenanthrene	178	11.017	11.017	(1.001)	22474	33.0033	33.0
	20 Anthracene	178	11.079	11.079	(1.007)	3849	5.53144	5.53
	24 Fluoranthene	202	12.505	12.506	(1.137)	42716	57.5928	57.6
	25 Pyrene	202	12.780	12.780	(1.162)	53132	70.5712	70.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.261	14.262	(0.998)	9151	12.9843	13.0
*	29 Chrysene-d12	240	14.283	14.295	(1.000)	141208	200.000	
	30 Chrysene	228	14.316	14.317	(1.002)	24932	35.8555	35.9
	32 Benzo(b)fluoranthene	252	15.572	15.572	(0.968)	28457	33.2657	33.3(M)
	33 Benzo(k)fluoranthene	252	15.572	15.595	(0.968)	28344	30.5169	30.5
	34 Benzo(a)pyrene	252	16.013	16.013	(0.995)	9294	13.8661	13.9(M)
*	35 Perylene-d12	264	16.090	16.091	(1.000)	149311	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.874	17.874	(1.111)	8462	10.8945	10.9
$	36 Dibenzo(a,h)anthracene-d14	292	17.820	17.820	(1.107)	60174	132.959	133
	38 Dibenzo(a,h)anthracene	278	17.887	17.887	(1.112)	4110	6.76501	6.77(M)
	39 Benzo(g,h,i)perylene	276	18.400	18.400	(1.144)	14736	22.0018	22.0



QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 030503.d
Lab Smp Id: QM04A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Calibration Date: 05-MAR-2010
Calibration Time: 10:33
Client Smp ID: CB31A022710COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	194491	12.35
11 Acenaphthene-d10	96677	48338	193354	93651	-3.13
18 Phenanthrene-d10	147750	73875	295500	137003	-7.27
29 Chrysene-d12	135219	67610	270438	141208	4.43
35 Perylene-d12	125815	62908	251630	149311	18.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.96	-0.03
11 Acenaphthene-d10	9.18	8.68	9.68	9.16	-0.14
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	0.00
29 Chrysene-d12	14.29	13.79	14.79	14.28	-0.08
35 Perylene-d12	16.09	15.59	16.59	16.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QM04A
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

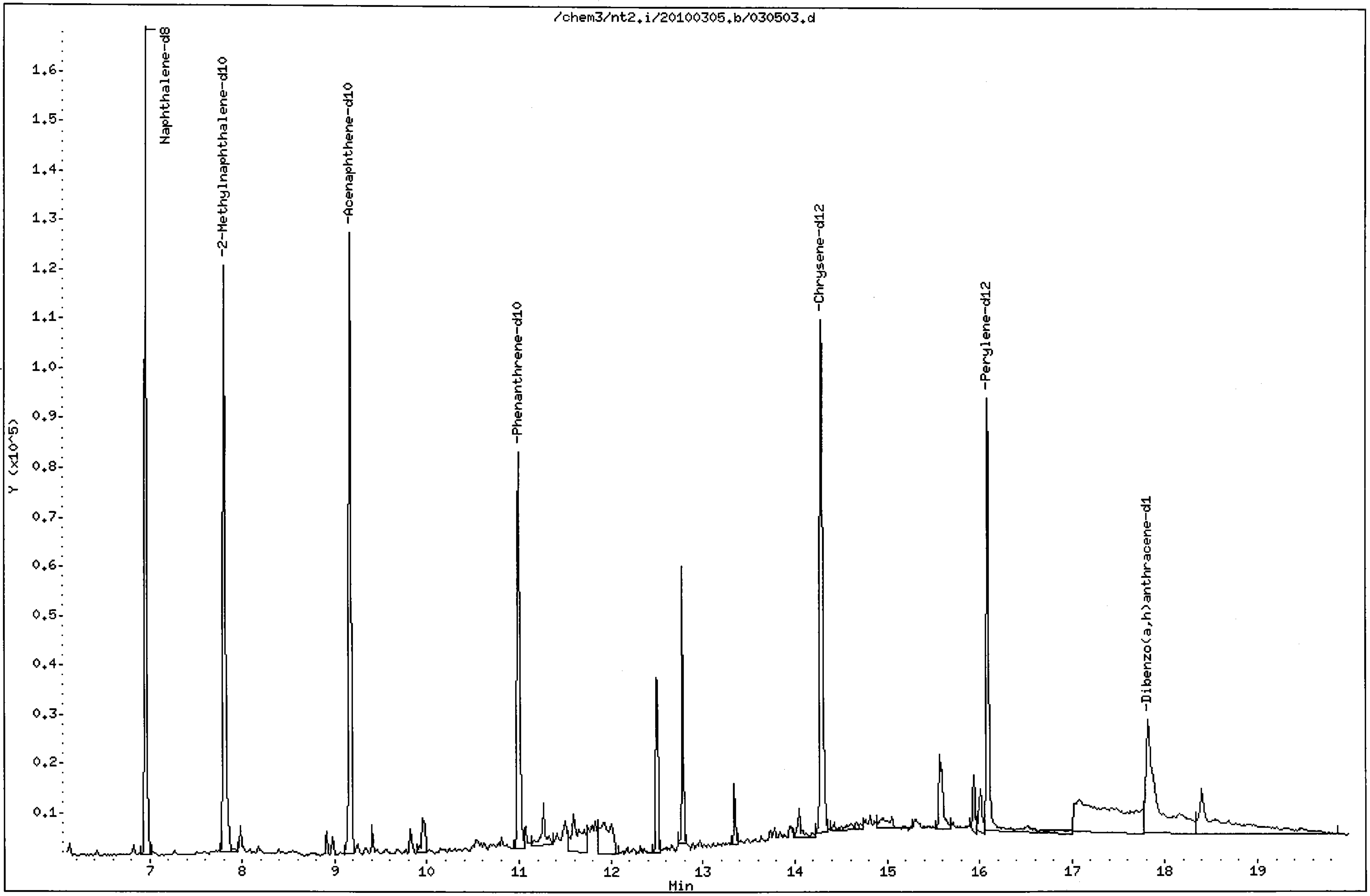
Client SDG: QM04
Fraction: SV
Client Smp ID: CB31A022710COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	147	48.99	31-109
$ 36 Dibenzo(a,h)anthra	300	133	44.32	10-133

Data File: /chem3/nt2.i/20100305.b/030503.d
Date : 05-MAR-2010 12:19
Client ID: CB31A022710COMP
Sample Info: QM04A
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

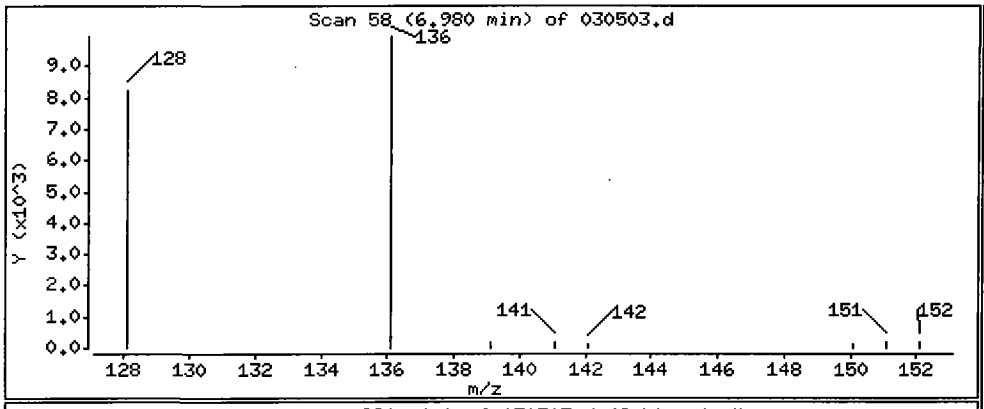
Operator: VTS

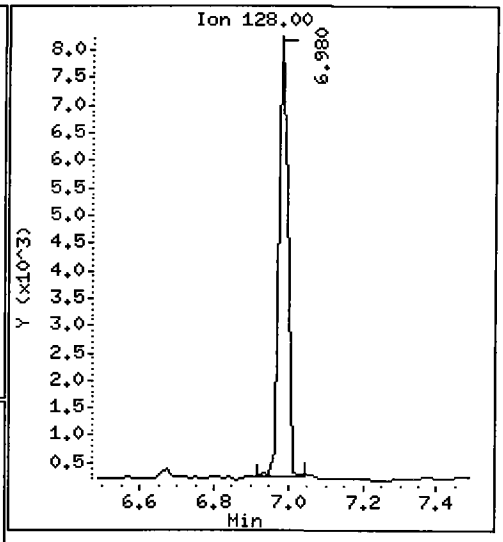
Column phase: ZB-5

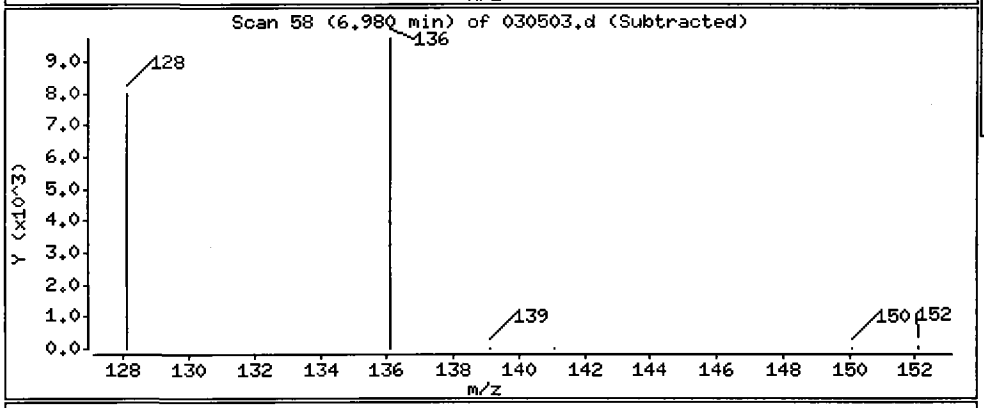
Column diameter: 0.25

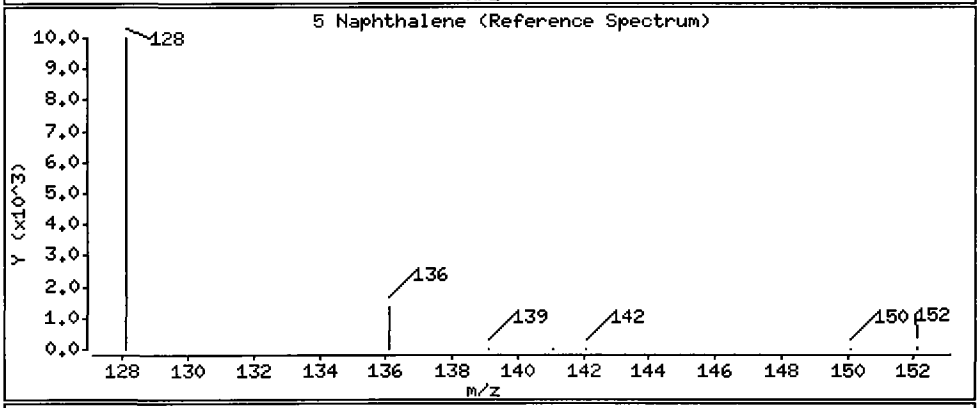
5 Naphthalene

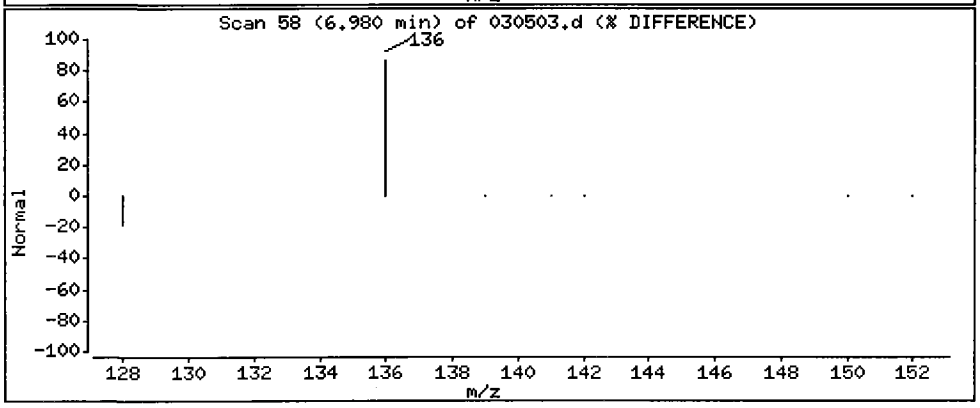
Concentration: 13.7 ug/L











Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

Operator: VTS

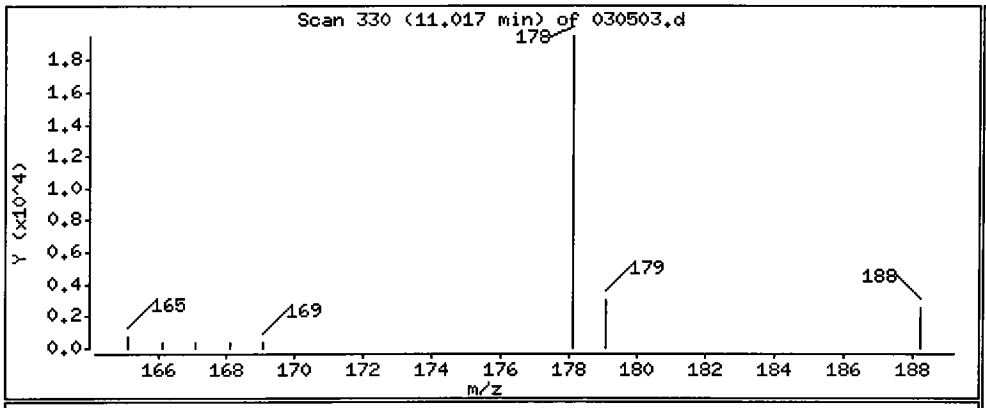
Column phase: ZB-5

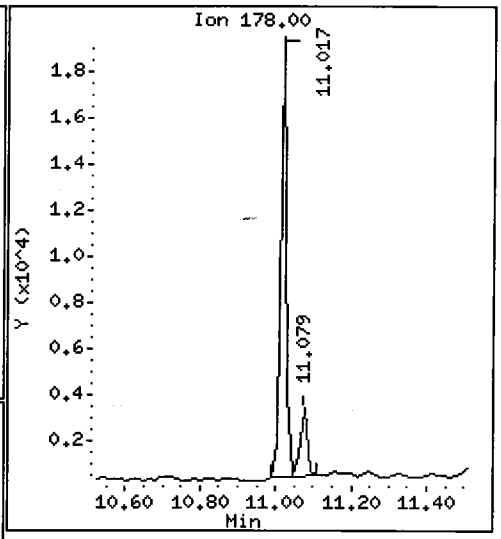
Column diameter: 0.25

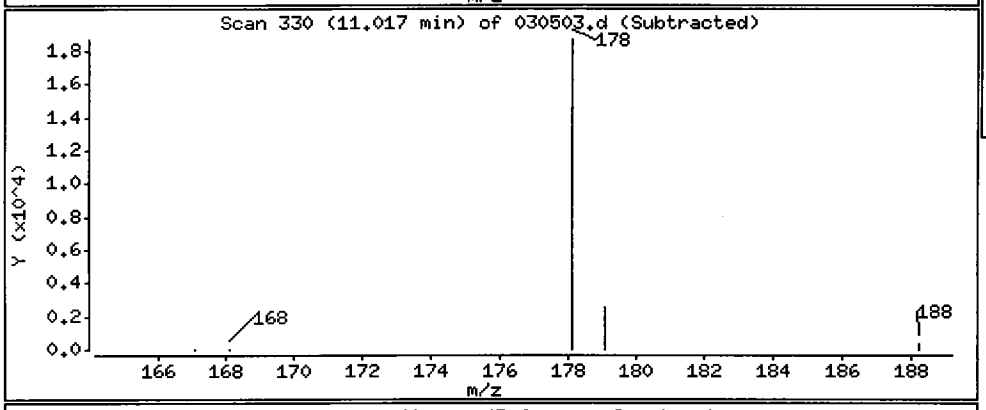
B

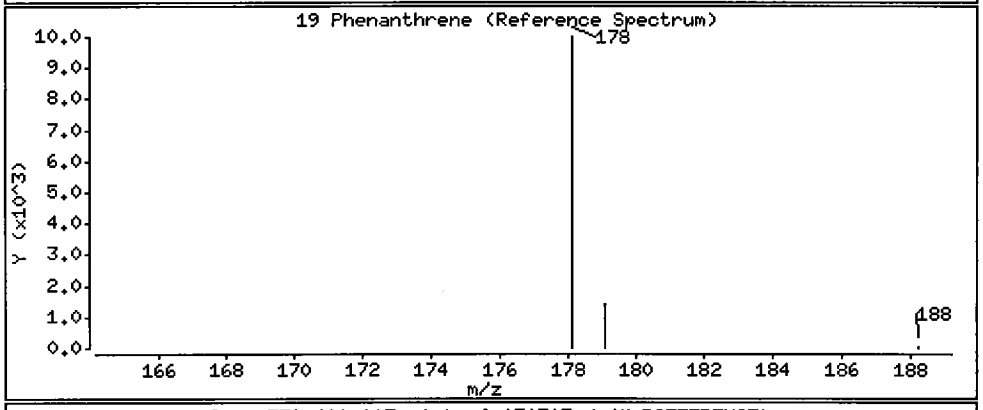
19 Phenanthrene

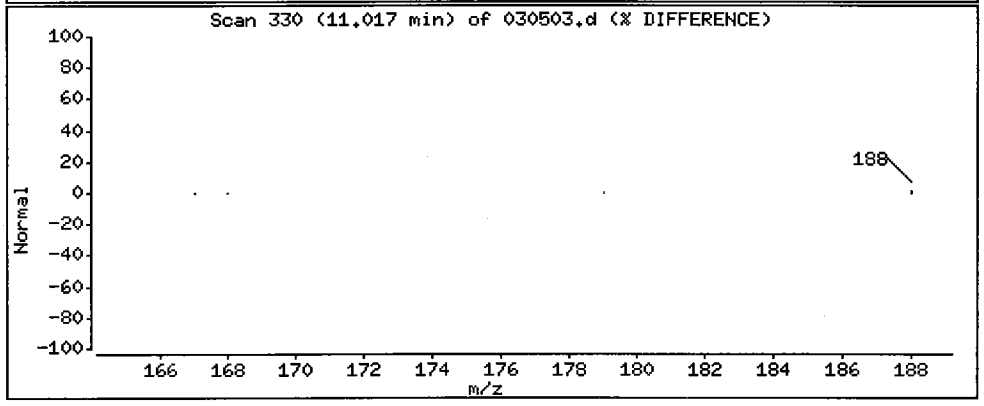
Concentration: 33.0 ug/L











Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

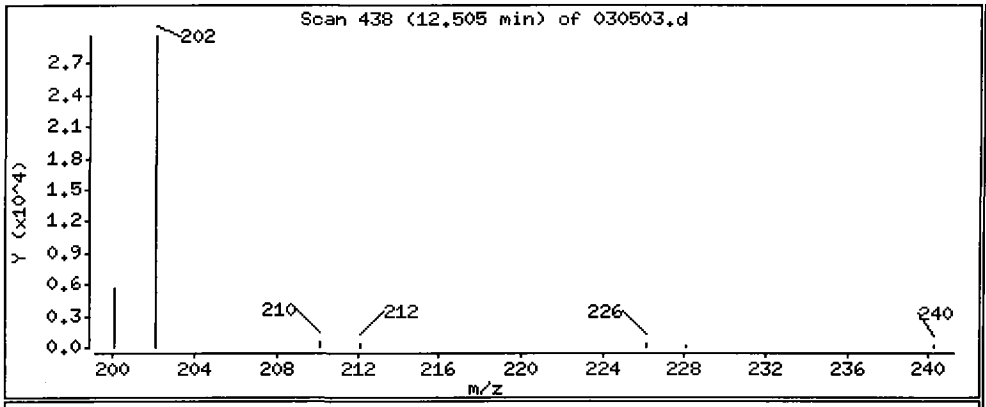
Operator: VTS

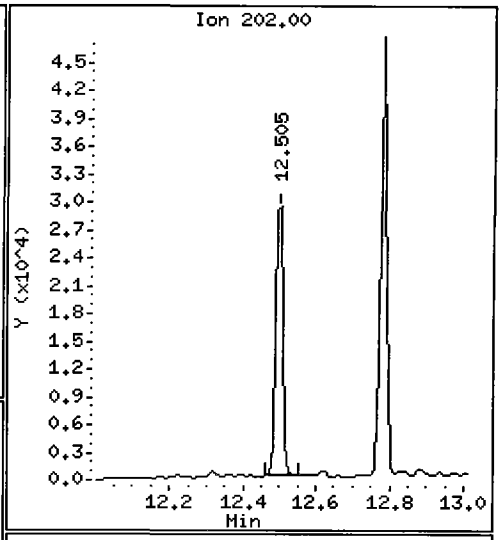
Column phase: ZB-5

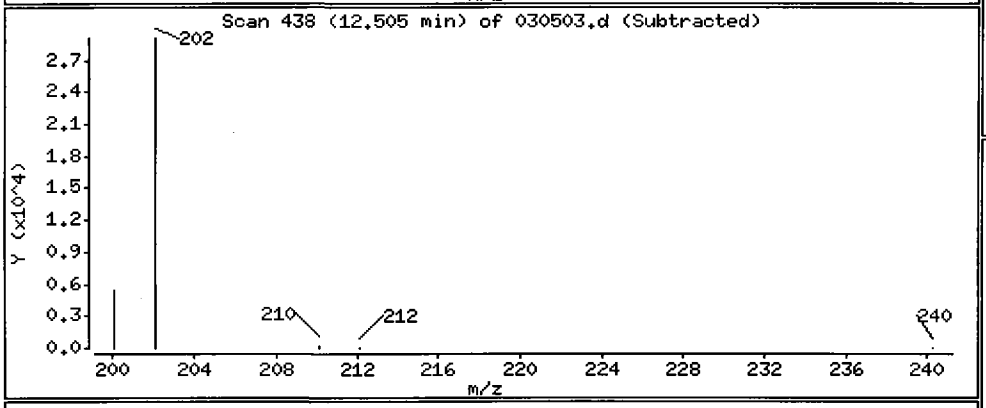
Column diameter: 0.25

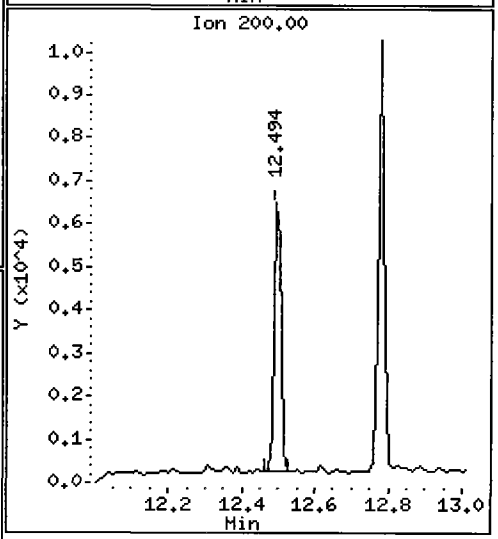
24 Fluoranthene

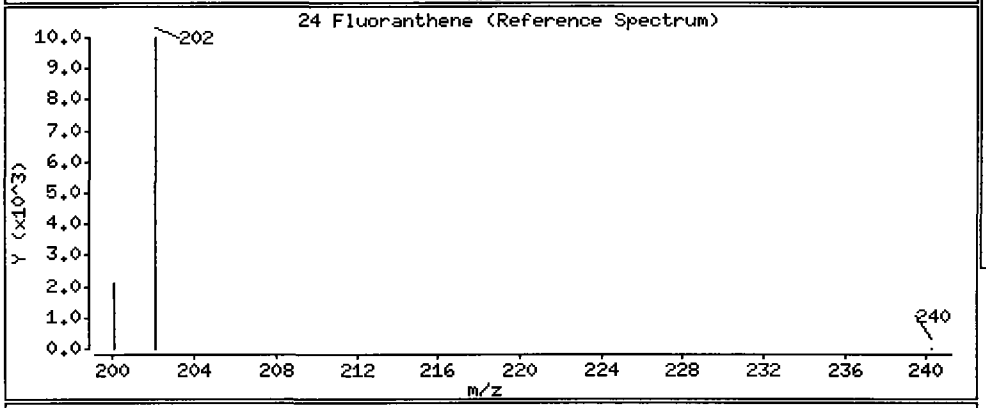
Concentration: 57.6 ug/L

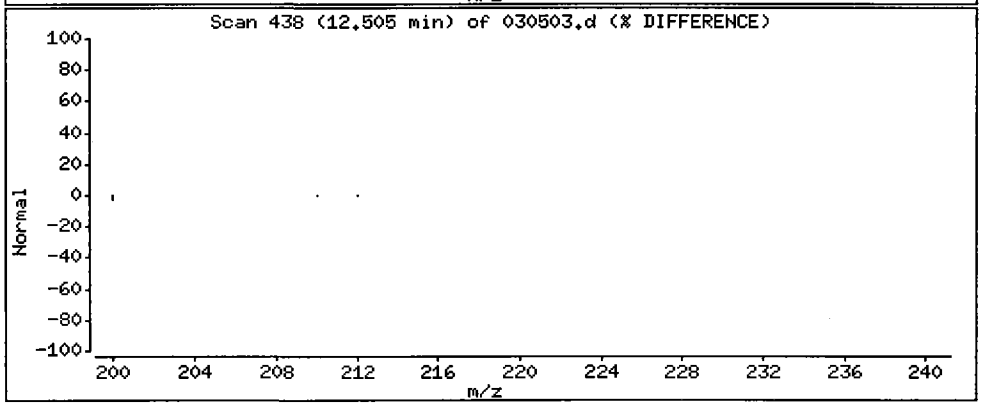












Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

Operator: VTS

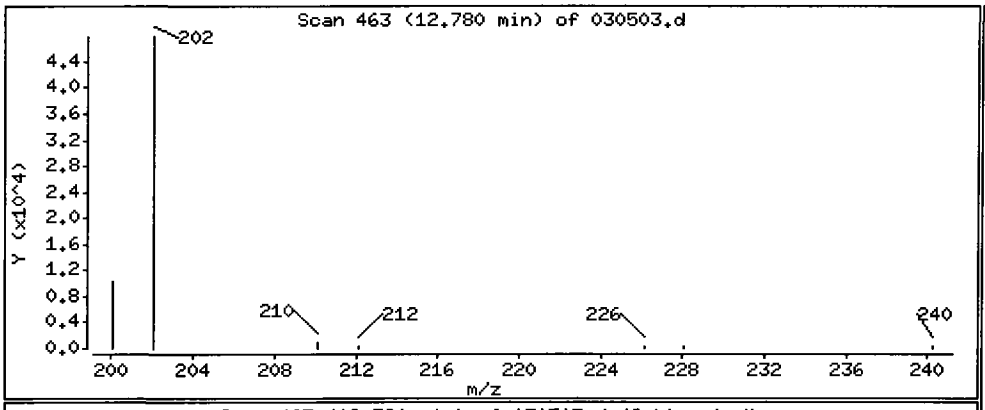
Column phase: ZB-5

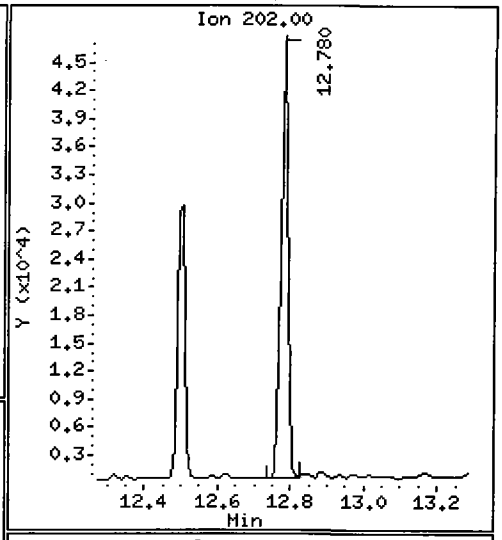
Column diameter: 0.25

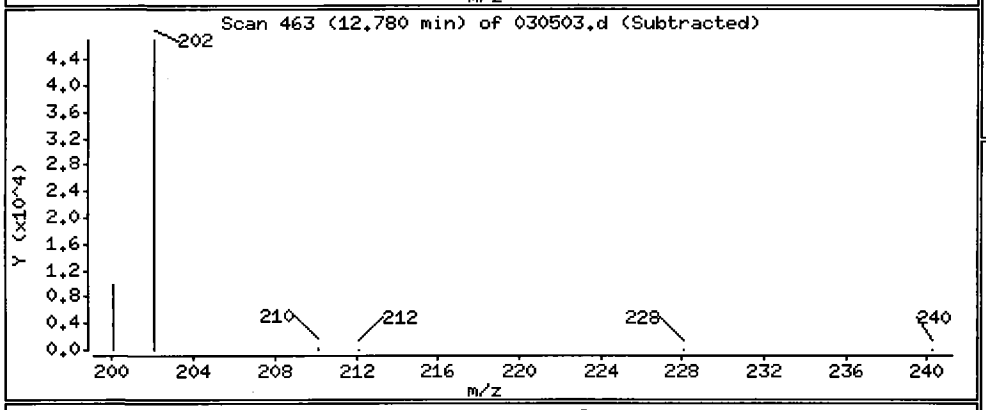
25 Pyrene

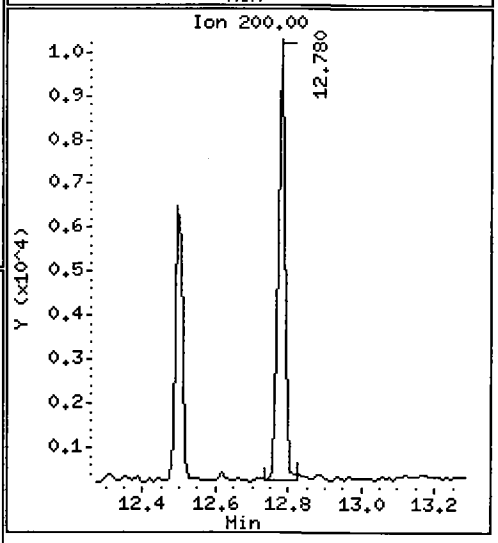
Concentration: 70.6 ug/L

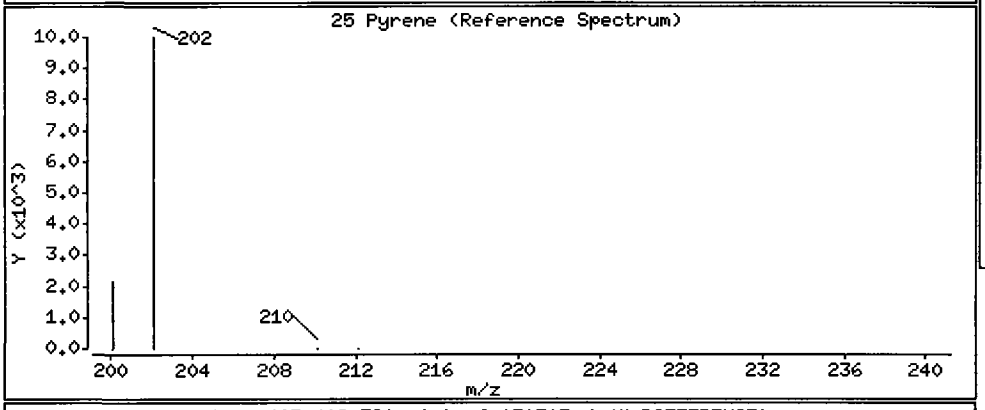
B

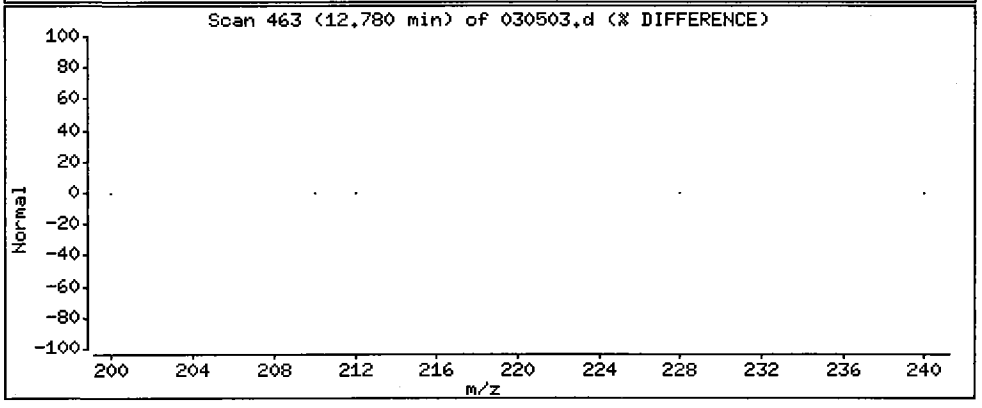












Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

Operator: VTS

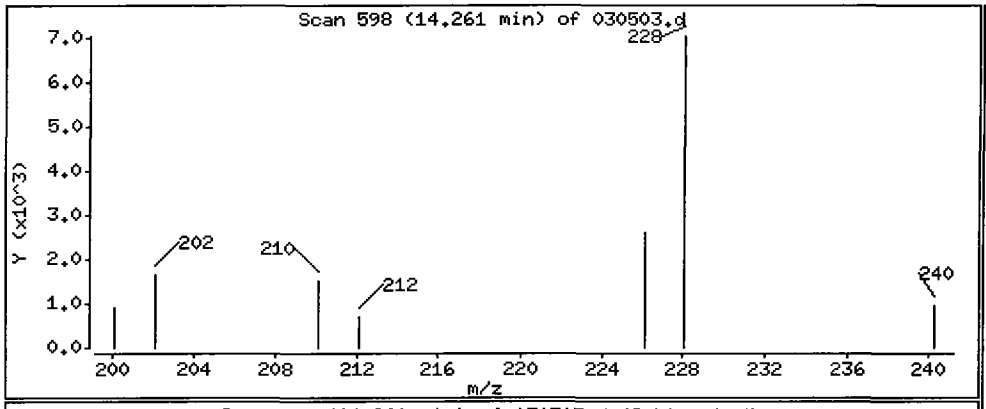
Column phase: ZB-5

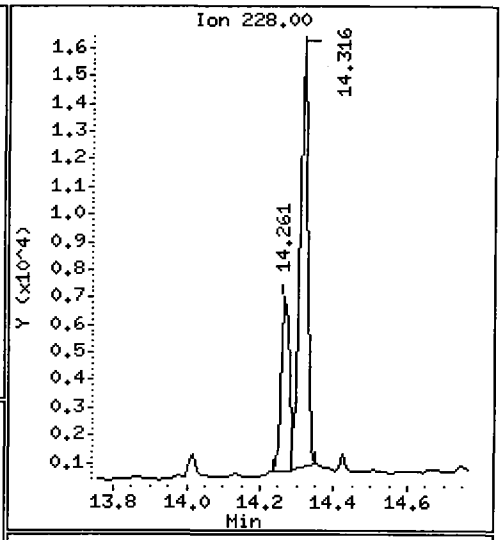
Column diameter: 0.25

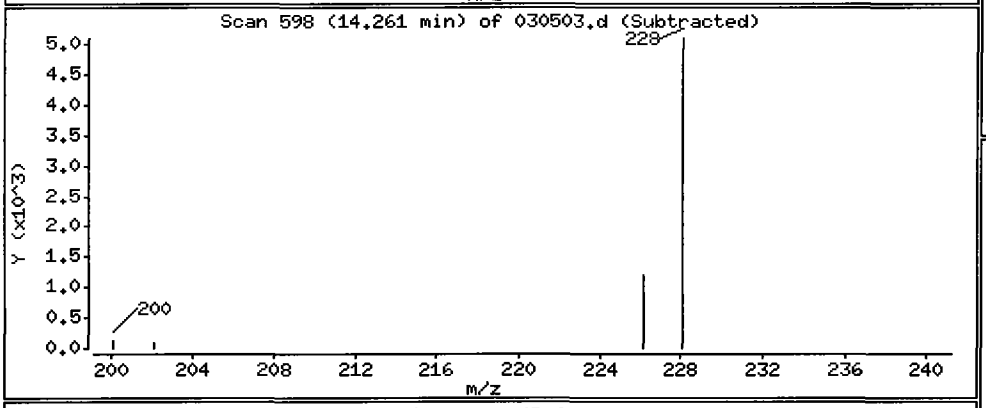
B

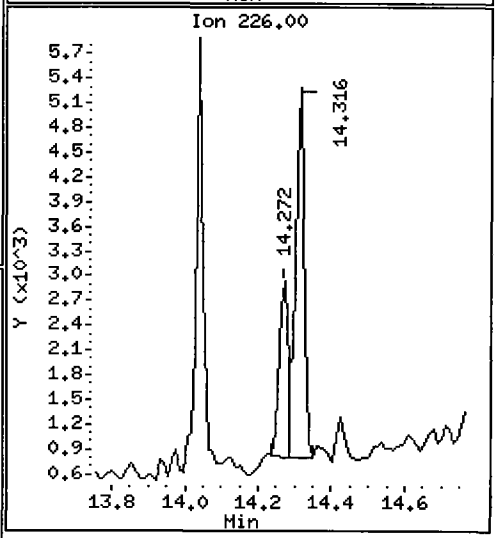
28 Benzo(a)anthracene

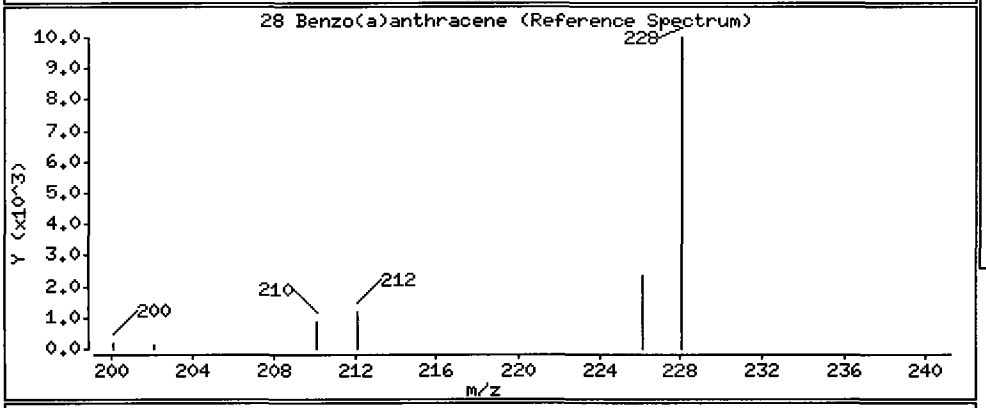
Concentration: 13.0 ug/L

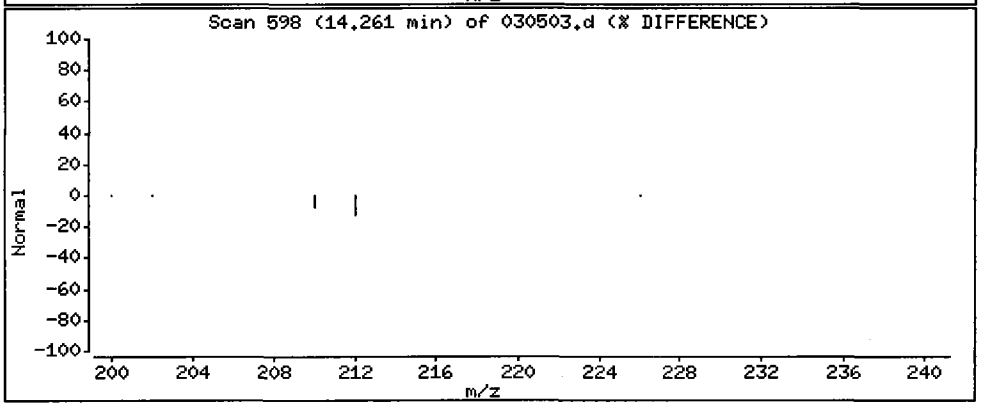












Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

Operator: VTS

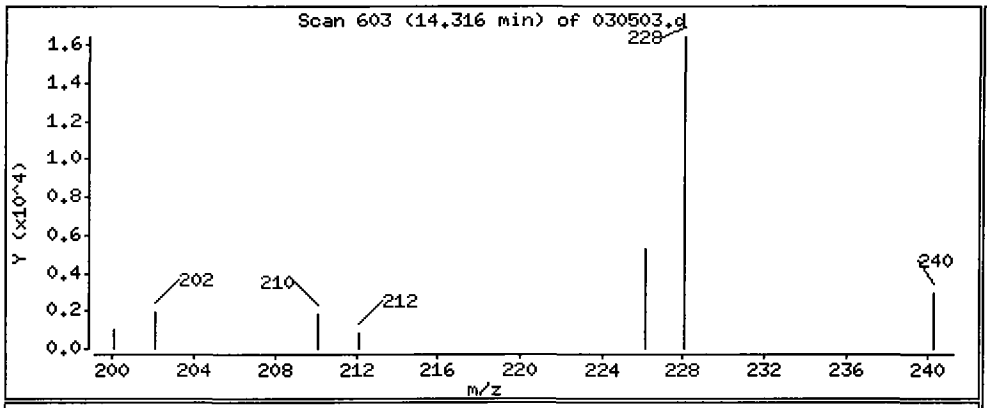
Column phase: ZB-5

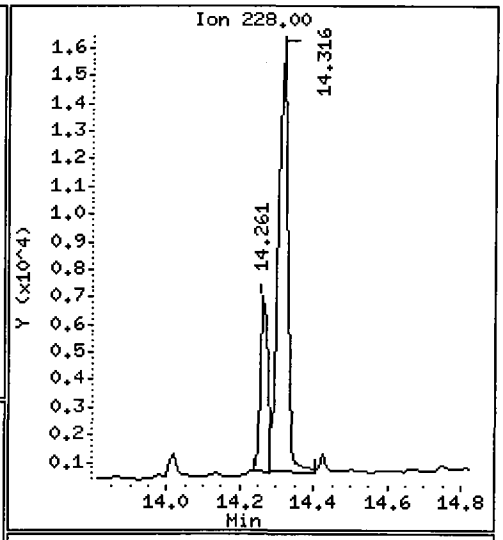
Column diameter: 0.25

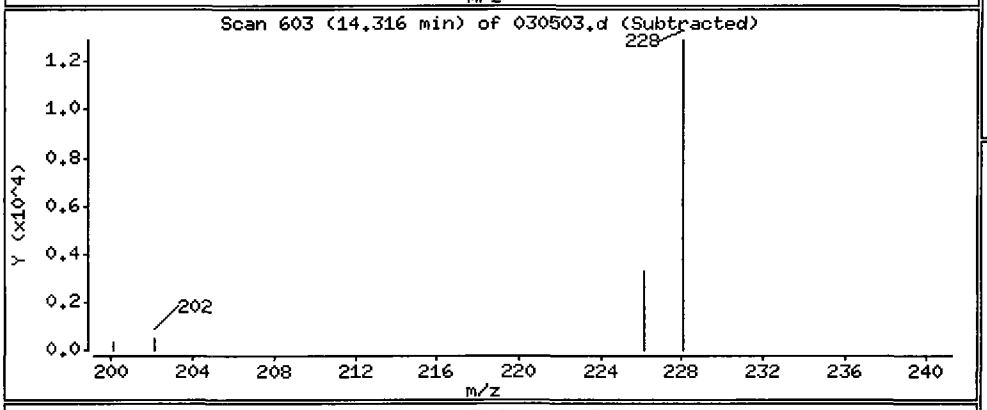
B

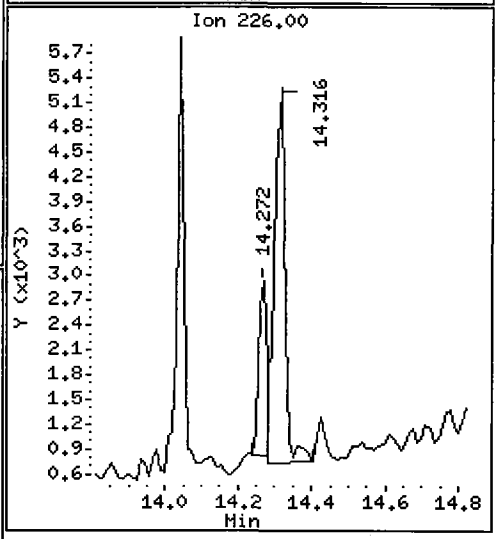
30 Chrysene

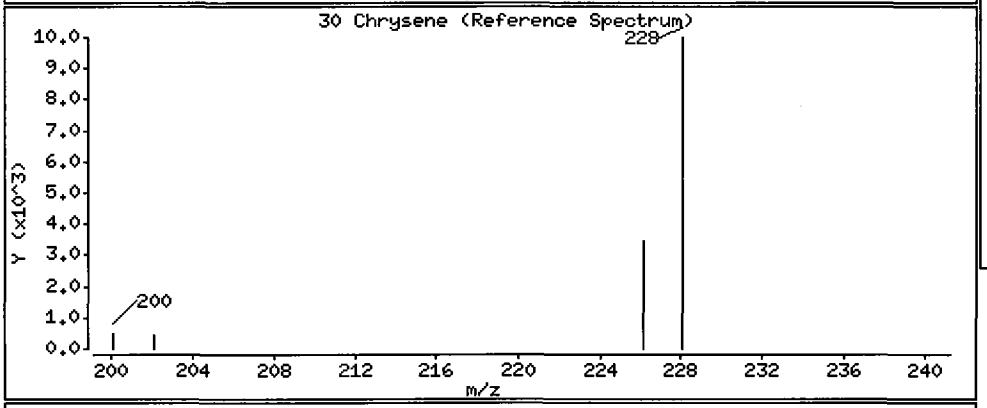
Concentration: 35.9 ug/L

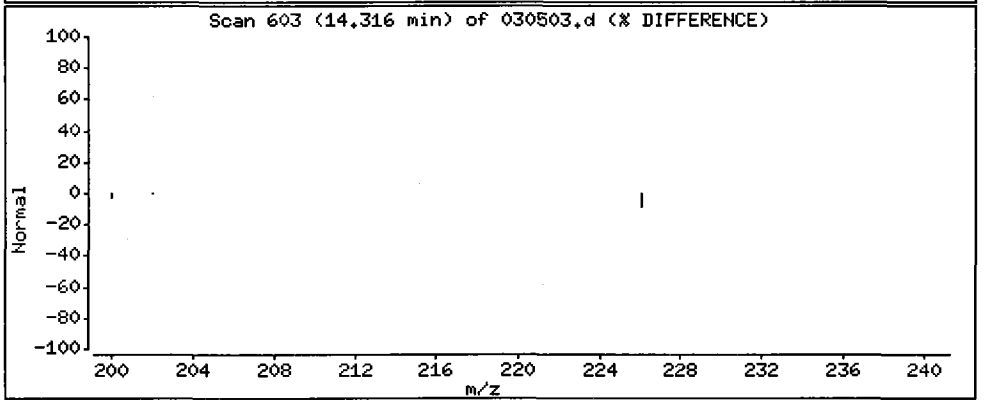












Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

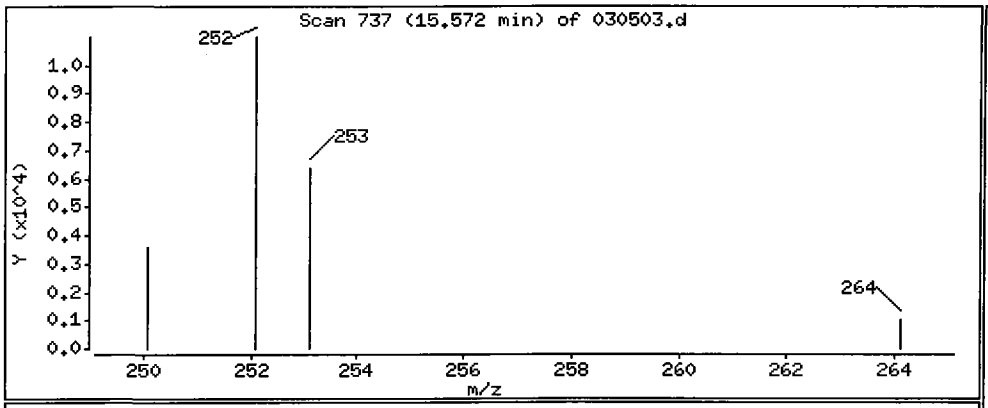
Operator: VTS

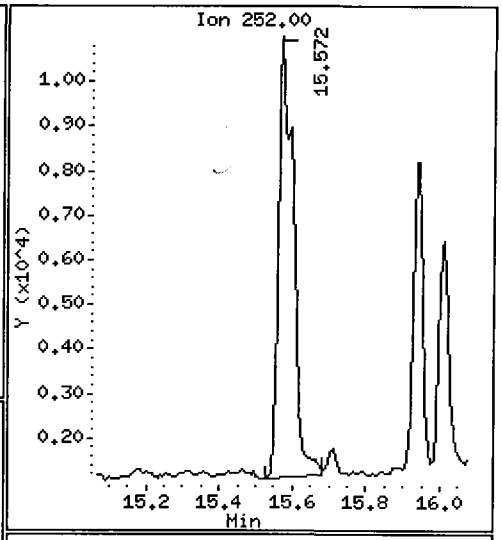
Column phase: ZB-5

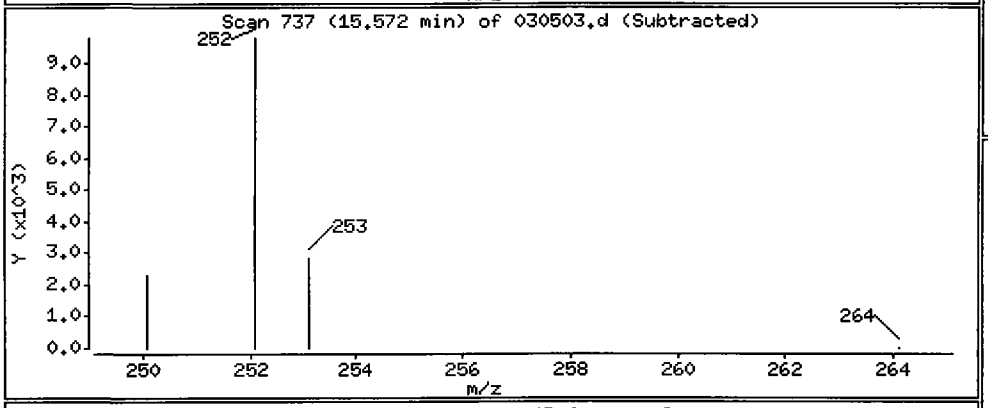
Column diameter: 0.25

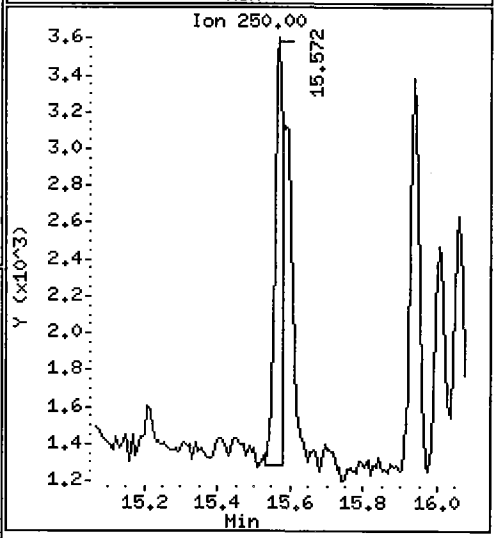
32 Benzo(b)fluoranthene

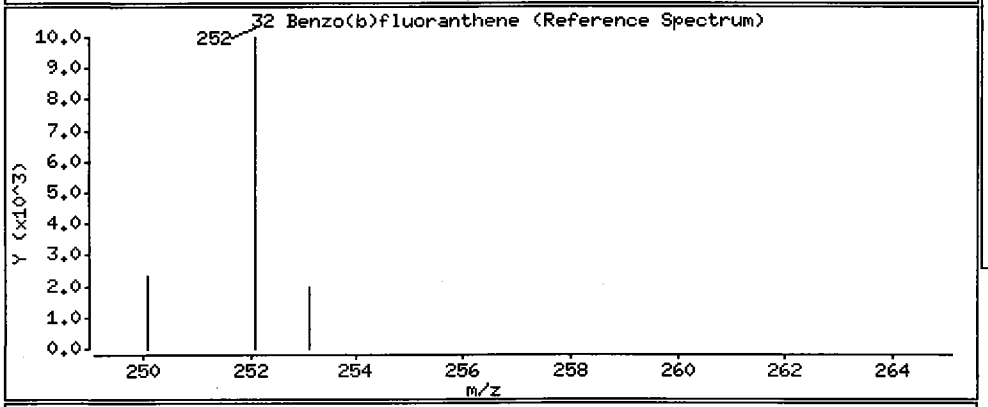
Concentration: 33.3 ug/L

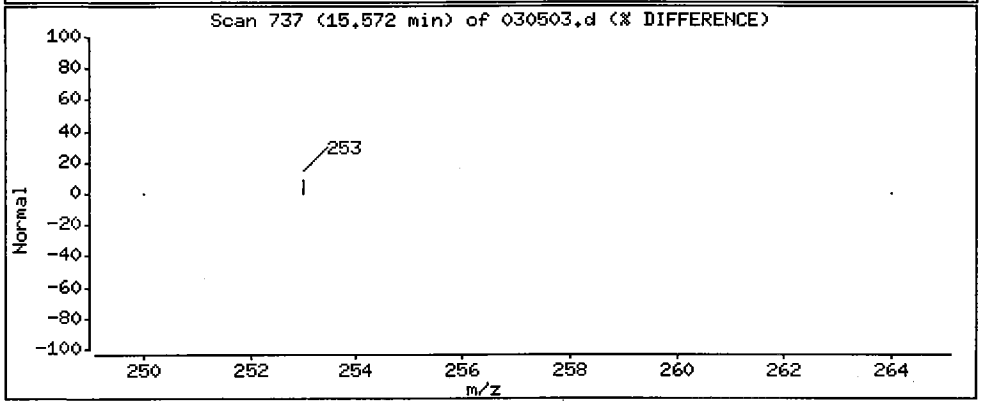












Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

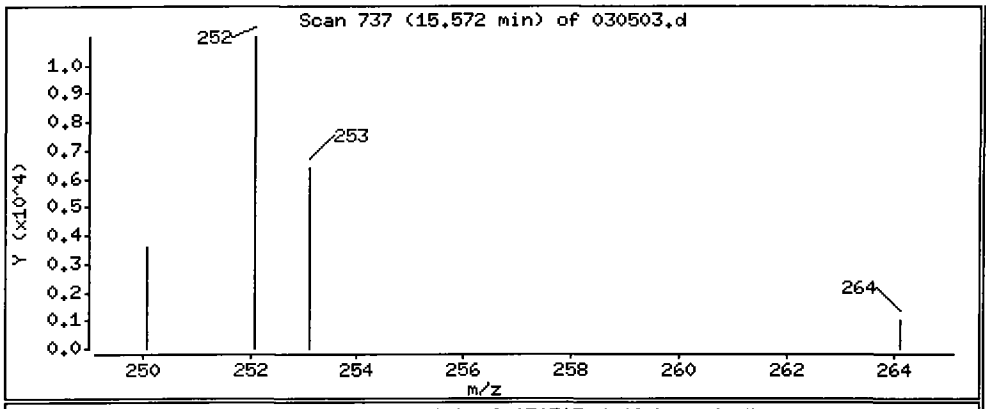
Operator: VTS

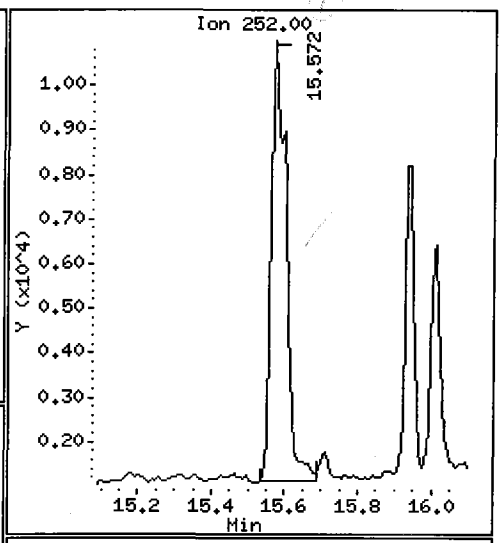
Column phase: ZB-5

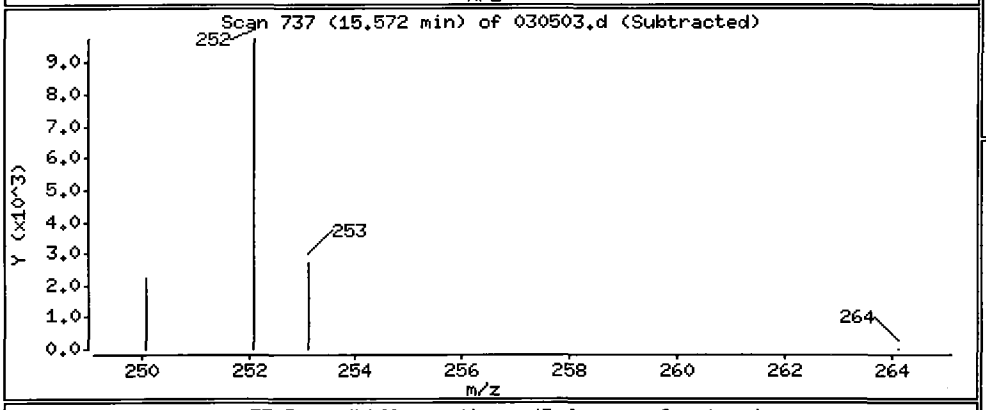
Column diameter: 0.25

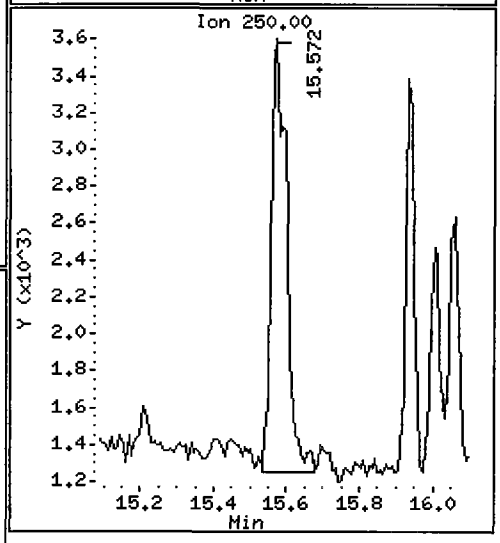
33 Benzo(k)fluoranthene

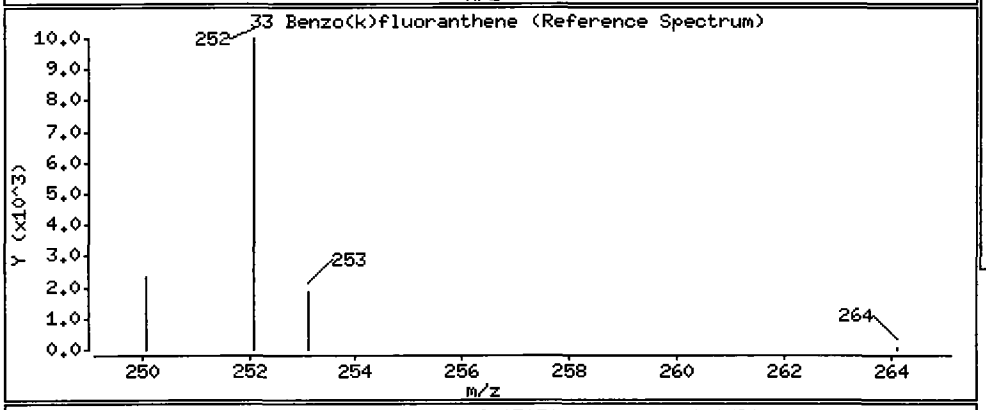
Concentration: 30.5 ug/L

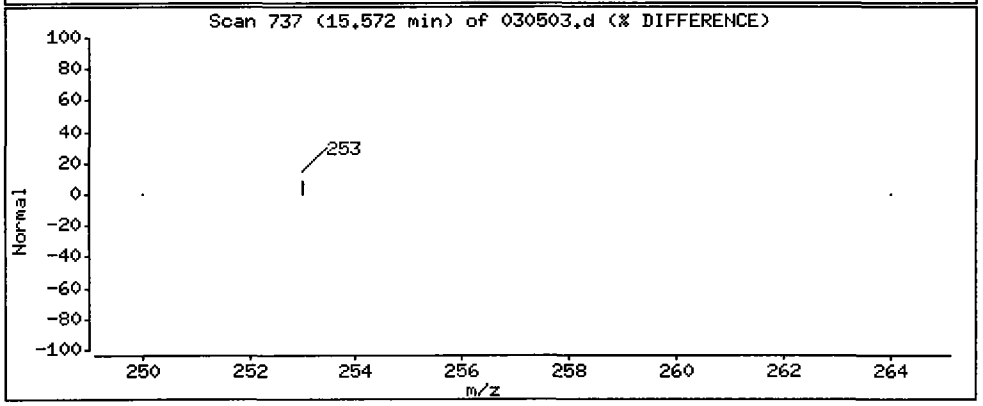












Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

Operator: VTS

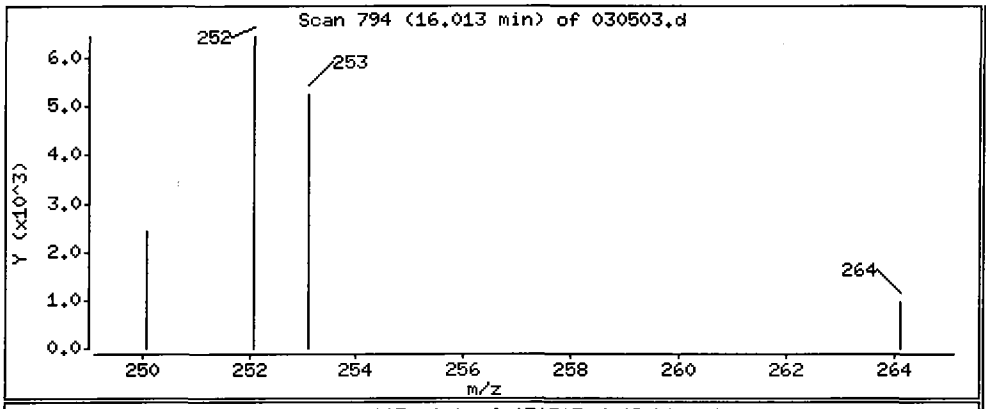
Column phase: ZB-5

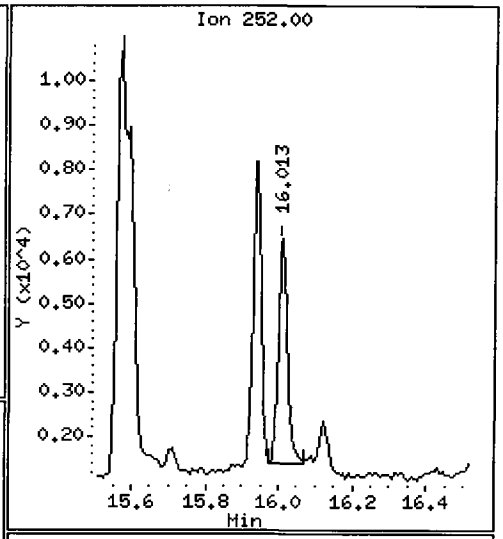
Column diameter: 0.25

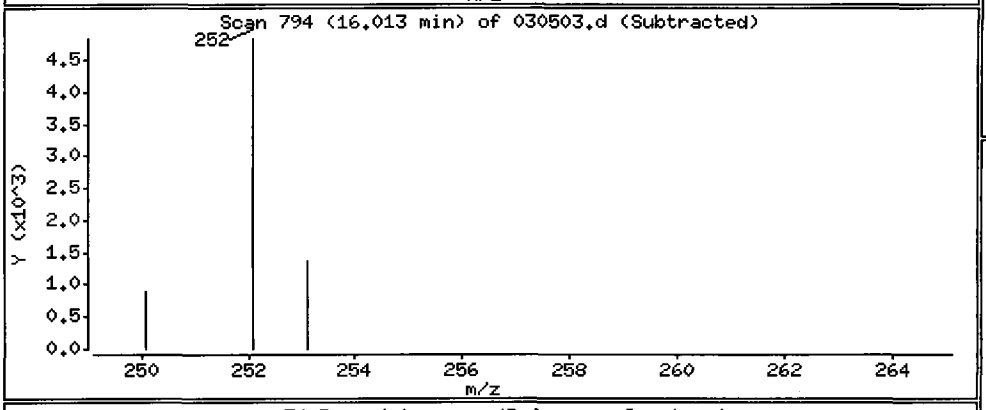
34 Benzo(a)pyrene

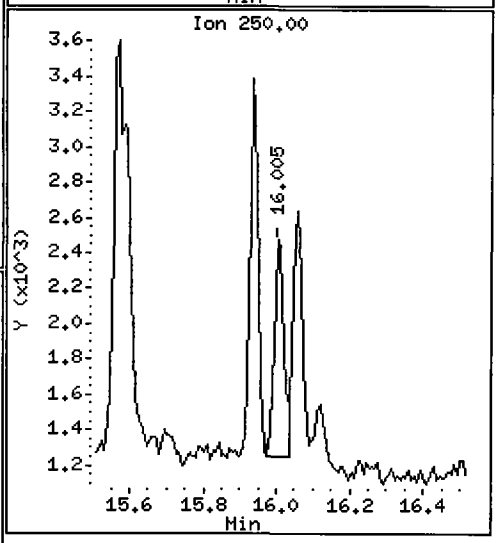
Concentration: 13.9 ug/L

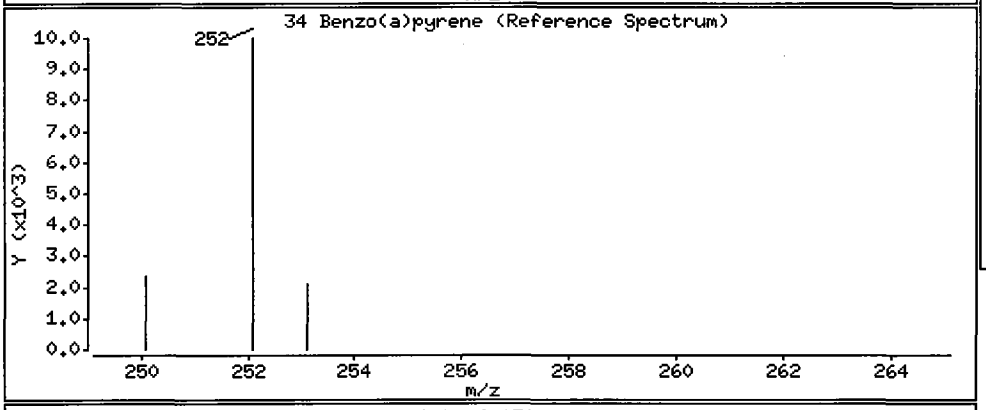
B

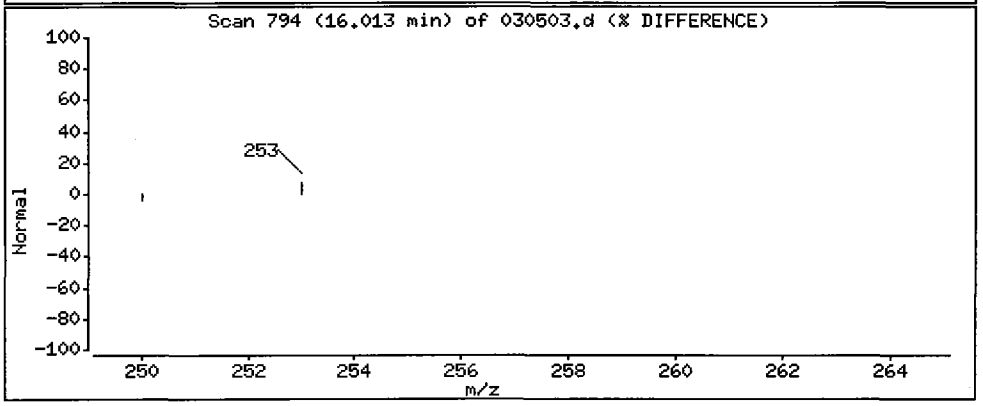












Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

Operator: VTS

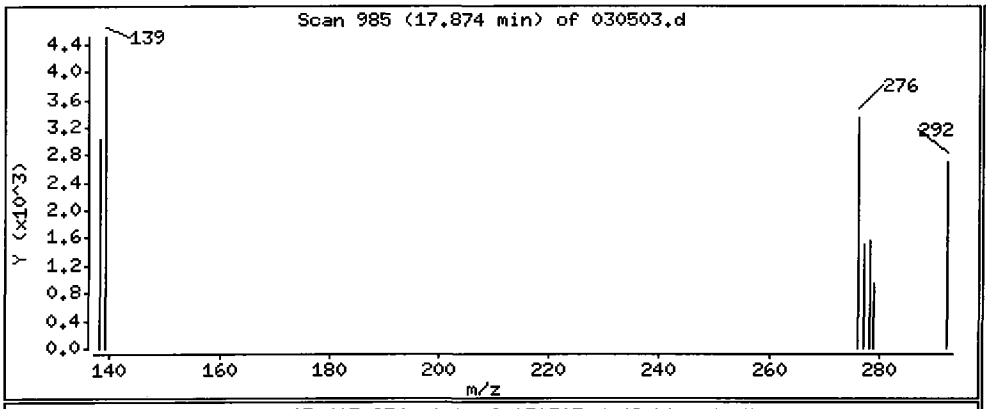
Column phase: ZB-5

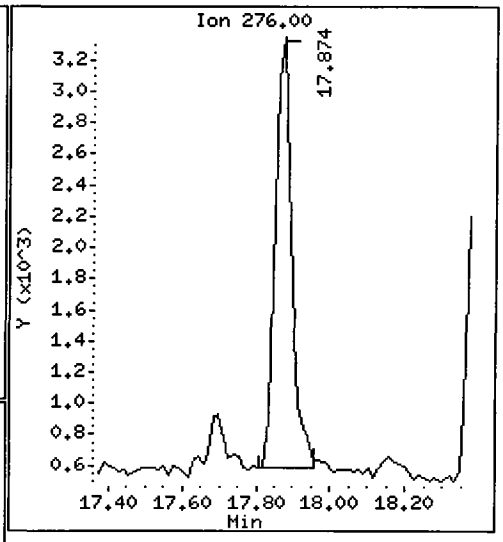
Column diameter: 0.25

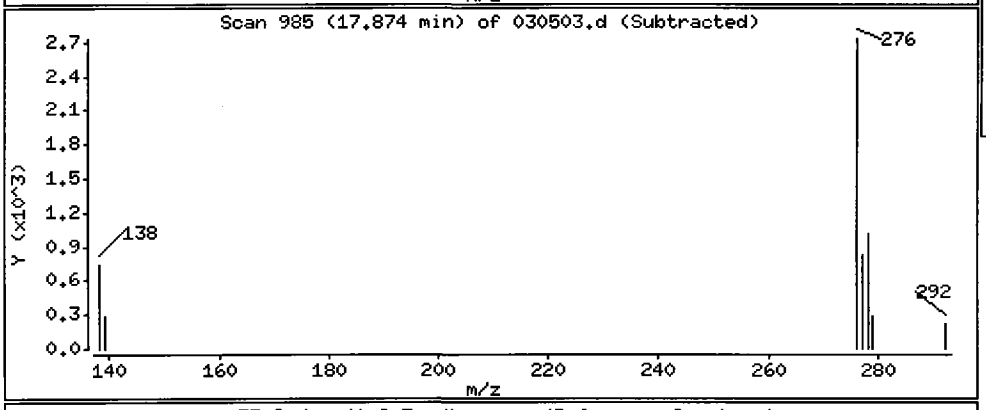
37 Indeno(1,2,3-cd)pyrene

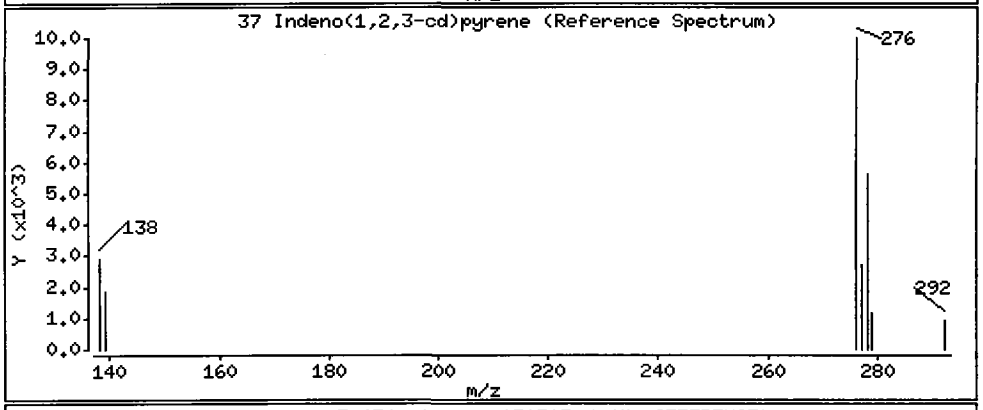
Concentration: 10.9 ug/L

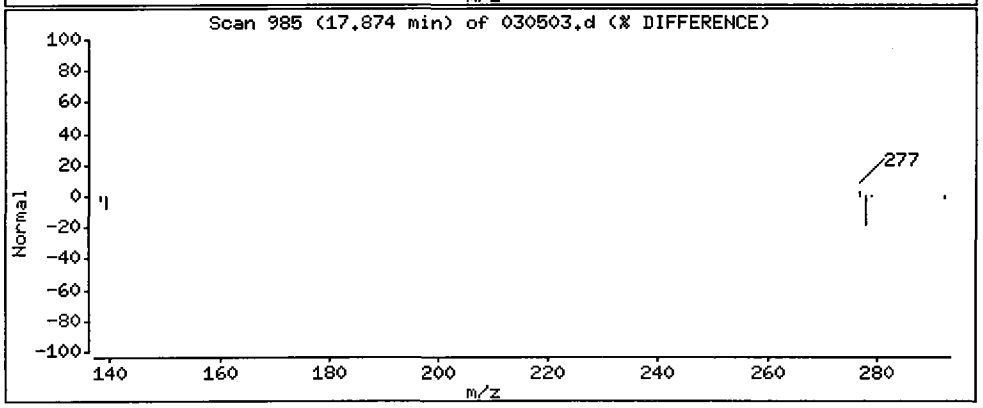
B











Data File: /chem3/nt2.i/20100305.b/030503.d

Date : 05-MAR-2010 12:19

Client ID: CB31A022710COMP

Instrument: nt2.i

Sample Info: QM04A

Volume Injected (uL): 2.0

Operator: VTS

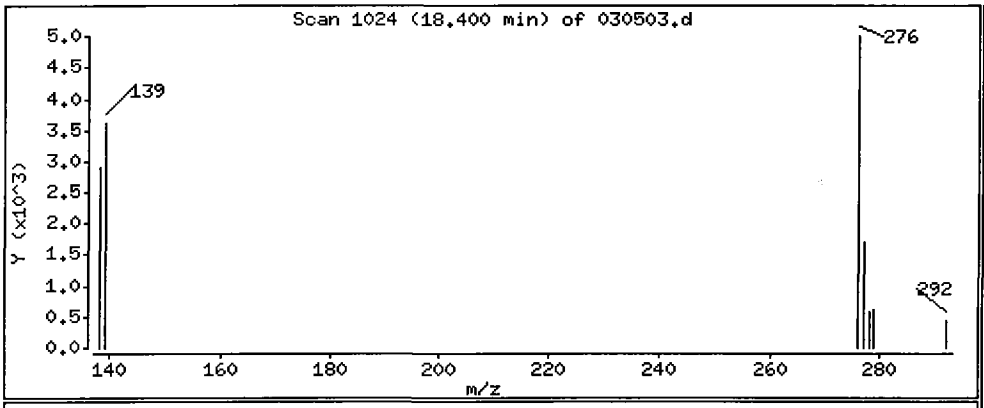
Column phase: ZB-5

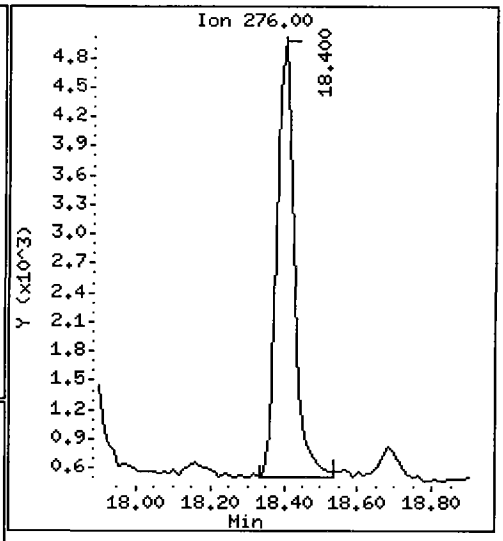
Column diameter: 0.25

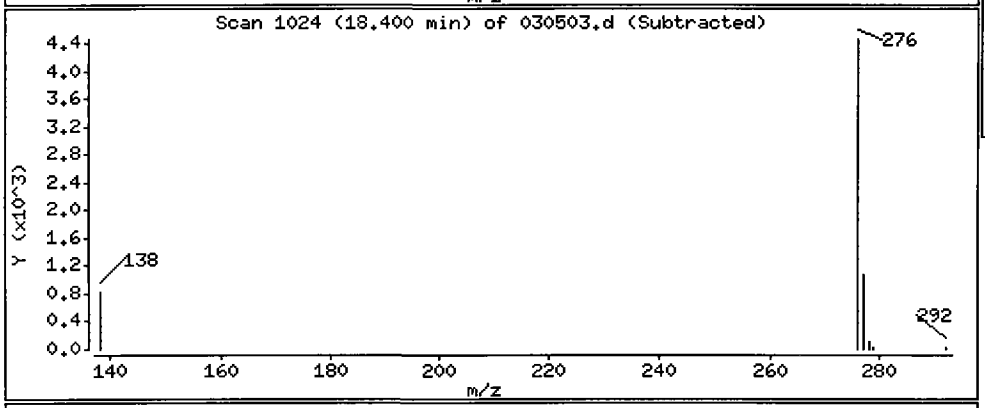
39 Benzo(g,h,i)perylene

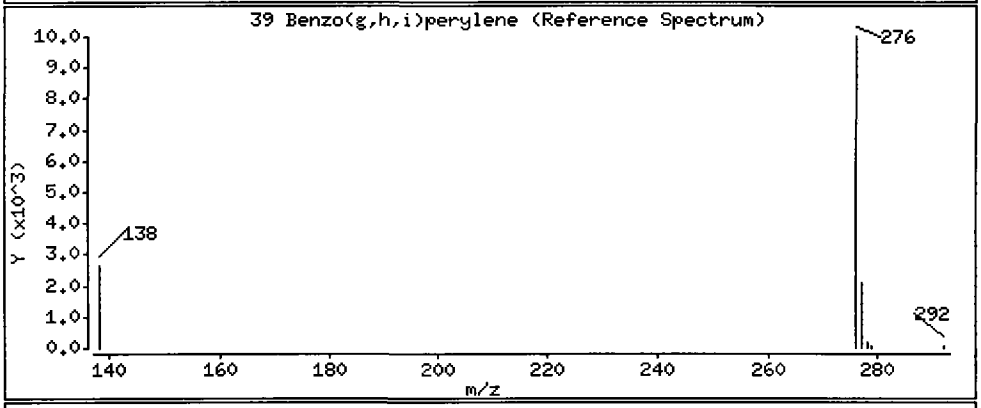
Concentration: 22.0 ug/L

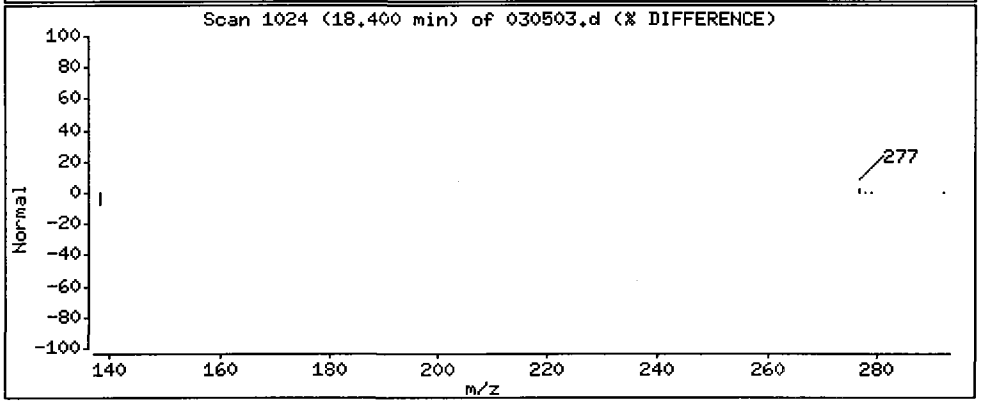
5



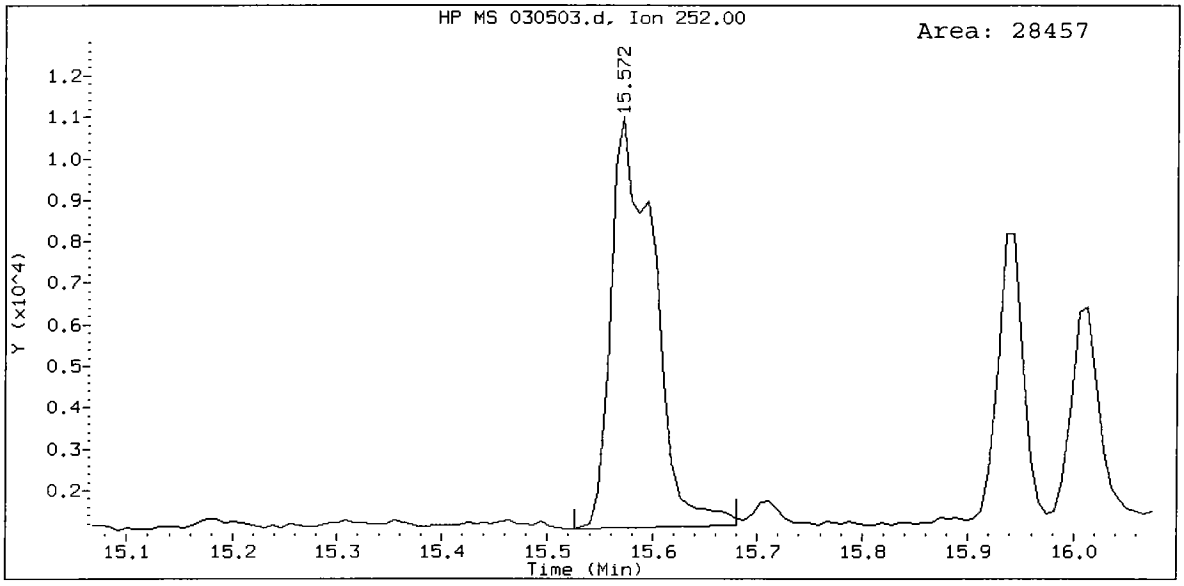


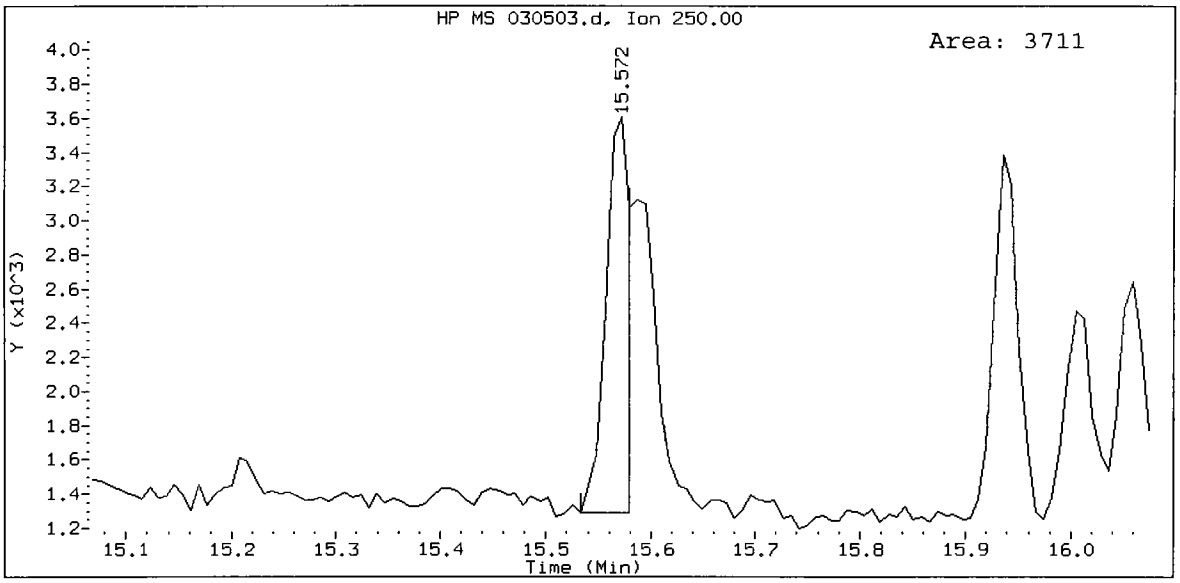




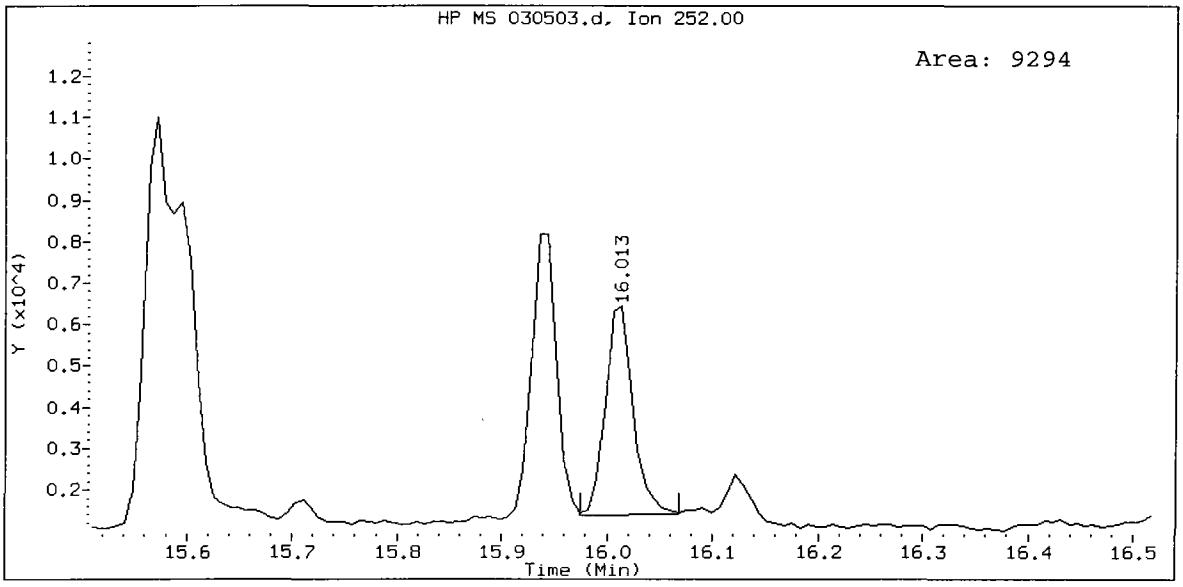


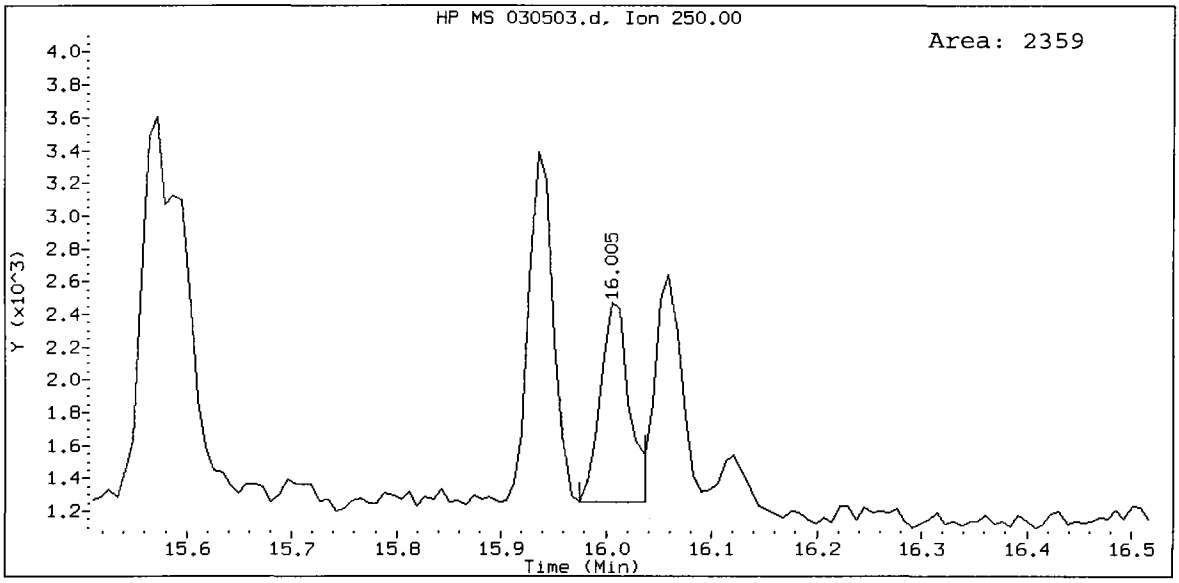
QM04A, /chem3/nt2.i/20100305.b/030503.d
Benzo(b)fluoranthene Amount: 33.27



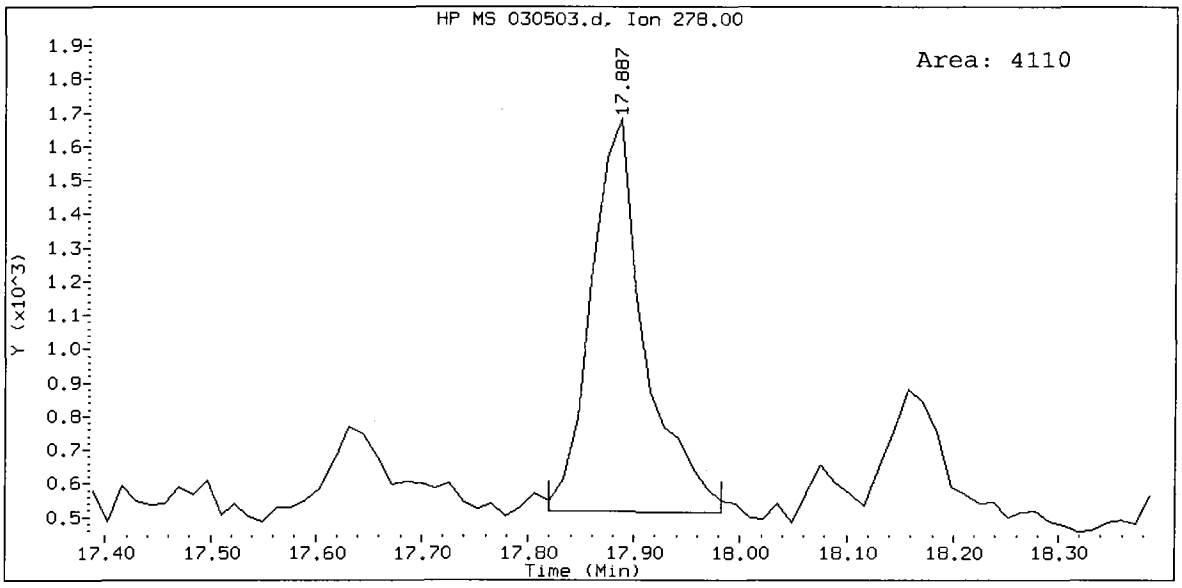


QM04A, /chem3/nt2.i/20100305.b/030503.d
Benzo(a)pyrene Amount: 13.87





QM04A, /chem3/nt2.i/20100305.b/030503.d
Dibenzo(a,h)anthracene Amount: 6.77



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB4857022710COMP
SAMPLE

Lab Sample ID: QM04B
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 13:33
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.013**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.026 B**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.046 B**
129-00-0	**Pyrene**	**0.010**	**0.055 B**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.012 B**
218-01-9	**Chrysene**	**0.010**	**0.030 B**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.020 B**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.012 B**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.012 B**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.010 B**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.017 B**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.0%
d14-Dibenzo(a,h)anthracene	49.7%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/030506.d
Lab Smp Id: QM04B Client Smp ID: CB4857022710COMP
Inj Date : 05-MAR-2010 13:33
Operator : VTS Inst ID: nt2.i
Smp Info : QM04B
Misc Info : 10-5088
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 08-Mar-2010 12:19 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	6.965	6.967	(1.000)	200304	200.000	
	5 Naphthalene	128	6.980	6.982	(1.002)	12762	13.2314	13.2
$	6 2-Methylnaphthalene-d10	152	7.811	7.813	(1.121)	87969	170.512	171
	7 2-Methylnaphthalene	142	7.842	7.844	(1.126)	4390	7.80475	7.80(M)
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	9.175	9.175	(1.000)	98440	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	11.001	11.002	(1.000)	139682	200.000	
	19 Phenanthrene	178	11.017	11.017	(1.001)	17852	25.7130	25.7 B
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	12.494	12.506	(1.136)	35163	46.5000	46.5
	25 Pyrene	202	12.780	12.780	(1.162)	42024	54.7467	54.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.261	14.262	(0.998)	8523	11.7874	11.8
*	29 Chrysene-d12	240	14.283	14.295	(1.000)	144871	200.000	
	30 Chrysene	228	14.316	14.317	(1.002)	21525	30.1731	30.2
	32 Benzo(b)fluoranthene	252	15.572	15.572	(0.968)	17934	20.3518	20.4
	33 Benzo(k)fluoranthene	252	15.595	15.595	(0.969)	11343	11.8556	11.9
	34 Benzo(a)pyrene	252	16.005	16.013	(0.995)	8021	11.6171	11.6(M)
*	35 Perylene-d12	264	16.090	16.091	(1.000)	153806	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.873	17.874	(1.111)	8099	10.1224	10.1
$	36 Dibenzo(a,h)anthracene-d14	292	17.819	17.820	(1.107)	69497	149.071	149
	38 Dibenzo(a,h)anthracene	278	17.873	17.887	(1.111)	3186	5.09086	5.09(M)
	39 Benzo(g,h,i)perylene	276	18.399	18.400	(1.143)	11584	16.7902	16.8

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 030506.d
Lab Smp Id: QM04B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5088

Calibration Date: 05-MAR-2010
Calibration Time: 10:33
Client Smp ID: CB4857022710COMI
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	200304	15.71
11 Acenaphthene-d10	96677	48338	193354	98440	1.82
18 Phenanthrene-d10	147750	73875	295500	139682	-5.46
29 Chrysene-d12	135219	67610	270438	144871	7.14
35 Perylene-d12	125815	62908	251630	153806	22.25

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.96	-0.03
11 Acenaphthene-d10	9.18	8.68	9.68	9.18	-0.01
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	0.00
29 Chrysene-d12	14.29	13.79	14.79	14.28	-0.08
35 Perylene-d12	16.09	15.59	16.59	16.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QM04B
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5088

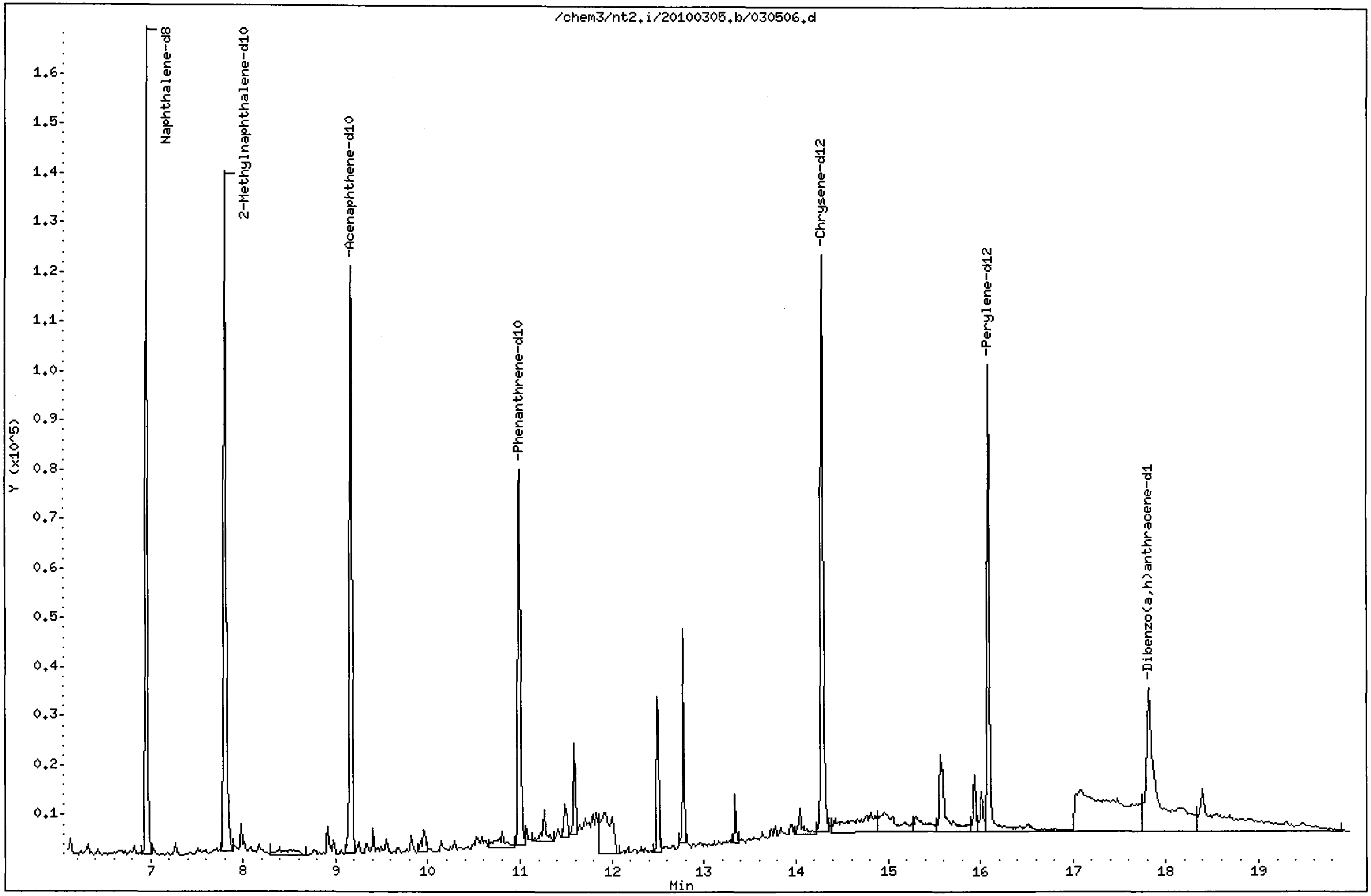
Client SDG: QM04
Fraction: SV
Client Smp ID: CB4857022710COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	171	56.84	31-109
$ 36 Dibenzo(a,h)anthra	300	149	49.69	10-133

Data File: /chem3/nt2.i/20100305.b/030506.d
Date : 05-MAR-2010 13:33
Client ID: CB4857022710COMP
Sample Info: QM04B
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

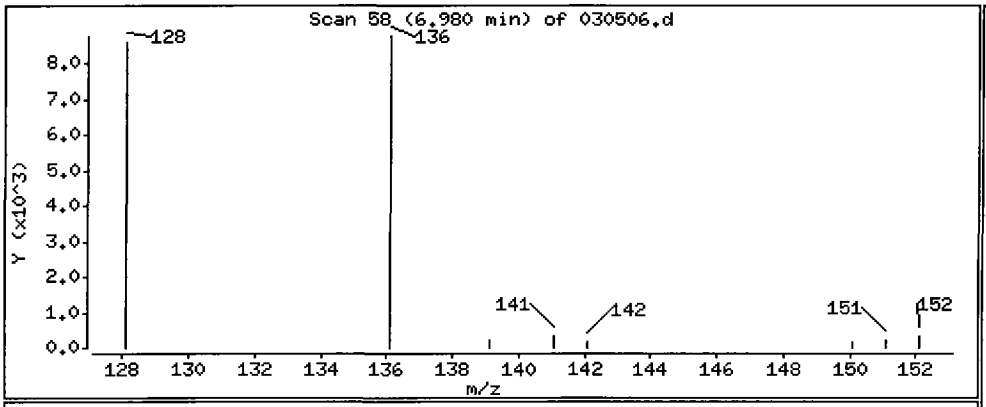
Operator: VTS

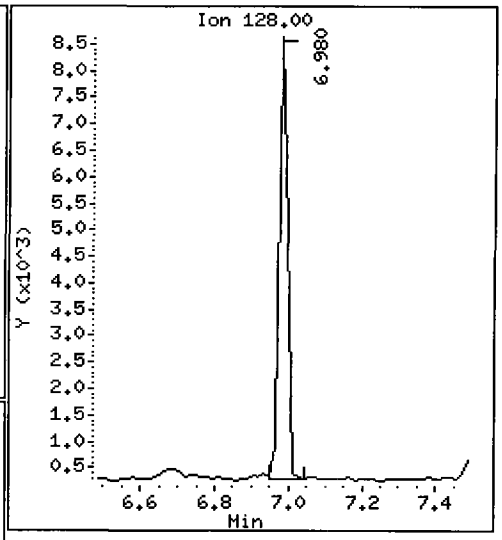
Column phase: ZB-5

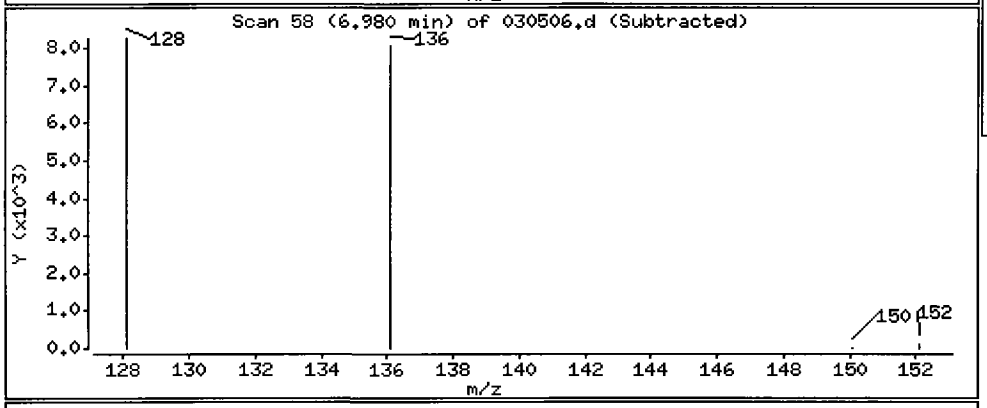
Column diameter: 0.25

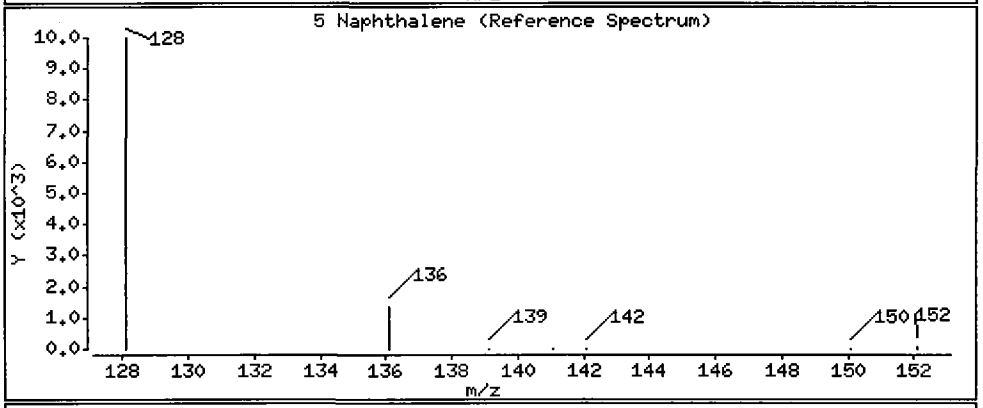
5 Naphthalene

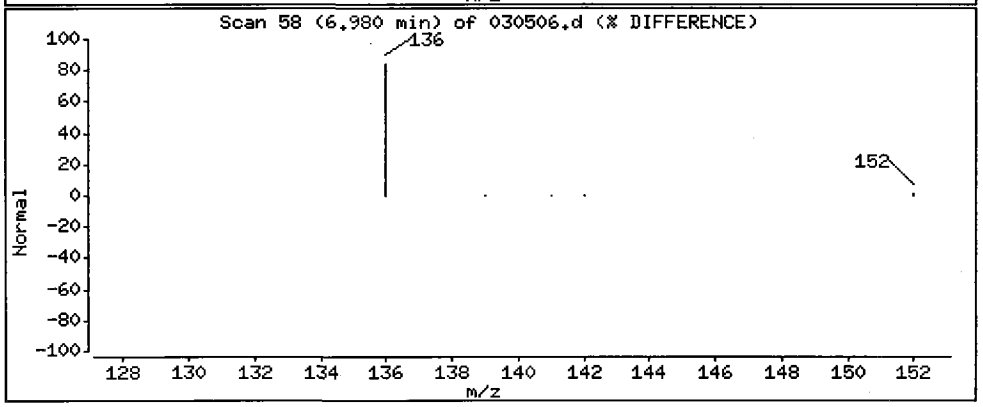
Concentration: 13.2 ug/L











Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

Operator: VTS

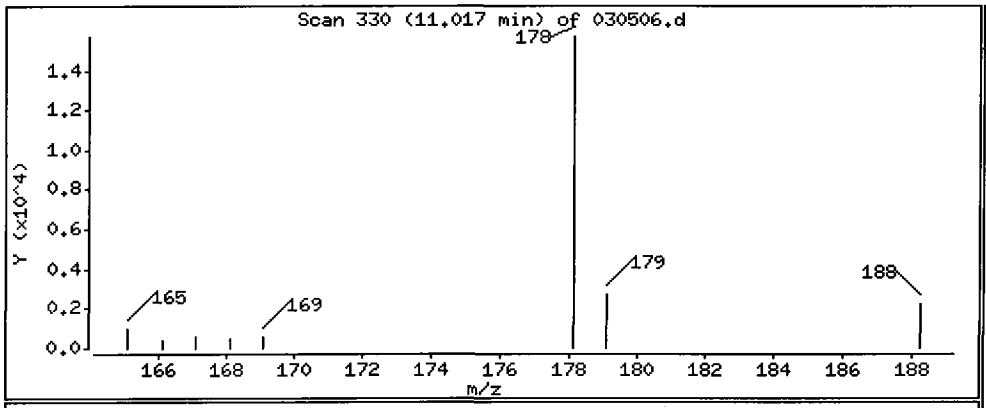
Column phase: ZB-5

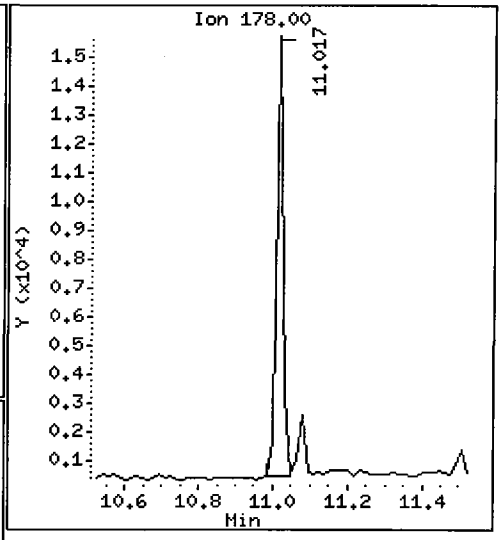
Column diameter: 0.25

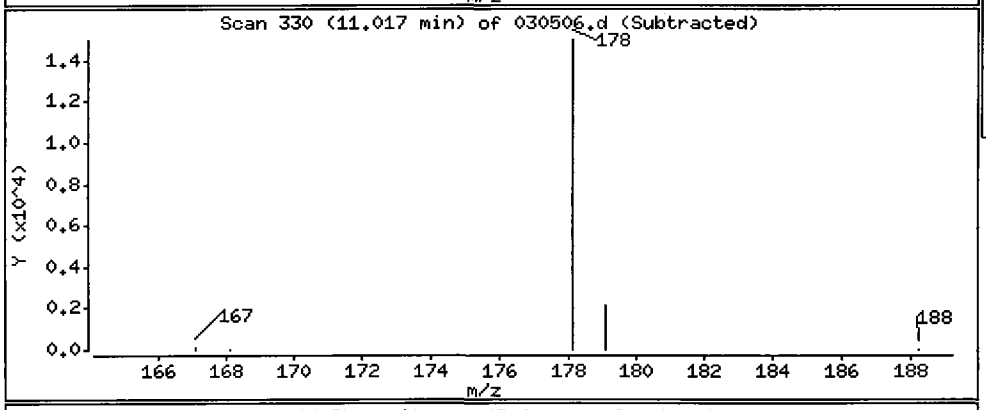
19 Phenanthrene

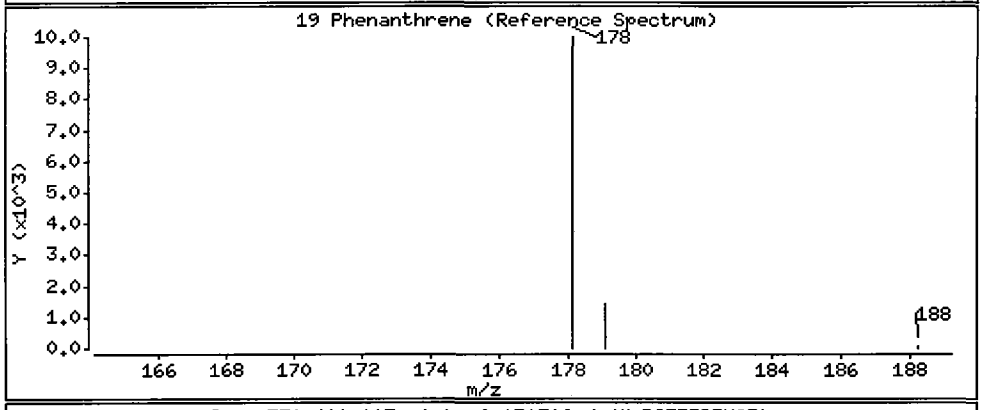
Concentration: 25.7 ug/L

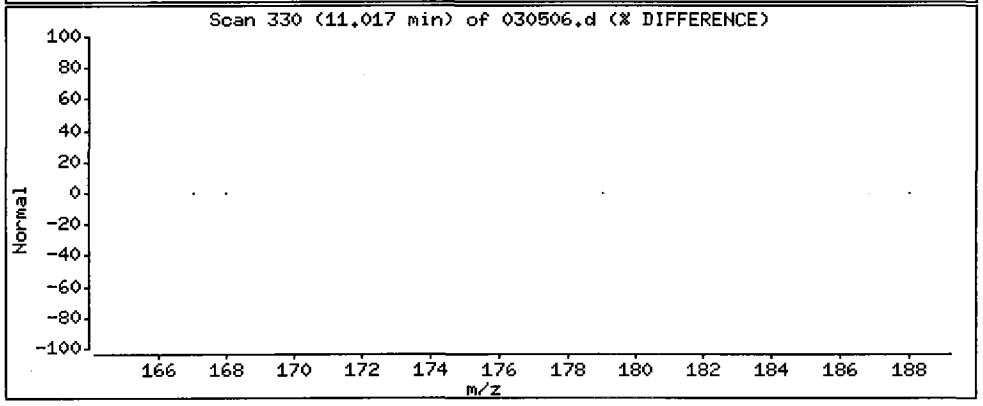
IS











Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

Operator: VTS

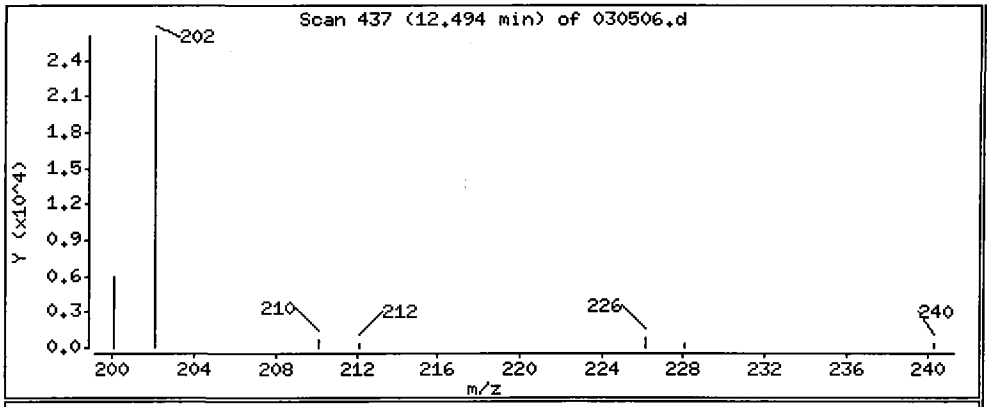
Column phase: ZB-5

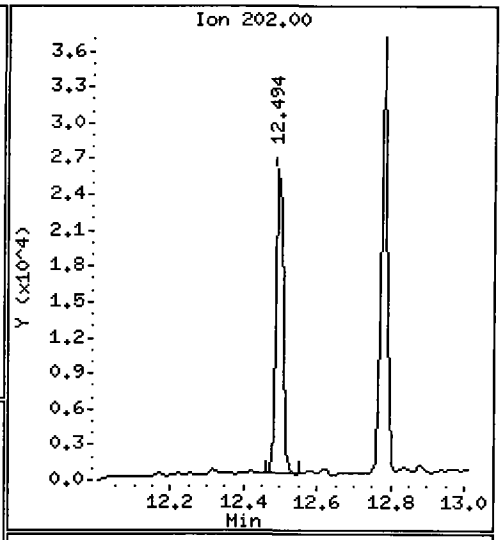
Column diameter: 0.25

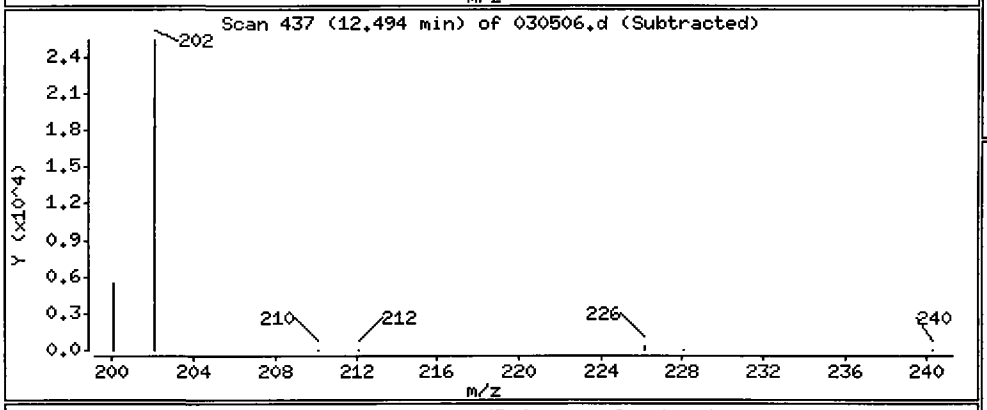
6

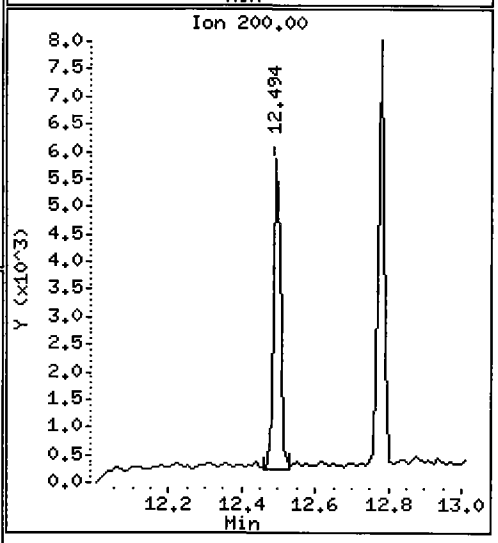
24 Fluoranthene

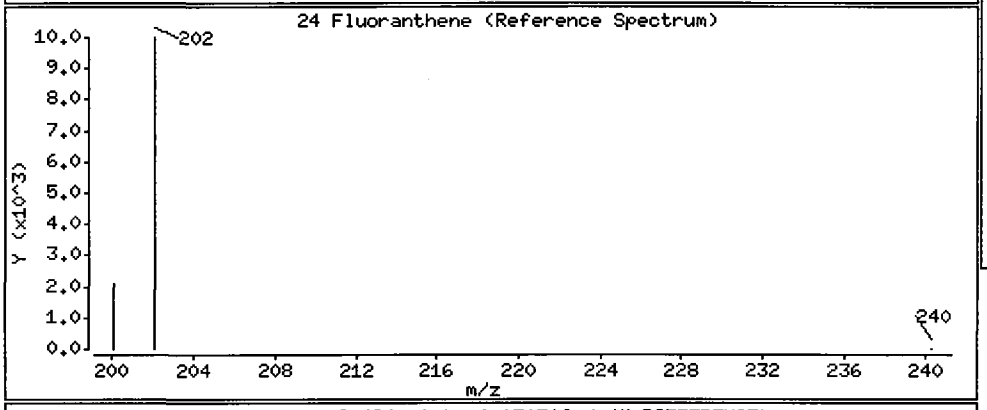
Concentration: 46.5 ug/L

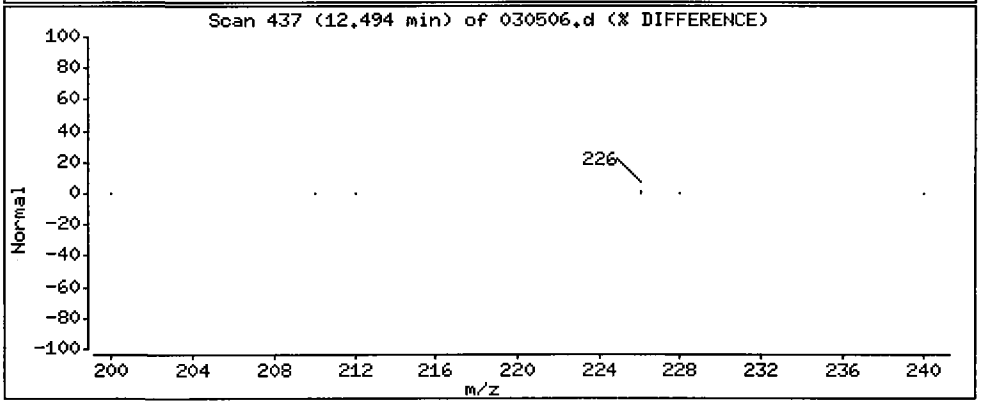












Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

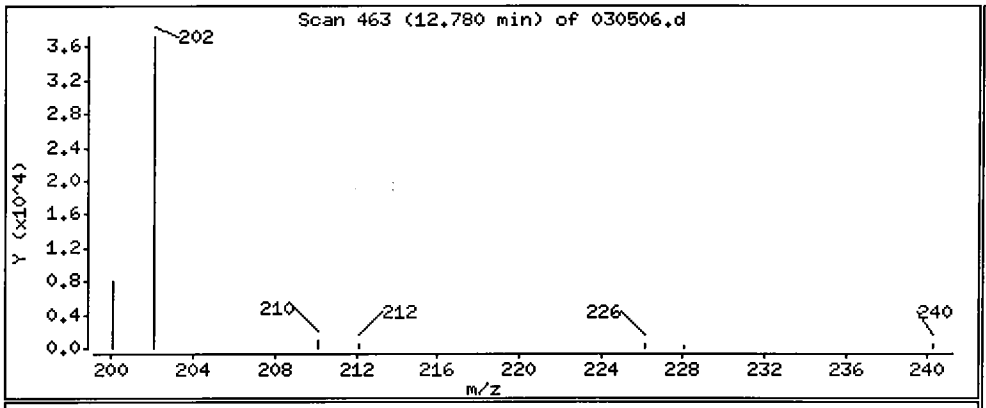
Operator: VTS

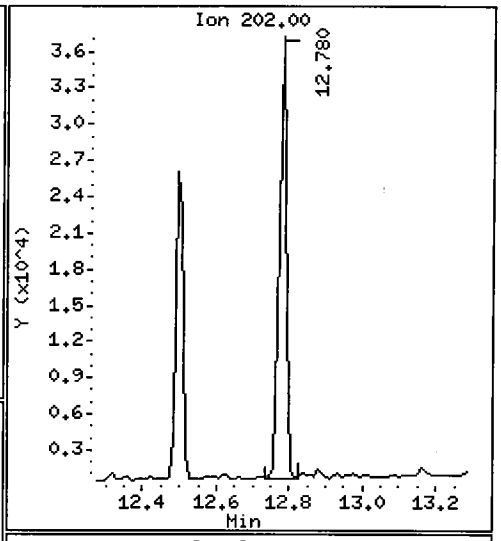
Column phase: ZB-5

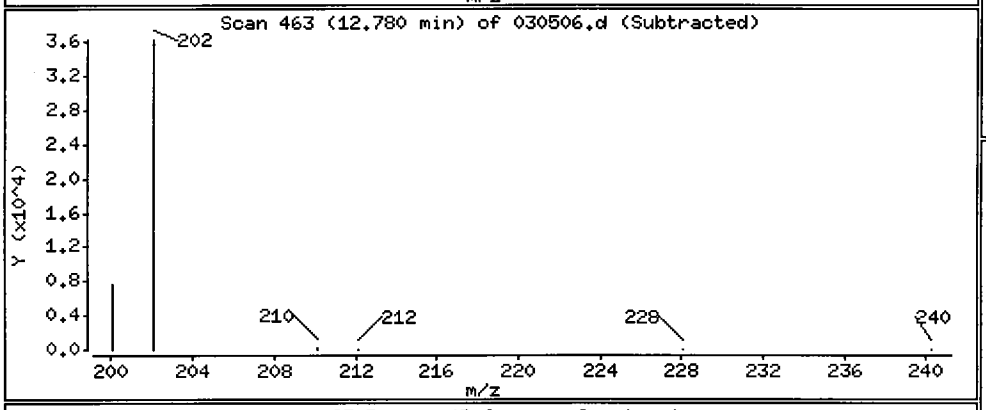
Column diameter: 0.25

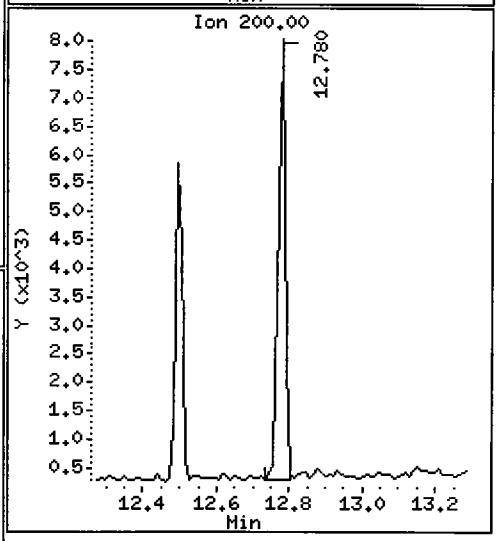
25 Pyrene

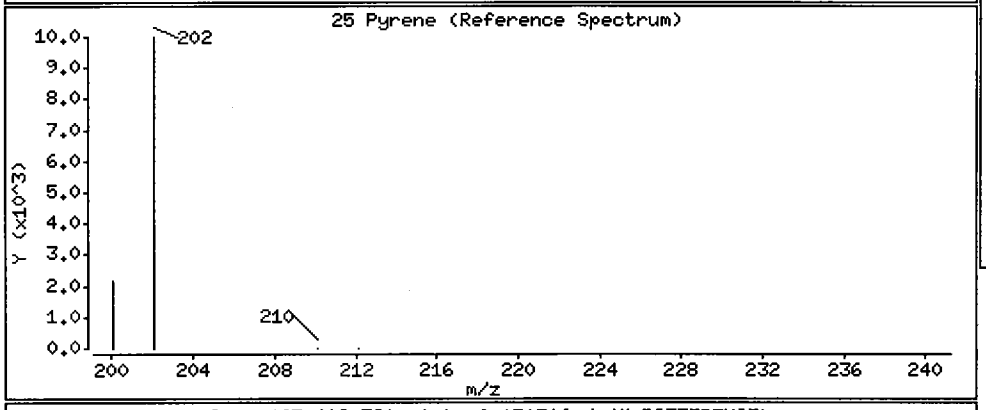
Concentration: 54.7 ug/L

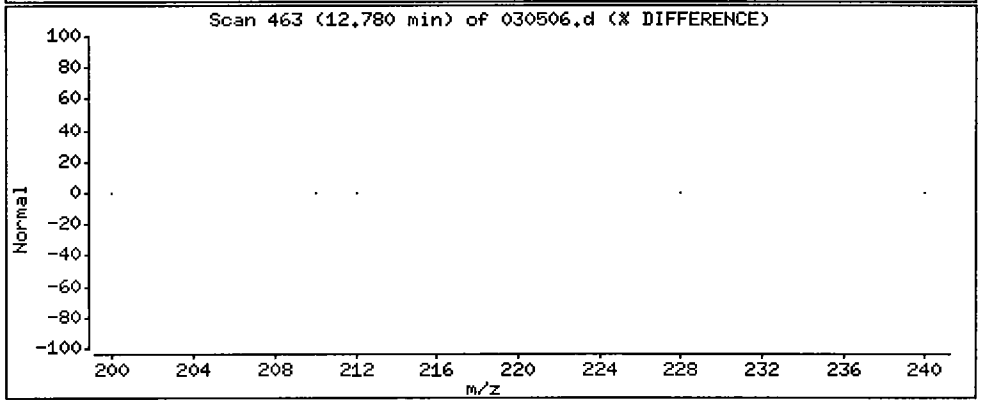












Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

Operator: VTS

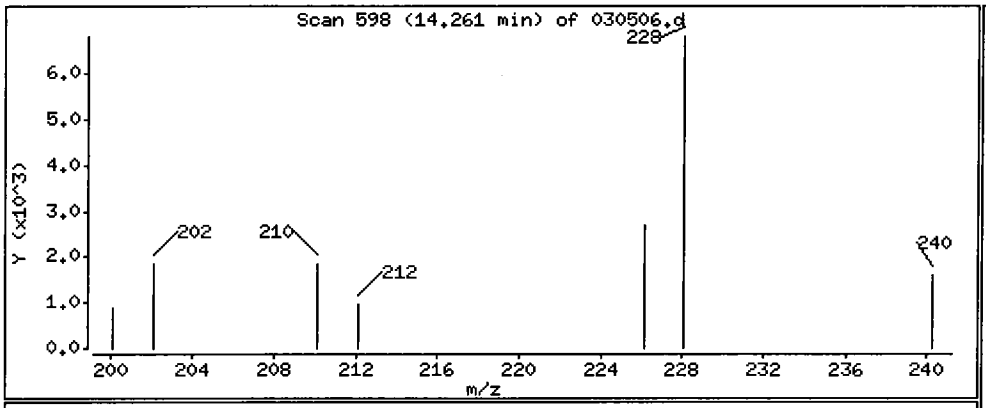
Column phase: ZB-5

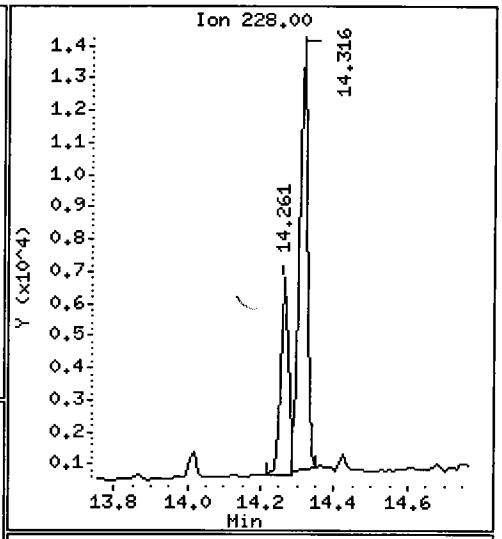
Column diameter: 0.25

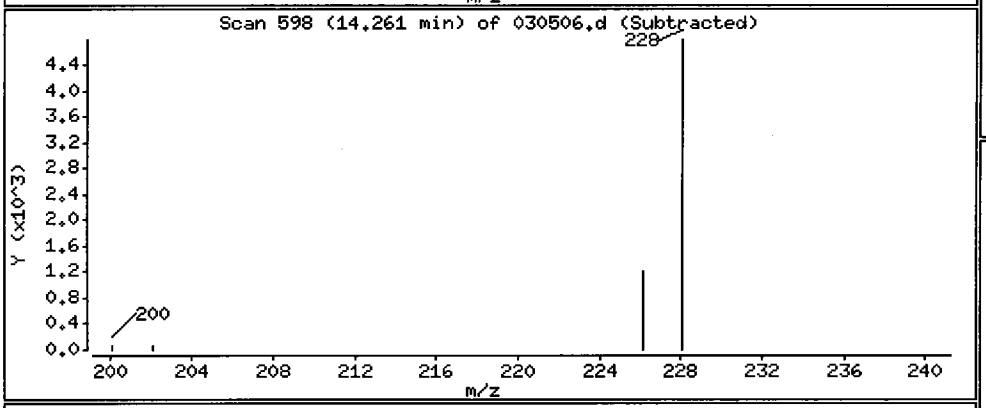
B

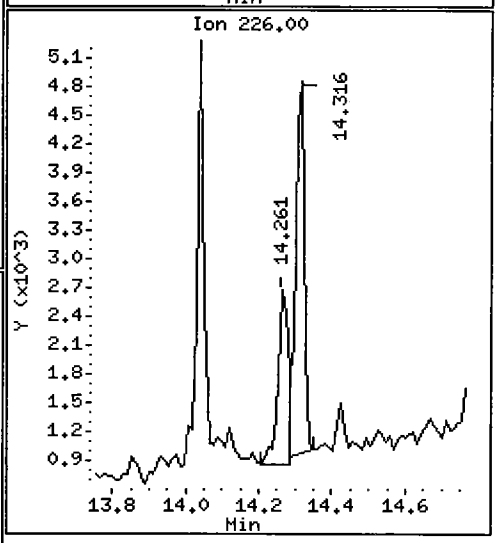
28 Benzo(a)anthracene

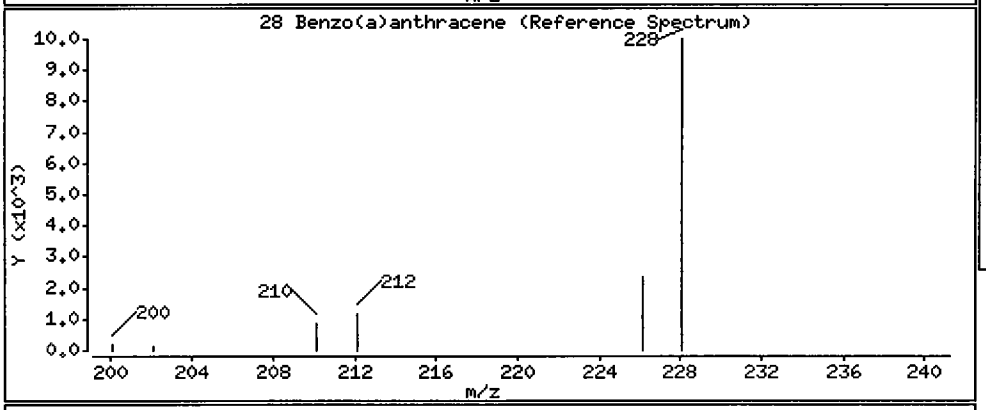
Concentration: 11.8 ug/L

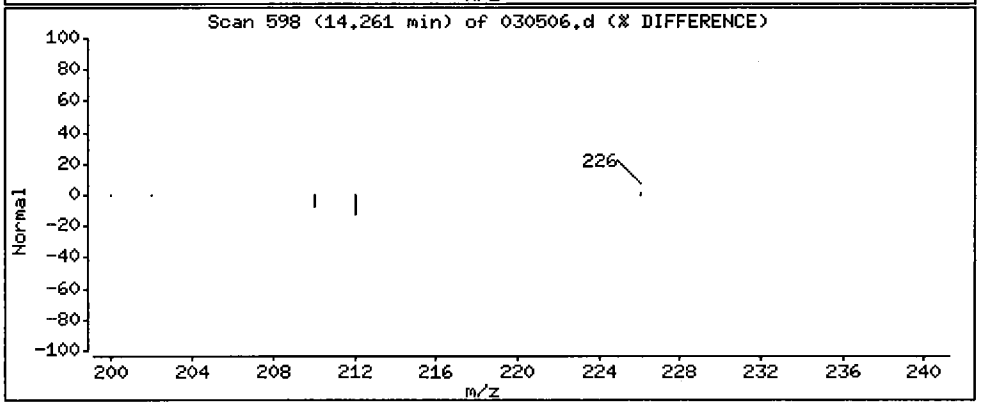












Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

Operator: VTS

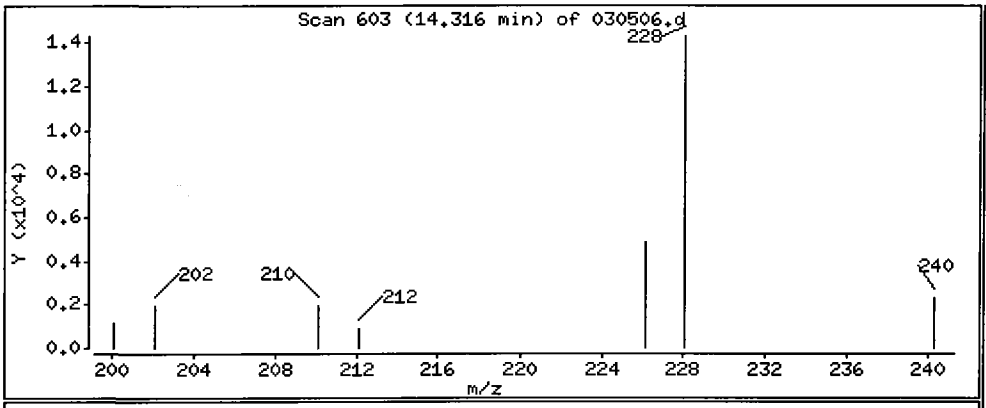
Column phase: ZB-5

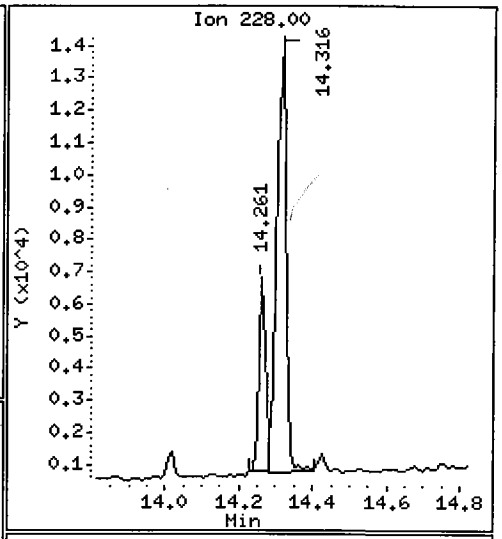
Column diameter: 0.25

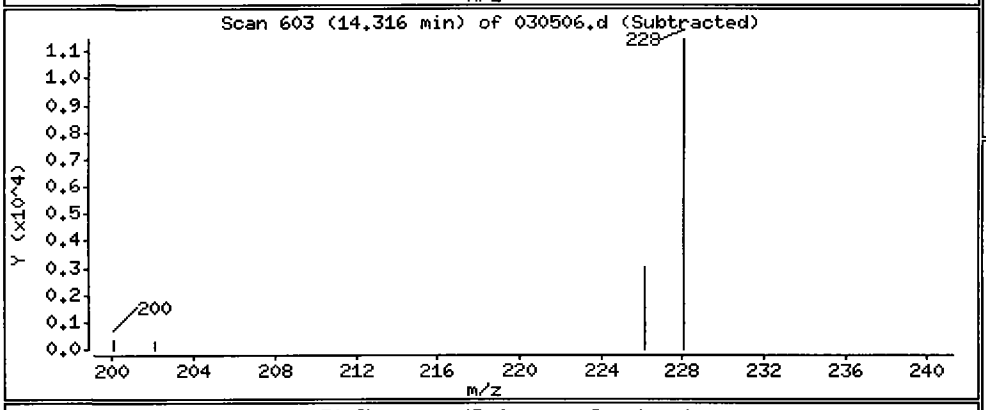
B

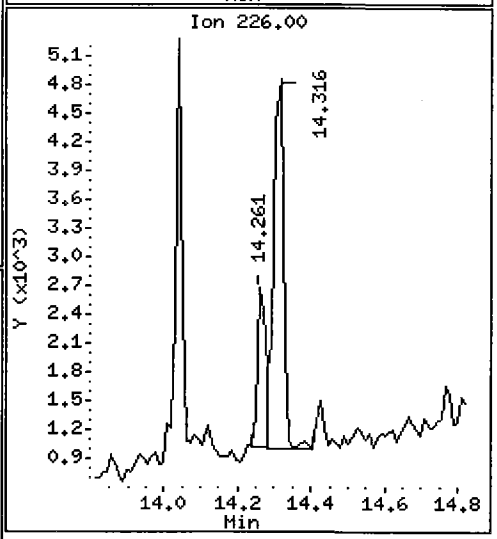
30 Chrysene

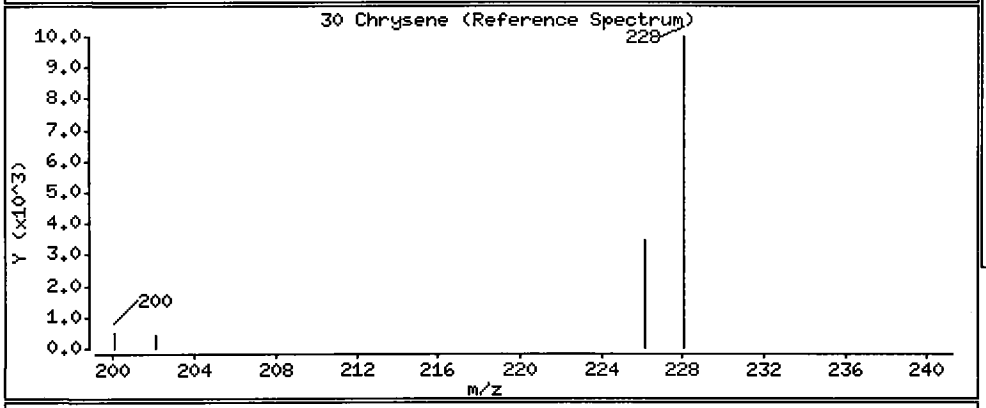
Concentration: 30.2 ug/L

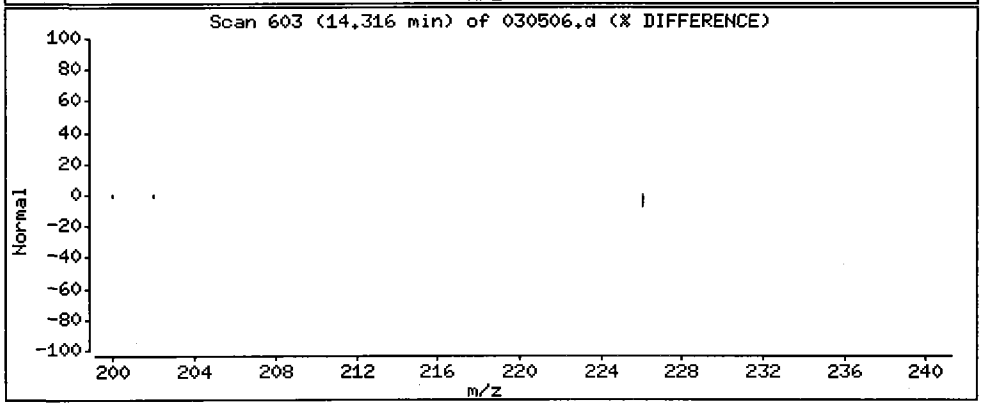












Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

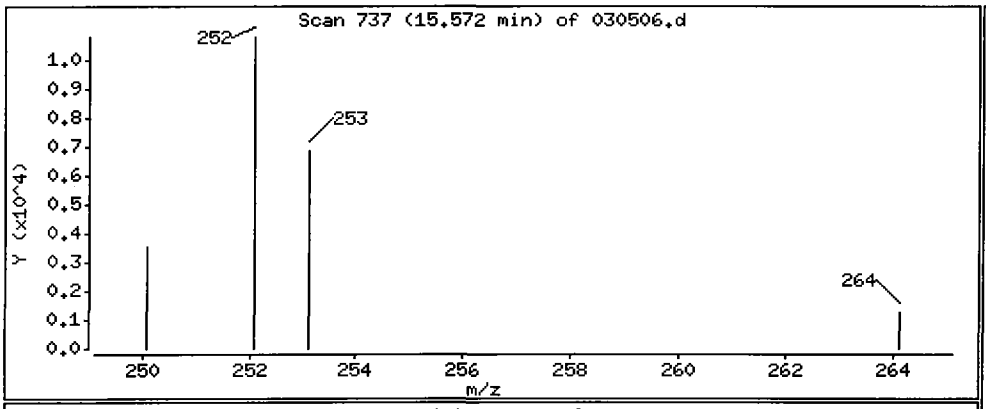
Operator: VTS

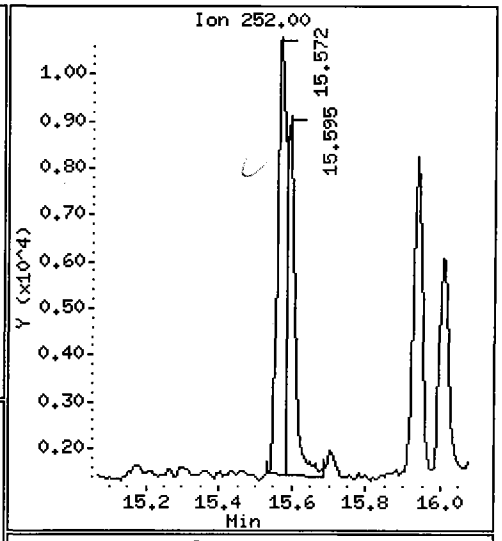
Column phase: ZB-5

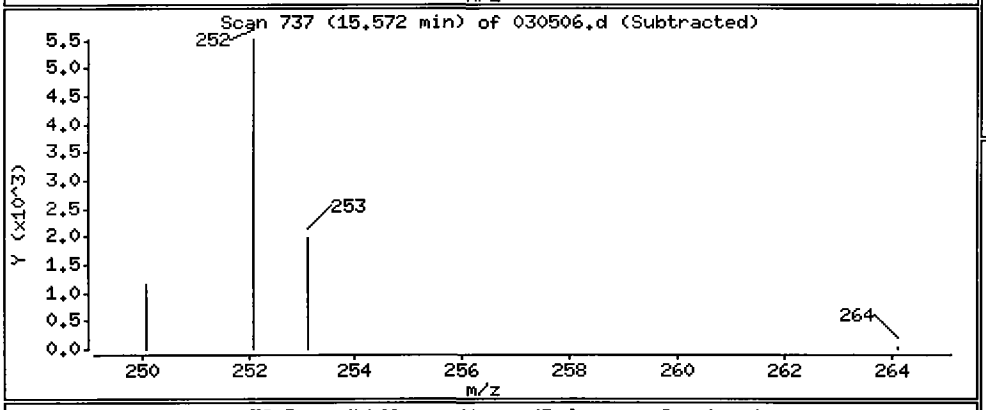
Column diameter: 0.25

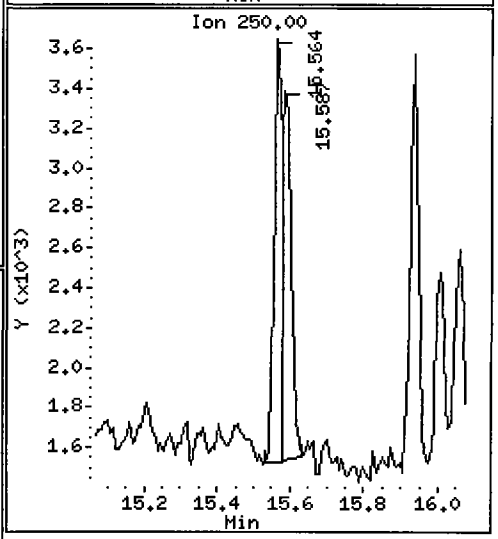
32 Benzo(b)fluoranthene

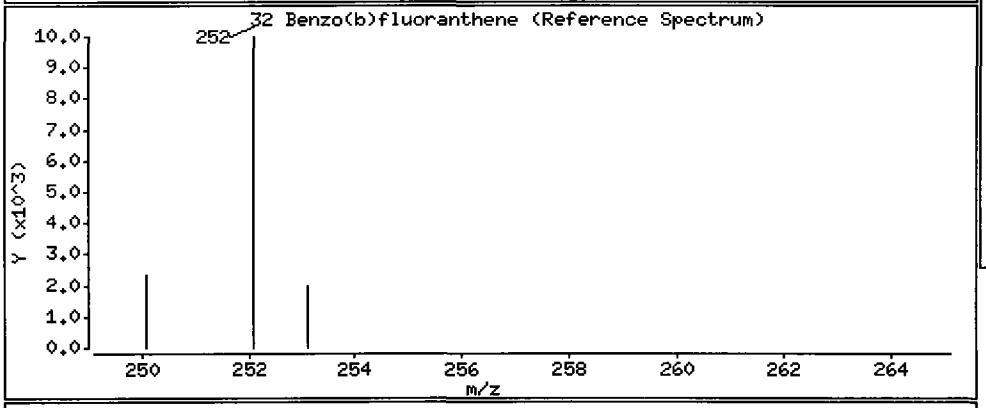
Concentration: 20.4 ug/L

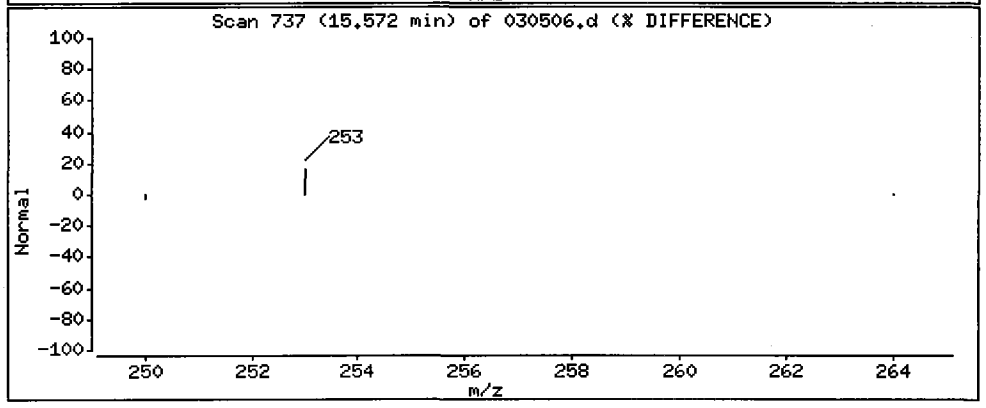












Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

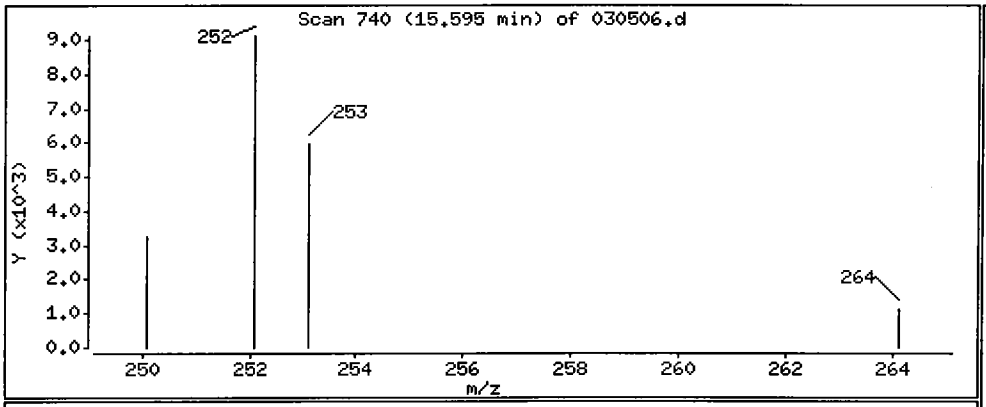
Operator: VTS

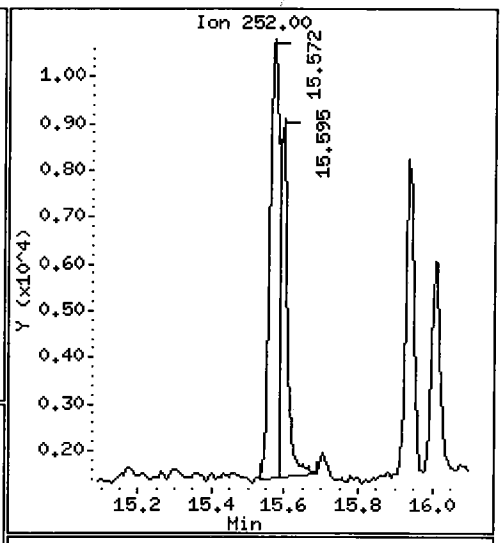
Column phase: ZB-5

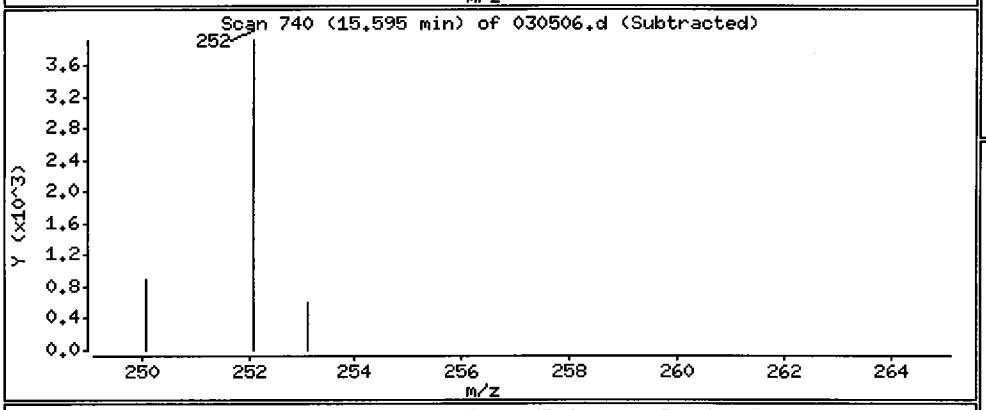
Column diameter: 0.25

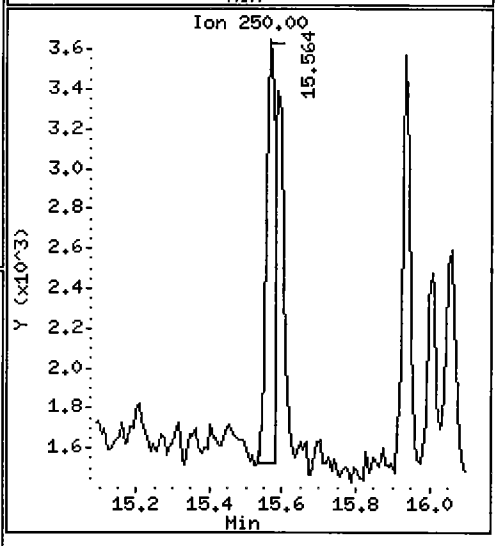
33 Benzo(k)fluoranthene

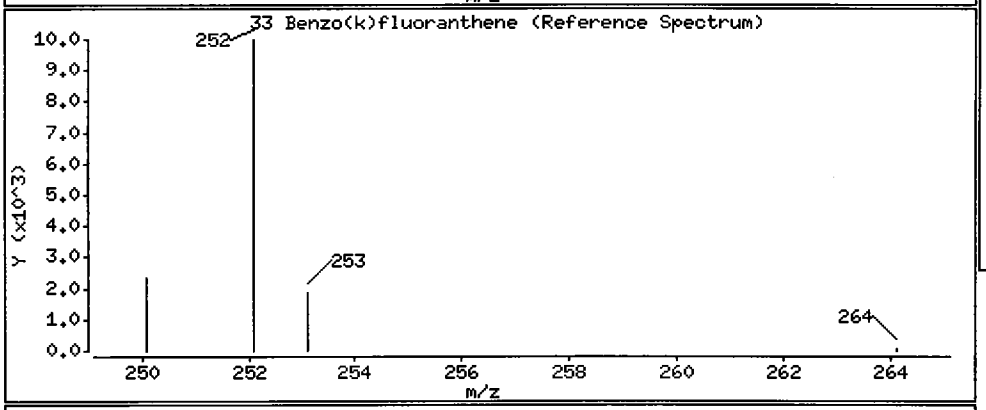
Concentration: 11.9 ug/L

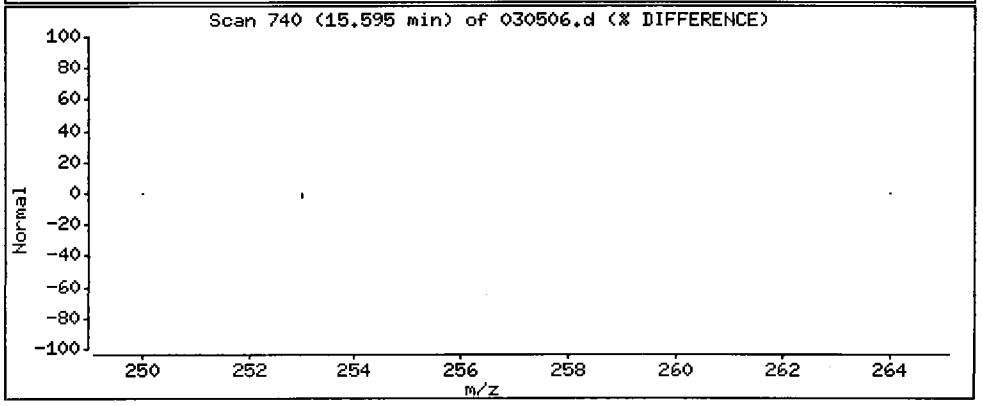












Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

Operator: VTS

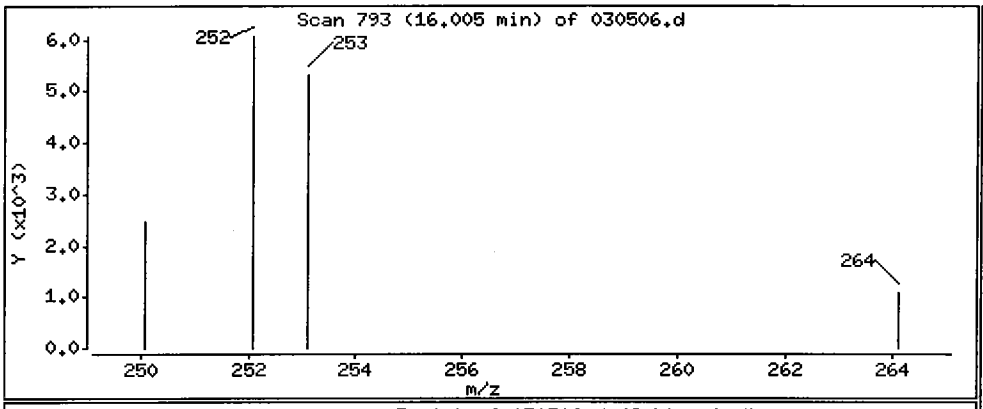
Column phase: ZB-5

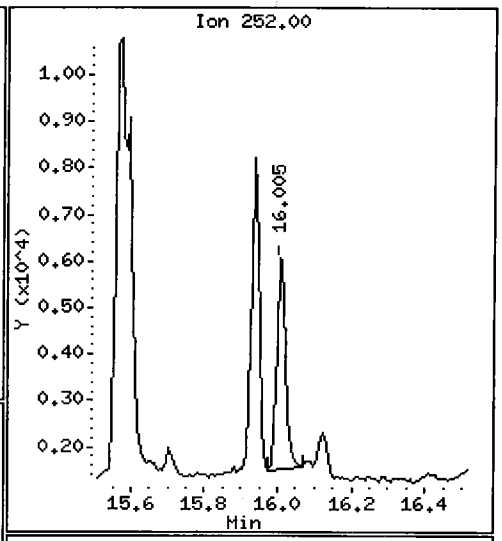
Column diameter: 0.25

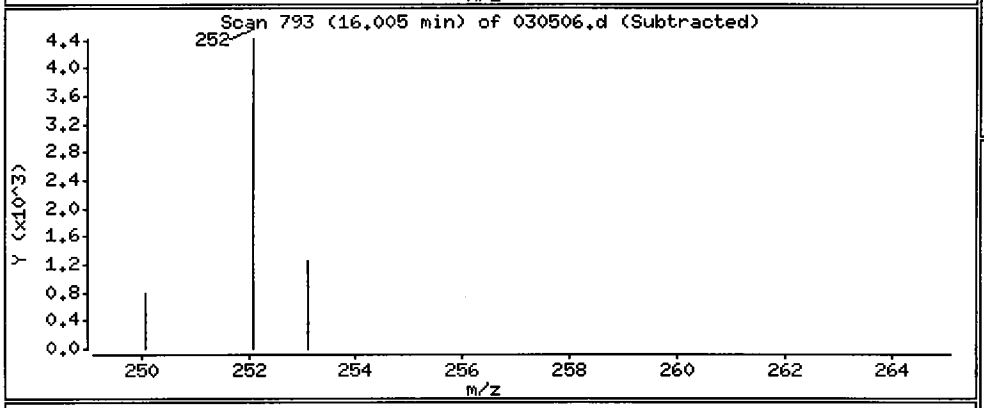
34 Benzo(a)pyrene

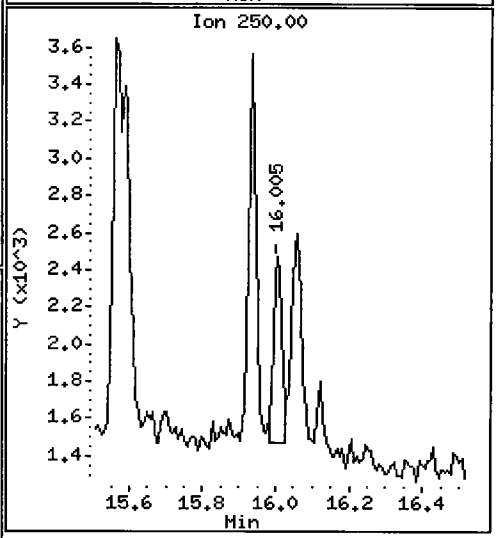
Concentration: 11.6 ug/L

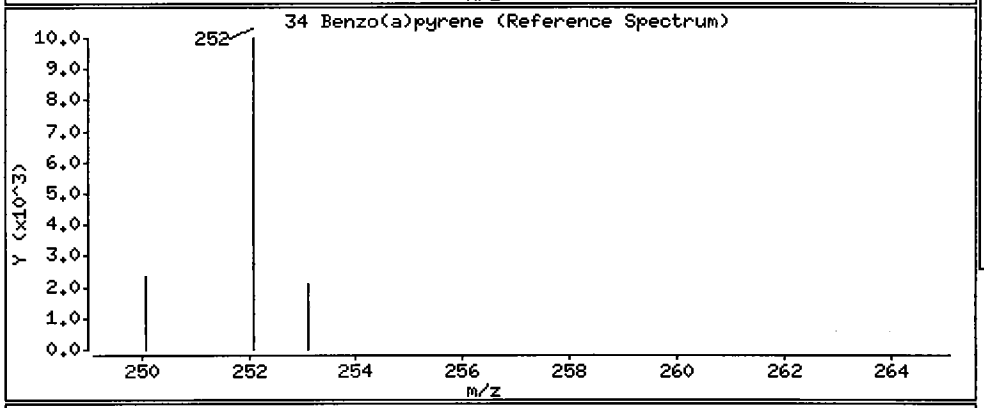
B

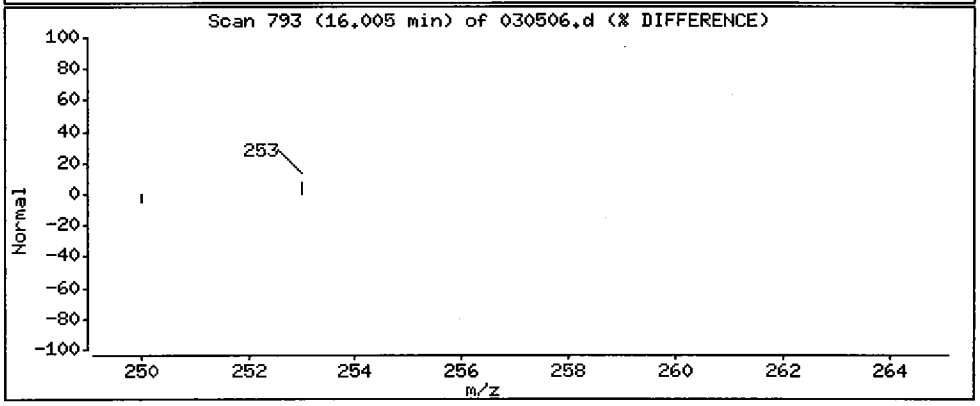












Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

Operator: VTS

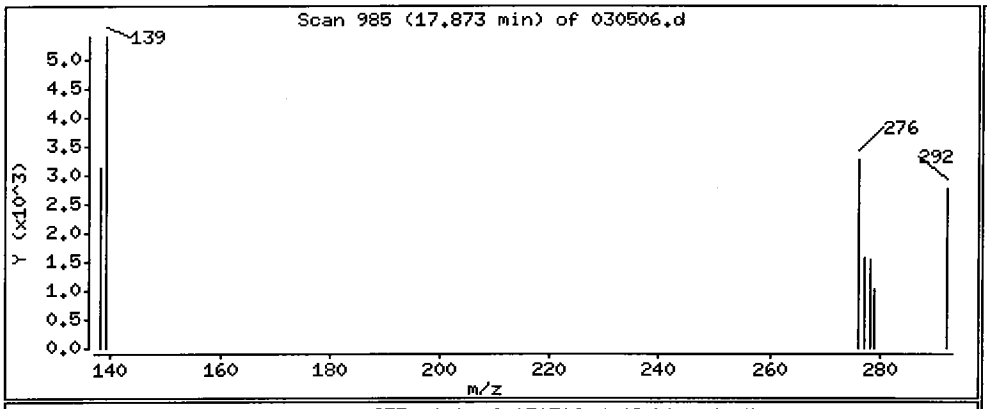
Column phase: ZB-5

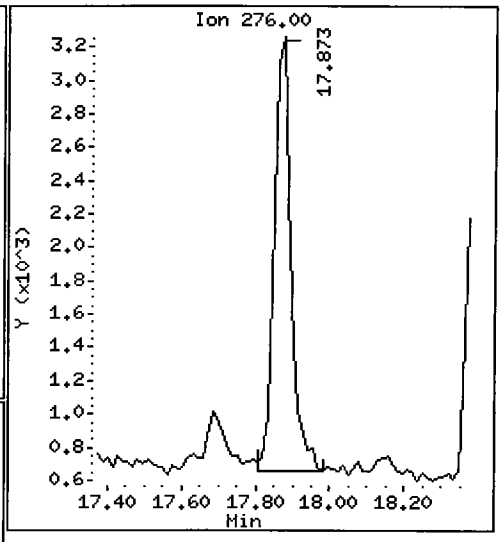
Column diameter: 0.25

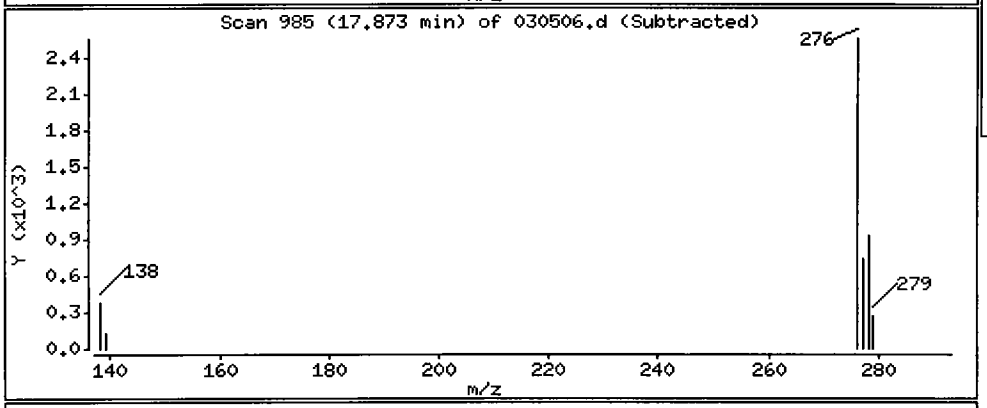
37 Indeno(1,2,3-cd)pyrene

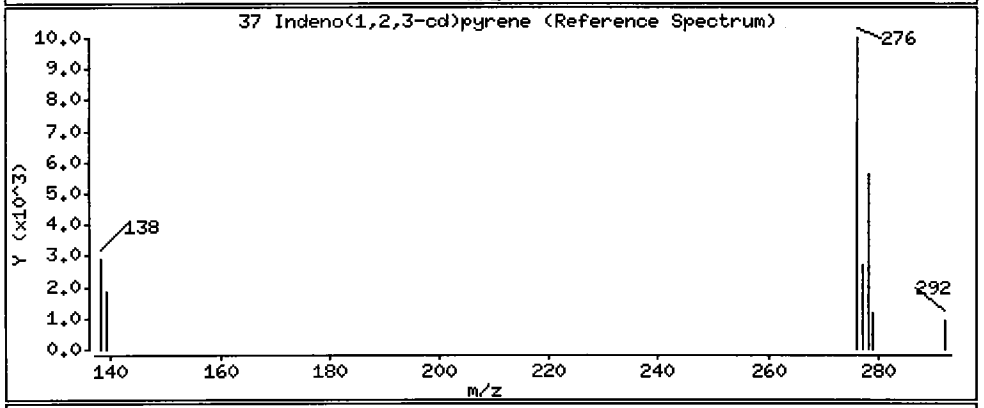
Concentration: 10.1 ug/L

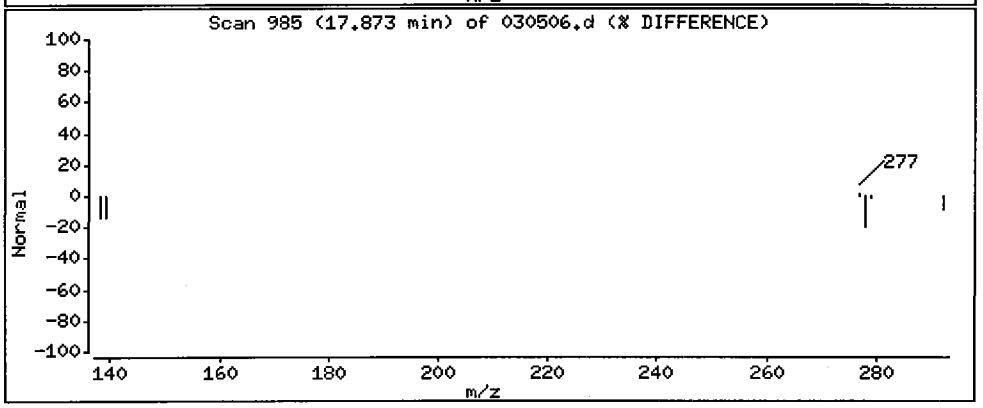
B











Data File: /chem3/nt2.i/20100305.b/030506.d

Date : 05-MAR-2010 13:33

Client ID: CB4857022710COMP

Instrument: nt2.i

Sample Info: QM04B

Volume Injected (uL): 2.0

Operator: VTS

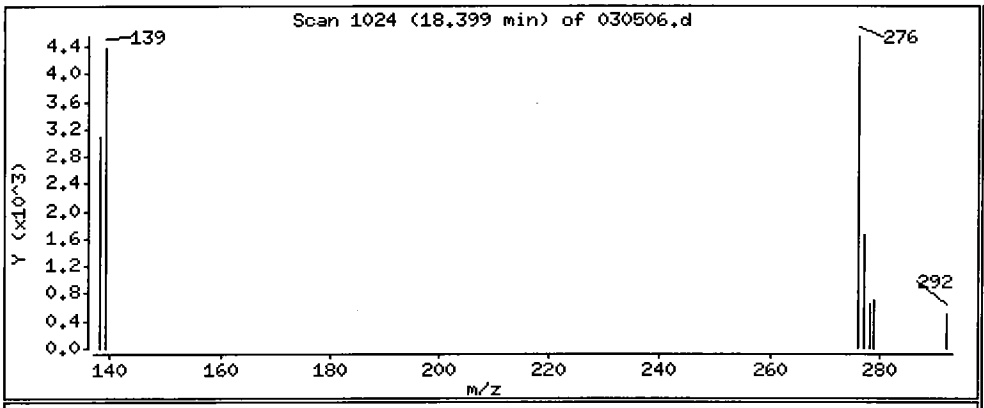
Column phase: ZB-5

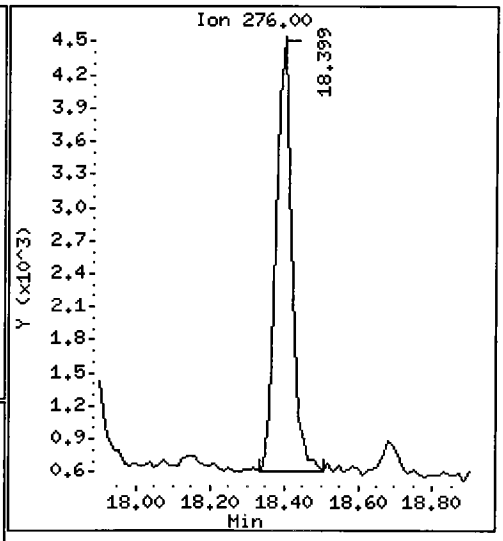
Column diameter: 0.25

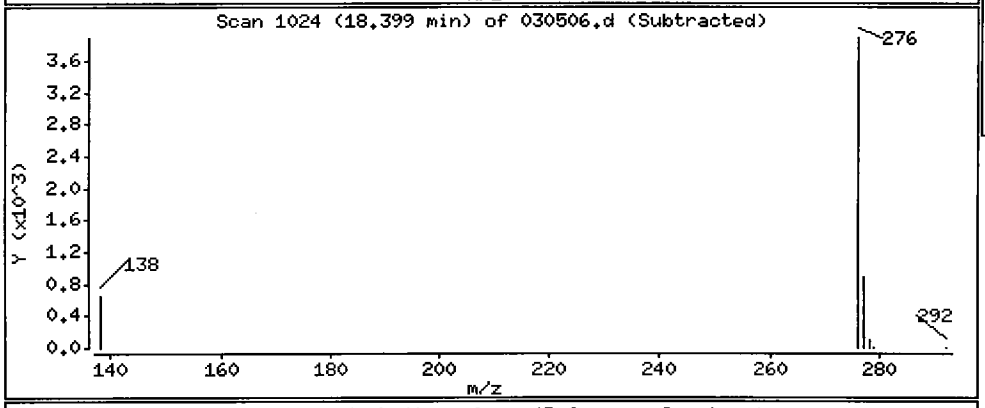
39 Benzo(g,h,i)perylene

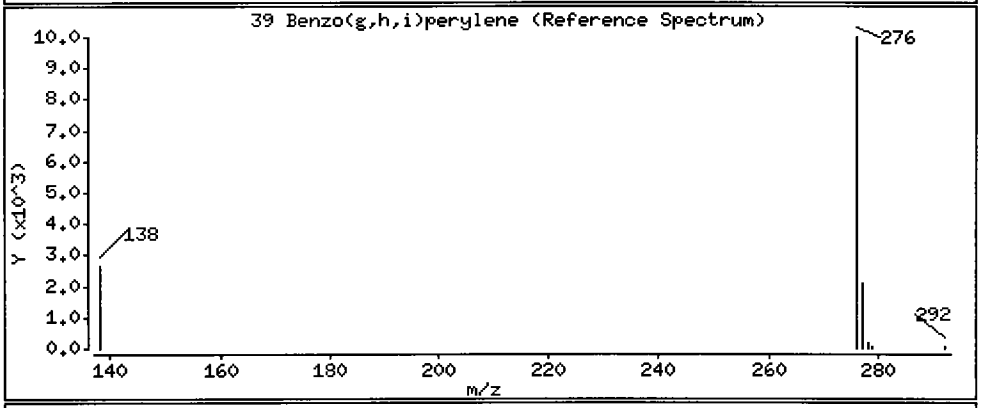
Concentration: 16.8 ug/L

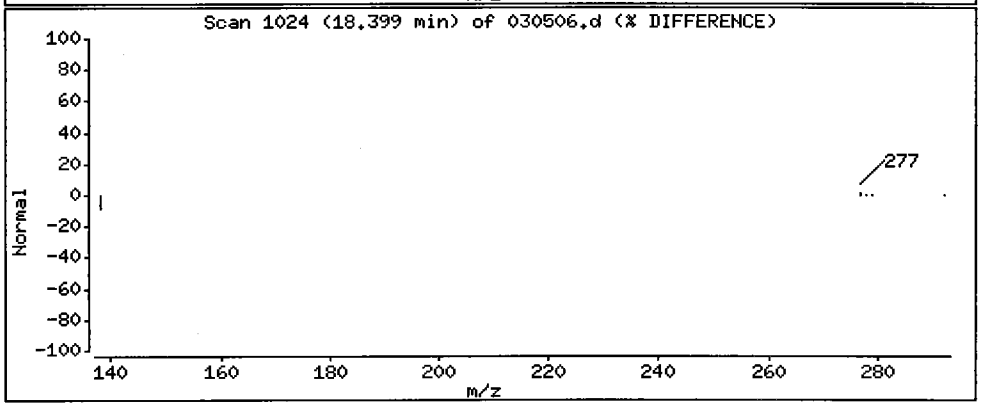
B



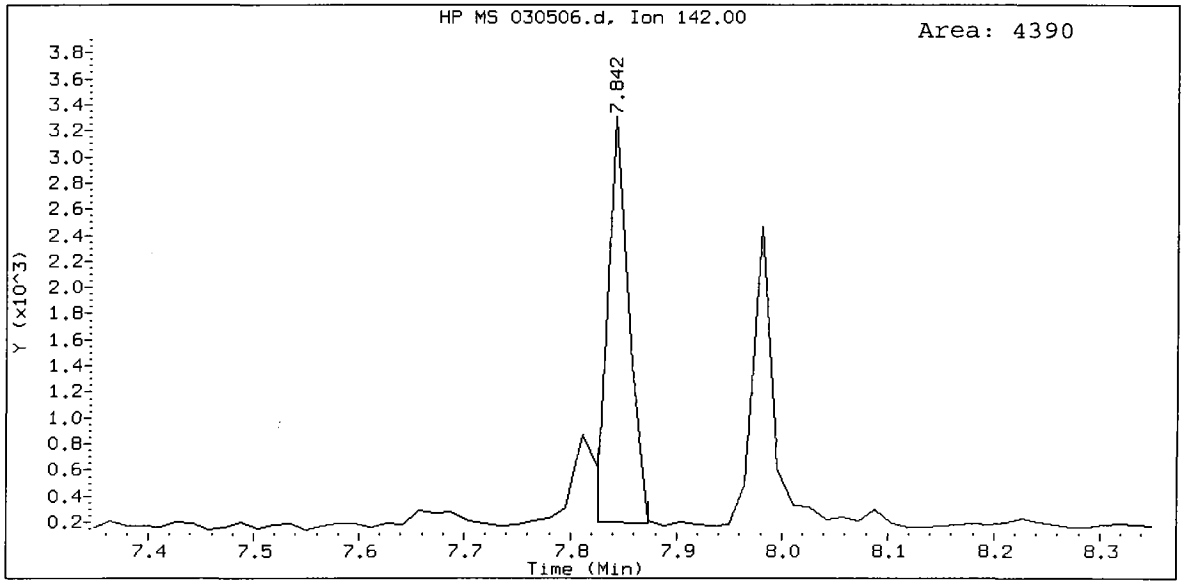


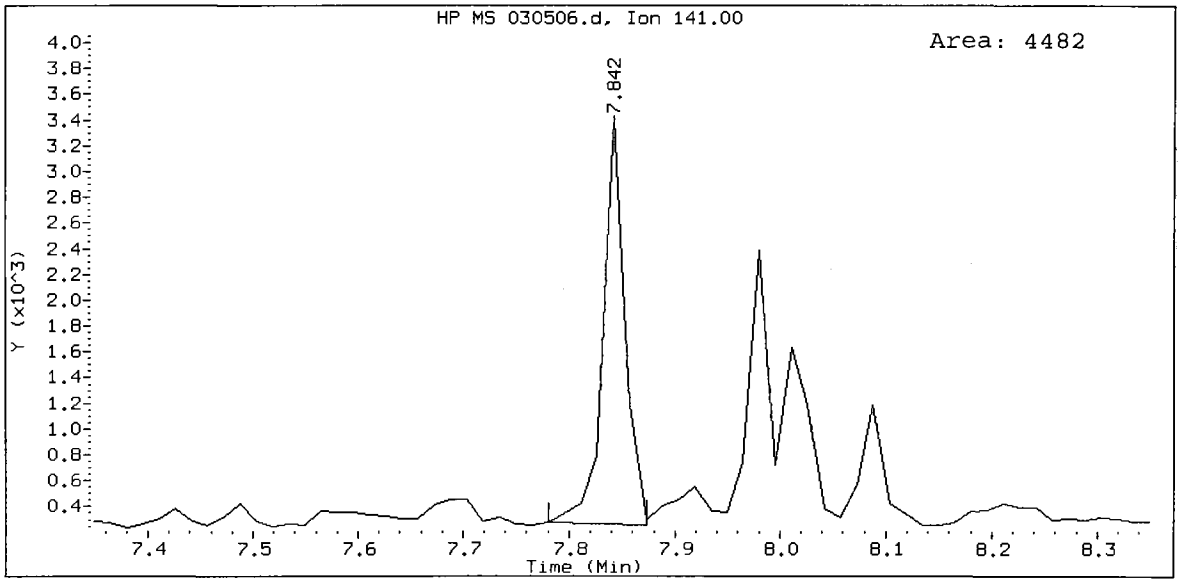


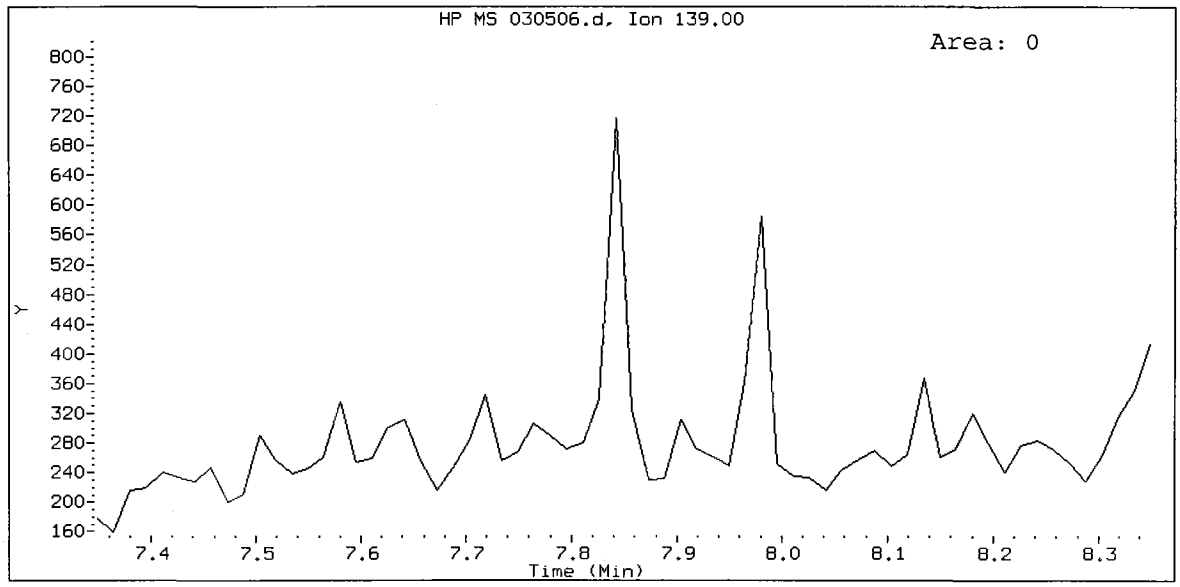




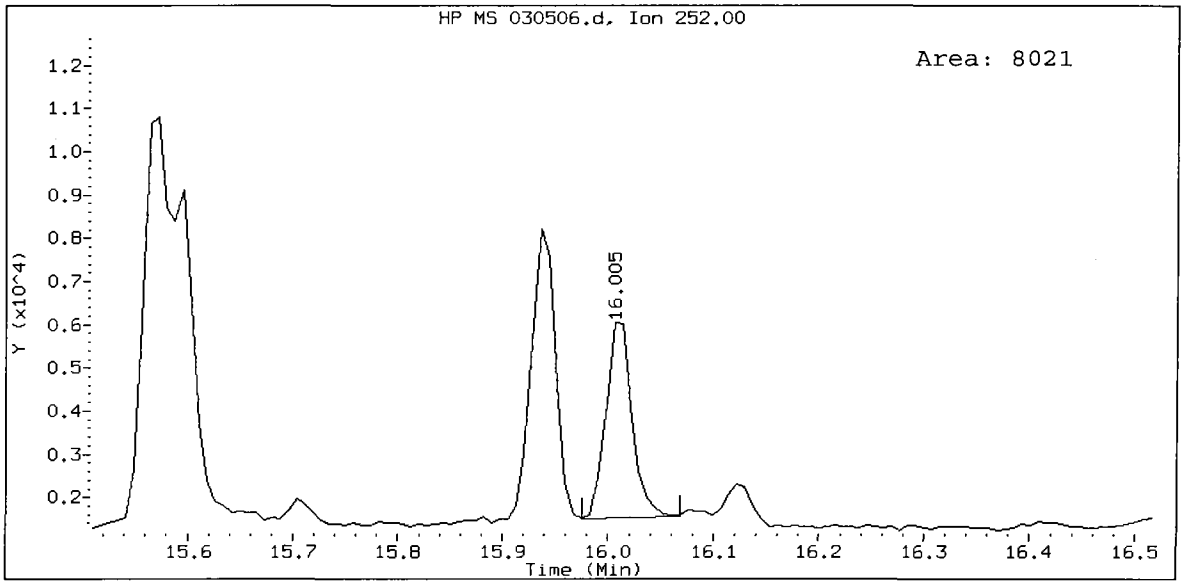
QM04B, /chem3/nt2.i/20100305.b/030506.d
2-Methylnaphthalene Amount: 7.80

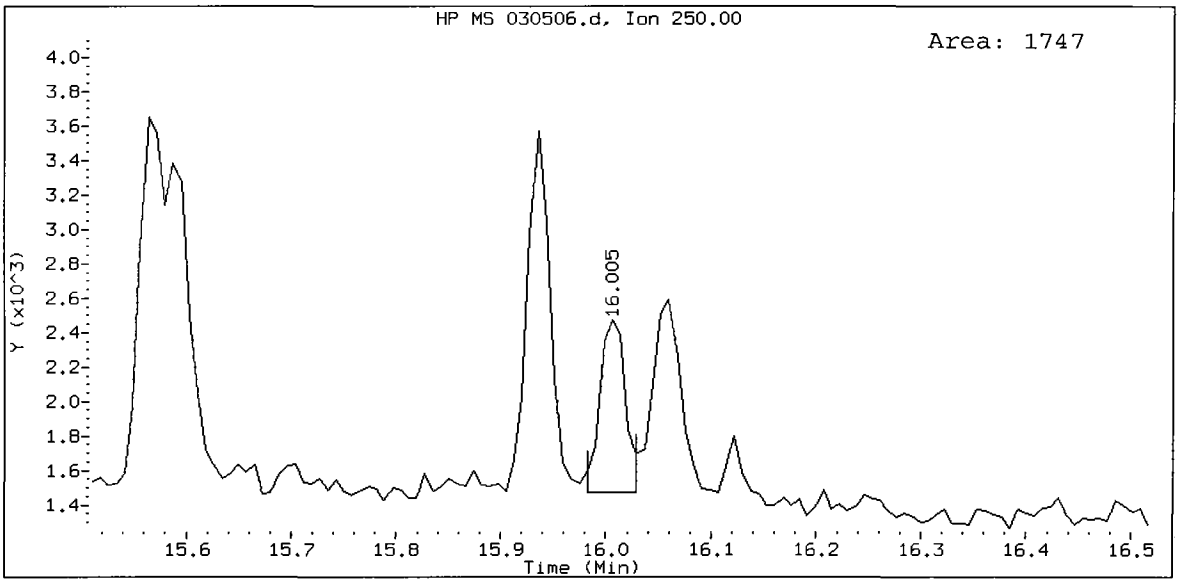




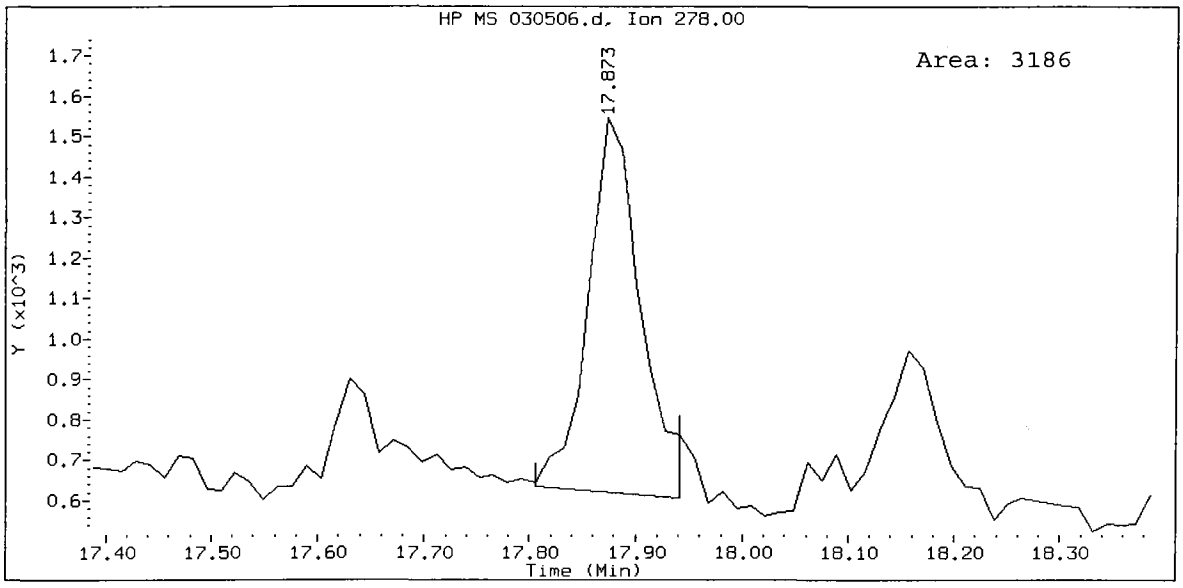


QM04B, /chem3/nt2.i/20100305.b/030506.d
Benzo(a)pyrene Amount: 11.62





QM04B, /chem3/nt2.i/20100305.b/030506.d
Dibenzo(a,h)anthracene Amount: 5.09



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB1022710COMP
SAMPLE

Lab Sample ID: QM04C
LIMS ID: 10-5089
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 13:58
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.014**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.011 B**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	Fluoranthene	0.010	< 0.010 U
129-00-0	Pyrene	0.010	< 0.010 U
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
205-99-2	Benzo(b)fluoranthene	0.010	< 0.010 U
207-08-9	Benzo(k)fluoranthene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	Benzo(g,h,i)perylene	0.010	< 0.010 U
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	63.7%
d14-Dibenzo(a,h)anthracene	71.3%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/030507.d
Lab Smp Id: QM04C Client Smp ID: CB1022710COMP
Inj Date : 05-MAR-2010 13:58
Operator : VTS Inst ID: nt2.i
Smp Info : QM04C
Misc Info : 10-5089
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 08-Mar-2010 12:19 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)	
*	4 Naphthalene-d8	136	6.965	6.967	(1.000)	194192	200.000		
	5 Naphthalene	128	6.981	6.982	(1.002)	13334	14.2595	14.3	
$	6 2-Methylnaphthalene-d10	152	7.812	7.813	(1.121)	95763	191.461	191	
	7 2-Methylnaphthalene	142	7.842	7.844	(1.126)	3797	6.96295	6.96	
	8 1-Methylnaphthalene	142	Compound Not Detected.						
	10 Acenaphthylene	152	Compound Not Detected.						
*	11 Acenaphthene-d10	164	9.175	9.175	(1.000)	96979	200.000		
	12 Acenaphthene	153	Compound Not Detected.						
	14 Dibenzofuran	168	Compound Not Detected.						
	15 Fluorene	166	Compound Not Detected.						
*	18 Phenanthrene-d10	188	11.001	11.002	(1.000)	137429	200.000		
	19 Phenanthrene	178	11.016	11.017	(1.001)	7261	10.6298	10.6	B
	20 Anthracene	178	Compound Not Detected.						
	24 Fluoranthene	202	12.504	12.506	(1.137)	5063	6.80514	6.81	(L)
	25 Pyrene	202	12.779	12.780	(1.162)	5491	7.27067	7.27	
	28 Benzo(a)anthracene	228	Compound Not Detected.						

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
* 29 Chrysene-d12	240	14.282	14.295	(1.000)	142155	200.000	
30 Chrysene	228	14.315	14.317	(1.002)	4015	5.73564	5.74
32 Benzo(b)fluoranthene	252	15.565	15.572	(0.967)	5135	6.10449	6.10
33 Benzo(k)fluoranthene	252	15.565	15.595	(0.967)	5135	5.62238	5.62
34 Benzo(a)pyrene	252	Compound Not Detected.					
* 35 Perylene-d12	264	16.091	16.091	(1.000)	146822	200.000	
37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 36 Dibenzo(a,h)anthracene-d14	292	17.821	17.820	(1.107)	95177	213.865	214
38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 030507.d
Lab Smp Id: QM04C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5089

Calibration Date: 05-MAR-2010
Calibration Time: 10:33
Client Smp ID: CB1022710COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	194192	12.18
11 Acenaphthene-d10	96677	48338	193354	96979	0.31
18 Phenanthrene-d10	147750	73875	295500	137429	-6.99
29 Chrysene-d12	135219	67610	270438	142155	5.13
35 Perylene-d12	125815	62908	251630	146822	16.70

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.97	-0.02
11 Acenaphthene-d10	9.18	8.68	9.68	9.17	-0.01
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	-0.01
29 Chrysene-d12	14.29	13.79	14.79	14.28	-0.09
35 Perylene-d12	16.09	15.59	16.59	16.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QM04C
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5089

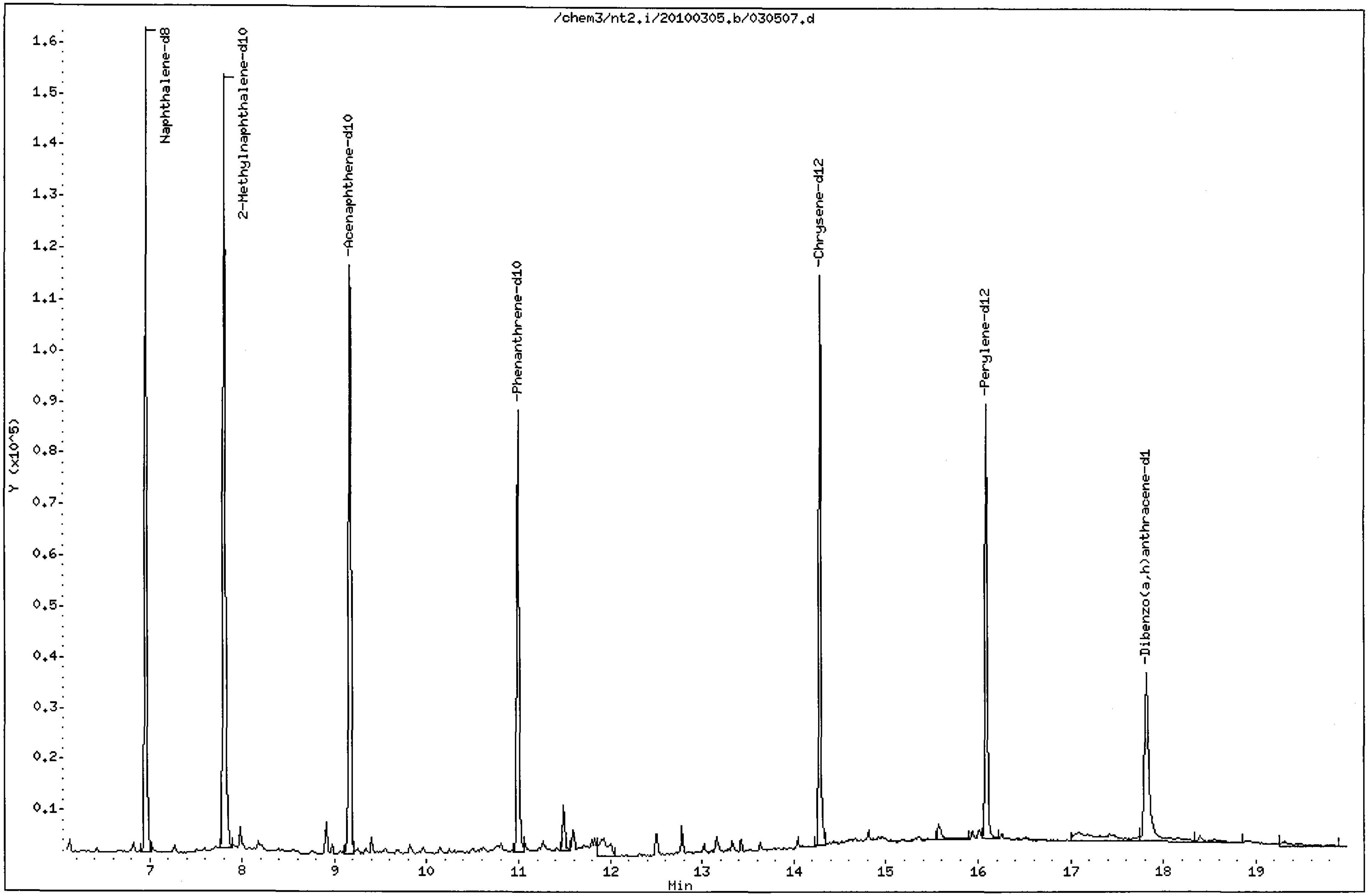
Client SDG: QM04
Fraction: SV
Client Smp ID: CB1022710COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	191	63.82	31-109
$ 36 Dibenzo(a,h)anthra	300	214	71.29	10-133

Data File: /chem3/nt2.i/20100305.b/030507.d
Date : 05-MAR-2010 13:58
Client ID: CB1022710COMP
Sample Info: QM04C
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Data File: /chem3/nt2.i/20100305.b/030507.d

Date : 05-MAR-2010 13:58

Client ID: CB1022710COMP

Instrument: nt2.i

Sample Info: QM04C

Volume Injected (uL): 2.0

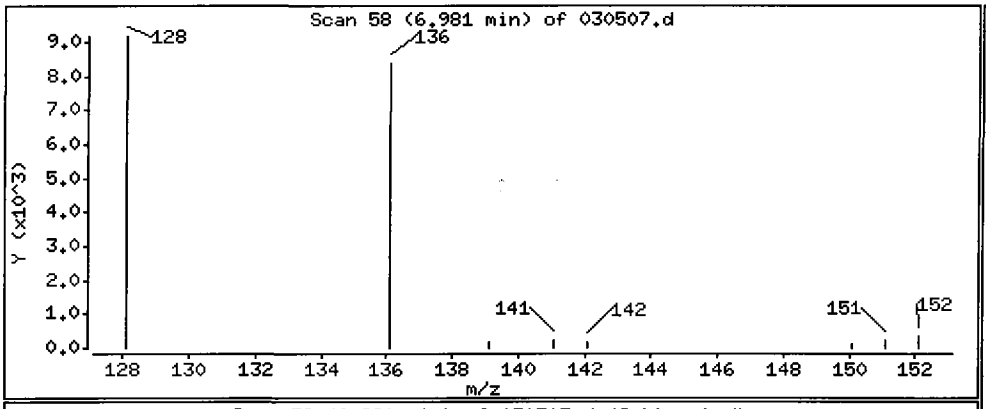
Operator: VTS

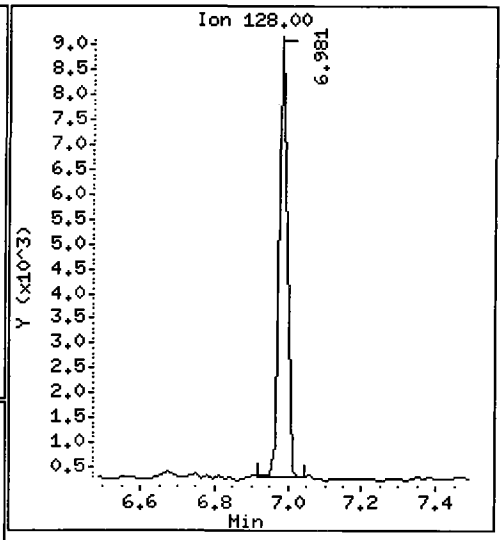
Column phase: ZB-5

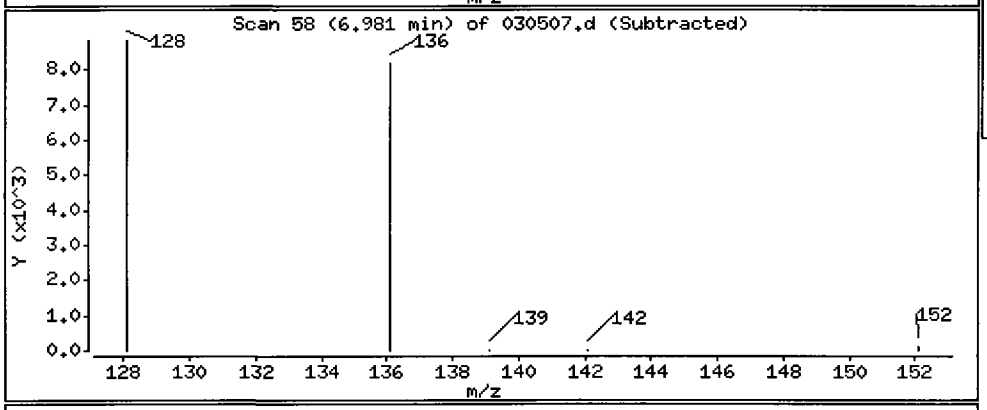
Column diameter: 0.25

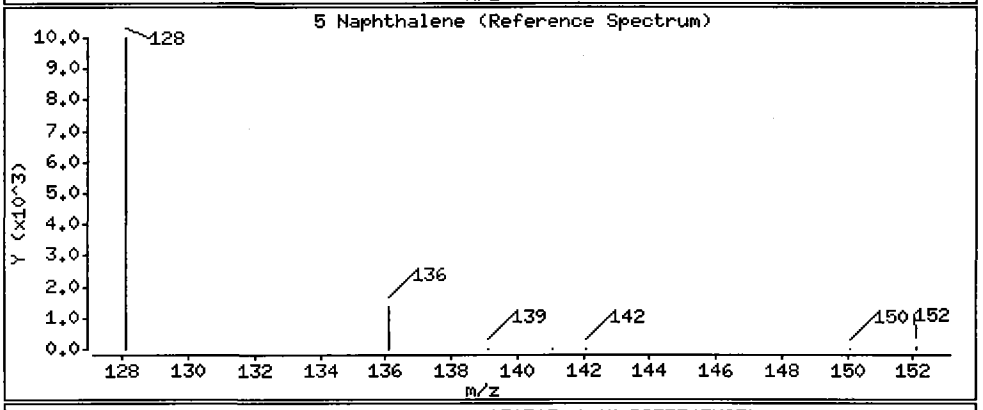
5 Naphthalene

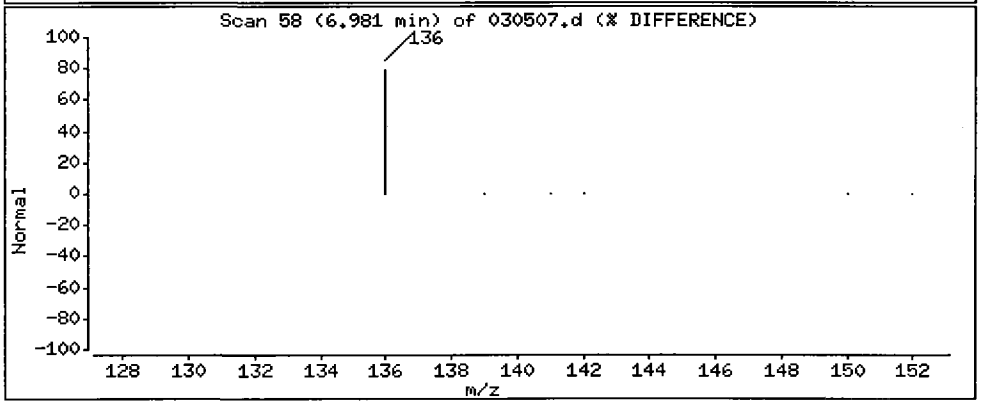
Concentration: 14.3 ug/L











Data File: /chem3/nt2.i/20100305.b/030507.d

Date : 05-MAR-2010 13:58

Client ID: CB1022710COMP

Instrument: nt2.i

Sample Info: QM04C

Volume Injected (uL): 2.0

Operator: VTS

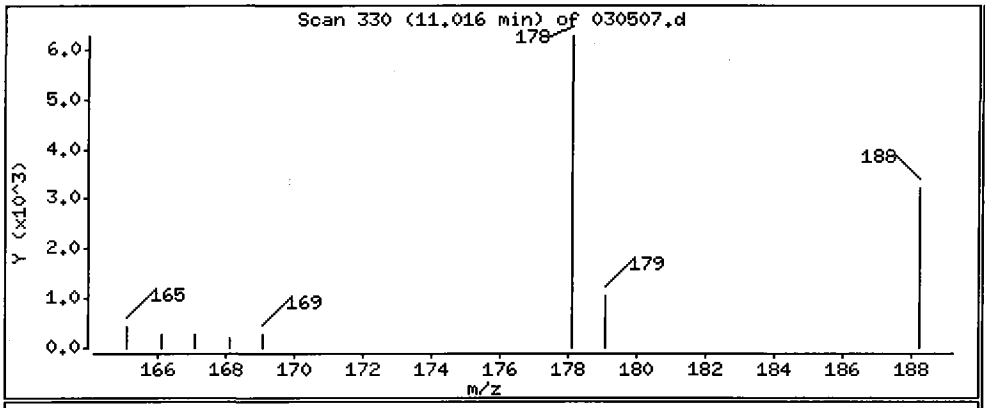
Column phase: ZB-5

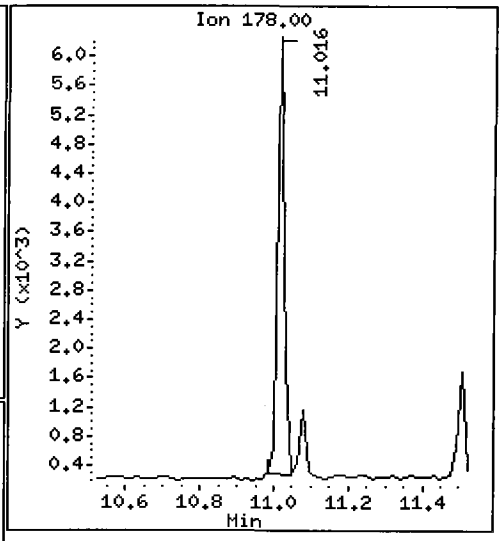
Column diameter: 0.25

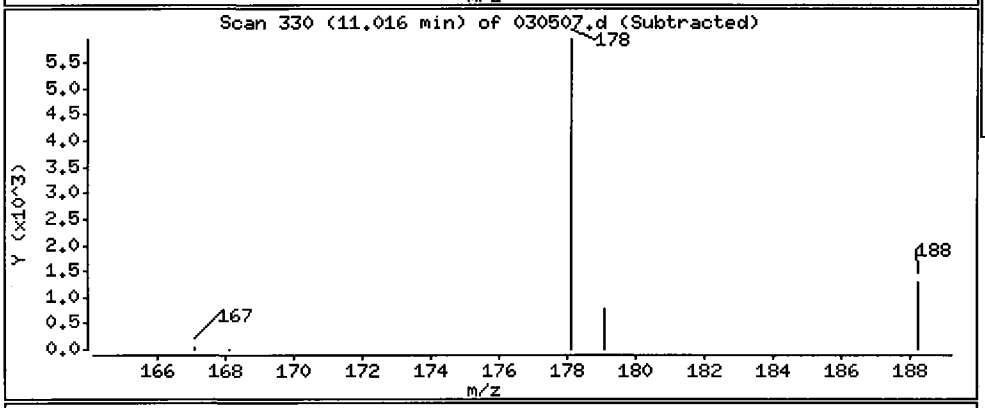
19 Phenanthrene

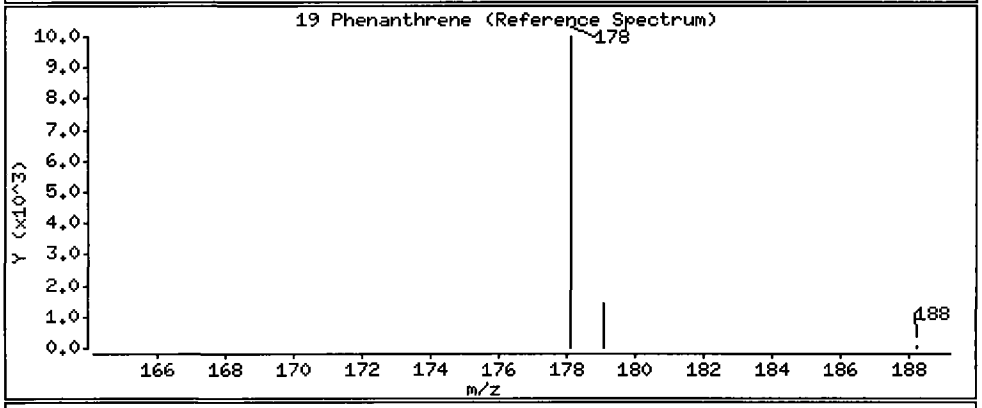
Concentration: 10.6 ug/L

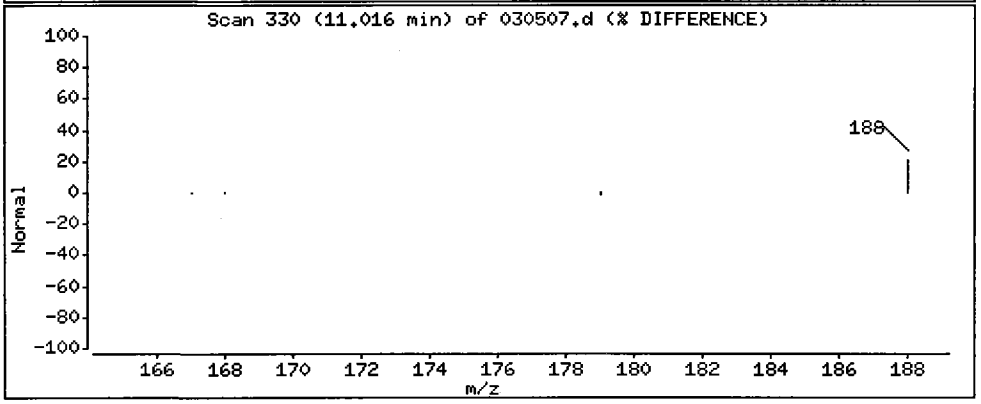
B











ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB102022710COMP
SAMPLE

Lab Sample ID: QM04D
LIMS ID: 10-5090
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 14:22
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.010**	**0.016**
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	Phenanthrene	0.010	< 0.010 U
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	Fluoranthene	0.010	< 0.010 U
129-00-0	Pyrene	0.010	< 0.010 U
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
205-99-2	Benzo(b)fluoranthene	0.010	< 0.010 U
207-08-9	Benzo(k)fluoranthene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	Benzo(g,h,i)perylene	0.010	< 0.010 U
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	63.3%
d14-Dibenzo(a,h)anthracene	52.7%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/030508.d
Lab Smp Id: QM04D Client Smp ID: CB102022710COMP
Inj Date : 05-MAR-2010 14:22
Operator : VTS Inst ID: nt2.i
Smp Info : QM04D
Misc Info : 10-5090
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 08-Mar-2010 12:19 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	6.967	6.967	(1.000)	190565	200.000	
	5 Naphthalene	128	6.982	6.982	(1.002)	14641	15.9553	16.0
$	6 2-Methylnaphthalene-d10	152	7.813	7.813	(1.121)	93159	189.800	190
	7 2-Methylnaphthalene	142	7.844	7.844	(1.126)	3999	7.47296	7.47(M)
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	9.174	9.175	(1.000)	97253	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	11.000	11.002	(1.000)	135411	200.000	
	19 Phenanthrene	178	11.016	11.017	(1.001)	6598	9.80314	9.80
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	12.504	12.506	(1.137)	4562	6.22313	6.22
	25 Pyrene	202	12.779	12.780	(1.162)	4742	6.37249	6.37
	28 Benzo(a)anthracene	228	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
* 29 Chrysene-d12	240	14.282	14.295	(1.000)	137694	200.000	
30 Chrysene	228	14.315	14.317	(1.002)	3611	5.32563	5.33(M)
32 Benzo(b)fluoranthene	252	Compound Not Detected.					
33 Benzo(k)fluoranthene	252	Compound Not Detected.					
34 Benzo(a)pyrene	252	Compound Not Detected.					
* 35 Perylene-d12	264	16.091	16.091	(1.000)	143609	200.000	
37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 36 Dibenzo(a,h)anthracene-d14	292	17.821	17.820	(1.107)	68614	157.627	158
38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 030508.d
Lab Smp Id: QM04D
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5090

Calibration Date: 05-MAR-2010
Calibration Time: 10:33
Client Smp ID: CB102022710COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	190565	10.08
11 Acenaphthene-d10	96677	48338	193354	97253	0.60
18 Phenanthrene-d10	147750	73875	295500	135411	-8.35
29 Chrysene-d12	135219	67610	270438	137694	1.83
35 Perylene-d12	125815	62908	251630	143609	14.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.97	0.01
11 Acenaphthene-d10	9.18	8.68	9.68	9.17	-0.01
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	-0.01
29 Chrysene-d12	14.29	13.79	14.79	14.28	-0.09
35 Perylene-d12	16.09	15.59	16.59	16.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QM04D
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5090

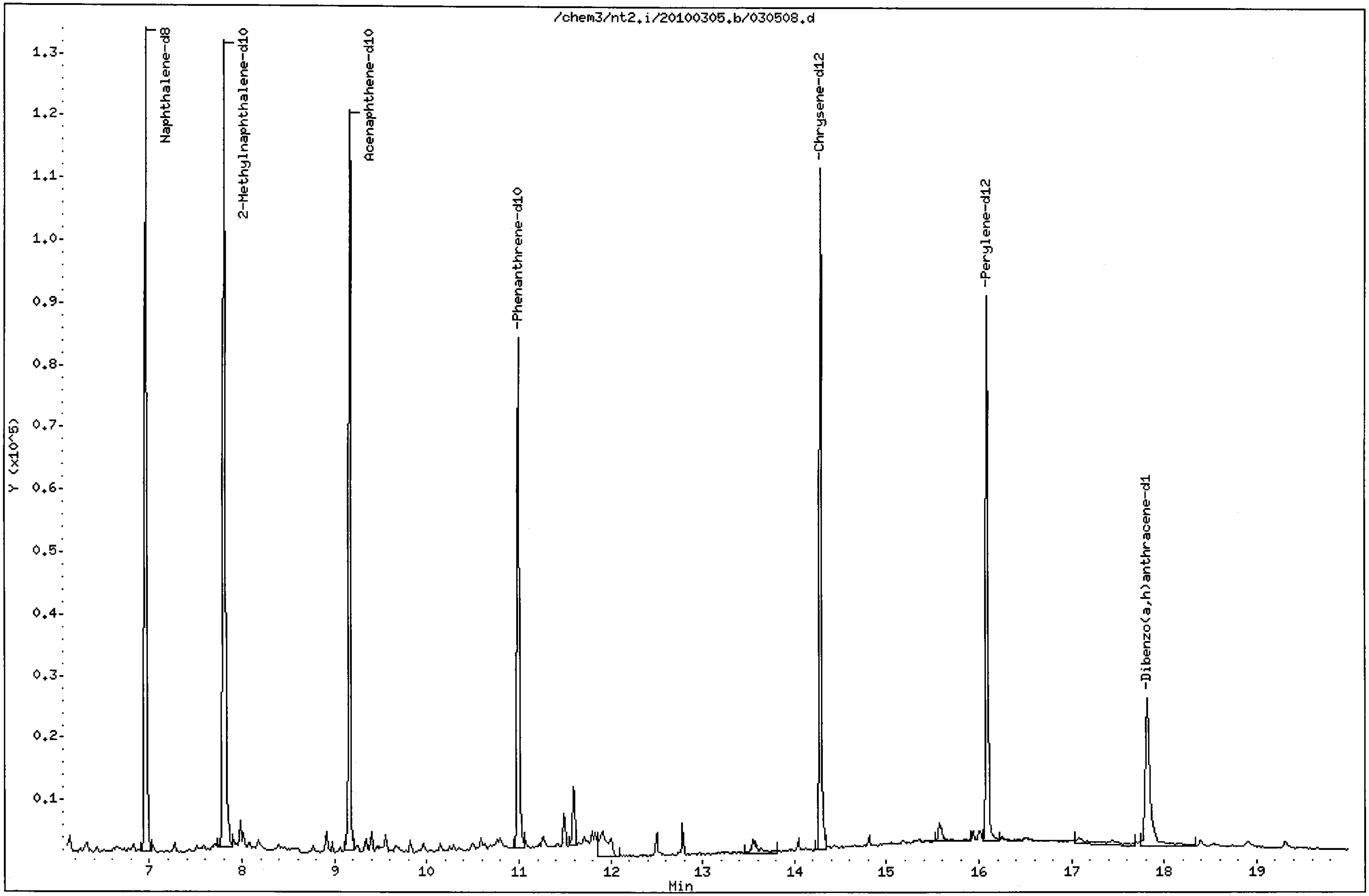
Client SDG: QM04
Fraction: SV
Client Smp ID: CB102022710COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	190	63.27	31-109
$ 36 Dibenzo(a,h)anthra	300	158	52.54	10-133

Data File: /chem3/nt2.i/20100305.b/030508.d
Date : 05-MAR-2010 14:22
Client ID: CB102022710COMP
Sample Info: QM04D
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Data File: /chem3/nt2.i/20100305.b/030508.d

Date : 05-MAR-2010 14:22

Client ID: CB102022710COMP

Instrument: nt2.i

Sample Info: QM04D

Volume Injected (uL): 2.0

Operator: VTS

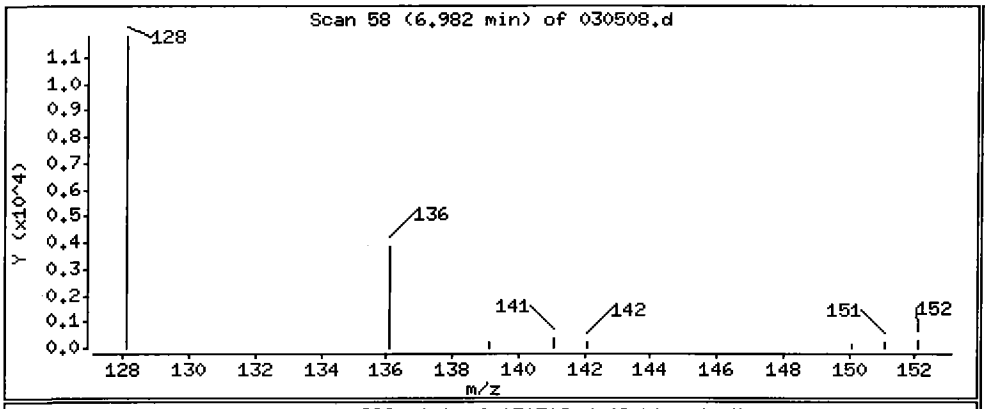
Column phase: ZB-5

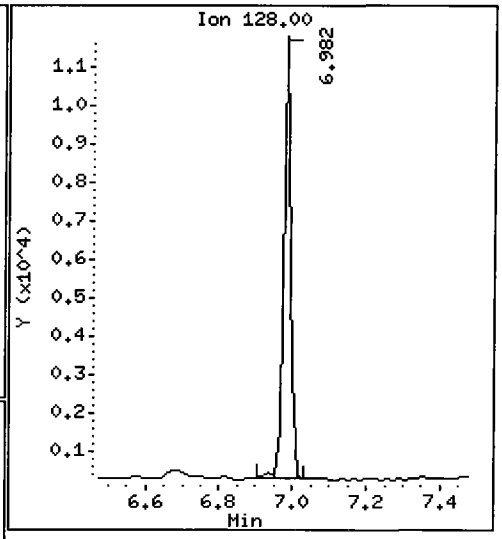
Column diameter: 0.25

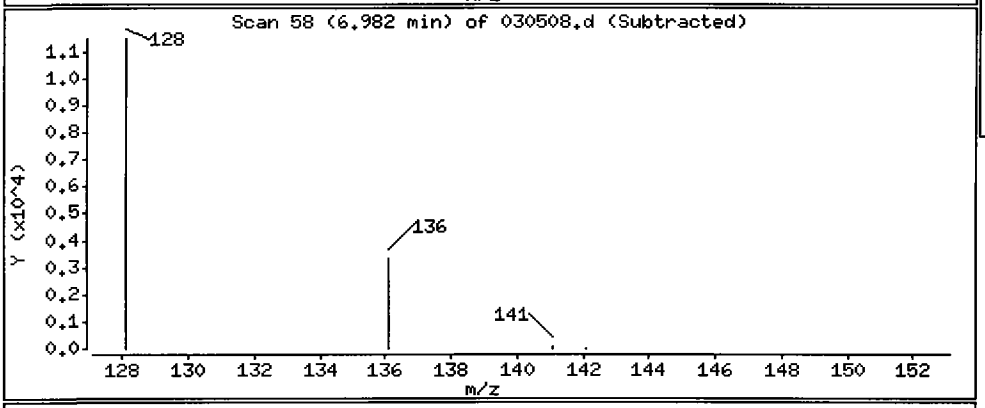
5 Naphthalene

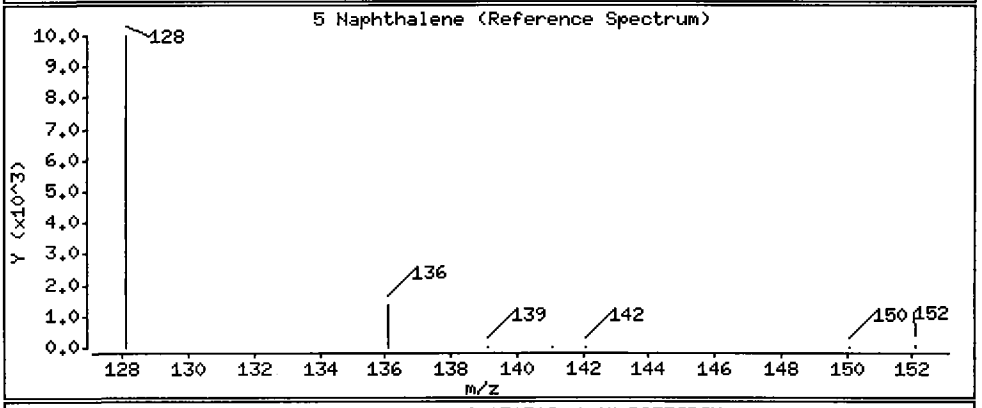
Concentration: 16.0 ug/L

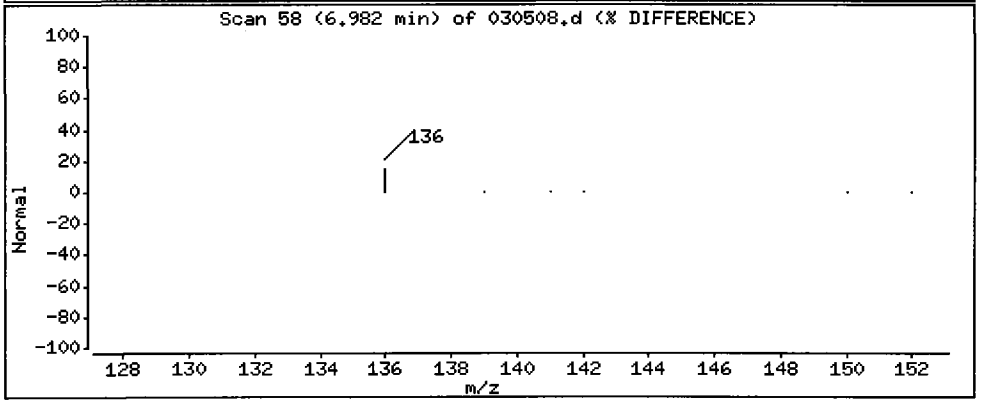
3/8/10



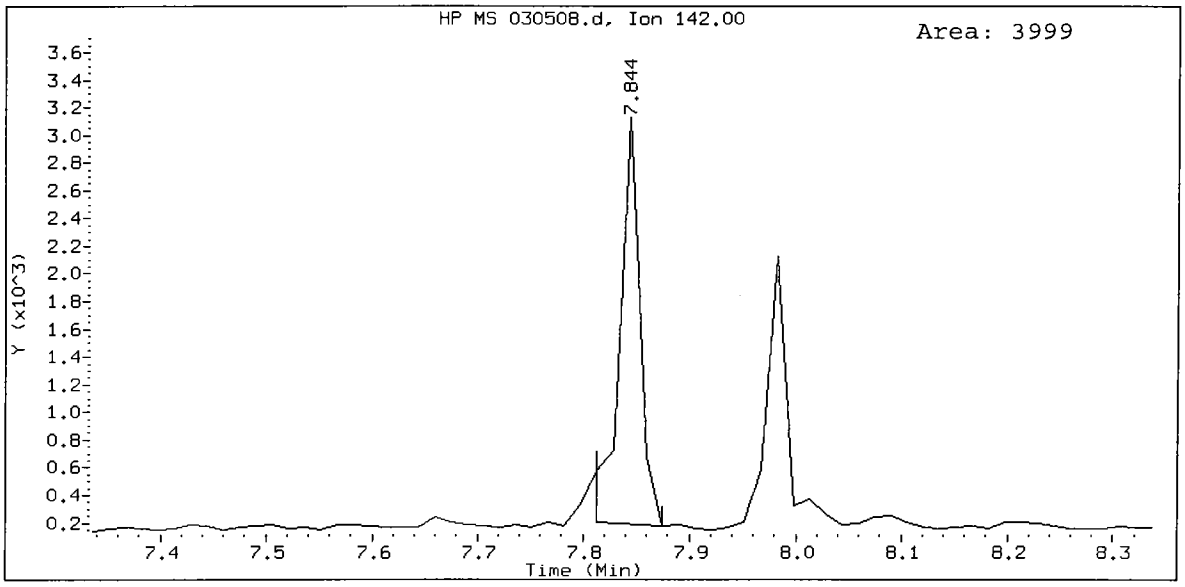


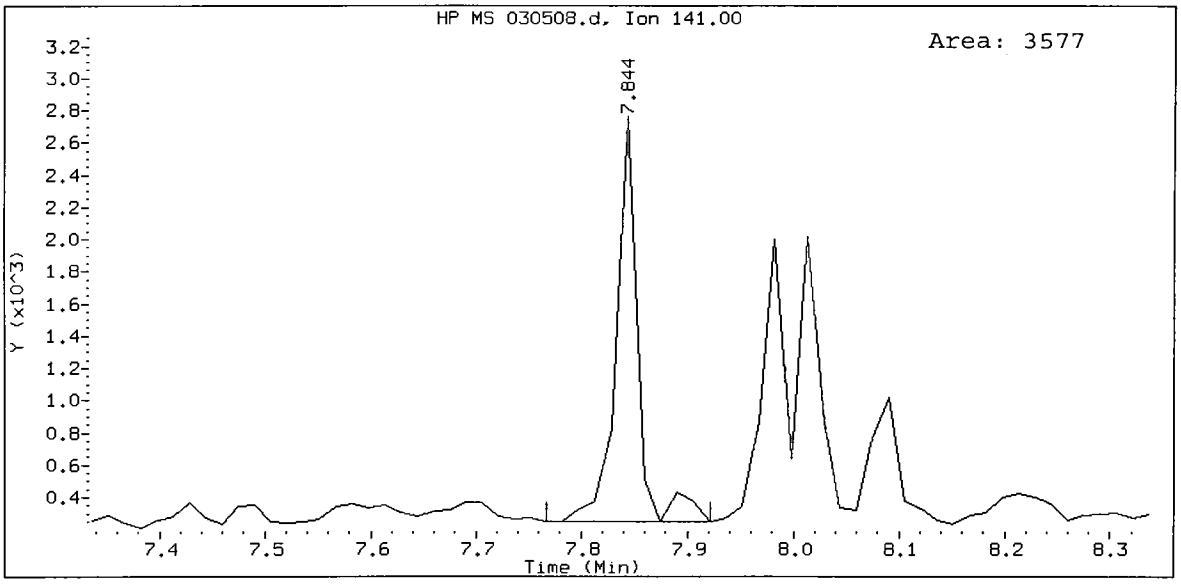


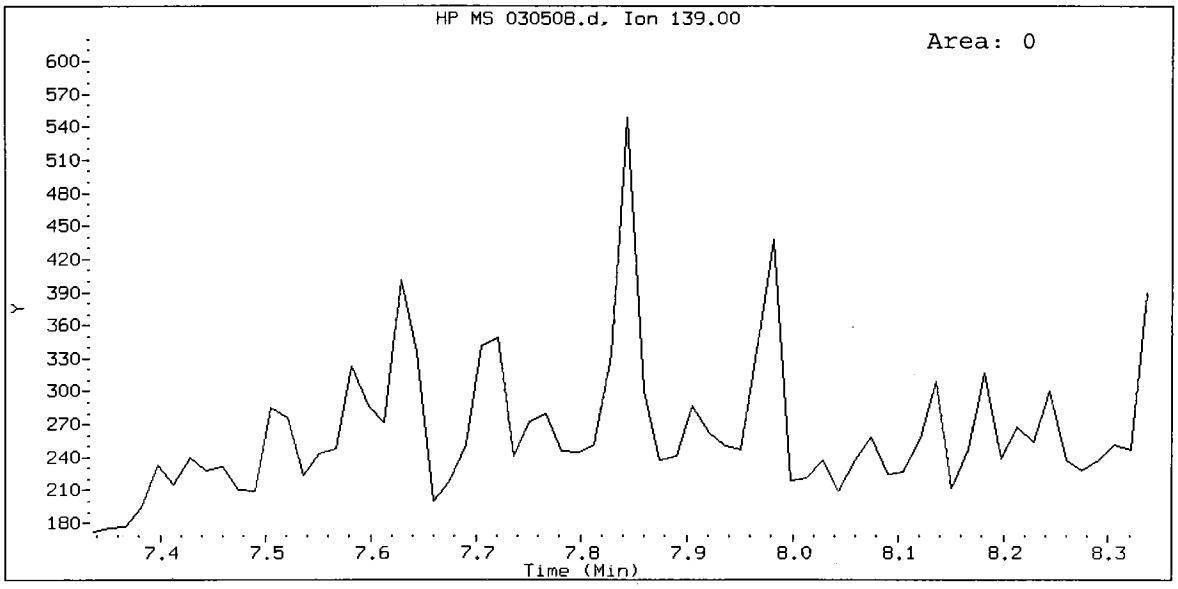




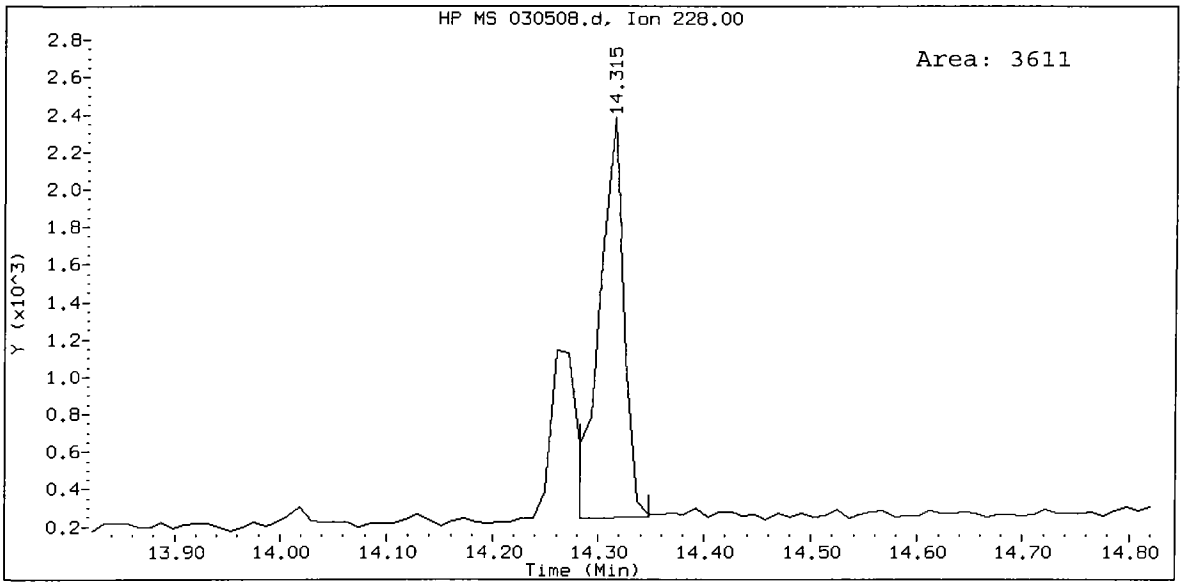
QM04D, /chem3/nt2.i/20100305.b/030508.d
2-Methylnaphthalene Amount: 7.47

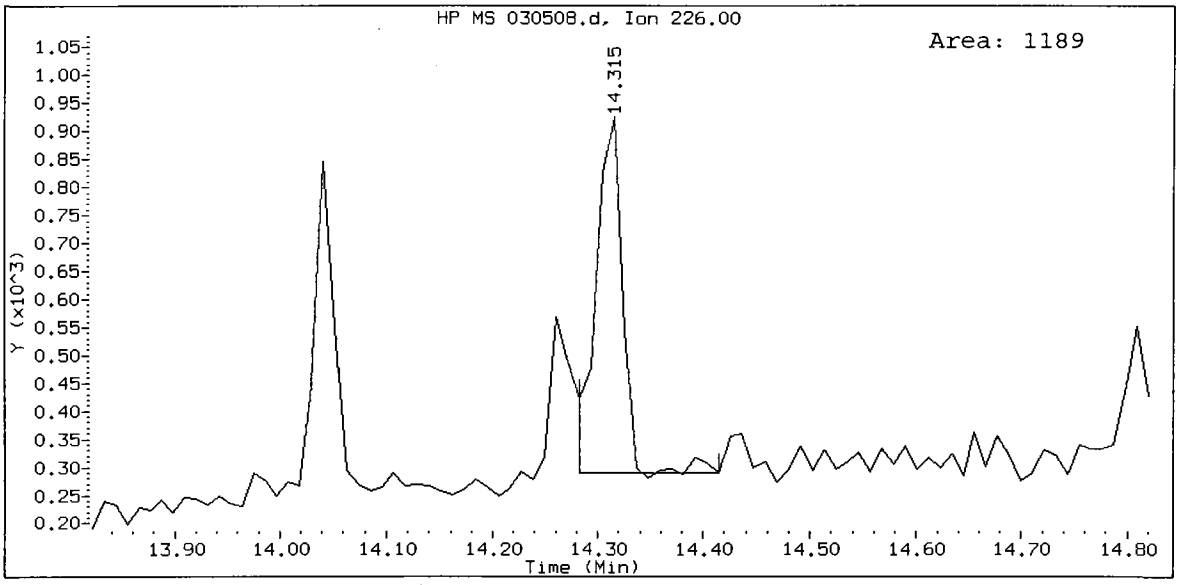






QM04D, /chem3/nt2.i/20100305.b/030508.d
Chrysene Amount: 5.33





SIM Semivolatile Analysis
Standard Raw Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QM04 Project: LORA LAKE APARTMENTS

Instrument ID: NT2 Calibration Date: 10/21/09

LAB FILE ID: RRF10 =IC102103 RRF50 =IC102105 RRF100=IC102106
RRF250=IC102101 RRF500=IC102104 RRF1000=IC102102

COMPOUND	RRF 10	RRF 50	RRF 100	RRF 250	RRF 500	RRF 1000	___ RRF	%RSD /R^2
Naphthalene	1.084	0.955	0.972	1.010	0.883	0.874	0.963	8.2
2-Methylnaphthalene	0.590	0.570	0.562	0.595	0.531	0.522	0.562	5.3
Acenaphthylene	1.603	1.583	1.560	1.586	1.575	1.589	1.583	0.9
Acenaphthene	1.030	0.993	0.975	0.940	0.965	0.990	0.982	3.1
Dibenzofuran	1.235	1.216	1.228	1.351	1.300	1.347	1.280	4.8
Fluorene	1.006	1.012	1.050	1.078	1.095	1.106	1.058	4.0
Phenanthrene	1.054	0.992	0.942	1.032	0.946	0.999	0.994	4.5
Anthracene	1.118	1.018	0.976	0.992	1.015	0.976	1.016	5.3
Fluoranthene	1.270	1.069	1.046	1.064	1.015	1.032	1.083	8.7
Pyrene	1.277	1.095	1.056	1.076	1.037	1.053	1.099	8.1
Benzo(a)anthracene	1.127	0.985	0.976	0.993	0.967	0.941	0.998	6.6
Chrysene	1.169	0.975	0.947	0.951	0.942	0.925	0.985	9.3
Benzo(b)fluoranthene	1.481	1.062	1.044	1.097	1.028	1.162	1.146	14.9
Benzo(k)fluoranthene	1.213	1.296	1.295	1.206	1.319	1.136	1.244	5.7
Benzo(a)pyrene	0.995	0.868	0.870	0.894	0.888	0.872	0.898	5.5
Indeno(1,2,3-cd)pyrene	1.162	0.994	0.990	1.037	1.029	1.029	1.040	6.0
Dibenzo(a,h)anthracene	0.833	0.775	0.782	0.830	0.830	0.832	0.814	3.4
Benzo(g,h,i)perylene	1.025	0.868	0.868	0.881	0.874	0.867	0.897	7.0
1-Methylnaphthalene	0.617	0.603	0.580	0.592	0.564	0.549	0.584	4.3
2-Methylnaphthalene-d10		0.521	0.525	0.538	0.500	0.492	0.515	3.7
Dibenzo(a,h)anthracene-d14	0.607	0.583	0.587	0.623	0.614	0.623	0.606	2.9

<- Outside QC limits: %RSD <20% or R^2 > 0.990

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-OCT-2009 11:37
End Cal Date : 21-OCT-2009 13:30
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt2.i/20091021.b/lowsim.m
Cal Date : 21-Oct-2009 14:43 peter
Curve Type : Average

Calibration File Names:
Level 1: /chem3/nt2.i/20091021.b/ic102103.d
Level 2: /chem3/nt2.i/20091021.b/ic102105.d
Level 3: /chem3/nt2.i/20091021.b/ic102106.d
Level 4: /chem3/nt2.i/20091021.b/ic102101.d
Level 5: /chem3/nt2.i/20091021.b/ic102104.d
Level 6: /chem3/nt2.i/20091021.b/ic102102.d

Compound	10.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
2 Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Naphthalene	1.08422	0.95508	0.97248	1.00959	0.88269	0.87431	0.96306	8.220
7 2-Methylnaphthalene	0.58989	0.57001	0.56209	0.59473	0.53115	0.52188	0.56162	5.326
8 1-Methylnaphthalene	0.61739	0.60333	0.58036	0.59256	0.56451	0.54912	0.58455	4.307
9 Dimethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Acenaphthylene	1.60290	1.58341	1.55976	1.58640	1.57495	1.58903	1.58274	0.915
12 Acenaphthene	1.03007	0.99322	0.97471	0.93965	0.96490	0.99045	0.98217	3.104
13 Diethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Dibenzofuran	1.23504	1.21614	1.22851	1.35147	1.29957	1.34662	1.27956	4.777
15 Fluorene	1.00655	1.01160	1.04982	1.07858	1.09460	1.10554	1.05778	3.986
17 Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Phenanthrene	1.05381	0.99175	0.94236	1.03155	0.94563	0.99939	0.99408	4.505
20 Anthracene	1.11827	1.01797	0.97565	0.99177	1.01513	0.97600	1.01580	5.261
21 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Fluoranthene	1.26962	1.06871	1.04646	1.06433	1.01541	1.03189	1.08274	8.654
25 Pyrene	1.27709	1.09496	1.05649	1.07591	1.03674	1.05327	1.09908	8.142
26 Butylbenzylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 Bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Benzo(a)anthracene	1.12699	0.98509	0.97625	0.99322	0.96700	0.94072	0.99821	6.576

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-OCT-2009 11:37
End Cal Date : 21-OCT-2009 13:30
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt2.i/20091021.b/lowsim.m
Cal Date : 21-Oct-2009 14:43 peter
Curve Type : Average

	Compound	10.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	30 Chrysene	1.16905	0.97489	0.94660	0.95134	0.94178	0.92546	0.98485	9.306
	31 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	32 Benzo(b)fluoranthene	1.48132	1.06240	1.04439	1.09699	1.02765	1.16238	1.14586	14.935
	33 Benzo(k)fluoranthene	1.21308	1.29612	1.29466	1.20580	1.31870	1.13631	1.24411	5.670
	34 Benzo(a)pyrene	0.99543	0.86769	0.87028	0.89402	0.88788	0.87159	0.89782	5.456
	37 Indeno(1,2,3-cd)pyrene	1.16231	0.99441	0.99043	1.03698	1.02944	1.02890	1.04041	6.039
	38 Dibenzo(a,h)anthracene	0.83347	0.77488	0.78166	0.82992	0.83027	0.83253	0.81379	3.395
	39 Benzo(g,h,i)perylene	1.02510	0.86831	0.86768	0.88079	0.87354	0.86741	0.89714	7.011
$	1 D5-Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	6 2-Methylnaphthalene-d10	+++++	0.52084	0.52510	0.53838	0.49952	0.49180	0.51513	3.710
$	16 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	23 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	36 Dibenzo(a,h)anthracene-d14	0.60727	0.58335	0.58716	0.62305	0.61361	0.62288	0.60622	2.860

Analytical Resources, Inc.

Data file : /chem3/nt2.i/20091021.b/ic102101.d
Lab Smp Id: PNA 250
Inj Date : 21-OCT-2009 11:37
Operator : VTS Inst ID: nt2.i
Smp Info : PNA 250
Misc Info :
Comment :
Method : /chem3/nt2.i/20091021.b/lowsim.m
Meth Date : 21-Oct-2009 14:44 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.226	6.226	(1.000)	173109	200.000	
	5 Naphthalene	128	6.257	6.257	(1.005)	218461	250.000	262
$	6 2-Methylnaphthalene-d10	152	7.073	7.073	(1.136)	116499	250.000	261
	7 2-Methylnaphthalene	142	7.119	7.103	(1.143)	128691	250.000	265
	8 1-Methylnaphthalene	142	7.242	7.242	(1.163)	128222	250.000	253
	10 Acenaphthylene	152	8.224	8.211	(0.977)	191711	250.000	251
*	11 Acenaphthene-d10	164	8.418	8.417	(1.000)	96677	200.000	
	12 Acenaphthene	153	8.443	8.443	(1.003)	113553	250.000	239
	14 Dibenzofuran	168	8.650	8.649	(1.028)	163320	250.000	264
	15 Fluorene	166	9.069	9.054	(1.077)	130342	250.000	255
*	18 Phenanthrene-d10	188	10.208	10.208	(1.000)	147750	200.000	
	19 Phenanthrene	178	10.239	10.239	(1.003)	190515	250.000	259
	20 Anthracene	178	10.300	10.285	(1.009)	183168	250.000	244
	24 Fluoranthene	202	11.702	11.691	(1.146)	196568	250.000	246
	25 Pyrene	202	11.977	11.966	(1.173)	198708	250.000	245

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
	28 Benzo(a)anthracene	228	13.447	13.447	(0.998)	167878	250.000	249
*	29 Chrysene-d12	240	13.469	13.469	(1.000)	135219	200.000	
	30 Chrysene	228	13.502	13.491	(1.002)	160799	250.000	241
	32 Benzo(b)fluoranthene	252	14.702	14.695	(0.973)	172523	250.000	239
	33 Benzo(k)fluoranthene	252	14.726	14.718	(0.975)	189635	250.000	242
	34 Benzo(a)pyrene	252	15.043	15.036	(0.996)	140601	250.000	249
*	35 Perylene-d12	264	15.105	15.098	(1.000)	125815	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	16.399	16.399	(1.086)	163084	250.000	249
$	36 Dibenzo(a,h)anthracene-d14	292	16.372	16.372	(1.084)	97986	250.000	257
	38 Dibenzo(a,h)anthracene	278	16.412	16.413	(1.087)	130520	250.000	255
	39 Benzo(g,h,i)perylene	276	16.777	16.763	(1.111)	138520	250.000	245

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: ic102101.d
Lab Smp Id: PNA 250
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

Calibration Date: 21-OCT-2009
Calibration Time: 11:37

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	173109	0.00
11 Acenaphthene-d10	96677	48338	193354	96677	0.00
18 Phenanthrene-d10	147750	73875	295500	147750	0.00
29 Chrysene-d12	135219	67610	270438	135219	0.00
35 Perylene-d12	125815	62908	251630	125815	0.00

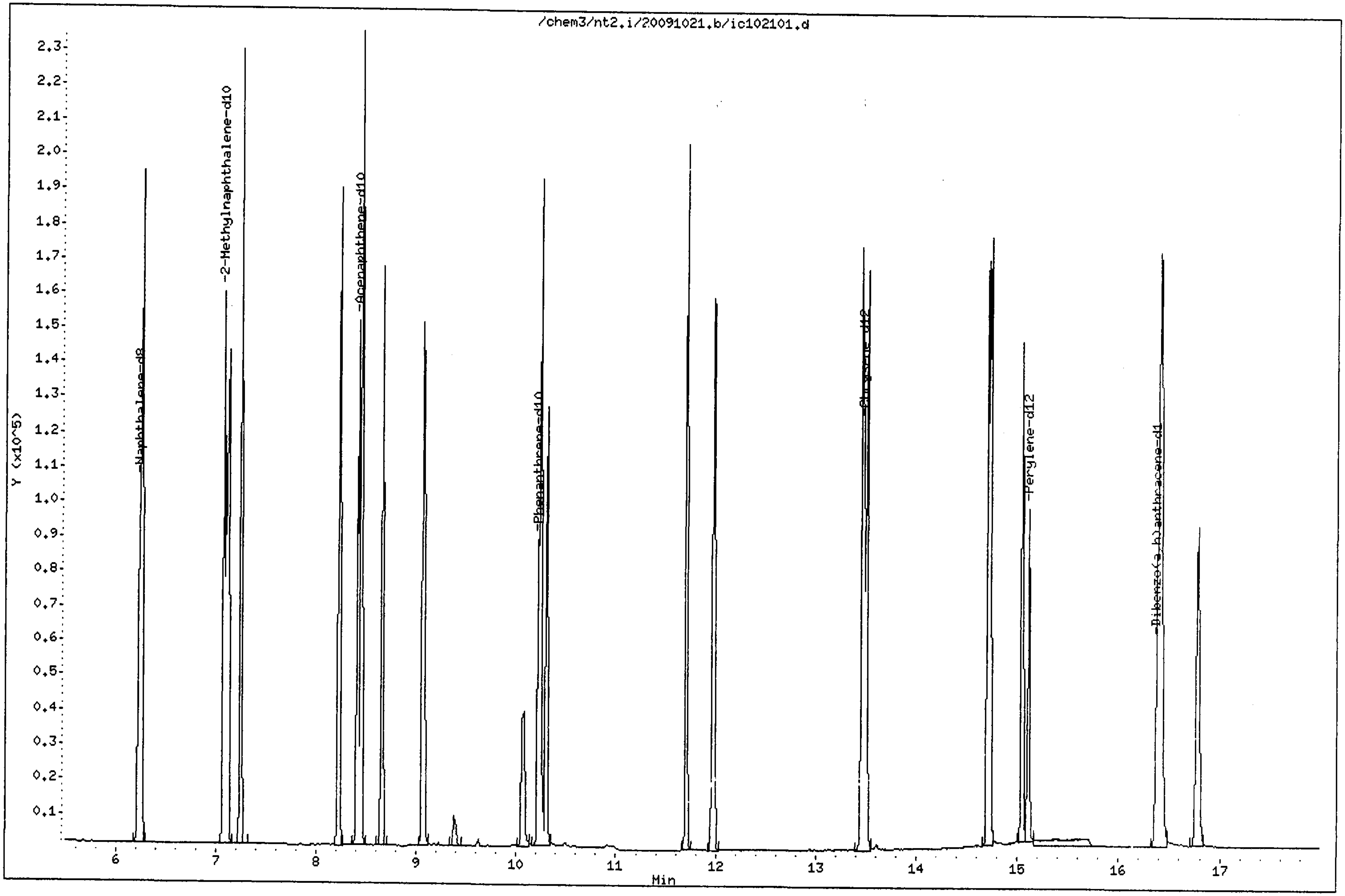
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.00
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	0.00
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.00
29 Chrysene-d12	13.47	12.97	13.97	13.47	0.00
35 Perylene-d12	15.11	14.61	15.61	15.11	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt2.i/20091021.b/ic102101.d
Date : 21-OCT-2009 11:37
Client ID:
Sample Info: PNA 250
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Analytical Resources, Inc.

Data file : /chem3/nt2.i/20091021.b/ic102102.d
Lab Smp Id: PNA 1000
Inj Date : 21-OCT-2009 12:00
Operator : VTS Inst ID: nt2.i
Smp Info : PNA 1000
Misc Info :
Comment :
Method : /chem3/nt2.i/20091021.b/lowsim.m
Meth Date : 21-Oct-2009 14:44 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
* 4 Naphthalene-d8	136	6.227	6.226	(1.000)	188814	200.000	
5 Naphthalene	128	6.258	6.257	(1.005)	825414	1000.00	908
$ 6 2-Methylnaphthalene-d10	152	7.074	7.073	(1.136)	464298	1000.00	955
7 2-Methylnaphthalene	142	7.104	7.103	(1.141)	492692	1000.00	929
8 1-Methylnaphthalene	142	7.243	7.242	(1.163)	518412	1000.00	939
10 Acenaphthylene	152	8.211	8.211	(0.976)	734789	1000.00	1000(A)
* 11 Acenaphthene-d10	164	8.417	8.417	(1.000)	92483	200.000	
12 Acenaphthene	153	8.443	8.443	(1.003)	457997	1000.00	1010(A)
14 Dibenzofuran	168	8.649	8.649	(1.028)	622698	1000.00	1050(A)
15 Fluorene	166	9.054	9.054	(1.076)	511218	1000.00	1050(A)
* 18 Phenanthrene-d10	188	10.208	10.208	(1.000)	148959	200.000	
19 Phenanthrene	178	10.238	10.239	(1.003)	744342	1000.00	1010(A)
20 Anthracene	178	10.285	10.285	(1.008)	726921	1000.00	961
24 Fluoranthene	202	11.702	11.691	(1.146)	768544	1000.00	953
25 Pyrene	202	11.965	11.966	(1.172)	784471	1000.00	958

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
	28 Benzo(a)anthracene	228	13.447	13.447	(0.998)	651296	1000.00	942
*	29 Chrysene-d12	240	13.469	13.469	(1.000)	138468	200.000	
	30 Chrysene	228	13.491	13.491	(1.002)	640733	1000.00	940
	32 Benzo(b)fluoranthene	252	14.694	14.695	(0.973)	727721	1000.00	1010(A)
	33 Benzo(k)fluoranthene	252	14.717	14.718	(0.974)	711396	1000.00	913
	34 Benzo(a)pyrene	252	15.035	15.036	(0.995)	545669	1000.00	971
*	35 Perylene-d12	264	15.104	15.098	(1.000)	125212	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	16.399	16.399	(1.086)	644155	1000.00	989
$	36 Dibenzo(a,h)anthracene-d14	292	16.372	16.372	(1.084)	389963	1000.00	1030(A)
	38 Dibenzo(a,h)anthracene	278	16.412	16.413	(1.087)	521214	1000.00	1020(A)
	39 Benzo(g,h,i)perylene	276	16.776	16.763	(1.111)	543050	1000.00	967

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: ic102102.d
Lab Smp Id: PNA 1000
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

Calibration Date: 21-OCT-2009
Calibration Time: 11:37

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	188814	9.07
11 Acenaphthene-d10	96677	48338	193354	92483	-4.34
18 Phenanthrene-d10	147750	73875	295500	148959	0.82
29 Chrysene-d12	135219	67610	270438	138468	2.40
35 Perylene-d12	125815	62908	251630	125212	-0.48

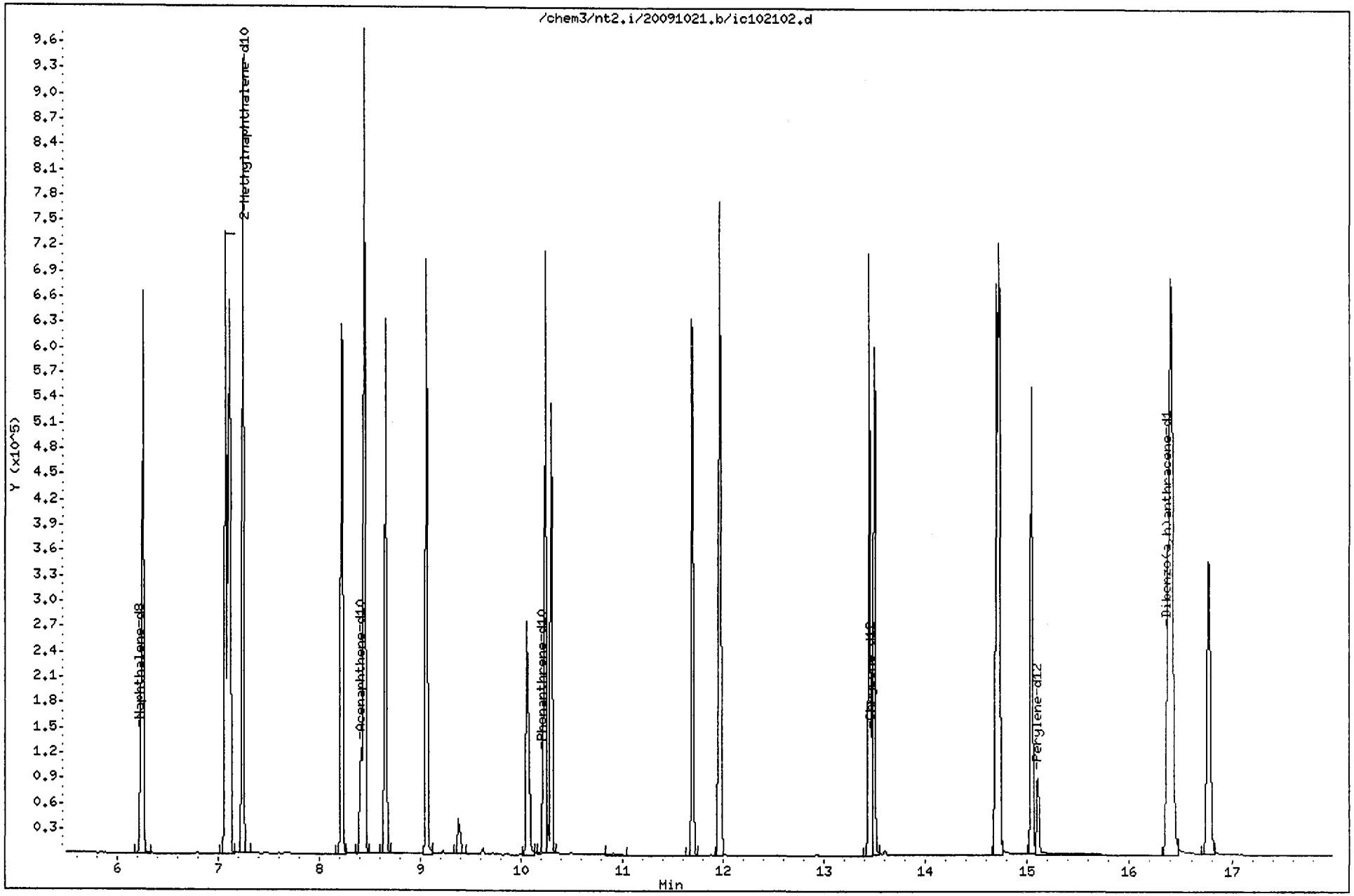
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.02
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	-0.01
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.00
29 Chrysene-d12	13.47	12.97	13.97	13.47	0.00
35 Perylene-d12	15.11	14.61	15.61	15.10	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt2.i/20091021.b/ic102102.d
Date : 21-OCT-2009 12:00
Client ID:
Sample Info: PNA 1000
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Analytical Resources, Inc.

Data file : /chem3/nt2.i/20091021.b/ic102103.d
Lab Smp Id: PNA 10
Inj Date : 21-OCT-2009 12:22
Operator : VTS Inst ID: nt2.i
Smp Info : PNA 10
Misc Info :
Comment :
Method : /chem3/nt2.i/20091021.b/lowsim.m
Meth Date : 21-Oct-2009 14:44 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.226	6.226	(1.000)	163657	200.000	
	5 Naphthalene	128	6.257	6.257	(1.005)	8872	10.0000	11.3
$	6 2-Methylnaphthalene-d10	152	7.073	7.073	(1.136)	4462	10.0000	10.6
	7 2-Methylnaphthalene	142	7.103	7.103	(1.141)	4827	10.0000	10.5
	8 1-Methylnaphthalene	142	7.242	7.242	(1.163)	5052	10.0000	10.6
	10 Acenaphthylene	152	8.211	8.211	(0.976)	6475	10.0000	10.1
*	11 Acenaphthene-d10	164	8.417	8.417	(1.000)	80791	200.000	
	12 Acenaphthene	153	8.443	8.443	(1.003)	4161	10.0000	10.5
	14 Dibenzofuran	168	8.649	8.649	(1.028)	4989	10.0000	9.65
	15 Fluorene	166	9.055	9.054	(1.076)	4066	10.0000	9.52
*	18 Phenanthrene-d10	188	10.208	10.208	(1.000)	128448	200.000	
	19 Phenanthrene	178	10.239	10.239	(1.003)	6768	10.0000	10.6
	20 Anthracene	178	10.285	10.285	(1.008)	7182	10.0000	11.0(M)
	24 Fluoranthene	202	11.691	11.691	(1.145)	8154	10.0000	11.7
	25 Pyrene	202	11.965	11.966	(1.172)	8202	10.0000	11.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
	28 Benzo(a)anthracene	228	13.447	13.447	(0.998)	6672	10.0000	11.3
*	29 Chrysene-d12	240	13.469	13.469	(1.000)	118404	200.000	
	30 Chrysene	228	13.491	13.491	(1.002)	6921	10.0000	11.9
	32 Benzo(b)fluoranthene	252	14.695	14.695	(0.973)	8140	10.0000	12.9
	33 Benzo(k)fluoranthene	252	14.718	14.718	(0.975)	6666	10.0000	9.75
	34 Benzo(a)pyrene	252	15.036	15.036	(0.996)	5470	10.0000	11.1
*	35 Perylene-d12	264	15.097	15.098	(1.000)	109902	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	16.399	16.399	(1.086)	6387	10.0000	11.2
$	36 Dibenzo(a,h)anthracene-d14	292	16.372	16.372	(1.084)	3337	10.0000	10.0
	38 Dibenzo(a,h)anthracene	278	16.413	16.413	(1.087)	4580	10.0000	10.2
	39 Benzo(g,h,i)perylene	276	16.763	16.763	(1.110)	5633	10.0000	11.4

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: ic102103.d
Lab Smp Id: PNA 10
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

Calibration Date: 21-OCT-2009
Calibration Time: 11:37

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	163657	-5.46
11 Acenaphthene-d10	96677	48338	193354	80791	-16.43
18 Phenanthrene-d10	147750	73875	295500	128448	-13.06
29 Chrysene-d12	135219	67610	270438	118404	-12.44
35 Perylene-d12	125815	62908	251630	109902	-12.65

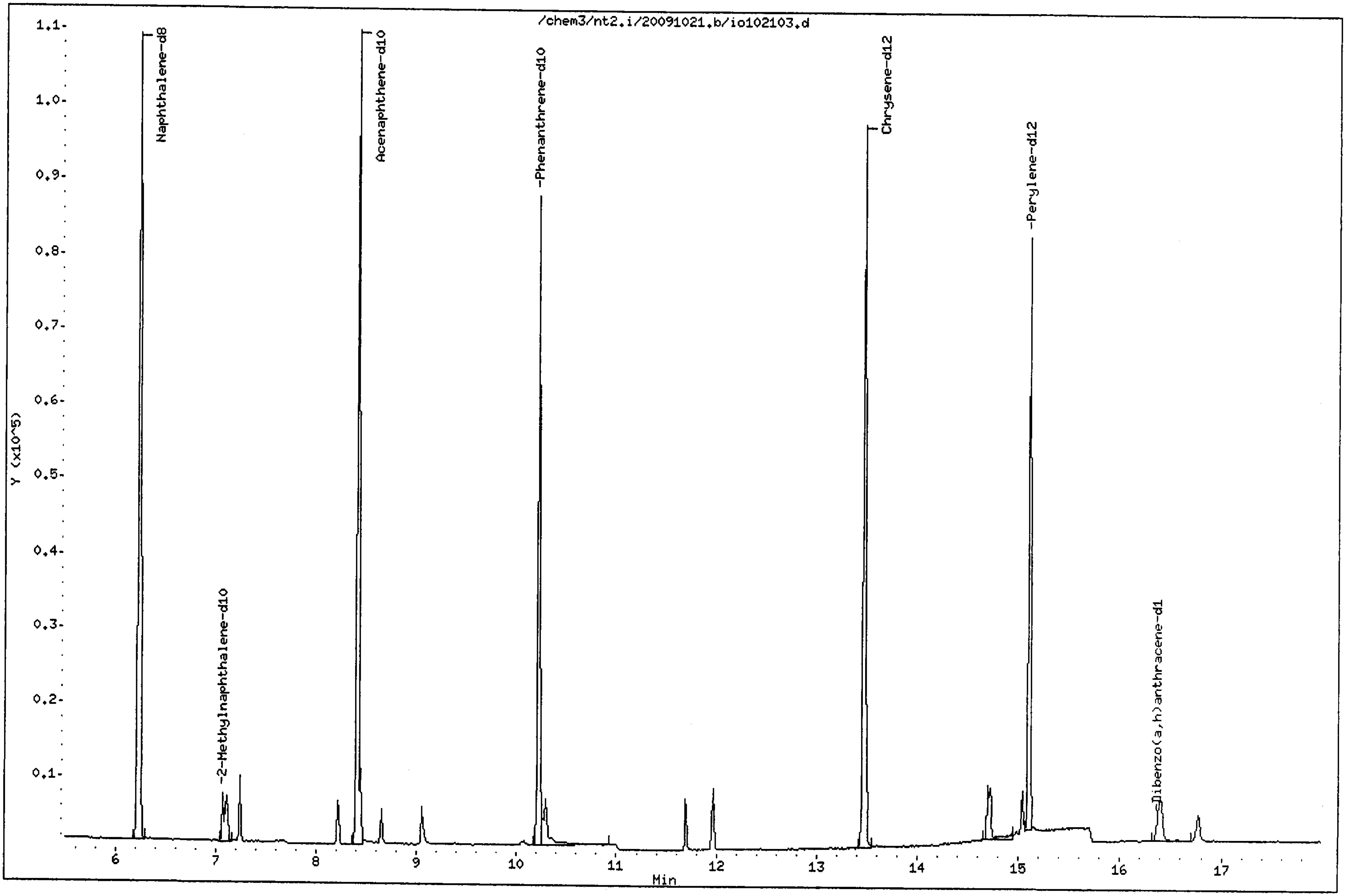
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.00
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	0.00
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.00
29 Chrysene-d12	13.47	12.97	13.97	13.47	0.00
35 Perylene-d12	15.11	14.61	15.61	15.10	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

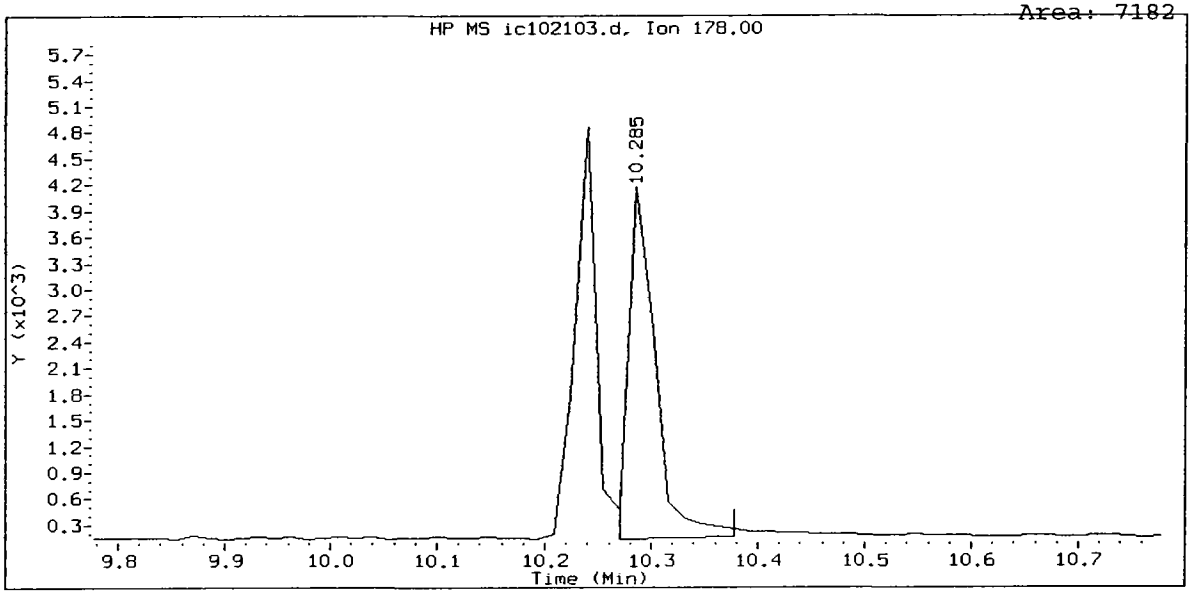
Data File: /chem3/nt2.i/20091021.b/ic102103.d
Date : 21-OCT-2009 12:22
Client ID:
Sample Info: PNA 10
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



PNA 10, /chem3/nt2.i/20091021.b/ic102103.d
Anthracene Amount: 11.01



Analytical Resources, Inc.

Data file : /chem3/nt2.i/20091021.b/ic102104.d
Lab Smp Id: PNA 500
Inj Date : 21-OCT-2009 12:45
Operator : VTS Inst ID: nt2.i
Smp Info : PNA 500
Misc Info :
Comment :
Method : /chem3/nt2.i/20091021.b/lowsim.m
Meth Date : 21-Oct-2009 14:44 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.227	6.226	(1.000)	177186	200.000	
	5 Naphthalene	128	6.258	6.257	(1.005)	390999	500.000	458
$	6 2-Methylnaphthalene-d10	152	7.073	7.073	(1.136)	221268	500.000	485
	7 2-Methylnaphthalene	142	7.104	7.103	(1.141)	235281	500.000	473
	8 1-Methylnaphthalene	142	7.243	7.242	(1.163)	250059	500.000	483
	10 Acenaphthylene	152	8.223	8.211	(0.977)	349646	500.000	498
*	11 Acenaphthene-d10	164	8.417	8.417	(1.000)	88802	200.000	
	12 Acenaphthene	153	8.442	8.443	(1.003)	214213	500.000	491
	14 Dibenzofuran	168	8.649	8.649	(1.028)	288512	500.000	508
	15 Fluorene	166	9.055	9.054	(1.076)	243007	500.000	517
*	18 Phenanthrene-d10	188	10.209	10.208	(1.000)	144260	200.000	
	19 Phenanthrene	178	10.240	10.239	(1.003)	341043	500.000	476
	20 Anthracene	178	10.286	10.285	(1.008)	366108	500.000	500
	24 Fluoranthene	202	11.691	11.691	(1.145)	366209	500.000	469
	25 Pyrene	202	11.965	11.966	(1.172)	373900	500.000	472

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
	28 Benzo(a)anthracene	228	13.447	13.447	(0.998)	308003	500.000	484
*	29 Chrysene-d12	240	13.469	13.469	(1.000)	127406	200.000	
	30 Chrysene	228	13.491	13.491	(1.002)	299970	500.000	478
	32 Benzo(b)fluoranthene	252	14.696	14.695	(0.973)	299055	500.000	448
	33 Benzo(k)fluoranthene	252	14.719	14.718	(0.975)	383753	500.000	530
	34 Benzo(a)pyrene	252	15.036	15.036	(0.996)	258381	500.000	494
*	35 Perylene-d12	264	15.098	15.098	(1.000)	116403	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	16.398	16.399	(1.086)	299575	500.000	495
$	36 Dibenzo(a,h)anthracene-d14	292	16.371	16.372	(1.084)	178564	500.000	506
	38 Dibenzo(a,h)anthracene	278	16.412	16.413	(1.087)	241614	500.000	510
	39 Benzo(g,h,i)perylene	276	16.762	16.763	(1.110)	254207	500.000	487

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: ic102104.d
Lab Smp Id: PNA 500
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

Calibration Date: 21-OCT-2009
Calibration Time: 11:37

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	177186	2.36
11 Acenaphthene-d10	96677	48338	193354	88802	-8.15
18 Phenanthrene-d10	147750	73875	295500	144260	-2.36
29 Chrysene-d12	135219	67610	270438	127406	-5.78
35 Perylene-d12	125815	62908	251630	116403	-7.48

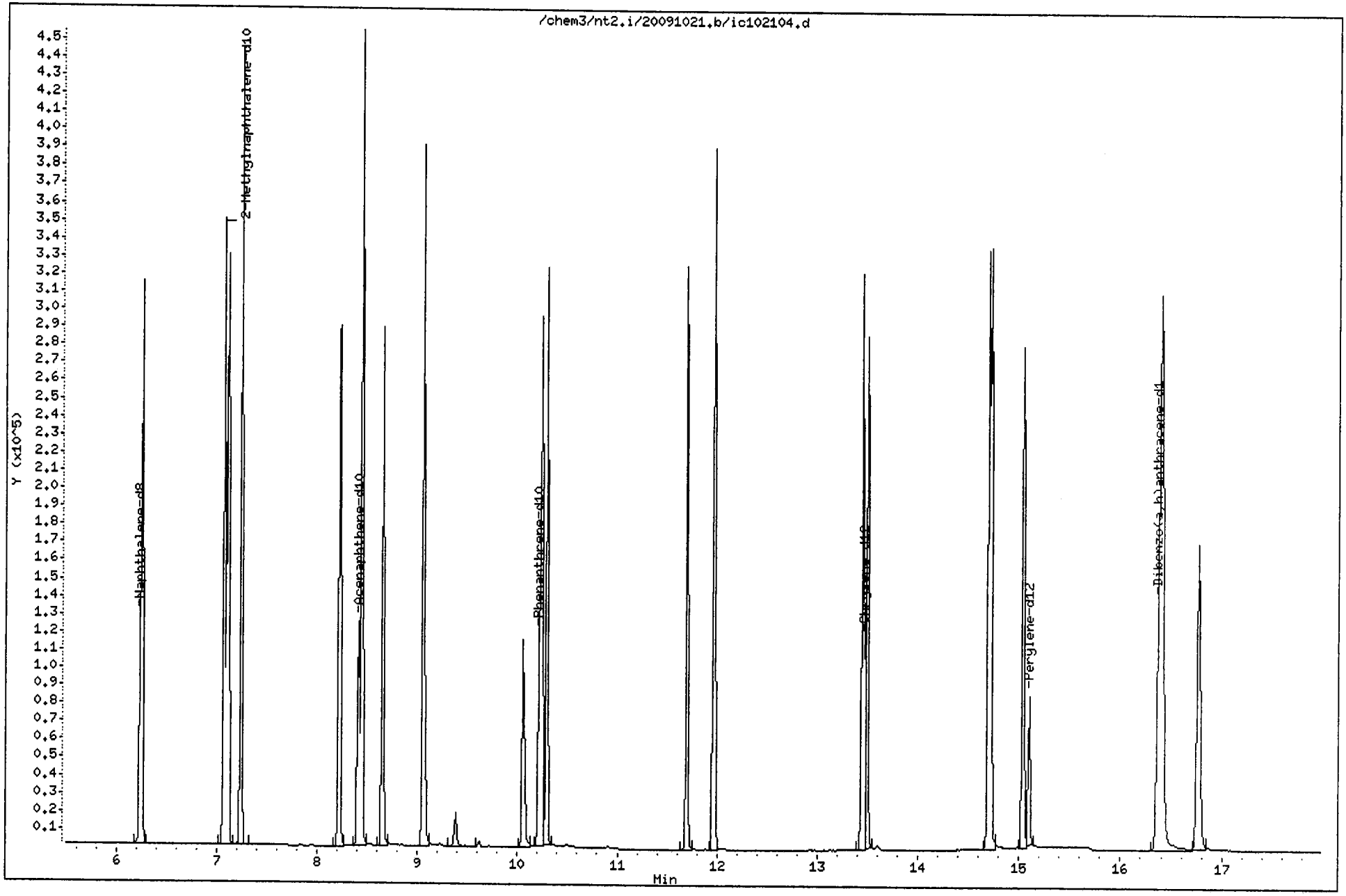
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.02
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	-0.01
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.01
29 Chrysene-d12	13.47	12.97	13.97	13.47	0.00
35 Perylene-d12	15.11	14.61	15.61	15.10	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt2.i/20091021.b/ic102104.d
Date : 21-OCT-2009 12:45
Client ID:
Sample Info: PNA 500
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Analytical Resources, Inc.

Data file : /chem3/nt2.i/20091021.b/ic102105.d
Lab Smp Id: PNA 50
Inj Date : 21-OCT-2009 13:07
Operator : VTS Inst ID: nt2.i
Smp Info : PNA 50
Misc Info :
Comment :
Method : /chem3/nt2.i/20091021.b/lowsim.m
Meth Date : 21-Oct-2009 14:44 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnalmn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.227	6.226	(1.000)	163275	200.000	
	5 Naphthalene	128	6.258	6.257	(1.005)	38985	50.0000	49.6
$	6 2-Methylnaphthalene-d10	152	7.073	7.073	(1.136)	21260	50.0000	50.6
	7 2-Methylnaphthalene	142	7.104	7.103	(1.141)	23267	50.0000	50.7
	8 1-Methylnaphthalene	142	7.243	7.242	(1.163)	24627	50.0000	51.6
	10 Acenaphthylene	152	8.223	8.211	(0.977)	31701	50.0000	50.0
*	11 Acenaphthene-d10	164	8.416	8.417	(1.000)	80083	200.000	
	12 Acenaphthene	153	8.442	8.443	(1.003)	19885	50.0000	50.6
	14 Dibenzofuran	168	8.648	8.649	(1.028)	24348	50.0000	47.5
	15 Fluorene	166	9.055	9.054	(1.076)	20253	50.0000	47.8
*	18 Phenanthrene-d10	188	10.209	10.208	(1.000)	130872	200.000	
	19 Phenanthrene	178	10.240	10.239	(1.003)	32448	50.0000	49.9
	20 Anthracene	178	10.286	10.285	(1.008)	33306	50.0000	50.1(M)
	24 Fluoranthene	202	11.690	11.691	(1.145)	34966	50.0000	49.4
	25 Pyrene	202	11.965	11.966	(1.172)	35825	50.0000	49.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
	28 Benzo(a)anthracene	228	13.446	13.447	(0.998)	29378	50.0000	49.3
*	29 Chrysene-d12	240	13.468	13.469	(1.000)	119291	200.000	
	30 Chrysene	228	13.490	13.491	(1.002)	29074	50.0000	49.5
	32 Benzo(b)fluoranthene	252	14.696	14.695	(0.973)	29110	50.0000	46.4
	33 Benzo(k)fluoranthene	252	14.719	14.718	(0.975)	35514	50.0000	52.1
	34 Benzo(a)pyrene	252	15.036	15.036	(0.996)	23775	50.0000	48.3
*	35 Perylene-d12	264	15.098	15.098	(1.000)	109601	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	16.398	16.399	(1.086)	27247	50.0000	47.8
$	36 Dibenzo(a,h)anthracene-d14	292	16.371	16.372	(1.084)	15984	50.0000	48.1
	38 Dibenzo(a,h)anthracene	278	16.411	16.413	(1.087)	21232	50.0000	47.6
	39 Benzo(g,h,i)perylene	276	16.762	16.763	(1.110)	23792	50.0000	48.4

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: ic102105.d
Lab Smp Id: PNA 50
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

Calibration Date: 21-OCT-2009
Calibration Time: 11:37

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	163275	-5.68
11 Acenaphthene-d10	96677	48338	193354	80083	-17.16
18 Phenanthrene-d10	147750	73875	295500	130872	-11.42
29 Chrysene-d12	135219	67610	270438	119291	-11.78
35 Perylene-d12	125815	62908	251630	109601	-12.89

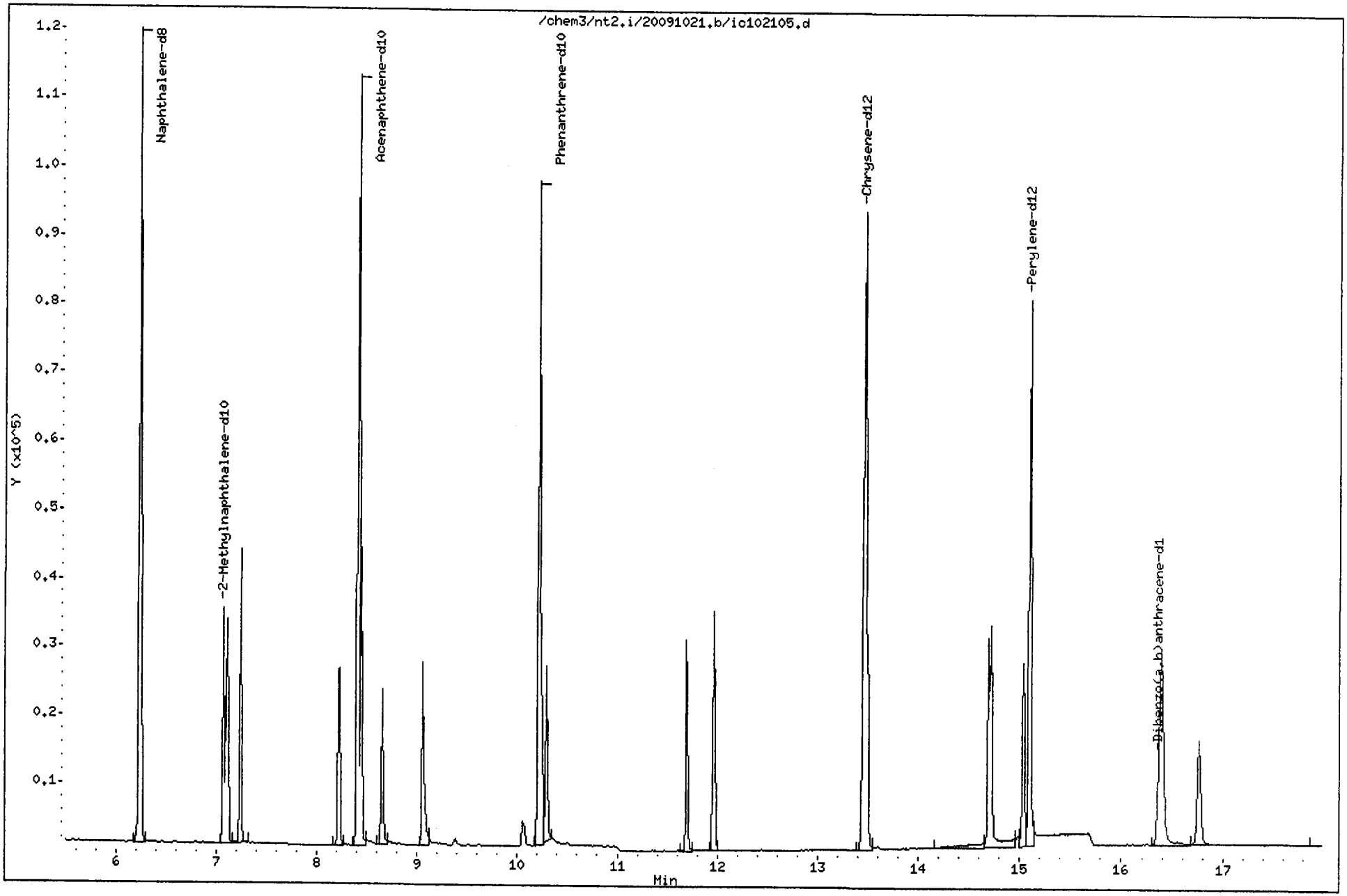
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.01
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	-0.01
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.01
29 Chrysene-d12	13.47	12.97	13.97	13.47	-0.01
35 Perylene-d12	15.11	14.61	15.61	15.10	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

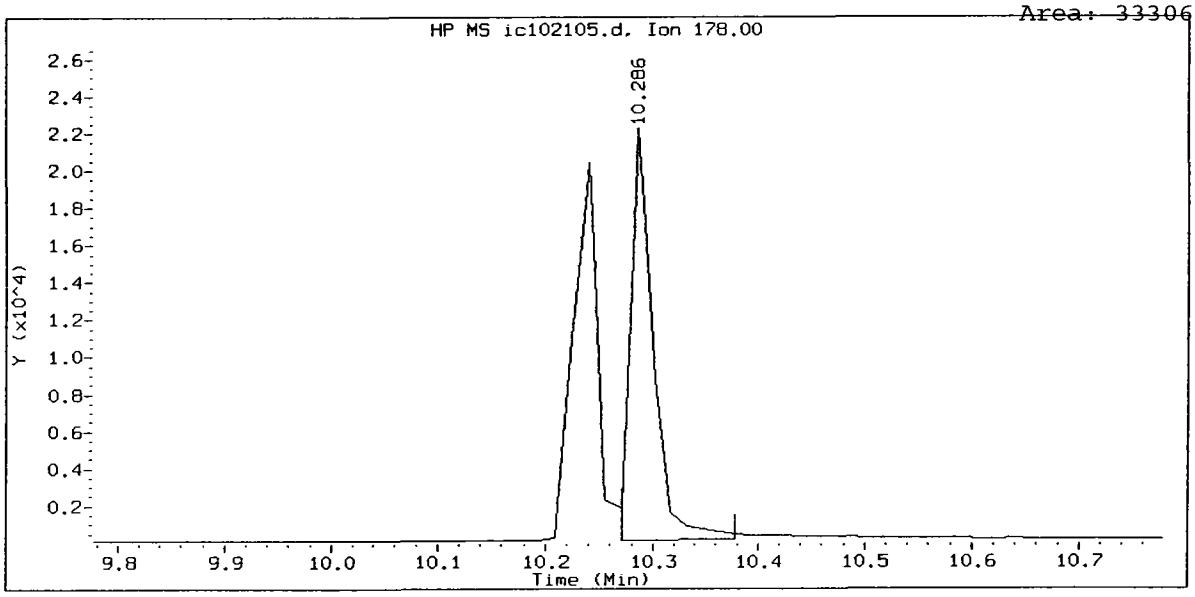
Data File: /chem3/nt2.i/20091021.b/ic102105.d
Date : 21-OCT-2009 13:07
Client ID:
Sample Info: PNA 50
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



PNA 50, /chem3/nt2.i/20091021.b/ic102105.d
Anthracene Amount: 50.11



Analytical Resources, Inc.

Data file : /chem3/nt2.i/20091021.b/ic102106.d
Lab Smp Id: PNA 100
Inj Date : 21-OCT-2009 13:30
Operator : VTS Inst ID: nt2.i
Smp Info : PNA 100
Misc Info :
Comment :
Method : /chem3/nt2.i/20091021.b/lowsim.m
Meth Date : 21-Oct-2009 14:44 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnalmn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
* 4 Naphthalene-d8	136	6.226	6.226	(1.000)	164822	200.000	
5 Naphthalene	128	6.257	6.257	(1.005)	80143	100.000	101
$ 6 2-Methylnaphthalene-d10	152	7.073	7.073	(1.136)	43274	100.000	102
7 2-Methylnaphthalene	142	7.103	7.103	(1.141)	46322	100.000	100
8 1-Methylnaphthalene	142	7.242	7.242	(1.163)	47828	100.000	99.3
10 Acenaphthylene	152	8.211	8.211	(0.976)	64025	100.000	98.5
* 11 Acenaphthene-d10	164	8.417	8.417	(1.000)	82096	200.000	
12 Acenaphthene	153	8.443	8.443	(1.003)	40010	100.000	99.2
14 Dibenzofuran	168	8.649	8.649	(1.028)	50428	100.000	96.0
15 Fluorene	166	9.054	9.054	(1.076)	43093	100.000	99.2
* 18 Phenanthrene-d10	188	10.208	10.208	(1.000)	134536	200.000	
19 Phenanthrene	178	10.239	10.239	(1.003)	63391	100.000	94.8
20 Anthracene	178	10.285	10.285	(1.008)	65630	100.000	96.0(M)
24 Fluoranthene	202	11.691	11.691	(1.145)	70393	100.000	96.6
25 Pyrene	202	11.966	11.966	(1.172)	71068	100.000	96.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
	28 Benzo(a)anthracene	228	13.447	13.447	(0.998)	59894	100.000	97.8
*	29 Chrysene-d12	240	13.469	13.469	(1.000)	122702	200.000	
	30 Chrysene	228	13.491	13.491	(1.002)	58075	100.000	96.1
	32 Benzo(b)fluoranthene	252	14.695	14.695	(0.973)	58281	100.000	91.1
	33 Benzo(k)fluoranthene	252	14.718	14.718	(0.975)	72247	100.000	104
	34 Benzo(a)pyrene	252	15.036	15.036	(0.996)	48565	100.000	96.9
*	35 Perylene-d12	264	15.098	15.098	(1.000)	111608	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	16.399	16.399	(1.086)	55270	100.000	95.2
$	36 Dibenzo(a,h)anthracene-d14	292	16.372	16.372	(1.084)	32766	100.000	96.9
	38 Dibenzo(a,h)anthracene	278	16.413	16.413	(1.087)	43620	100.000	96.1
	39 Benzo(g,h,i)perylene	276	16.763	16.763	(1.110)	48420	100.000	96.7

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: ic102106.d
Lab Smp Id: PNA 100
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

Calibration Date: 21-OCT-2009
Calibration Time: 11:37

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	164822	-4.79
11 Acenaphthene-d10	96677	48338	193354	82096	-15.08
18 Phenanthrene-d10	147750	73875	295500	134536	-8.94
29 Chrysene-d12	135219	67610	270438	122702	-9.26
35 Perylene-d12	125815	62908	251630	111608	-11.29

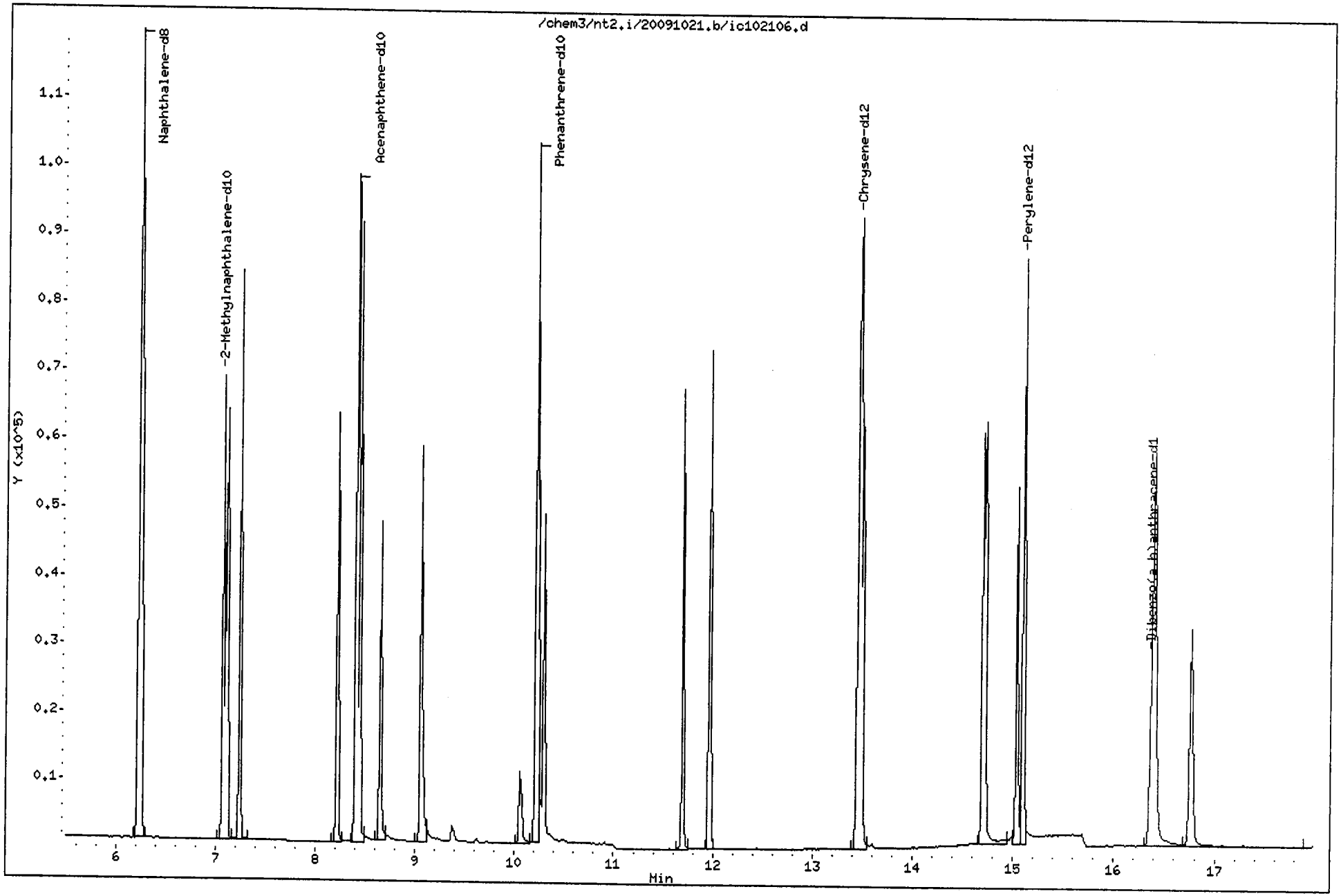
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.00
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	0.00
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.00
29 Chrysene-d12	13.47	12.97	13.97	13.47	0.00
35 Perylene-d12	15.11	14.61	15.61	15.10	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

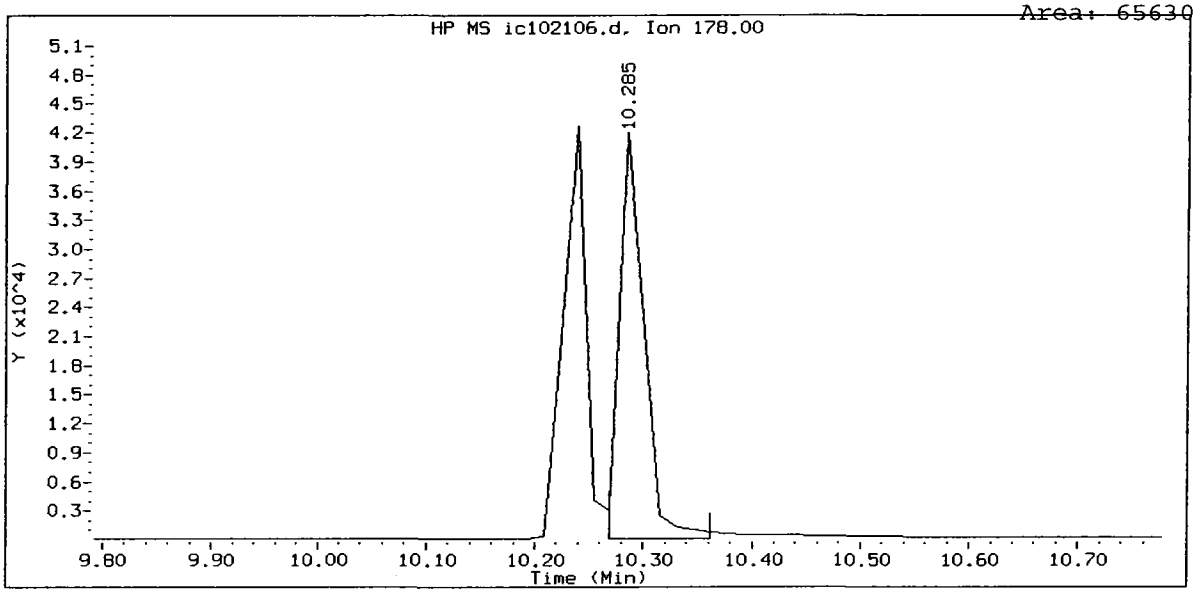
Data File: /chem3/nt2.i/20091021.b/ic102106.d
Date : 21-OCT-2009 13:30
Client ID:
Sample Info: PNA 100
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



PNA 100, /chem3/nt2.i/20091021.b/ic102106.d
Anthracene Amount: 96.05



Analytical Resources, Inc.

Data file : /chem3/nt2.i/20091021.b/ic102107.d
Lab Smp Id: ICV
Inj Date : 21-OCT-2009 13:52
Operator : VTS Inst ID: nt2.i
Smp Info : ICV
Misc Info :
Comment :
Method : /chem3/nt2.i/20091021.b/lowsim.m
Meth Date : 21-Oct-2009 14:46 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnalmn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ng/L)
*	4 Naphthalene-d8	136	6.227	6.226	(1.000)	158208	200.000	
	5 Naphthalene	128	6.258	6.257	(1.005)	212775	279.299	279
$	6 2-Methylnaphthalene-d10	152	Compound Not Detected.					
	7 2-Methylnaphthalene	142	7.104	7.103	(1.141)	127290	286.517	287
	8 1-Methylnaphthalene	142	7.243	7.242	(1.163)	127749	276.275	276
	10 Acenaphthylene	152	8.210	8.211	(0.976)	188049	288.176	288
*	11 Acenaphthene-d10	164	8.417	8.417	(1.000)	82458	200.000	
	12 Acenaphthene	153	8.442	8.443	(1.003)	111957	276.480	276
	14 Dibenzofuran	168	8.649	8.649	(1.028)	166353	315.332	315(R)
	15 Fluorene	166	9.055	9.054	(1.076)	131841	302.310	302
*	18 Phenanthrene-d10	188	10.209	10.208	(1.000)	134236	200.000	
	19 Phenanthrene	178	10.240	10.239	(1.003)	174636	261.741	262
	20 Anthracene	178	10.286	10.285	(1.008)	182670	267.928	268
	24 Fluoranthene	202	11.691	11.691	(1.145)	190861	262.637	263
	25 Pyrene	202	11.965	11.966	(1.172)	194465	263.617	264

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ng/L)
	28 Benzo(a)anthracene	228	13.447	13.447	(0.998)	160274	276.584	277
*	29 Chrysene-d12	240	13.469	13.469	(1.000)	116103	200.000	
	30 Chrysene	228	13.490	13.491	(1.002)	165864	290.113	290
	32 Benzo(b)fluoranthene	252	14.694	14.695	(0.973)	151948	250.880	251
	33 Benzo(k)fluoranthene	252	14.717	14.718	(0.975)	202487	307.921	308
	34 Benzo(a)pyrene	252	15.035	15.036	(0.996)	138813	292.512	293
*	35 Perylene-d12	264	15.097	15.098	(1.000)	105713	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	16.399	16.399	(1.086)	153123	278.443	278
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	16.412	16.413	(1.087)	120941	281.166	281
	39 Benzo(g,h,i)perylene	276	16.763	16.763	(1.110)	129353	272.784	273

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: ic102107.d
Lab Smp Id: ICV
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

Calibration Date: 21-OCT-2009
Calibration Time: 11:37

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	158208	-8.61
11 Acenaphthene-d10	96677	48338	193354	82458	-14.71
18 Phenanthrene-d10	147750	73875	295500	134236	-9.15
29 Chrysene-d12	135219	67610	270438	116103	-14.14
35 Perylene-d12	125815	62908	251630	105713	-15.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.02
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	-0.01
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.01
29 Chrysene-d12	13.47	12.97	13.97	13.47	-0.01
35 Perylene-d12	15.11	14.61	15.61	15.10	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: ICV
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

Client SDG: 20091021
Fraction: SV

Operator: VTS
SampleType: LCS
Quant Type: ISTD

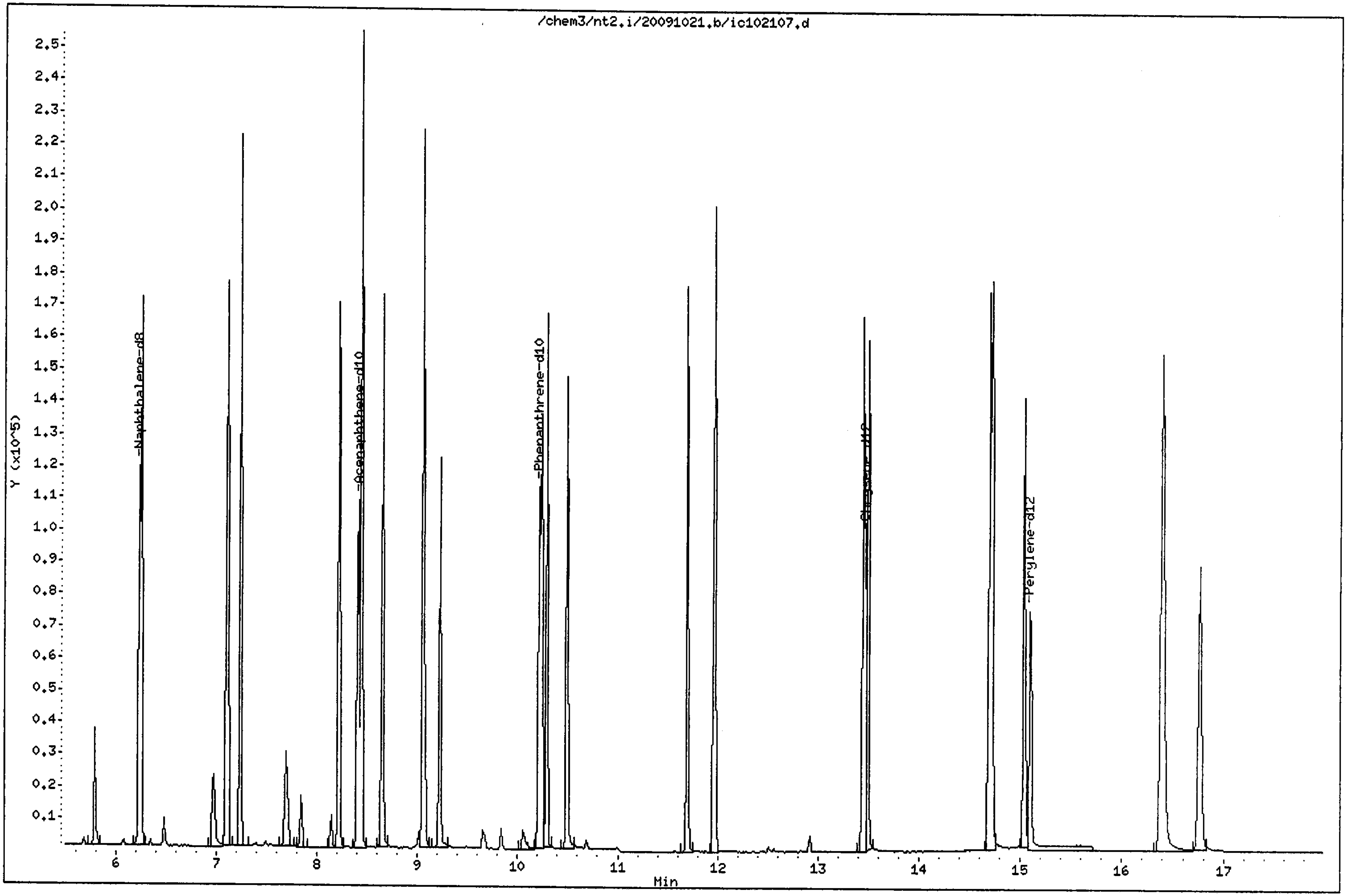
SPIKE COMPOUND	CONC ADDED ng/L	CONC RECOVERED ng/L	% RECOVERED	LIMITS
5 Naphthalene	300	279	93.10	41-101
7 2-Methylnaphthalen	300	287	95.51	47-100
8 1-Methylnaphthalen	300	276	92.09	30-160
10 Acenaphthylene	300	288	96.06	35-100
12 Acenaphthene	300	276	92.16	43-104
14 Dibenzofuran	300	315	105.11*	37-100
15 Fluorene	300	302	100.77	51-103
19 Phenanthrene	300	262	87.25	55-109
20 Anthracene	300	268	89.31	30-101
24 Fluoranthene	300	263	87.55	49-123
25 Pyrene	300	264	87.87	48-120
28 Benzo(a)anthracene	300	277	92.19	43-113
30 Chrysene	300	290	96.70	59-112
32 Benzo(b)fluoranthe	300	251	83.63	44-121
33 Benzo(k)fluoranthe	300	308	102.64	50-117
34 Benzo(a)pyrene	300	293	97.50	10-100
37 Indeno(1,2,3-cd)py	300	278	92.81	43-112
38 Dibenzo(a,h)anthra	300	281	93.72	42-114
39 Benzo(g,h,i)peryle	300	273	90.93	31-118

SURROGATE COMPOUND	CONC ADDED ng/L	CONC RECOVERED ng/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthale	300	0.00	*	31-109
$ 36 Dibenzo(a,h)anthr	300	0.00	*	10-133

Data File: /chem3/nt2.i/20091021.b/ic102107.d
Date : 21-OCT-2009 13:52
Client ID:
Sample Info: ICV
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: QM04 Project: LORA LAKE APARTMENTS

Instrument ID: NT2 Cont. Calib. Date: 03/05/10

Init. Calib. Date: 10/21/09 Cont. Calib. Time: 1033

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	0.963	0.962	0.700	AVRG	-0.1
2-Methylnaphthalene	0.562	0.597	0.400	AVRG	6.2
Acenaphthylene	1.583	1.716	0.900	AVRG	8.4
Acenaphthene	0.982	1.072	0.900	AVRG	9.2
Dibenzofuran	1.280	1.489	0.800	AVRG	16.3
Fluorene	1.058	1.170	0.900	AVRG	10.6
Phenanthrene	0.994	1.090	0.700	AVRG	9.6
Anthracene	1.016	1.112	0.700	AVRG	9.4
Fluoranthene	1.083	1.156	0.600	AVRG	6.7
Pyrene	1.099	1.181	0.600	AVRG	7.5
Benzo(a)anthracene	0.998	1.092	0.800	AVRG	9.4
Chrysene	0.985	1.095	0.700	AVRG	11.2
Benzo(b)fluoranthene	1.146	1.285	0.700	AVRG	12.1
Benzo(k)fluoranthene	1.244	1.292	0.700	AVRG	3.8
Benzo(a)pyrene	0.898	0.965	0.700	AVRG	7.5
Indeno(1,2,3-cd)pyrene	1.040	1.026	0.500	AVRG	-1.3
Dibenzo(a,h)anthracene	0.814	0.848	0.400	AVRG	4.2
Benzo(g,h,i)perylene	0.897	0.852	0.500	AVRG	-5.0
1-Methylnaphthalene	0.584	0.582	0.010	AVRG	-0.3
2-Methylnaphthalene-d10	0.515	0.555	0.010	AVRG	7.8
Dibenzo(a,h)anthracene-d14	0.606	0.602	0.010	AVRG	-0.7

<- Exceeds QC limit of 20% D
* RF less than minimum RF

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 05-MAR-2010 10:33
Lab File ID: cc0305.d Init. Cal. Date(s): 21-OCT-2009 21-OCT-2009
Analysis Type: WATER Init. Cal. Times: 11:37 13:30
Lab Sample ID: PNA 250 Quant Type: ISTD
Method: /chem3/nt2.i/20100305.b/lowsim.m

COMPOUND	RRF / AMOUNT	RF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
5 Naphthalene	0.96306	0.96174	0.010	-0.13710	20.00000	Averaged
$ 6 2-Methylnaphthalene-d10	0.51513	0.55469	0.010	7.67911	20.00000	Averaged
7 2-Methylnaphthalene	0.56162	0.59723	0.010	6.33955	20.00000	Averaged
8 1-Methylnaphthalene	0.58455	0.58171	0.010	-0.48587	20.00000	Averaged
10 Acenaphthylene	1.58274	1.71609	0.010	8.42518	20.00000	Averaged
12 Acenaphthene	0.98217	1.07162	0.010	9.10836	20.00000	Averaged
14 Dibenzofuran	1.27956	1.48868	0.010	16.34356	20.00000	Averaged
15 Fluorene	1.05778	1.17005	0.010	10.61377	20.00000	Averaged
19 Phenanthrene	0.99408	1.08970	0.010	9.61855	20.00000	Averaged
20 Anthracene	1.01580	1.11218	0.010	9.48755	20.00000	Averaged
24 Fluoranthene	1.08274	1.15589	0.010	6.75627	20.00000	Averaged
25 Pyrene	1.09908	1.18133	0.010	7.48340	20.00000	Averaged
28 Benzo(a)anthracene	0.99821	1.09199	0.010	9.39431	20.00000	Averaged
30 Chrysene	0.98485	1.09497	0.010	11.18062	20.00000	Averaged
32 Benzo(b)fluoranthene	1.14586	1.28509	0.010	12.15145	20.00000	Averaged
33 Benzo(k)fluoranthene	1.24411	1.29195	0.010	3.84500	20.00000	Averaged
34 Benzo(a)pyrene	0.89782	0.96476	0.010	7.45620	20.00000	Averaged
37 Indeno(1,2,3-cd)pyrene	1.04041	1.02648	0.010	-1.33902	20.00000	Averaged
$ 36 Dibenzo(a,h)anthracene-d14	0.60622	0.60242	0.010	-0.62665	20.00000	Averaged
38 Dibenzo(a,h)anthracene	0.81379	0.84758	0.010	4.15226	20.00000	Averaged
39 Benzo(g,h,i)perylene	0.89714	0.85166	0.010	-5.06906	20.00000	Averaged

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/cc0305.d
Lab Smp Id: PNA 250
Inj Date : 05-MAR-2010 10:33
Operator : VTS Inst ID: nt2.i
Smp Info : PNA 250
Misc Info :
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 05-Mar-2010 11:46 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.967	6.967	(1.000)	185725	200.000	
	5 Naphthalene	128	6.982	6.982	(1.002)	223274	250.000	250
$	6 2-Methylnaphthalene-d10	152	7.813	7.813	(1.121)	128774	250.000	269
	7 2-Methylnaphthalene	142	7.844	7.844	(1.126)	138650	250.000	266
	8 1-Methylnaphthalene	142	7.982	7.982	(1.146)	135046	250.000	249
	10 Acenaphthylene	152	8.969	8.969	(0.978)	188466	250.000	271
*	11 Acenaphthene-d10	164	9.175	9.175	(1.000)	87858	200.000	
	12 Acenaphthene	153	9.201	9.201	(1.003)	117689	250.000	273
	14 Dibenzofuran	168	9.407	9.407	(1.025)	163492	250.000	291
	15 Fluorene	166	9.817	9.817	(1.070)	128499	250.000	277
*	18 Phenanthrene-d10	188	11.002	11.002	(1.000)	131061	200.000	
	19 Phenanthrene	178	11.017	11.017	(1.001)	178522	250.000	274
	20 Anthracene	178	11.079	11.079	(1.007)	182205	250.000	274
	24 Fluoranthene	202	12.506	12.506	(1.137)	189366	250.000	267
	25 Pyrene	202	12.780	12.780	(1.162)	193533	250.000	269
	28 Benzo(a)anthracene	228	14.262	14.262	(0.998)	170916	250.000	273

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
* 29 Chrysene-d12	240	14.295	14.295	(1.000)	125215	200.000	
30 Chrysene	228	14.317	14.317	(1.002)	171382	250.000	278
32 Benzo(b)fluoranthene	252	15.572	15.572	(0.968)	189593	250.000	280
33 Benzo(k)fluoranthene	252	15.595	15.595	(0.969)	190604	250.000	260
34 Benzo(a)pyrene	252	16.013	16.013	(0.995)	142333	250.000	269
* 35 Perylene-d12	264	16.091	16.091	(1.000)	118026	200.000	
37 Indeno(1,2,3-cd)pyrene	276	17.874	17.874	(1.111)	151439	250.000	247
$ 36 Dibenzo(a,h)anthracene-d14	292	17.820	17.820	(1.107)	88876	250.000	248
38 Dibenzo(a,h)anthracene	278	17.887	17.887	(1.112)	125045	250.000	260
39 Benzo(g,h,i)perylene	276	18.400	18.400	(1.143)	125647	250.000	237

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: cc0305.d
Lab Smp Id: PNA 250
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info:

Calibration Date: 05-MAR-2010
Calibration Time: 10:33

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	185725	7.29
11 Acenaphthene-d10	96677	48338	193354	87858	-9.12
18 Phenanthrene-d10	147750	73875	295500	131061	-11.30
29 Chrysene-d12	135219	67610	270438	125215	-7.40
35 Perylene-d12	125815	62908	251630	118026	-6.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.97	0.00
11 Acenaphthene-d10	9.18	8.68	9.68	9.18	0.00
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	0.00
29 Chrysene-d12	14.29	13.79	14.79	14.29	0.00
35 Perylene-d12	16.09	15.59	16.59	16.09	0.00

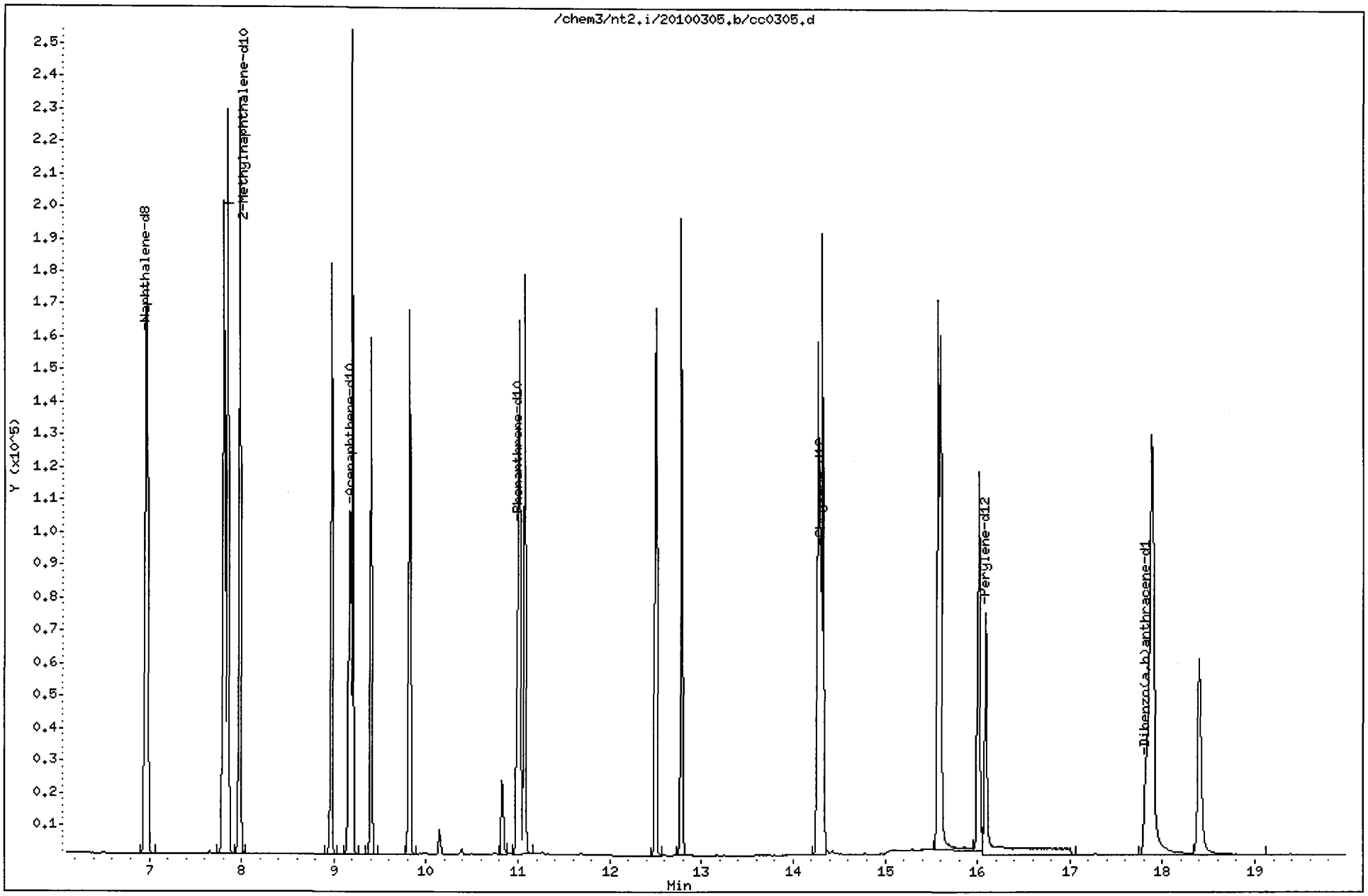
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt2.i/20100305.b/cc0305.d
Date : 05-MAR-2010 10:33
Client ID:
Sample Info: PNA 250
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25

QM91:001132



SIM Semivolatile Analysis
QC Raw Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

Data File: /chem3/nt2.i/20091021.b/df1021.d

Date : 21-OCT-2009 10:55

Client ID:

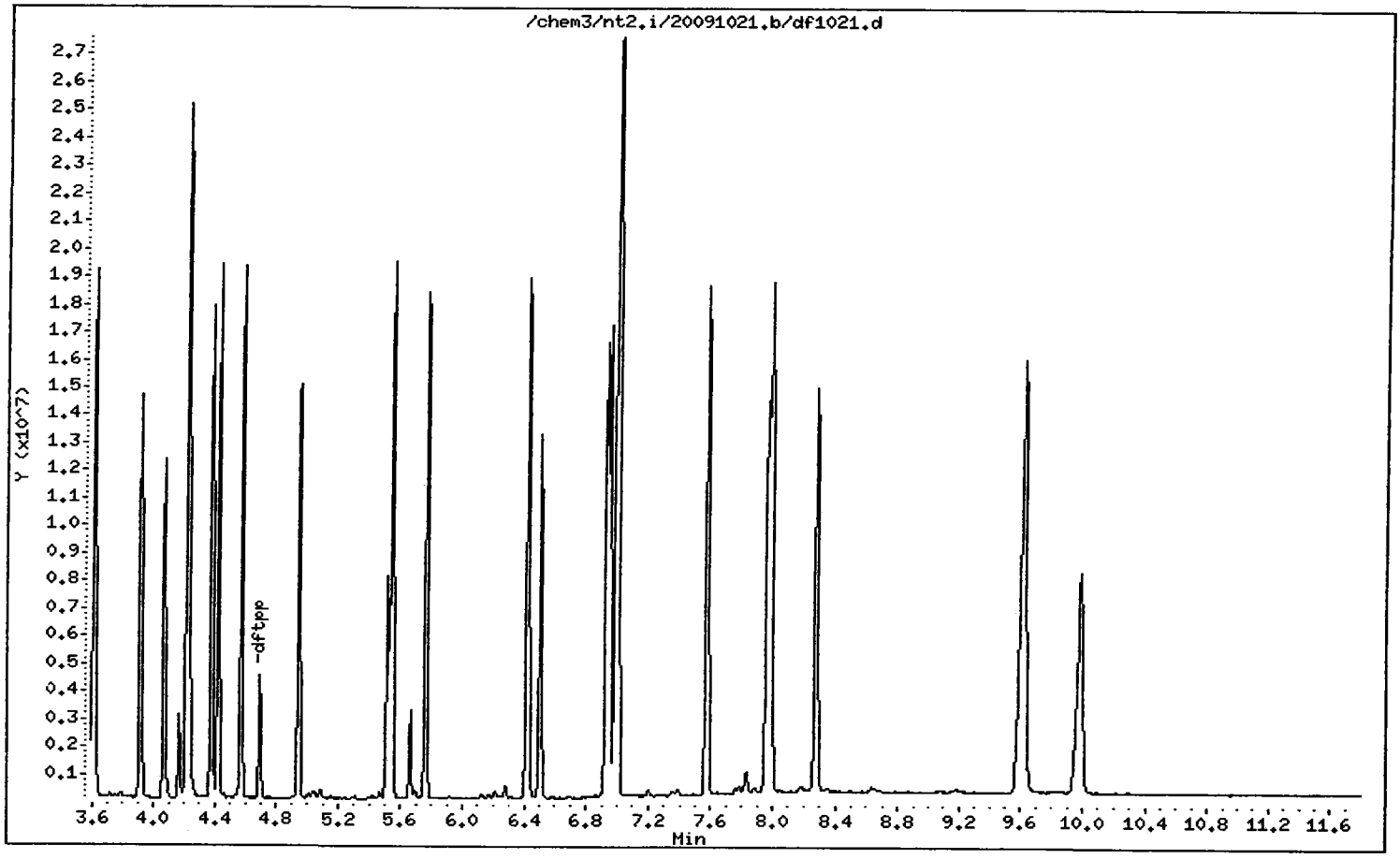
Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase:

Column diameter: 0.25



Data File: /chem3/nt2.i/20091021.b/df1021.d

Date : 21-OCT-2009 10:55

Client ID:

Instrument: nt2.i

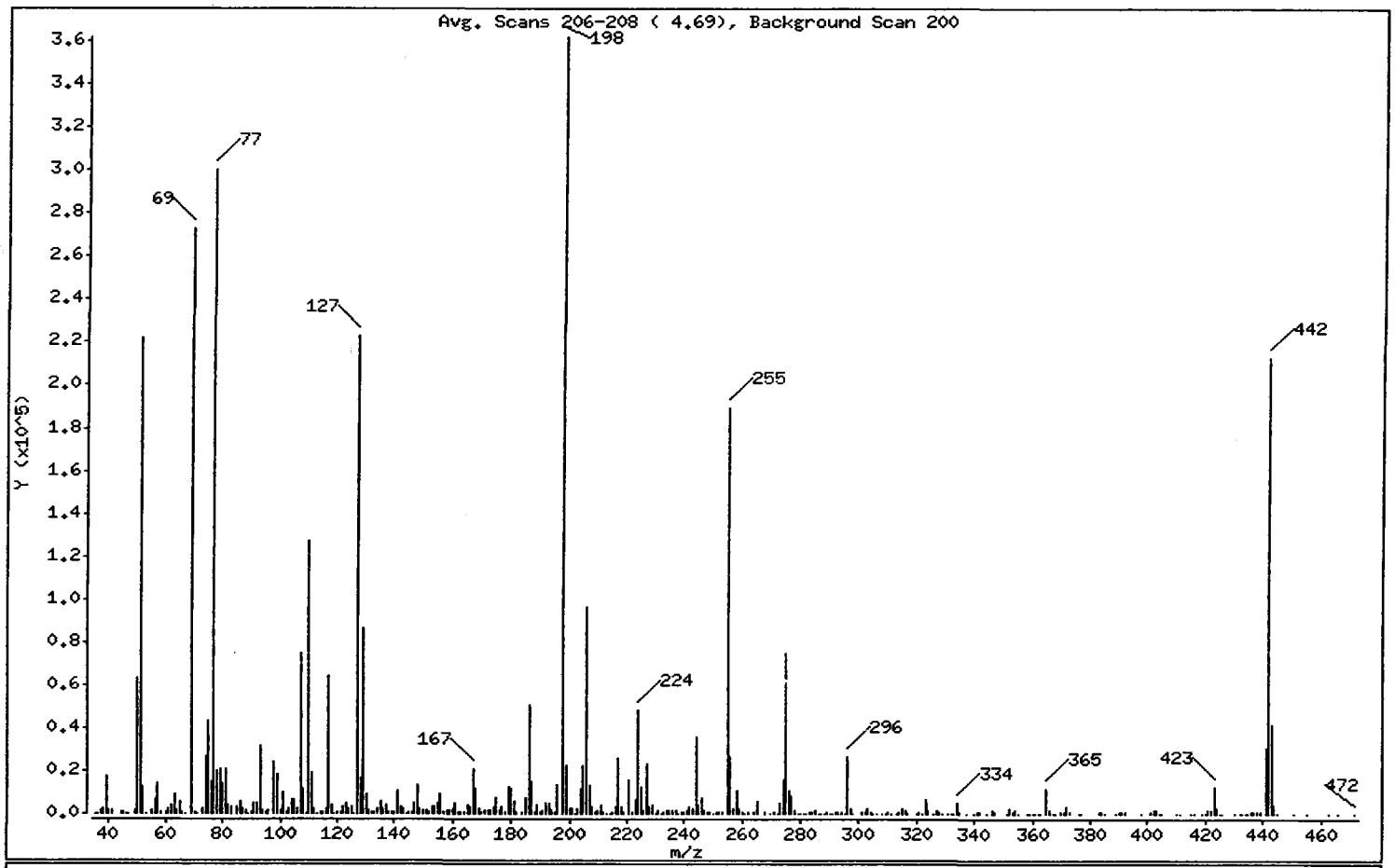
Sample Info: DFTPP

Operator: VTS

Column phase:

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	61.33
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	75.33
70	Less than 2.00% of mass 69	0.18 (0.24)
127	25.00 - 75.00% of mass 198	61.72
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.29
275	10.00 - 30.00% of mass 198	20.60
365	Greater than 0.75% of mass 198	3.13
441	Present, but less than mass 443	8.44
442	40.00 - 110.00% of mass 198	58.96
443	15.00 - 24.00% of mass 442	11.55 (19.59)

Data File: /chem3/nt2.i/20091021.b/df1021.d

Date : 21-OCT-2009 10:55

Client ID:

Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase:

Column diameter: 0.25

Data File: df1021.d
Spectrum: Avg. Scans 206-208 (4.69), Background Scan 200
Location of Maximum: 198.00
Number of points: 348

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	140	132.00	786	223.00	6281	322.00	387
36.00	258	133.00	482	224.00	48560	323.00	6932
37.00	1821	134.00	2296	225.00	12858	324.00	1682
38.00	2438	135.00	5831	226.00	1903	326.00	155
39.00	17824	136.00	2234	227.00	23440	327.00	1583
40.00	1467	137.00	4331	228.00	3110	328.00	718
41.00	1352	138.00	603	229.00	4228	329.00	89
44.00	525	139.00	507	230.00	274	331.00	203
45.00	920	140.00	831	231.00	1708	332.00	398
46.00	24	141.00	10585	232.00	197	333.00	301
47.00	298	142.00	3242	233.00	613	334.00	5004
49.00	1814	143.00	2107	234.00	1567	335.00	1226
50.00	62832	144.00	129	235.00	1387	337.00	126
51.00	221824	145.00	688	236.00	1573	340.00	217
52.00	12724	146.00	1174	237.00	1725	341.00	844
53.00	7	147.00	4765	238.00	343	342.00	438
55.00	1535	148.00	13285	239.00	963	344.00	93
56.00	6834	149.00	2419	240.00	787	346.00	1313
57.00	14117	150.00	1311	241.00	1253	347.00	605
58.00	526	151.00	1877	242.00	3340	351.00	188
60.00	1001	152.00	1053	243.00	2777	352.00	2123
61.00	2642	153.00	3601	244.00	35712	353.00	1231
62.00	3819	154.00	3395	245.00	4511	354.00	1740
63.00	8786	155.00	5170	246.00	7834	355.00	292
64.00	2038	156.00	8906	247.00	1485	358.00	192
65.00	6216	157.00	1127	248.00	534	359.00	79
66.00	672	158.00	1932	249.00	1246	360.00	71
67.00	277	159.00	1570	250.00	244	361.00	91
69.00	272448	160.00	2848	251.00	616	362.00	93
70.00	647	161.00	4617	252.00	465	363.00	194
71.00	304	162.00	868	253.00	809	365.00	11331
73.00	2649	163.00	497	255.00	189888	366.00	1793
74.00	26440	164.00	518	256.00	26896	367.00	89
75.00	43000	165.00	3954	257.00	2712	368.00	180
76.00	15032	166.00	3273	258.00	11027	370.00	437

Data File: /chem3/nt2.i/20091021.b/df1021.d

Date : 21-OCT-2009 10:55

Client ID:

Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase:

Column diameter: 0.25

Data File: df1021.d
Spectrum: Avg. Scans 206-208 (4.69), Background Scan 200
Location of Maximum: 198.00
Number of points: 348

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	300480	167.00	20824	259.00	2690	371.00	980
78.00	19760	168.00	11796	260.00	640	372.00	3121
79.00	20416	169.00	2158	261.00	163	373.00	892
80.00	14353	170.00	782	262.00	453	376.00	93
81.00	20928	171.00	1266	264.00	614	377.00	67
82.00	4155	172.00	1541	265.00	6019	383.00	1241
83.00	3230	173.00	1703	268.00	581	384.00	436
85.00	2923	174.00	3645	270.00	389	385.00	86
86.00	6074	175.00	7459	271.00	781	389.00	74
87.00	2086	176.00	1832	272.00	120	390.00	445
88.00	1441	177.00	3007	273.00	5054	391.00	439
89.00	373	178.00	820	274.00	15967	392.00	473
90.00	474	179.00	12695	275.00	74520	398.00	104
91.00	5085	180.00	11643	276.00	10855	401.00	437
92.00	4813	181.00	5504	277.00	7917	402.00	1671
93.00	31840	182.00	1101	278.00	1413	403.00	2024
94.00	2029	184.00	1174	279.00	256	404.00	344
95.00	1016	185.00	7381	280.00	141	405.00	115
96.00	1253	186.00	50960	281.00	66	410.00	72
98.00	23928	187.00	15206	282.00	230	411.00	102
99.00	18344	188.00	643	283.00	726	415.00	104
100.00	1339	189.00	3765	284.00	890	416.00	67
101.00	10129	190.00	965	285.00	1307	419.00	83
102.00	1054	191.00	1539	286.00	342	420.00	298
103.00	2753	192.00	5162	287.00	95	421.00	1670
104.00	6614	193.00	5083	288.00	326	422.00	1737
105.00	6470	194.00	1511	289.00	483	423.00	12293
106.00	2642	195.00	1119	290.00	161	424.00	2904
107.00	74992	196.00	13307	291.00	281	425.00	238
108.00	11892	198.00	361664	292.00	709	426.00	226
109.00	413	199.00	22752	293.00	1121	430.00	336
110.00	126888	200.00	2477	294.00	826	432.00	132
111.00	18896	201.00	2343	295.00	231	433.00	247
112.00	2347	202.00	253	296.00	26512	434.00	234
113.00	374	203.00	2834	297.00	2694	435.00	199

Data File: /chem3/nt2.i/20091021.b/df1021.d

Date : 21-OCT-2009 10:55

Client ID:

Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase:

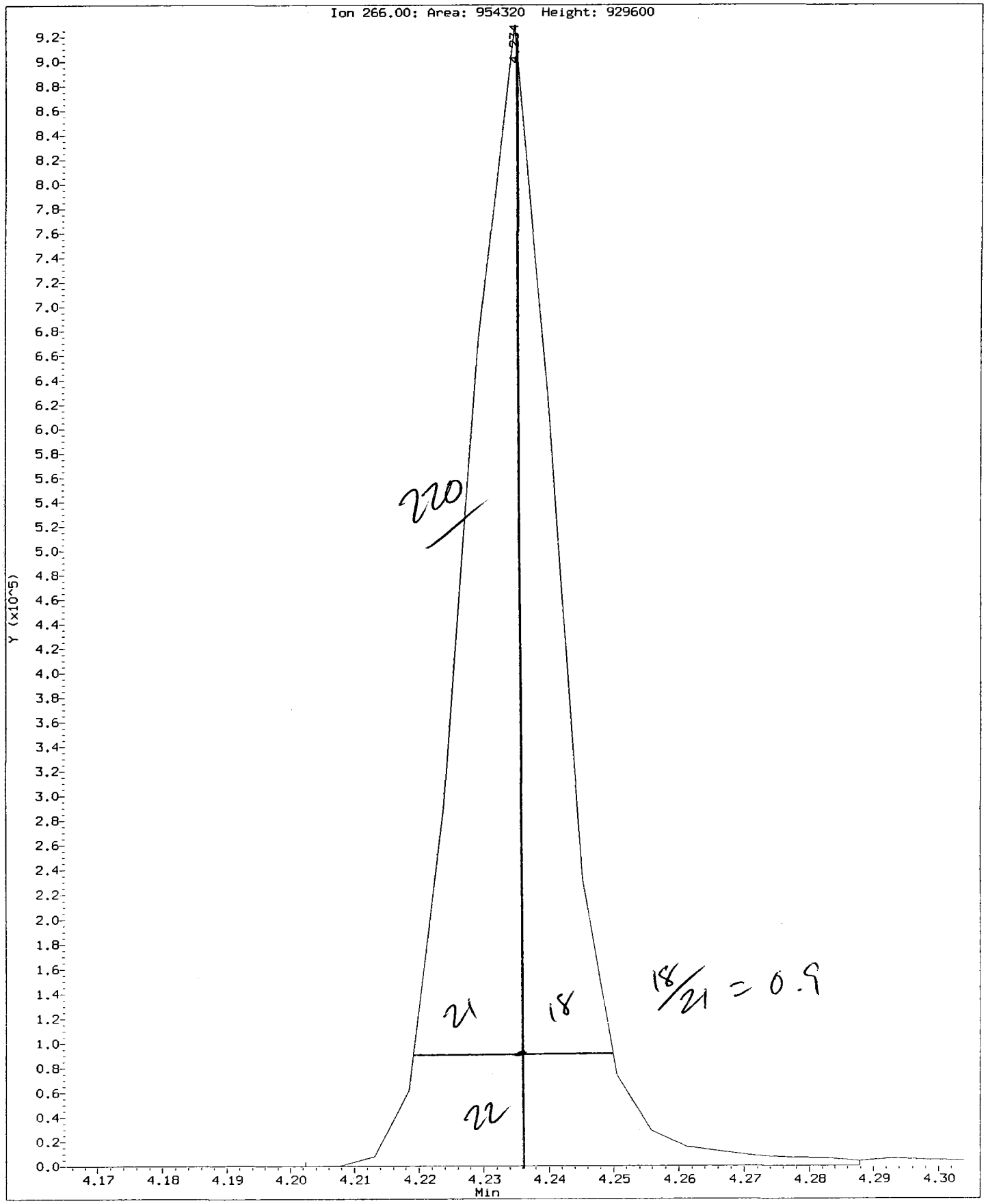
Column diameter: 0.25

Data File: df1021.d
Spectrum: Avg. Scans 206-208 (4.69), Background Scan 200
Location of Maximum: 198.00
Number of points: 348

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	686	204.00	11882	298.00	249	436.00	432
115.00	521	205.00	22336	301.00	520	437.00	706
116.00	2168	206.00	96336	302.00	539	438.00	1172
117.00	64256	207.00	12897	303.00	2585	439.00	1058
118.00	4114	208.00	3501	304.00	818	441.00	30512
119.00	285	209.00	906	305.00	70	442.00	213248
120.00	1227	210.00	1952	306.00	92	443.00	41784
121.00	744	211.00	4438	308.00	165	444.00	3786
122.00	3733	212.00	985	309.00	222	445.00	390
123.00	5140	213.00	69	310.00	546	451.00	71
124.00	2736	214.00	396	311.00	396	455.00	83
125.00	3032	215.00	843	313.00	381	463.00	76
126.00	194	216.00	2913	314.00	507	466.00	84
127.00	223232	217.00	25872	315.00	2667	472.00	160
128.00	16688	218.00	3337	316.00	1363		
129.00	86640	219.00	534	317.00	126		
130.00	8941	221.00	15590	320.00	170		
131.00	2045	222.00	1145	321.00	1067		

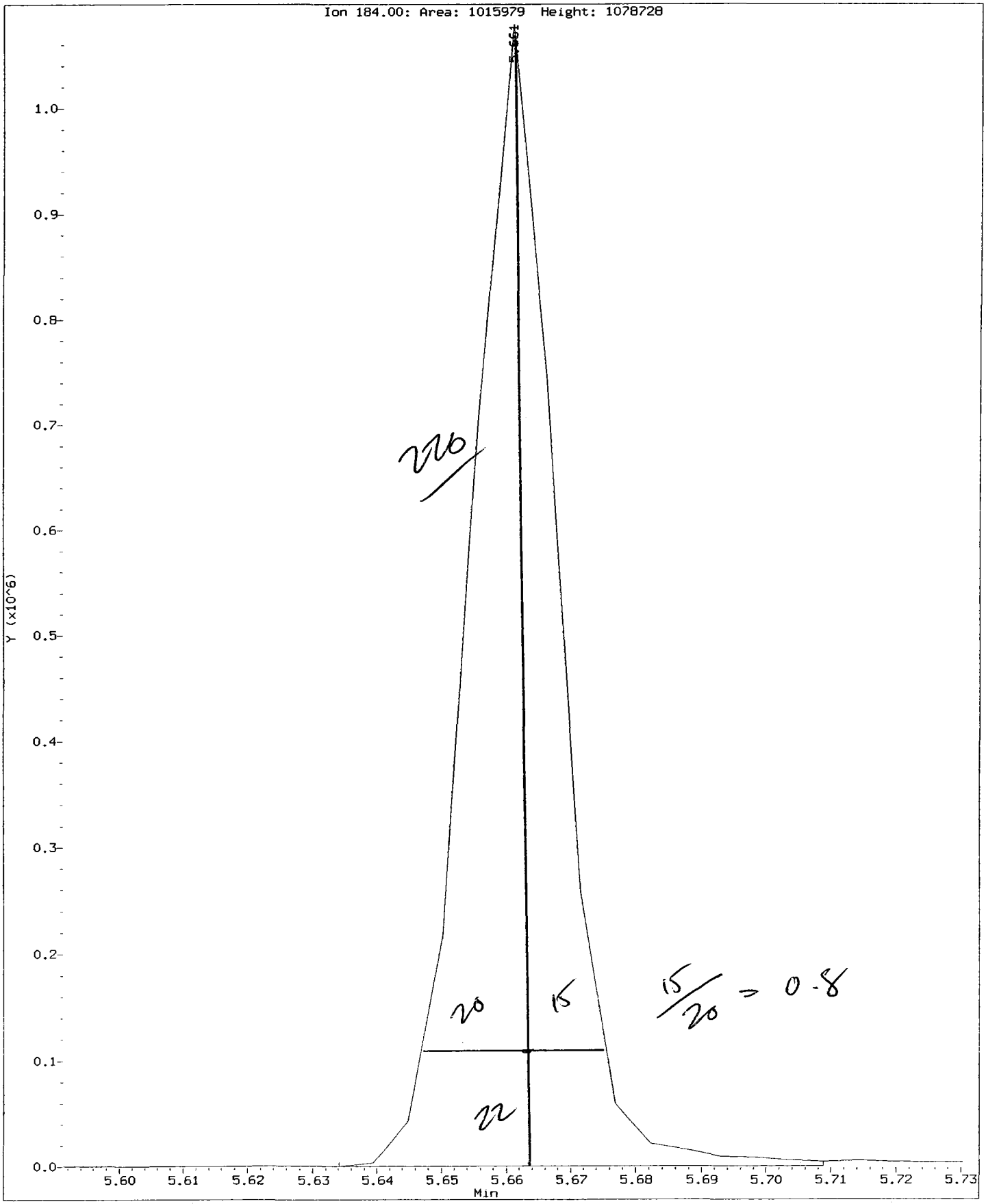
Data File: /chem3/nt2.i/20091021.b/ddt.b/df1021.d
Injection Date: 21-OCT-2009 10:55
Instrument: nt2.i
Client Sample ID:

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt2.i/20091021.b/ddt.b/df1021.d
Injection Date: 21-OCT-2009 10:55
Instrument: nt2.i
Client Sample ID:

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt2.i/20091021.b/ddt.b/df1021.d
Method: /chem3/nt2.i/20091021.b/ddt.b/sw846ddt.m
Analysis Date: 21-OCT-2009 10:55

ARI ID: DFTPP
Misc:
Instrument: nt2.i

COMPOUND	RT	AREA
Pentachlorophenol	4.234	954320
Benzidine	5.661	1015979
4,4'-DDE	5.885	3029
4,4'-DDD	6.211	41668
4,4'-DDT	6.505	2284724

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 3029 + 41668) * 100}{(\ 3029 + 41668 + 2284724)}$$

DDT Percent Breakdown = 1.9 %

Data File: /chem3/nt2.i/20100305.b/df0305.d

Date : 05-MAR-2010 09:58

Client ID:

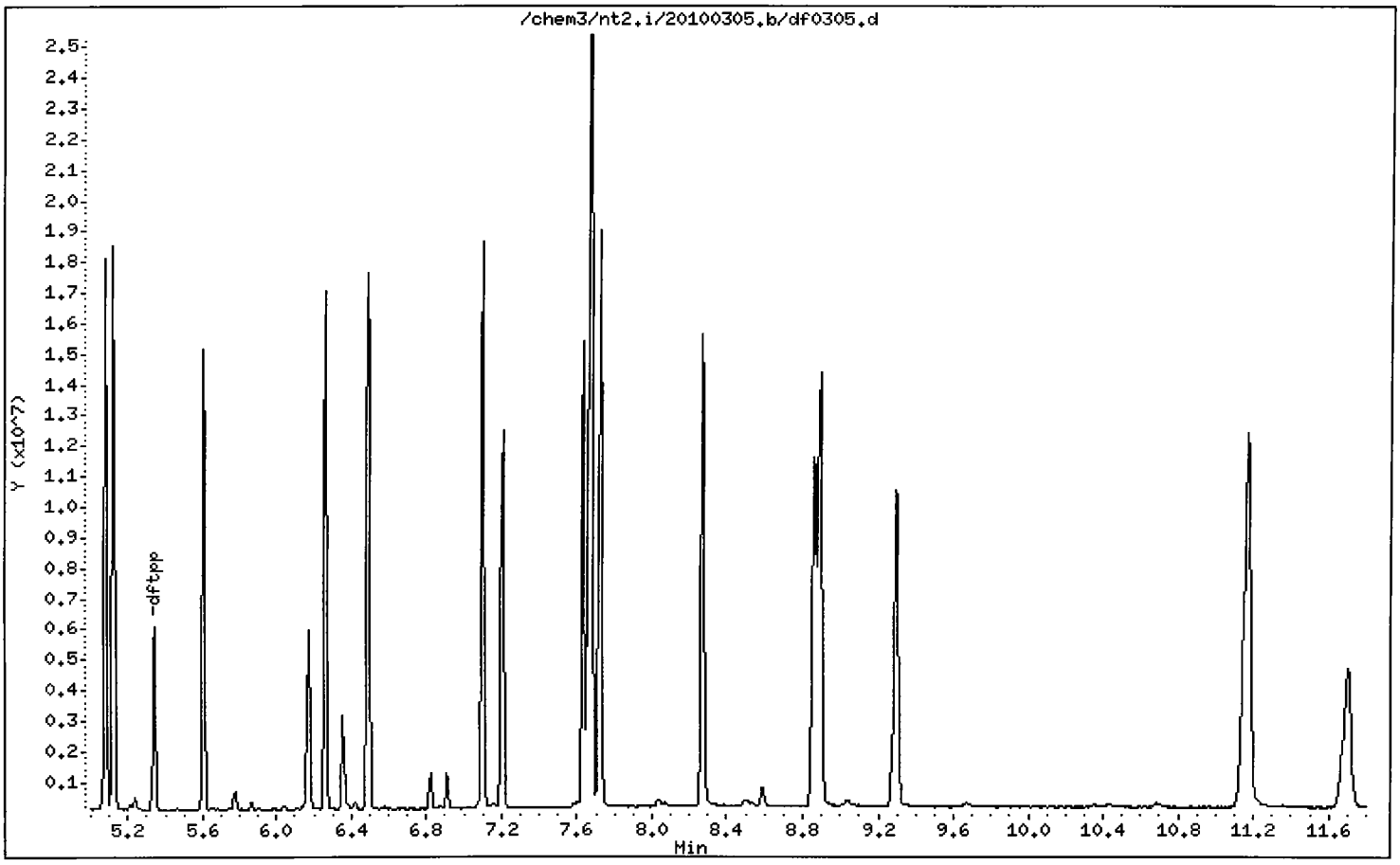
Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem3/nt2.i/20100305.b/df0305.d

Date : 05-MAR-2010 09:58

Client ID:

Instrument: nt2.i

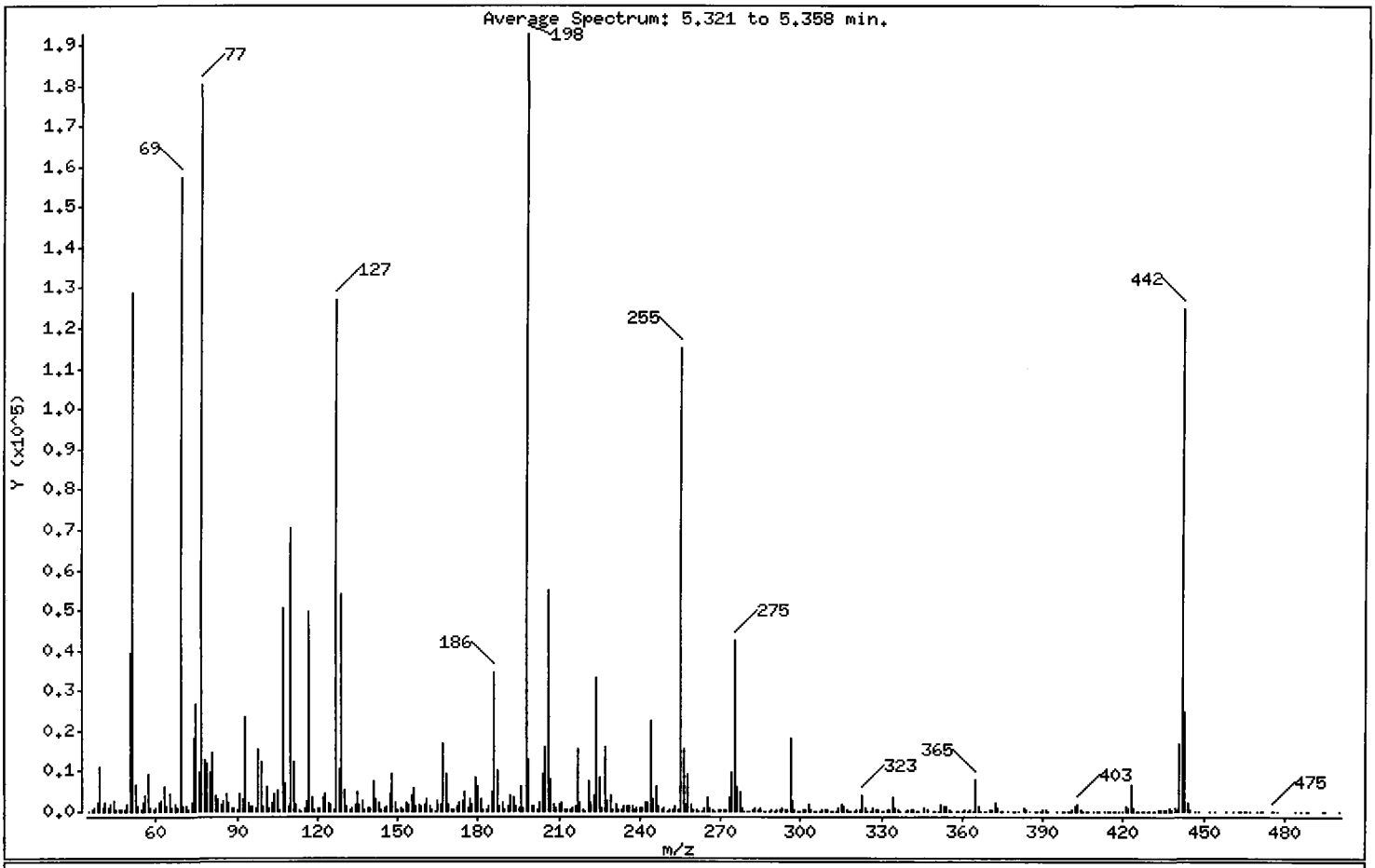
Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	66.88
68	Less than 2.00% of mass 69	0.42 (0.51)
69	Mass 69 relative abundance	81.56
70	Less than 2.00% of mass 69	0.66 (0.80)
127	10.00 - 80.00% of mass 198	65.92
197	Less than 2.00% of mass 198	0.35
199	5.00 - 9.00% of mass 198	6.73
275	10.00 - 60.00% of mass 198	21.98
365	Greater than 1.00% of mass 198	4.20
441	0.01 - 24.00% of mass 442	8.70 (13.43)
442	50.00 - 200.00% of mass 198	64.77
443	15.00 - 24.00% of mass 442	12.97 (20.03)

Data File: /chem3/nt2.i/20100305.b/df0305.d

Date : 05-MAR-2010 09:58

Client ID:

Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0305.d
Spectrum: Average Spectrum: 5.321 to 5.358 min.
Location of Maximum: 198.00
Number of points: 421

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	134	141.00	7617	247.00	1374	356.00	162
36.00	434	142.00	3045	248.00	323	358.00	26
37.00	933	143.00	2018	249.00	923	359.00	119
38.00	2219	144.00	611	250.00	86	360.00	101
39.00	11268	145.00	748	251.00	506	361.00	278
40.00	899	146.00	1317	252.00	411	362.00	34
41.00	2243	147.00	4389	253.00	1128	363.00	286
42.00	986	148.00	9310	254.00	254	364.00	176
43.00	1951	149.00	2003	255.00	115016	365.00	8087
44.00	2530	150.00	631	256.00	15484	366.00	1132
45.00	562	151.00	1081	257.00	1919	367.00	116
46.00	357	152.00	531	258.00	9090	368.00	75
47.00	453	153.00	2359	259.00	1734	369.00	37
48.00	373	154.00	1657	260.00	233	370.00	553
49.00	1831	155.00	4170	261.00	449	371.00	267
50.00	39448	156.00	5613	262.00	124	372.00	2028
51.00	128864	157.00	1190	263.00	41	373.00	716
52.00	6737	158.00	1621	264.00	668	374.00	26
53.00	1517	159.00	1200	265.00	3486	375.00	38
54.00	494	160.00	1842	266.00	904	377.00	68
55.00	2030	161.00	3090	267.00	262	379.00	134
56.00	4203	162.00	1363	268.00	216	380.00	25
57.00	9361	163.00	549	269.00	254	381.00	32
58.00	695	164.00	175	270.00	348	383.00	673
59.00	641	165.00	2870	271.00	509	384.00	224
60.00	793	166.00	1753	272.00	538	385.00	128
61.00	2103	167.00	16968	273.00	3357	387.00	133
62.00	2757	168.00	9112	274.00	9946	388.00	71
63.00	6054	169.00	1554	275.00	42352	389.00	39
64.00	1298	170.00	654	276.00	6112	390.00	348
65.00	4350	171.00	558	277.00	4763	391.00	324
66.00	816	172.00	1448	278.00	981	392.00	101
67.00	1723	173.00	2215	279.00	184	395.00	79
68.00	804	174.00	2761	280.00	27	397.00	49
69.00	157120	175.00	4923	281.00	132	398.00	68

Data File: /chem3/nt2.i/20100305.b/df0305.d

Date : 05-MAR-2010 09:58

Client ID:

Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0305.d
Spectrum: Average Spectrum: 5.321 to 5.358 min.
Location of Maximum: 198.00
Number of points: 421

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	1264	176.00	1100	282.00	256	399.00	78
71.00	1172	177.00	2960	283.00	733	400.00	156
72.00	245	178.00	1713	284.00	453	401.00	348
73.00	2339	179.00	8628	285.00	910	402.00	1220
74.00	18176	180.00	6180	286.00	81	403.00	1828
75.00	26704	181.00	3298	287.00	79	404.00	437
76.00	9643	182.00	461	288.00	43	405.00	103
77.00	180032	183.00	450	289.00	294	406.00	156
78.00	12964	184.00	1143	290.00	163	407.00	108
79.00	11823	185.00	4874	291.00	383	409.00	107
80.00	9916	186.00	34736	292.00	508	410.00	61
81.00	14672	187.00	10187	293.00	873	411.00	93
82.00	3785	188.00	1155	294.00	543	413.00	100
83.00	3064	189.00	2326	295.00	241	414.00	55
84.00	1558	190.00	631	296.00	18192	415.00	79
85.00	2764	191.00	1345	297.00	2632	416.00	111
86.00	4430	192.00	3921	298.00	253	417.00	29
87.00	2215	193.00	3488	299.00	176	418.00	125
88.00	793	194.00	1137	300.00	59	420.00	69
89.00	850	195.00	752	301.00	348	421.00	1449
90.00	345	196.00	6010	302.00	322	422.00	957
91.00	4372	197.00	673	303.00	1655	423.00	6498
92.00	3317	198.00	192640	304.00	640	424.00	1095
93.00	23288	199.00	12975	305.00	137	425.00	208
94.00	2351	200.00	1234	306.00	64	426.00	150
95.00	1492	201.00	1236	307.00	46	427.00	185
96.00	1257	202.00	408	308.00	373	428.00	135
97.00	754	203.00	2098	309.00	225	429.00	219
98.00	15624	204.00	9433	310.00	307	430.00	107
99.00	12539	205.00	15786	311.00	94	431.00	174
100.00	1210	206.00	55024	312.00	139	432.00	164
101.00	6146	207.00	7751	313.00	184	433.00	354
102.00	680	208.00	1814	314.00	964	434.00	263
103.00	2428	209.00	808	315.00	1973	435.00	495
104.00	4323	210.00	1683	316.00	1239	436.00	385

Data File: /chem3/nt2.i/20100305.b/df0305.d

Date : 05-MAR-2010 09:58

Client ID:

Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0305.d
Spectrum: Average Spectrum: 5.321 to 5.358 min.
Location of Maximum: 198.00
Number of points: 421

m/z	Y	m/z	Y	m/z	Y	m/z	Y
105.00	5216	211.00	2395	317.00	386	437.00	760
106.00	579	212.00	326	318.00	35	438.00	522
107.00	50680	213.00	355	319.00	165	439.00	668
108.00	7244	214.00	307	320.00	190	440.00	290
109.00	1182	215.00	856	321.00	583	441.00	16752
110.00	70544	216.00	1297	322.00	553	442.00	124784
111.00	12198	217.00	15529	323.00	3855	443.00	24984
112.00	1917	218.00	2004	324.00	781	444.00	2198
113.00	497	219.00	384	325.00	199	445.00	258
114.00	150	220.00	70	326.00	196	447.00	26
115.00	848	221.00	7362	327.00	1022	448.00	62
116.00	2554	222.00	2305	328.00	625	452.00	52
117.00	49600	223.00	3942	329.00	245	454.00	54
118.00	3617	224.00	33160	330.00	26	458.00	26
119.00	613	225.00	8542	331.00	96	461.00	54
120.00	758	226.00	1000	332.00	526	463.00	81
121.00	894	227.00	16108	333.00	571	464.00	73
122.00	3671	228.00	2718	334.00	3494	465.00	91
123.00	4336	229.00	3977	335.00	666	466.00	32
124.00	2303	230.00	601	336.00	328	467.00	41
125.00	1891	231.00	1755	337.00	170	470.00	25
126.00	654	232.00	431	339.00	95	471.00	90
127.00	127000	233.00	415	340.00	271	472.00	31
128.00	10540	234.00	1307	341.00	652	475.00	117
129.00	53960	235.00	1421	342.00	322	476.00	26
130.00	5474	236.00	1298	343.00	86	477.00	33
131.00	1118	237.00	1188	344.00	142	484.00	47
132.00	659	238.00	371	346.00	963	486.00	41
133.00	705	239.00	865	347.00	395	488.00	33
134.00	1964	240.00	802	349.00	25	489.00	50
135.00	4788	241.00	872	350.00	89	494.00	25
136.00	1958	242.00	2375	351.00	131	495.00	55
137.00	2687	243.00	2312	352.00	1727	500.00	42
138.00	631	244.00	22496	353.00	1173		
139.00	743	245.00	3131	354.00	1303		

Date : 05-MAR-2010 09:58

Client ID: Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

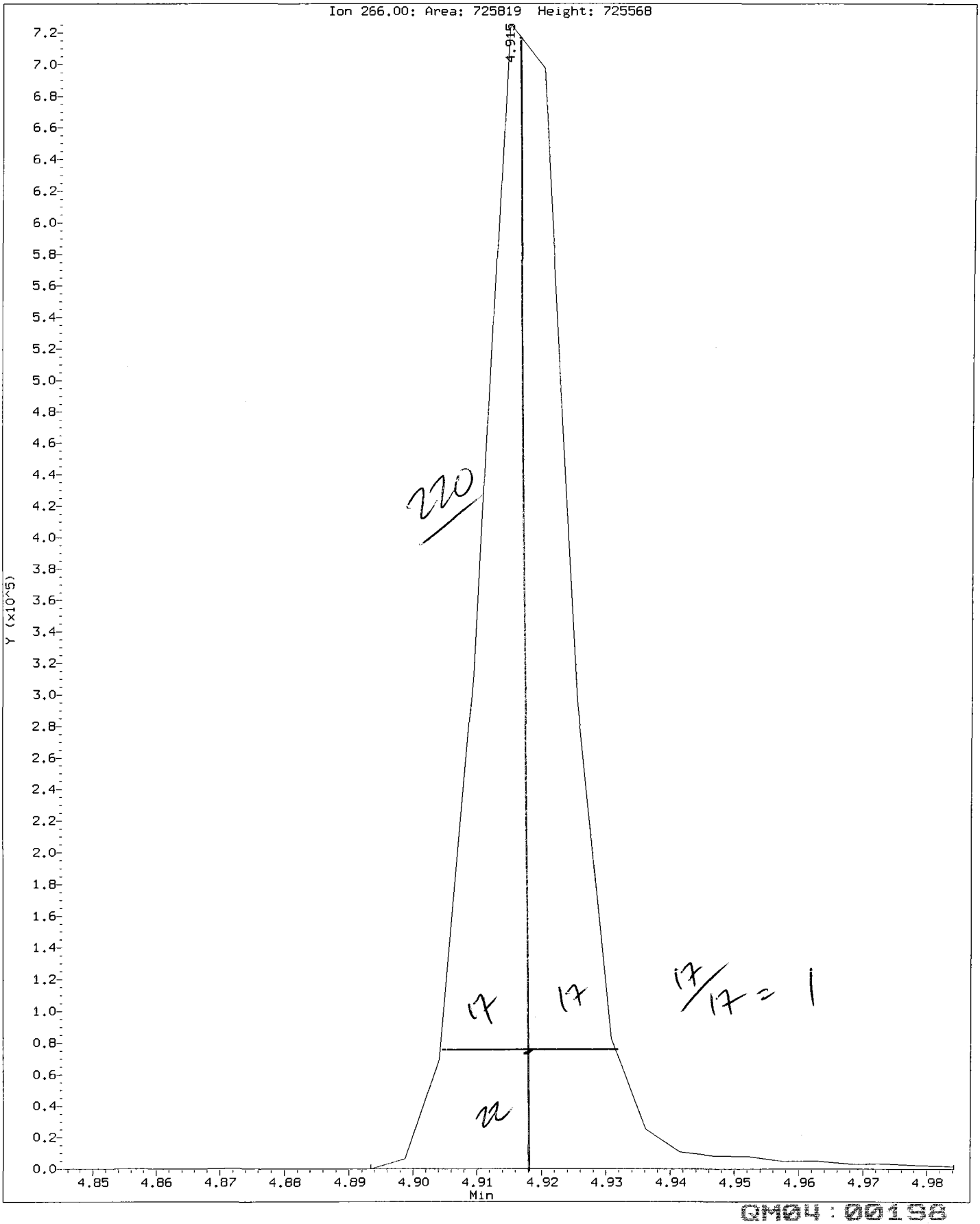
Column phase: ZB-5msi Column diameter: 0.25

Data File: df0305.d
Spectrum: Average Spectrum: 5.321 to 5.358 min.
Location of Maximum: 198.00
Number of points: 421

m/z	Y	m/z	Y	m/z	Y	m/z	Y
140.00	1022	246.00	6070	355.00	525		

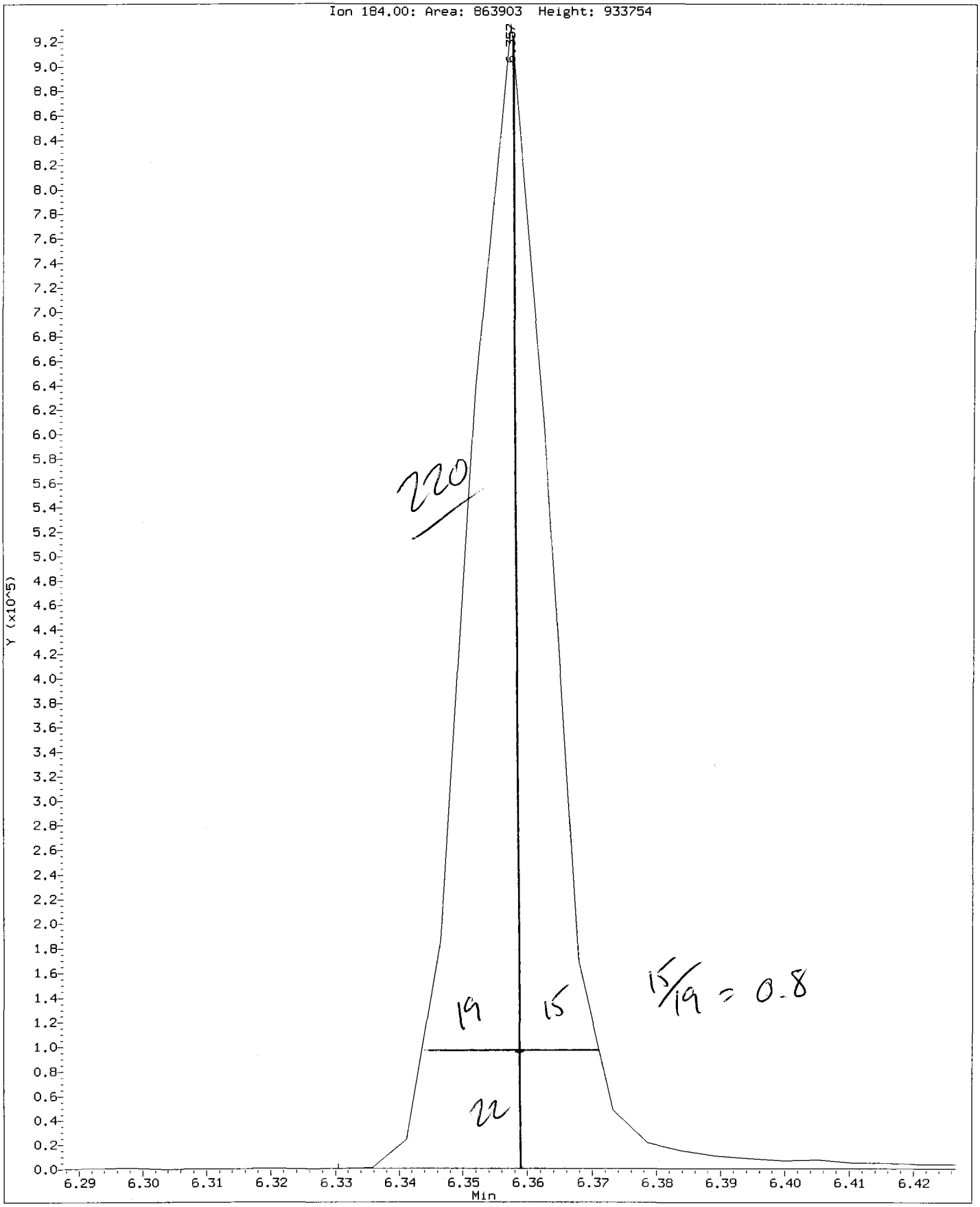
Data File: /chem3/nt2.i/20100305.b/ddt.b/df0305.d
Injection Date: 05-MAR-2010 09:58
Instrument: nt2.i
Client Sample ID:

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt2.i/20100305.b/ddt.b/df0305.d
Injection Date: 05-MAR-2010 09:58
Instrument: nt2.i
Client Sample ID:

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt2.i/20100305.b/ddt.b/df0305.d
Method: /chem3/nt2.i/20100305.b/ddt.b/sw846ddt.m
Analysis Date: 05-MAR-2010 09:58

ARI ID: DFTPP
Misc:
Instrument: nt2.i

COMPOUND	RT	AREA
Pentachlorophenol	4.915	725819
Benzidine	6.357	863903
4,4'-DDE	6.582	6357
4,4'-DDD	6.913	157233
4,4'-DDT	7.207	1710294

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 6357 + 157233) * 100}{(\ 6357 + 157233 + 1710294)}$$

DDT Percent Breakdown = 8.7 %

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MB-030310
METHOD BLANK

Lab Sample ID: MB-030310
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 11:30
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	< 0.010 U
91-57-6	2-Methylnaphthalene	0.010	< 0.010 U
90-12-0	1-Methylnaphthalene	0.010	< 0.010 U
208-96-8	Acenaphthylene	0.010	< 0.010 U
83-32-9	Acenaphthene	0.010	< 0.010 U
86-73-7	Fluorene	0.010	< 0.010 U
85-01-8	**Phenanthrene**	**0.010**	**0.0060 J**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.0064 J**
129-00-0	**Pyrene**	**0.010**	**0.0070 J**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.0064 J**
218-01-9	**Chrysene**	**0.010**	**0.0070 J**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.0062 J**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.0063 J**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.0063 J**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.0051 J**
53-70-3	**Dibenz(a,h)anthracene**	**0.010**	**0.0058 J**
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.0052 J**
132-64-9	**Dibenzofuran**	**0.010**	**0.0067 J**

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	71.0%
d14-Dibenzo(a,h)anthracene	64.7%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/030501.d
Lab Smp Id: QM04MBW1 Client Smp ID: QM04MBW1
Inj Date : 05-MAR-2010 11:30
Operator : VTS Inst ID: nt2.i
Smp Info : QM04MBW1
Misc Info : 10-5087
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 08-Mar-2010 12:19 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.966	6.967	(1.000)	193103	200.000	
	5 Naphthalene	128	Compound Not Detected.					
$	6 2-Methylnaphthalene-d10	152	7.812	7.813	(1.121)	105834	212.790	213
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	9.175	9.175	(1.000)	94604	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	9.407	9.407	(1.025)	4030	6.65833	6.66(R)
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	11.001	11.002	(1.000)	144207	200.000	
	19 Phenanthrene	178	11.016	11.017	(1.001)	4306	6.00751	6.01(R)
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	12.505	12.506	(1.137)	5023	6.43405	6.43(R)
	25 Pyrene	202	12.780	12.780	(1.162)	5512	6.95543	6.96(R)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.272	14.262	(0.998)	4423	6.35436	6.35(R)
*	29 Chrysene-d12	240	14.294	14.295	(1.000)	139461	200.000	
	30 Chrysene	228	14.316	14.317	(1.002)	4820	7.01864	7.02(RM)
	32 Benzo(b)fluoranthene	252	15.573	15.572	(0.968)	4731	6.17380	6.17(R)
	33 Benzo(k)fluoranthene	252	15.604	15.595	(0.970)	5223	6.27755	6.28(R)
	34 Benzo(a)pyrene	252	16.014	16.013	(0.995)	3797	6.32387	6.32(R)
*	35 Perylene-d12	264	16.091	16.091	(1.000)	133752	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.873	17.874	(1.111)	3536	5.08203	5.08(R)
$	36 Dibenzo(a,h)anthracene-d14	292	17.833	17.820	(1.108)	78771	194.297	194
	38 Dibenzo(a,h)anthracene	278	17.886	17.887	(1.112)	3147	5.78249	5.78(R)
	39 Benzo(g,h,i)perylene	276	18.399	18.400	(1.143)	3144	5.24027	5.24(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 030501.d
Lab Smp Id: QM04MBW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Calibration Date: 05-MAR-2010
Calibration Time: 10:33
Client Smp ID: QM04MBW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	193103	11.55
11 Acenaphthene-d10	96677	48338	193354	94604	-2.14
18 Phenanthrene-d10	147750	73875	295500	144207	-2.40
29 Chrysene-d12	135219	67610	270438	139461	3.14
35 Perylene-d12	125815	62908	251630	133752	6.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.97	-0.01
11 Acenaphthene-d10	9.18	8.68	9.68	9.17	-0.01
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	0.00
29 Chrysene-d12	14.29	13.79	14.79	14.29	0.00
35 Perylene-d12	16.09	15.59	16.59	16.09	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QM04MBW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Client SDG: QM04
Fraction: SV
Client Smp ID: QM04MBW1
Operator: VTS
SampleType: BLANK
Quant Type: ISTD

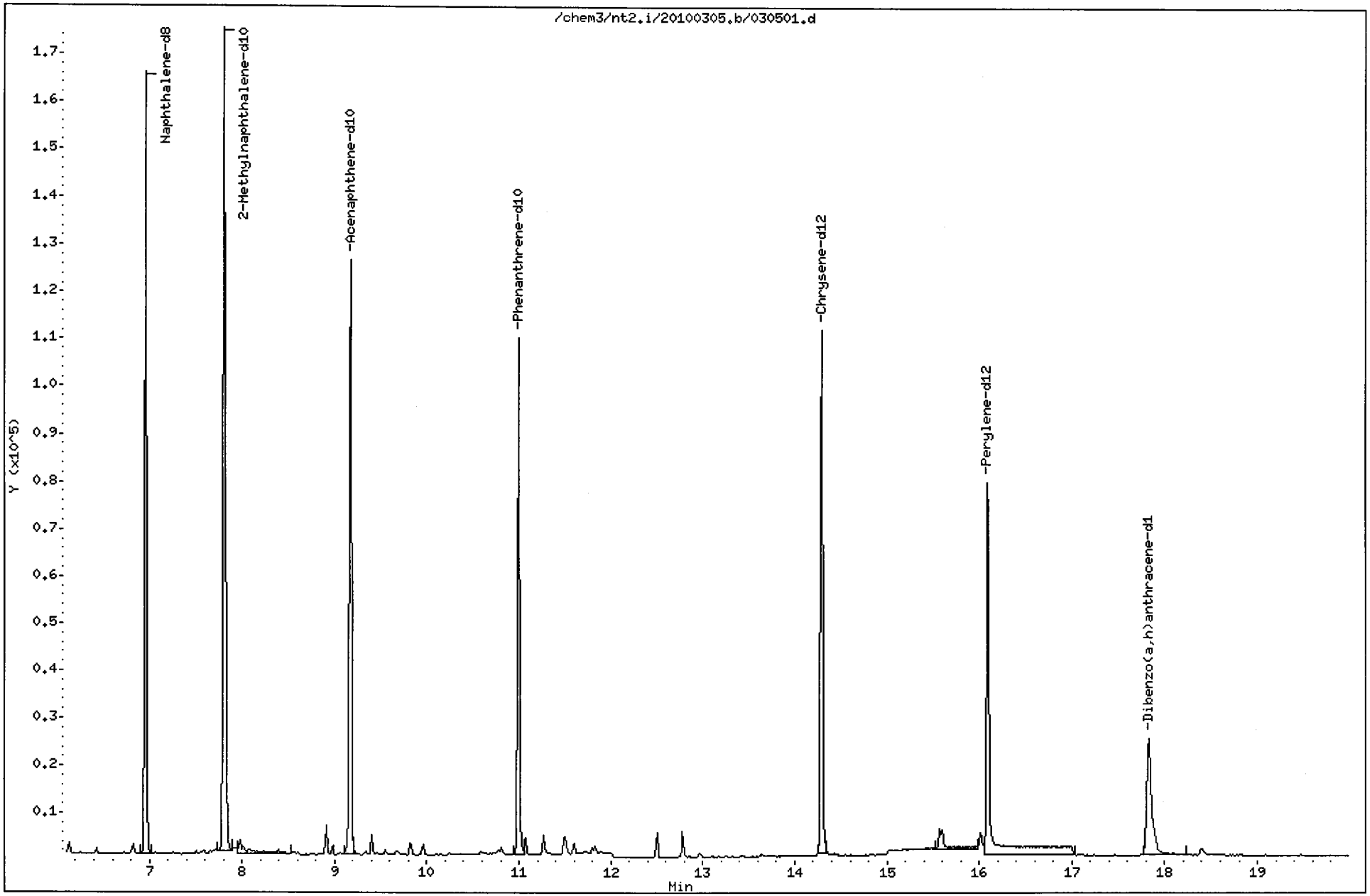
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	0.00	*	41-101
7 2-Methylnaphthale	300	0.00	*	47-100
8 1-Methylnaphthale	300	0.00	*	30-160
10 Acenaphthylene	300	0.00	*	35-100
12 Acenaphthene	300	0.00	*	43-104
14 Dibenzofuran	300	6.66	2.22*	37-100
15 Fluorene	300	0.00	*	51-103
19 Phenanthrene	300	6.01	2.00*	55-109
20 Anthracene	300	0.00	*	30-101
24 Fluoranthene	300	6.43	2.14*	49-123
25 Pyrene	300	6.96	2.32*	48-120
28 Benzo(a)anthracene	300	6.35	2.12*	43-113
30 Chrysene	300	7.02	2.34*	59-112
32 Benzo(b)fluoranthe	300	6.17	2.06*	44-121
33 Benzo(k)fluoranthe	300	6.28	2.09*	50-117
34 Benzo(a)pyrene	300	6.32	2.11*	10-100
37 Indeno(1,2,3-cd)py	300	5.08	1.69*	43-112
38 Dibenzo(a,h)anthra	300	5.78	1.93*	42-114
39 Benzo(g,h,i)peryle	300	5.24	1.75*	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	213	70.93	31-109
$ 36 Dibenzo(a,h)anthra	300	194	64.77	10-133

Data File: /chem3/nt2.i/20100305.b/030501.d
Date : 05-MAR-2010 11:30
Client ID: QM04MBW1
Sample Info: QM04MBW1
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

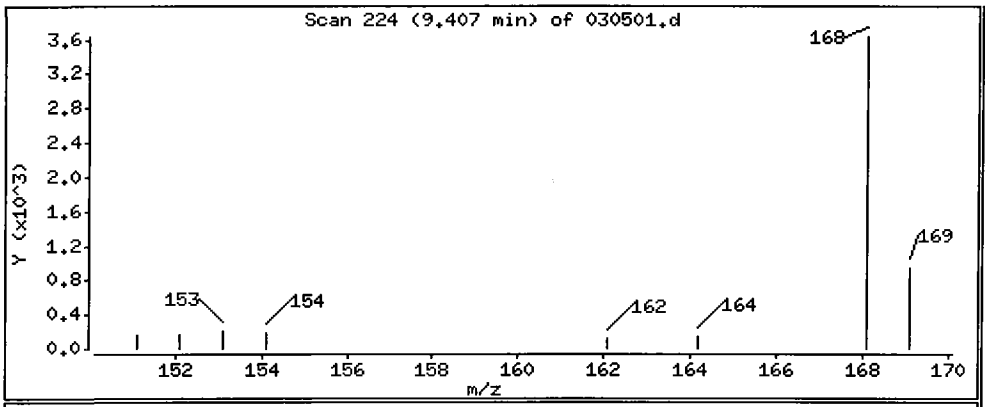
Operator: VTS

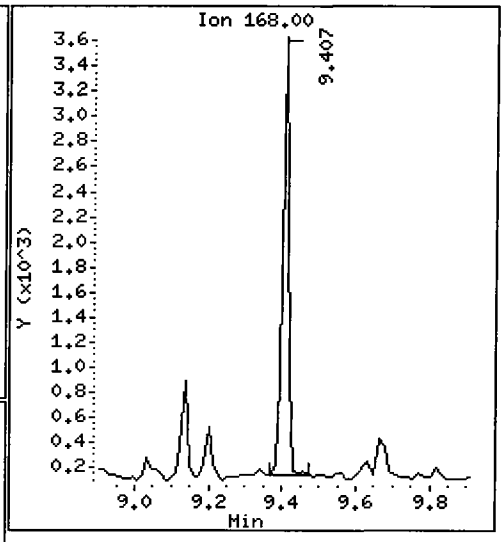
Column phase: ZB-5

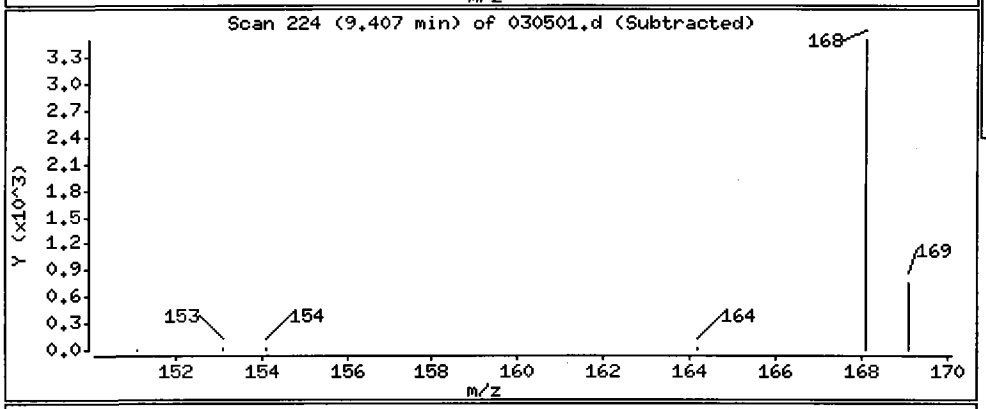
Column diameter: 0.25

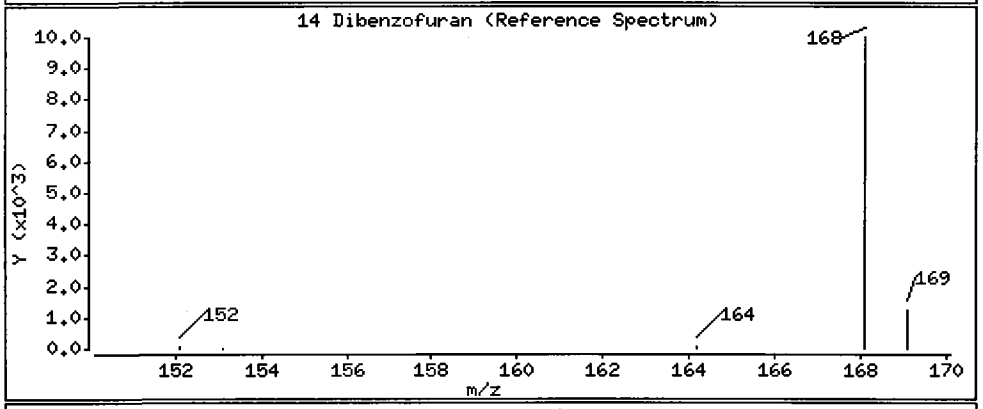
14 Dibenzofuran

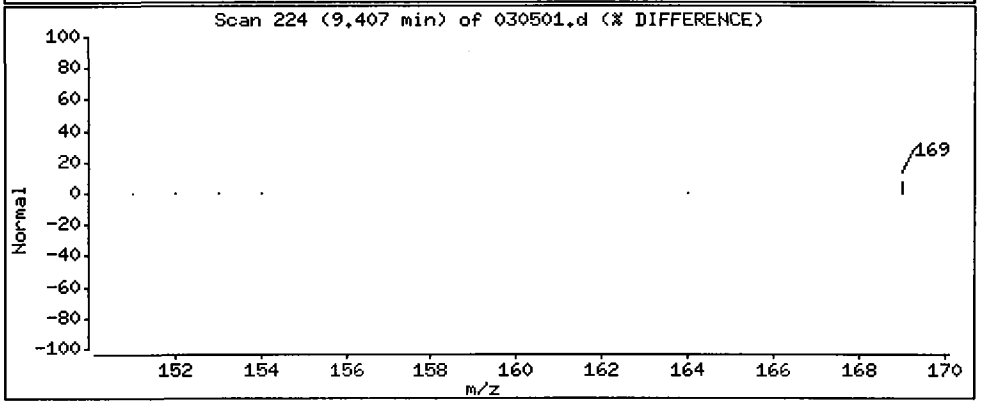
Concentration: 6.66 ug/L











Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

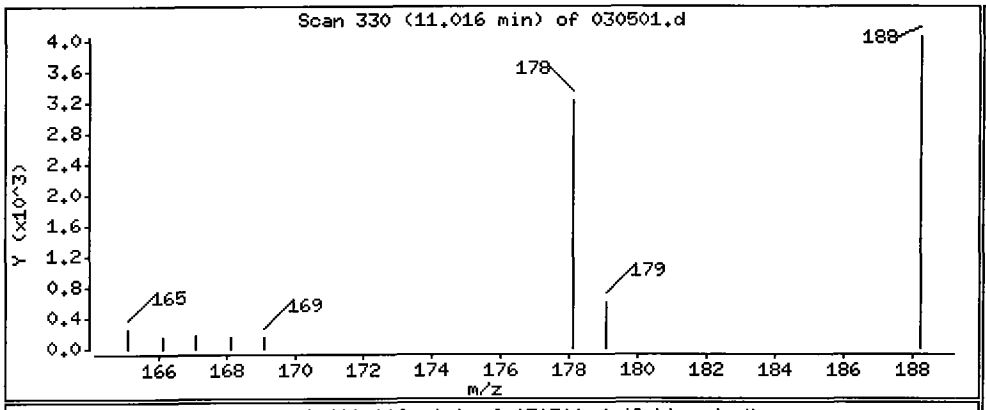
Operator: VTS

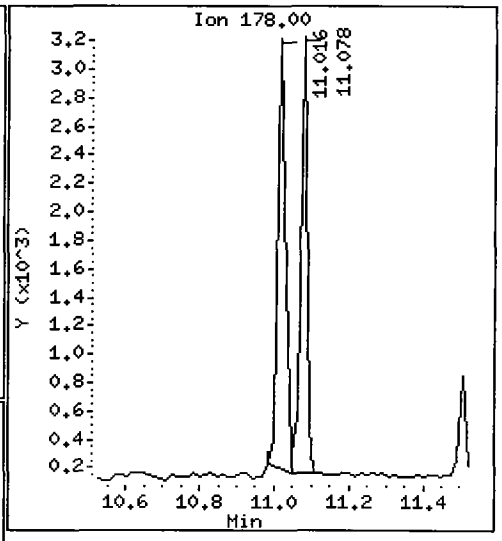
Column phase: ZB-5

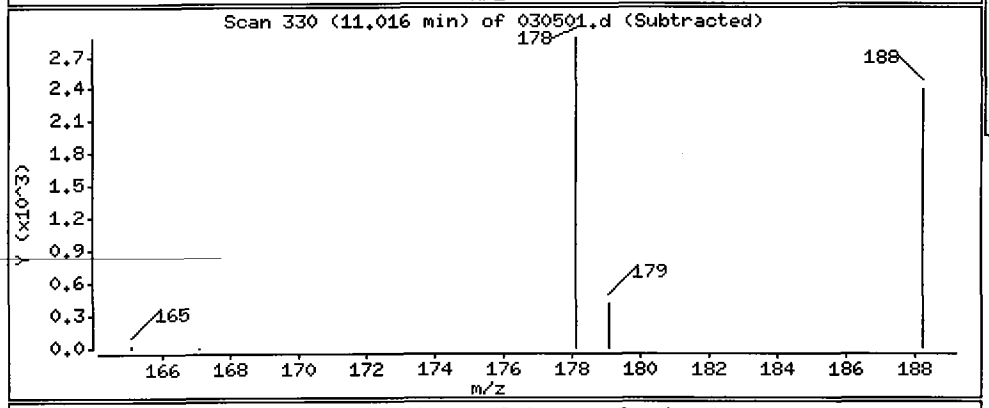
Column diameter: 0.25

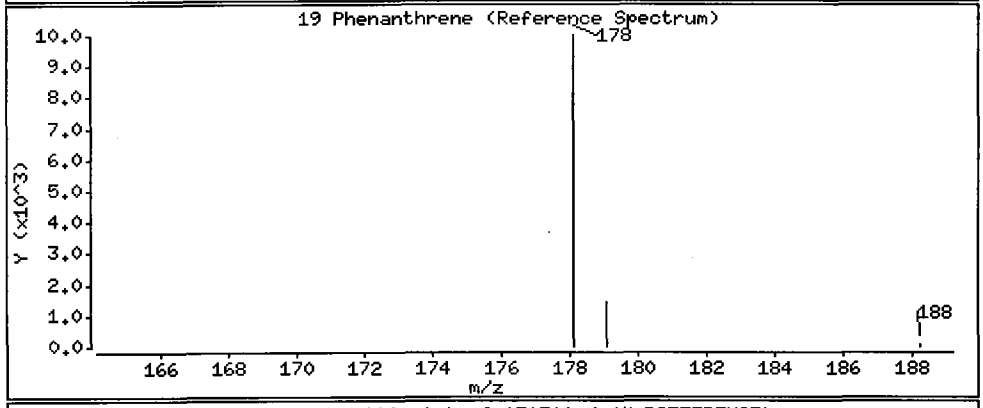
19 Phenanthrene

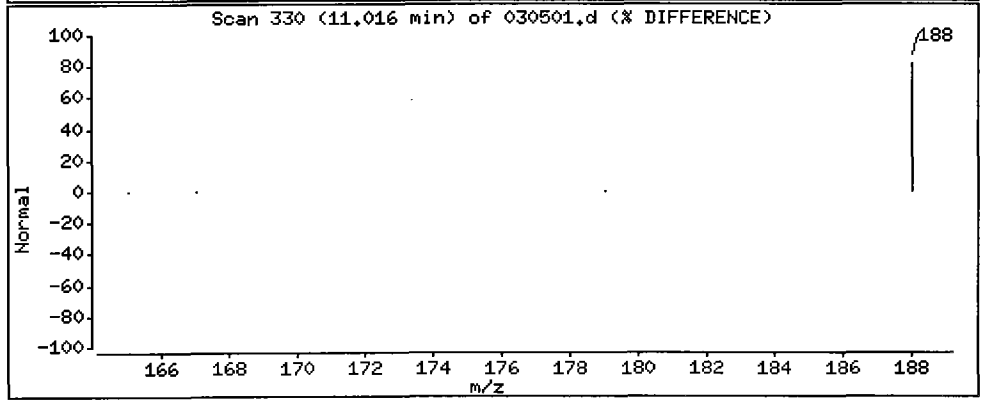
Concentration: 6.01 ug/L











Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

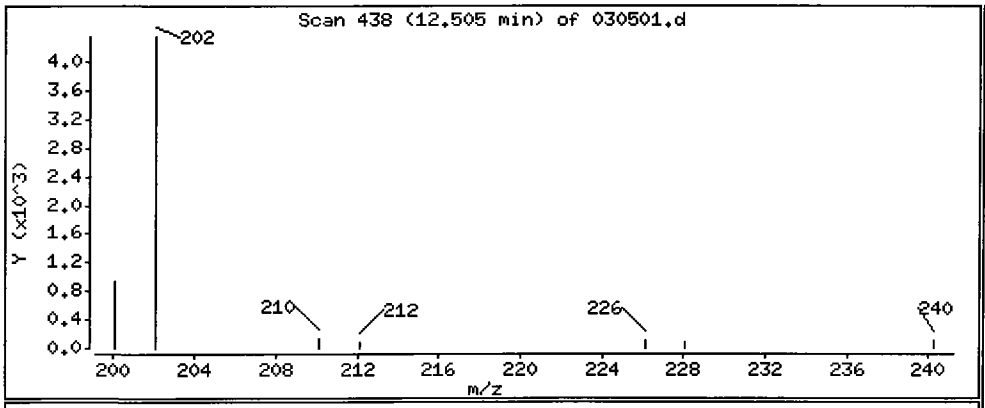
Operator: VTS

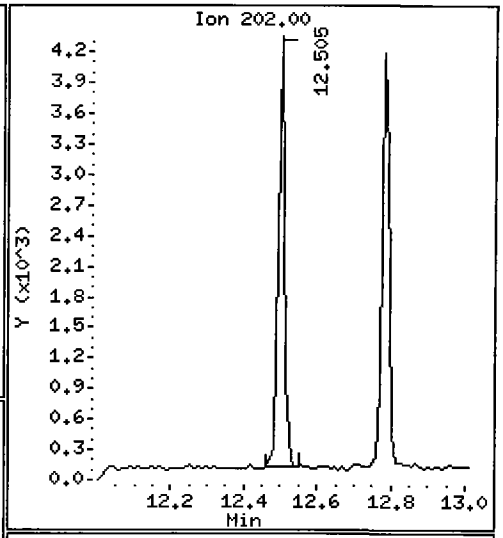
Column phase: ZB-5

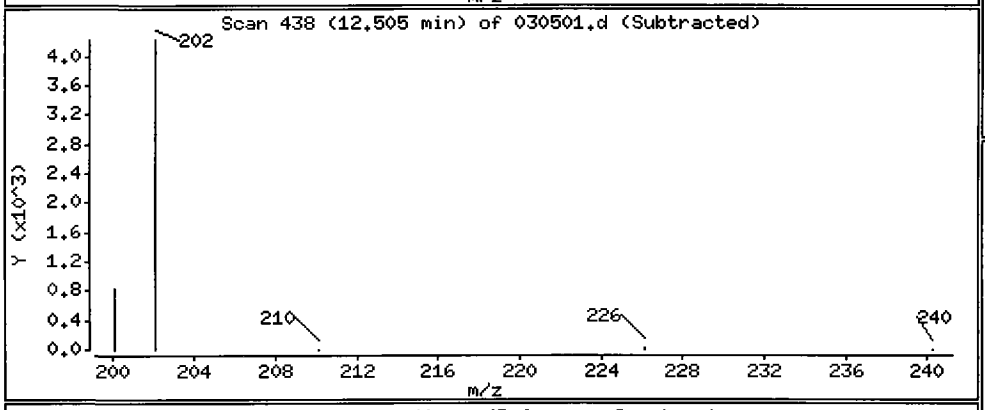
Column diameter: 0.25

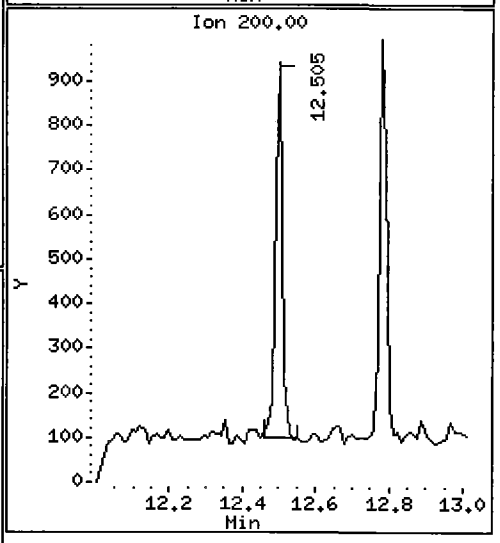
24 Fluoranthene

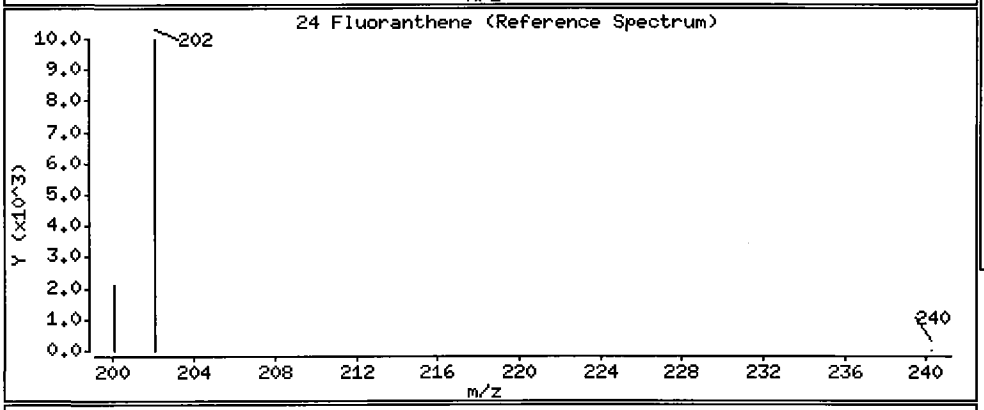
Concentration: 6.43 ug/L

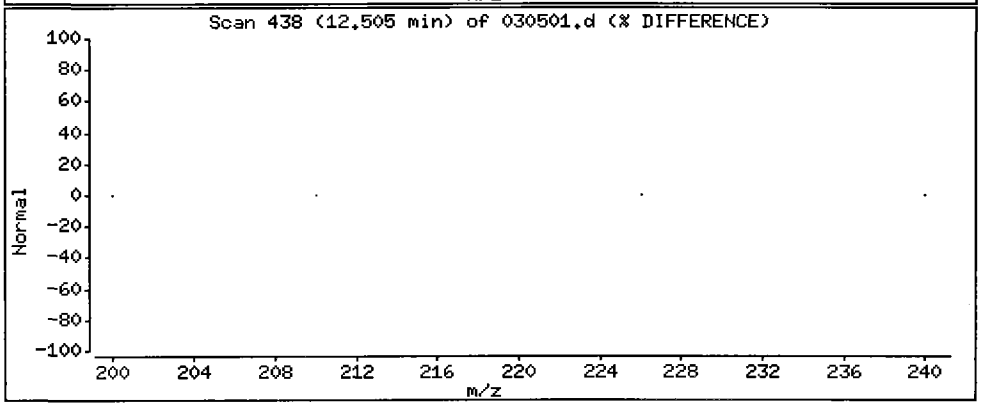












Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

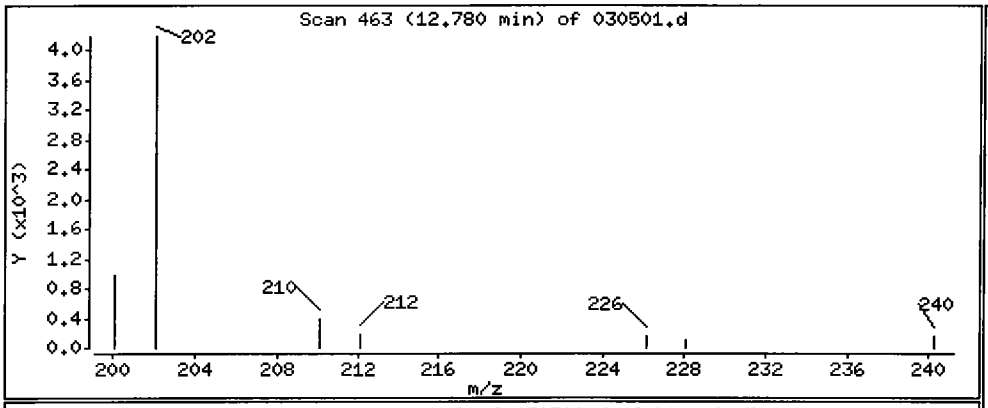
Operator: VTS

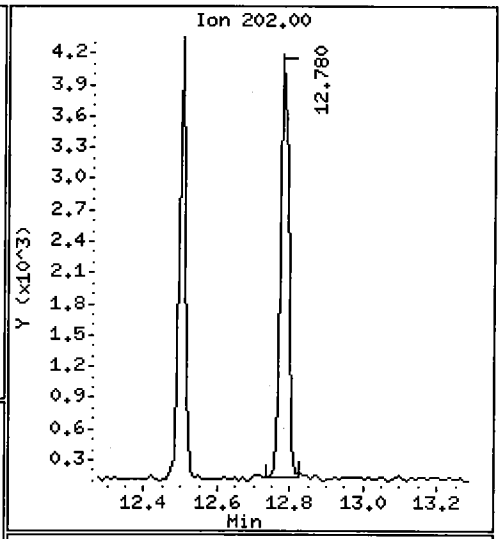
Column phase: ZB-5

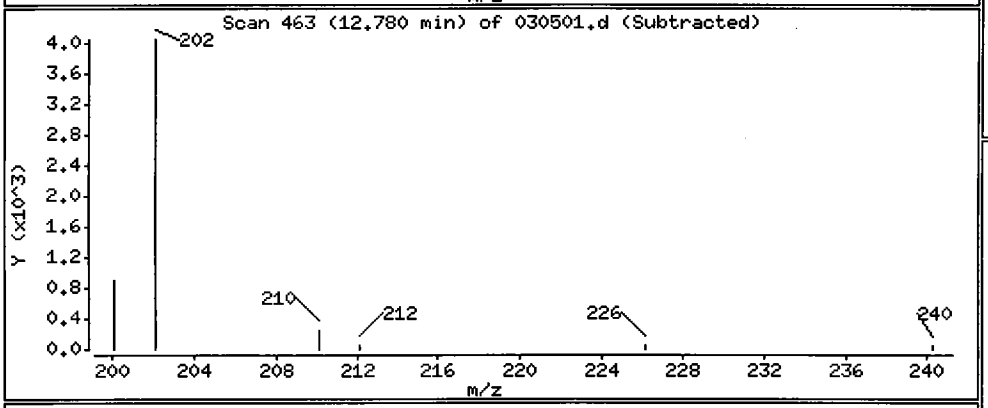
Column diameter: 0.25

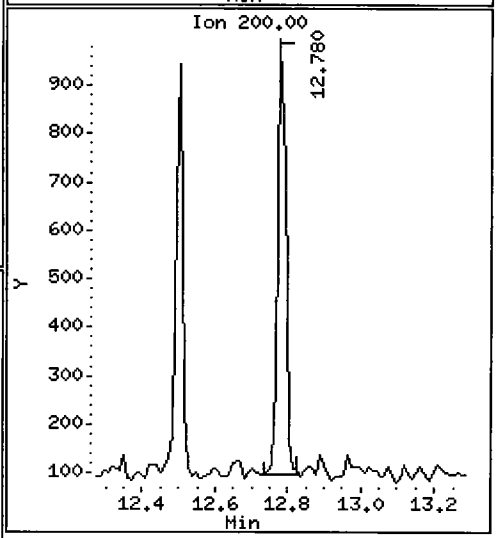
25 Pyrene

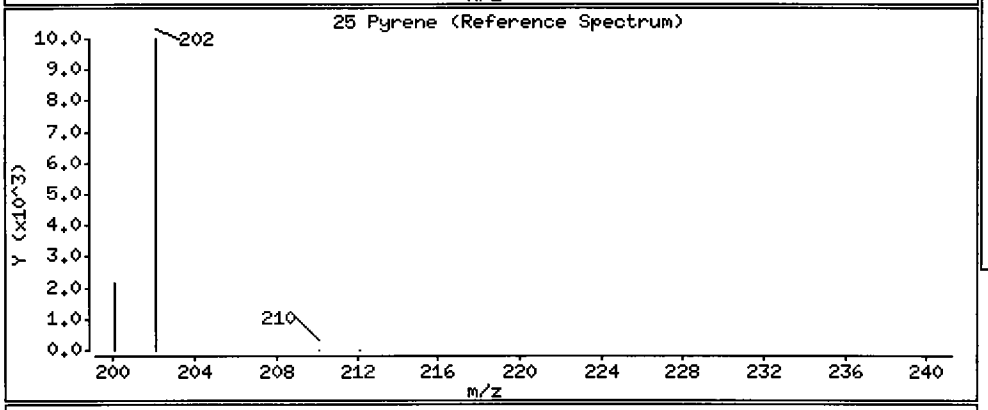
Concentration: 6.96 ug/L

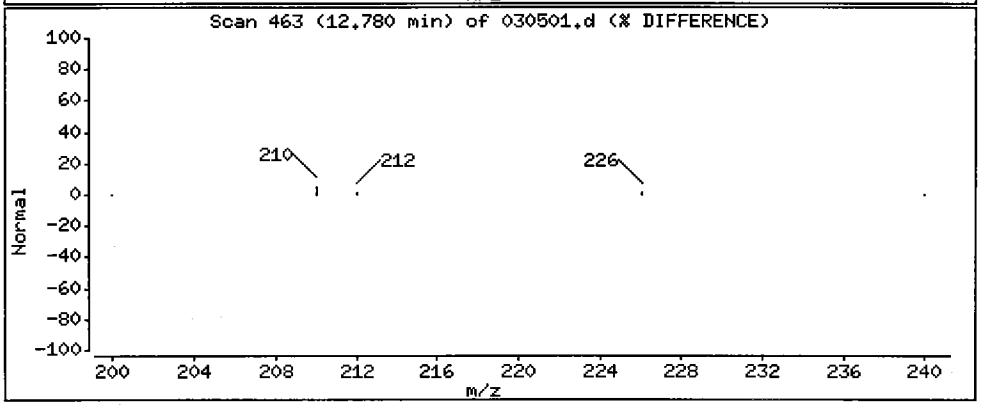












Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

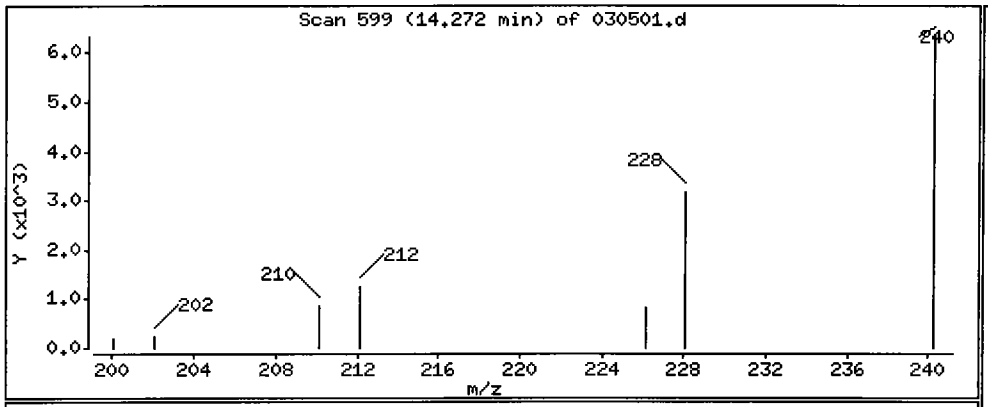
Operator: VTS

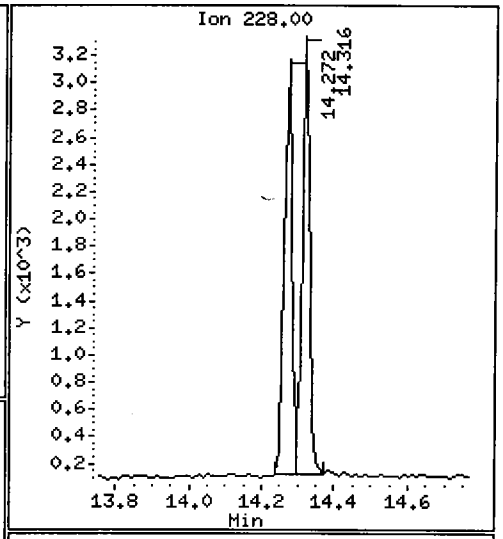
Column phase: ZB-5

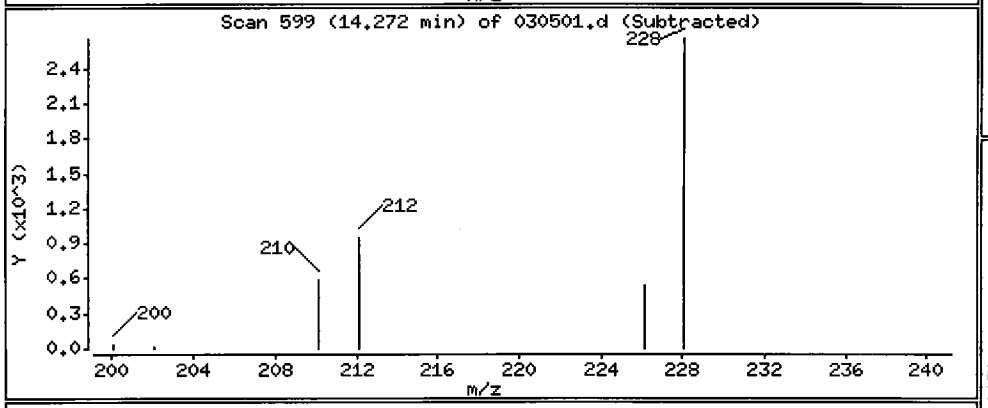
Column diameter: 0.25

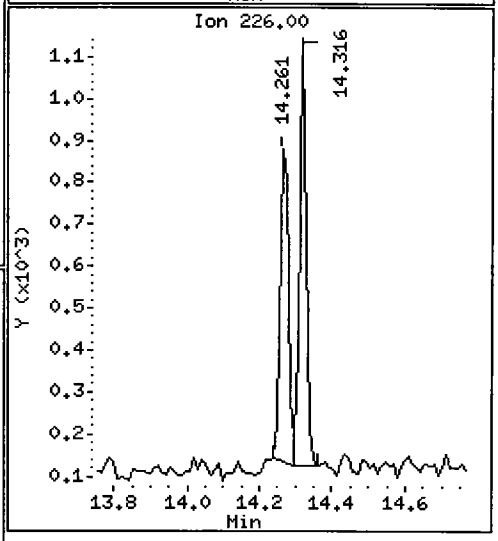
28 Benzo(a)anthracene

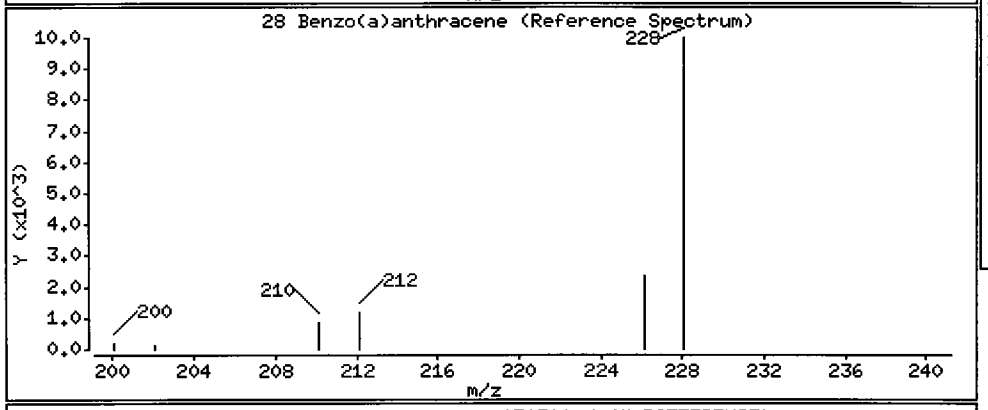
Concentration: 6.35 ug/L

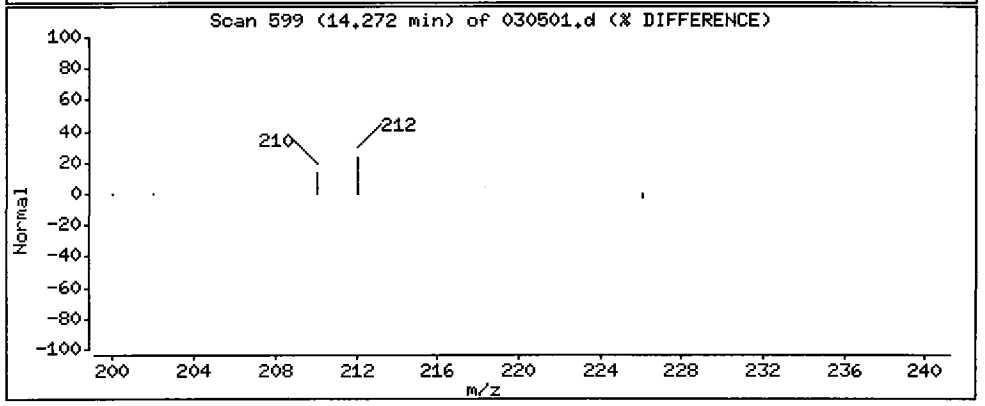












Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

Operator: VTS

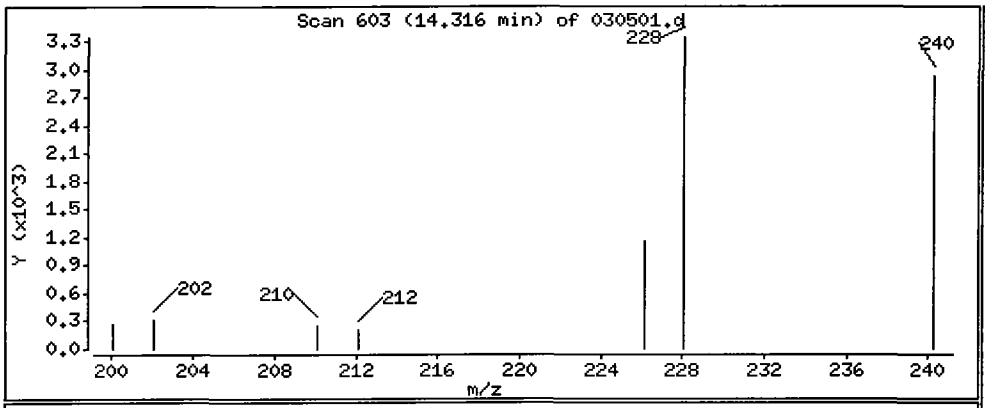
Column phase: ZB-5

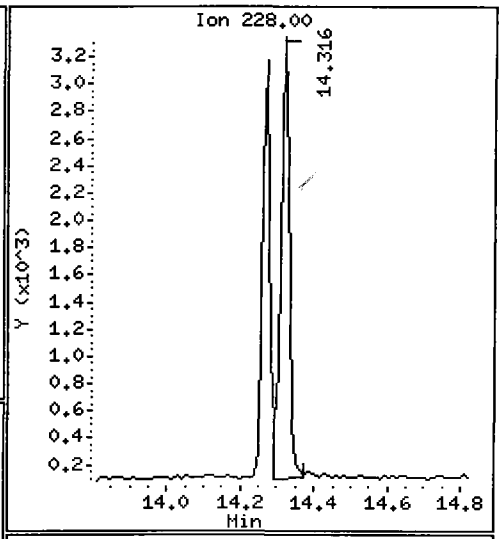
Column diameter: 0.25

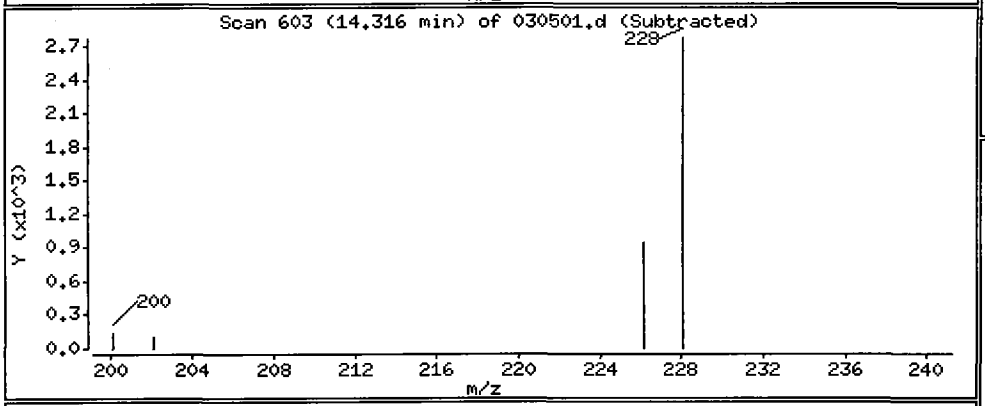
30 Chrysene

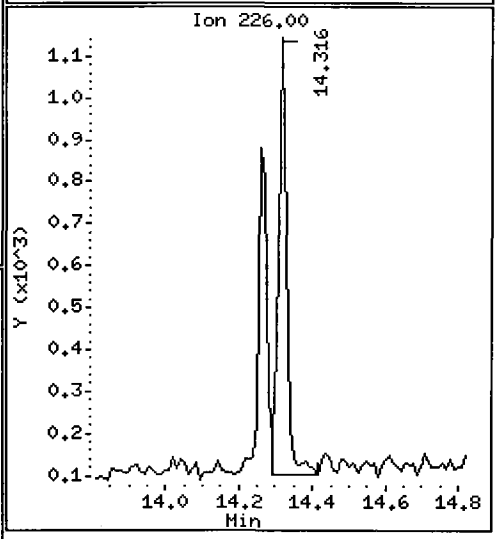
Concentration: 7.02 ug/L

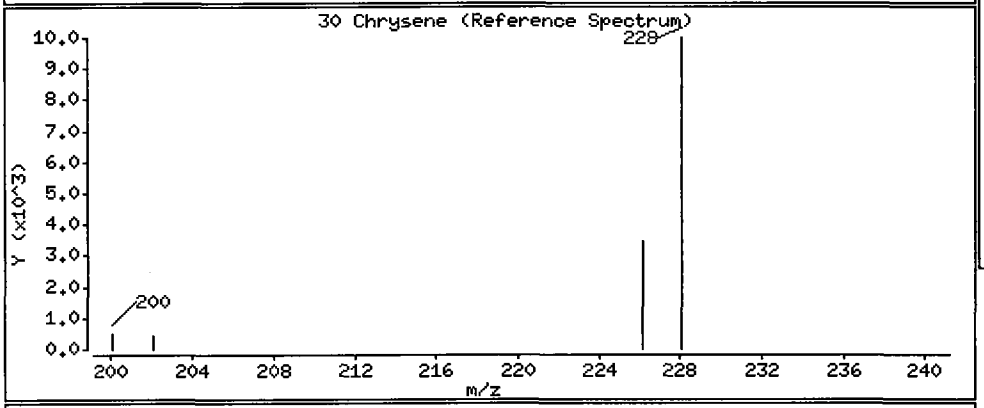
GC/MS

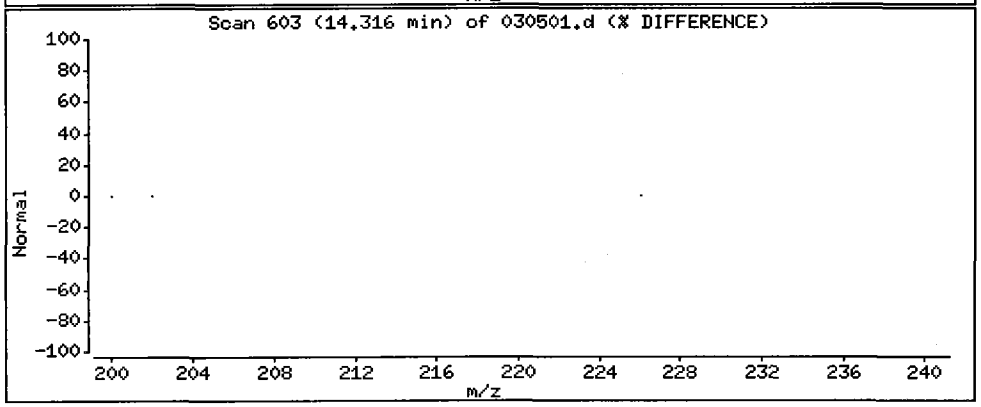












Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

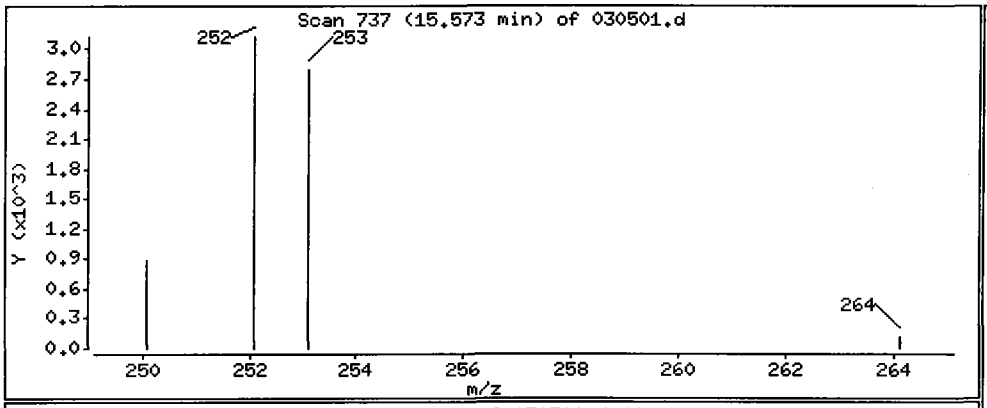
Operator: VTS

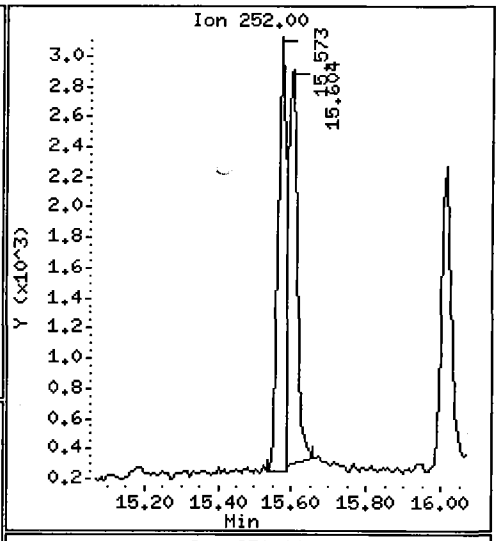
Column phase: ZB-5

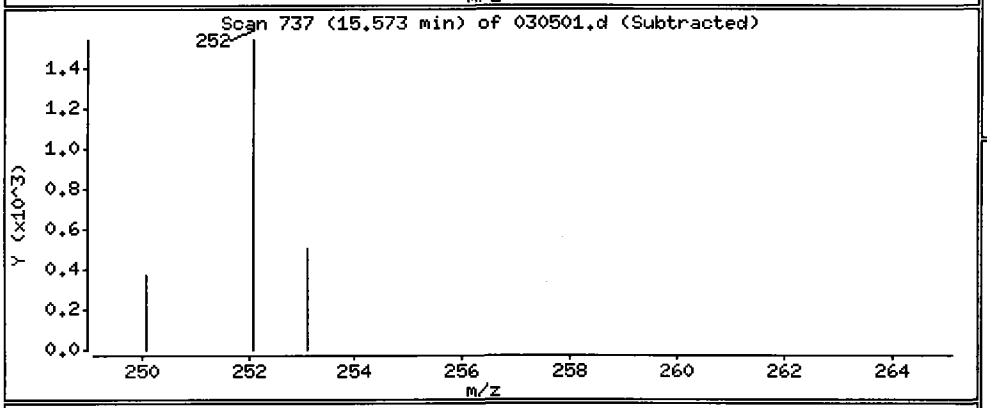
Column diameter: 0.25

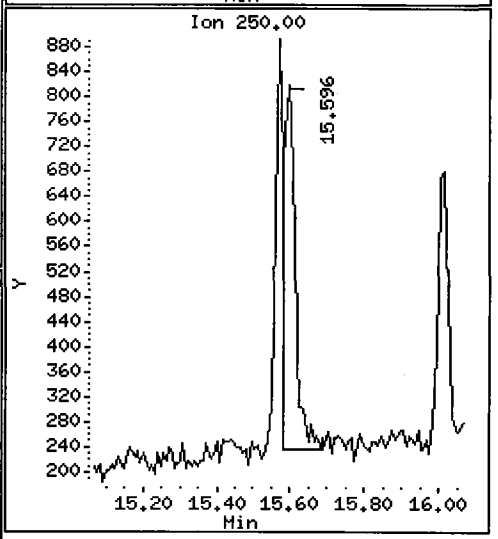
32 Benzo(b)fluoranthene

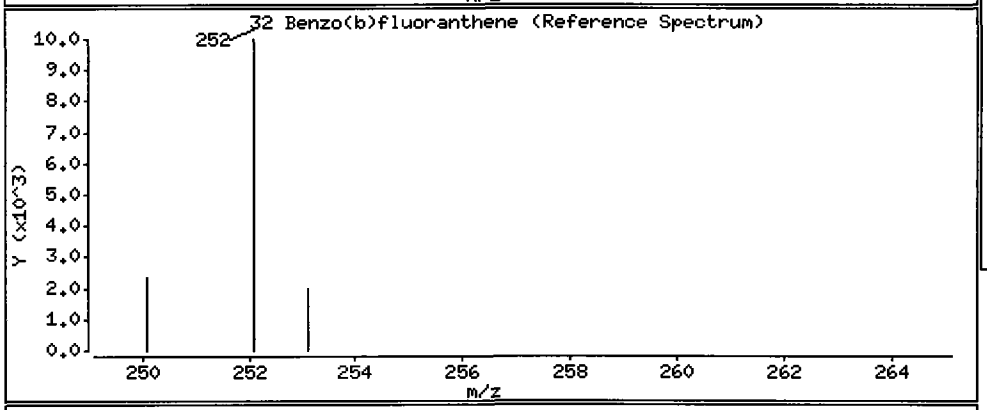
Concentration: 6.17 ug/L

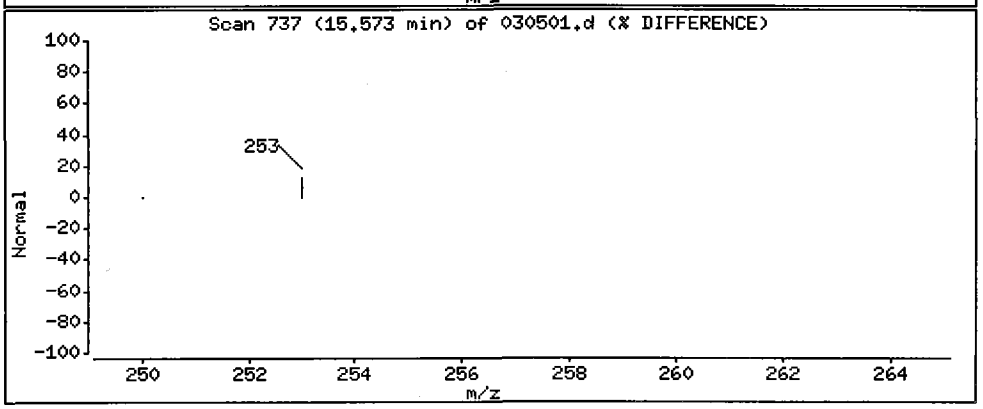












Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

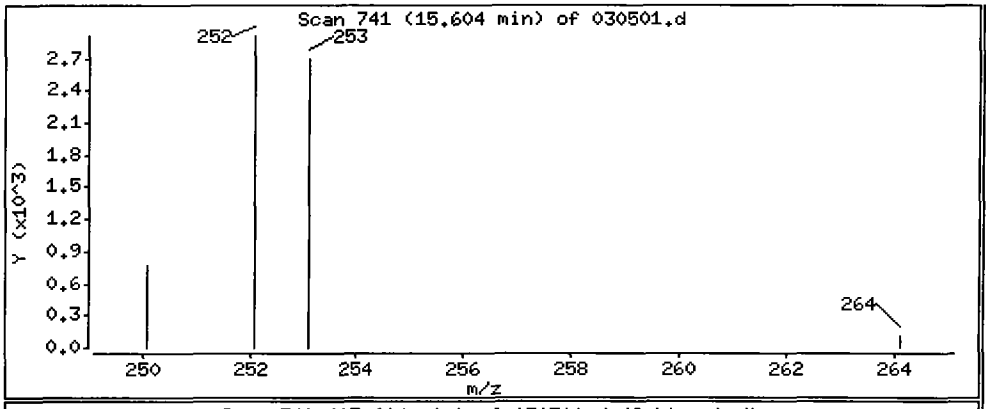
Client ID: QM04MBW1 Instrument: nt2.i

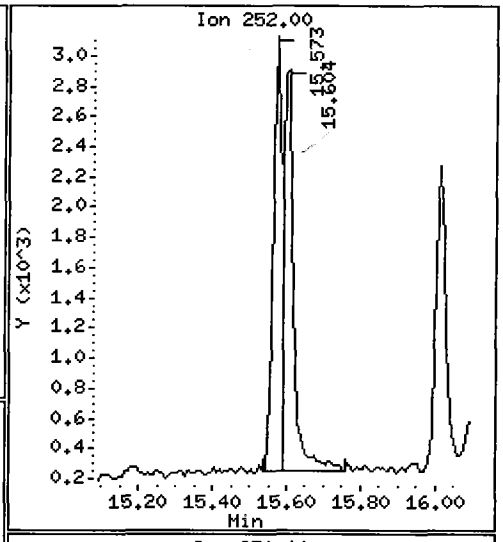
Sample Info: QM04MBW1

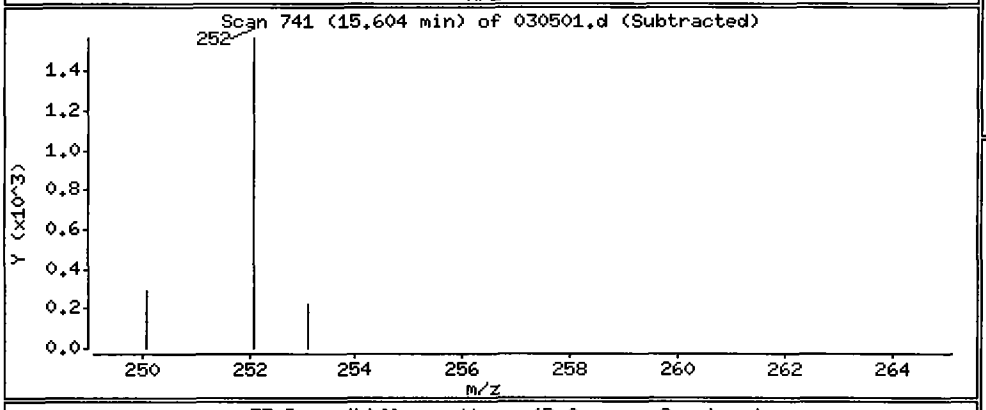
Volume Injected (uL): 2.0 Operator: VTS

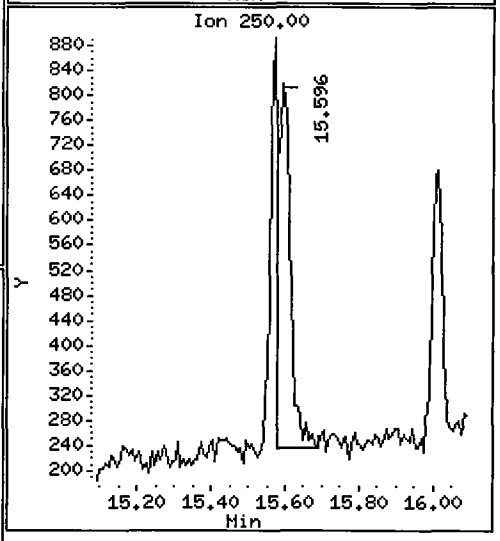
Column phase: ZB-5 Column diameter: 0.25

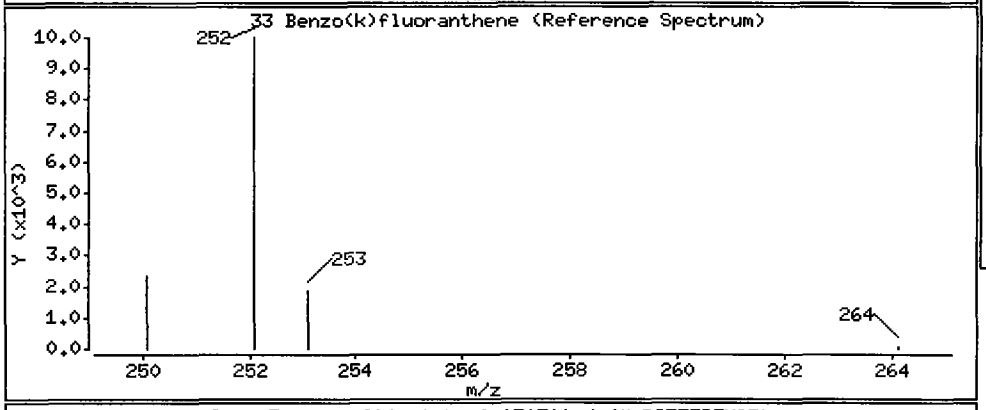
33 Benzo(k)fluoranthene Concentration: 6.28 ug/L

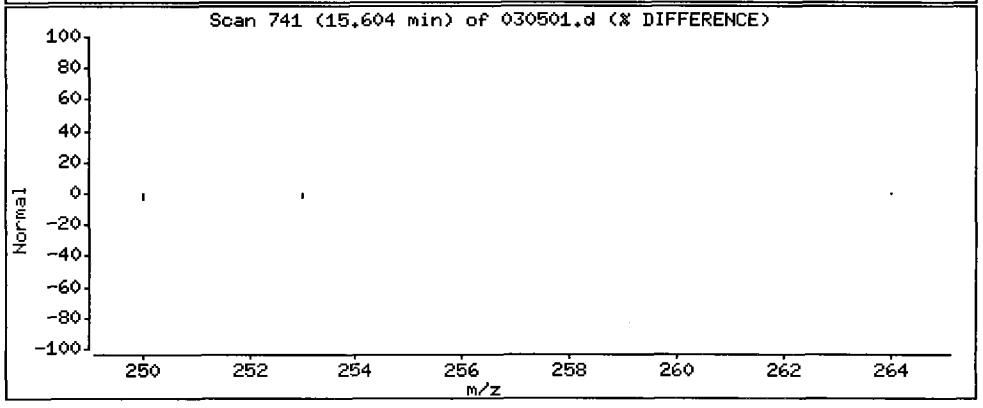












Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

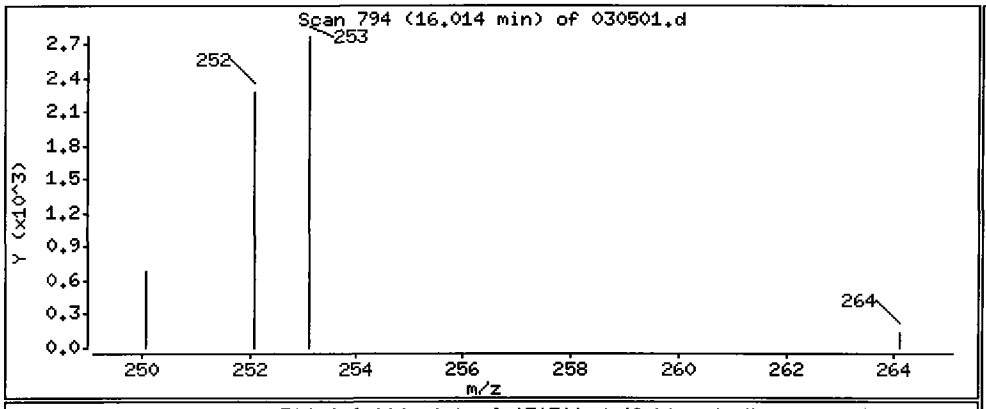
Operator: VTS

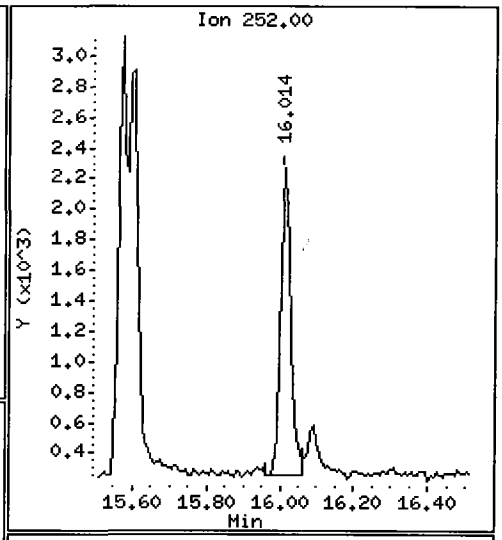
Column phase: ZB-5

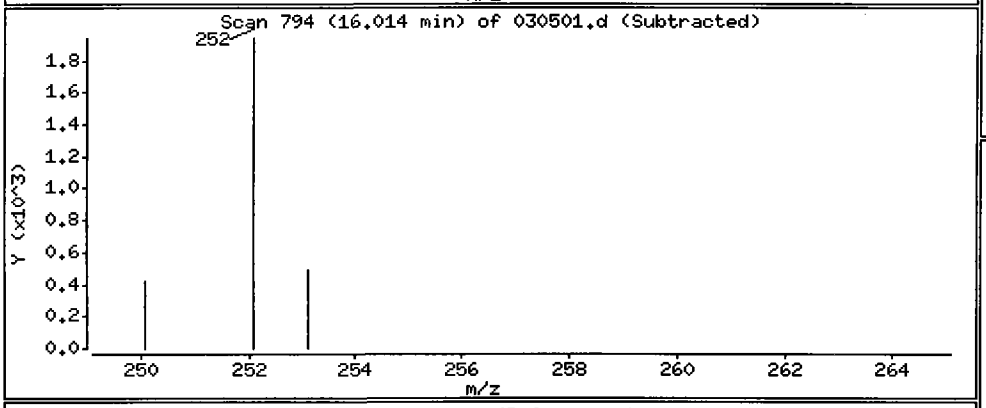
Column diameter: 0.25

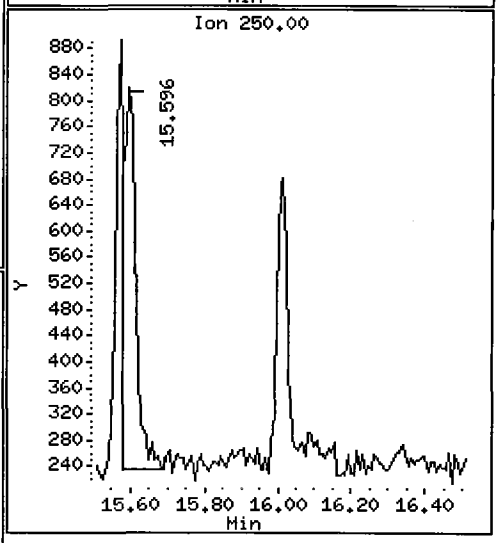
34 Benzo(a)pyrene

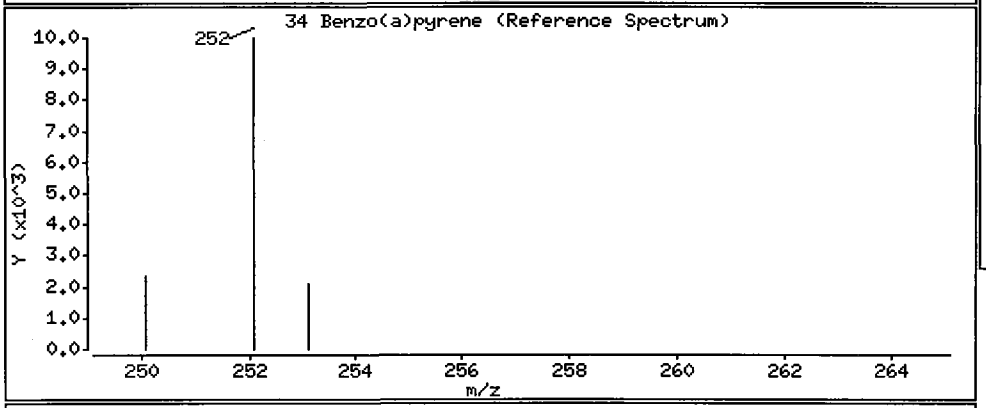
Concentration: 6.32 ug/L

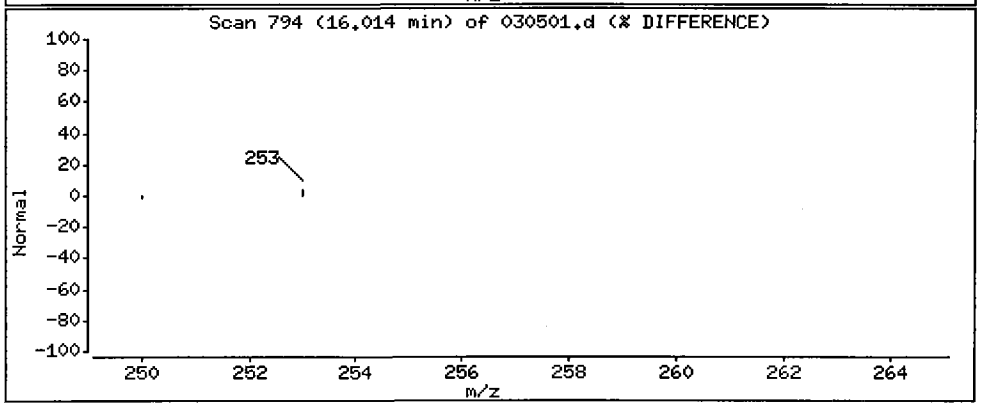












Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

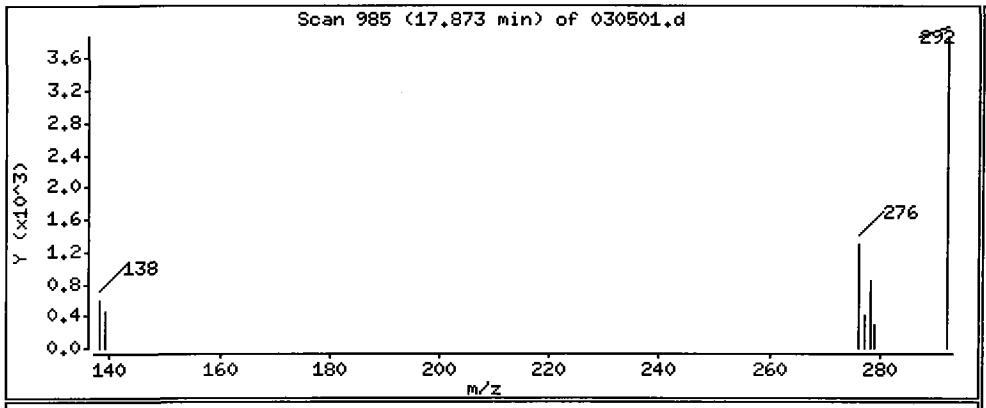
Client ID: QM04MBW1 Instrument: nt2.i

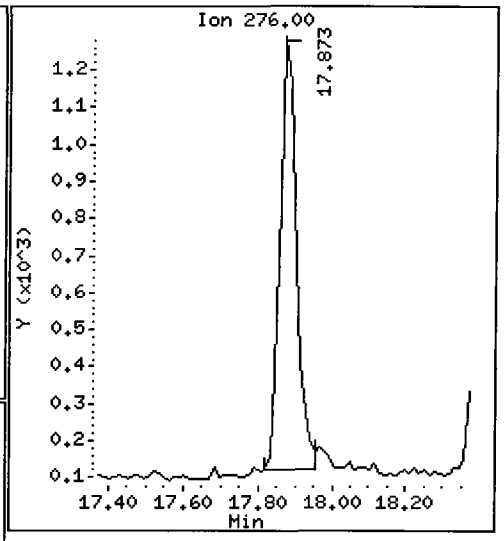
Sample Info: QM04MBW1

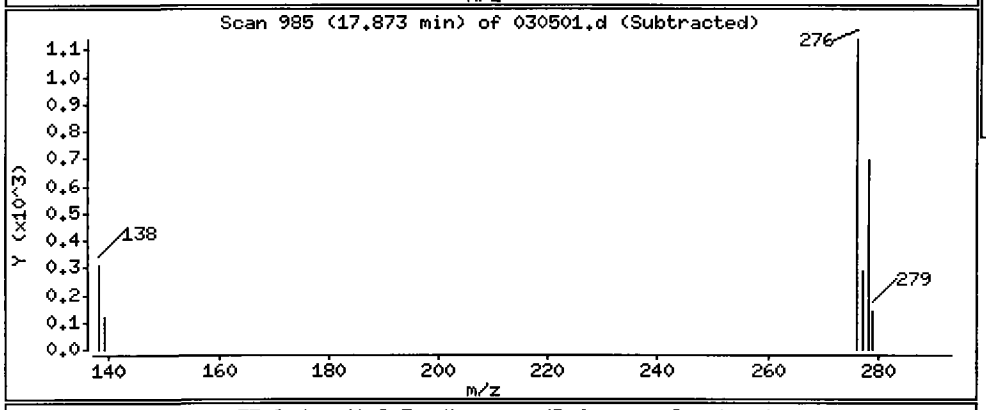
Volume Injected (uL): 2.0 Operator: VTS

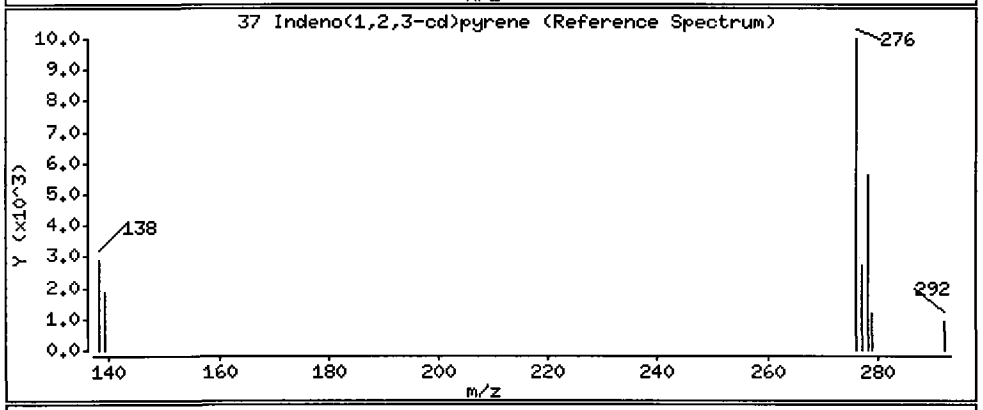
Column phase: ZB-5 Column diameter: 0.25

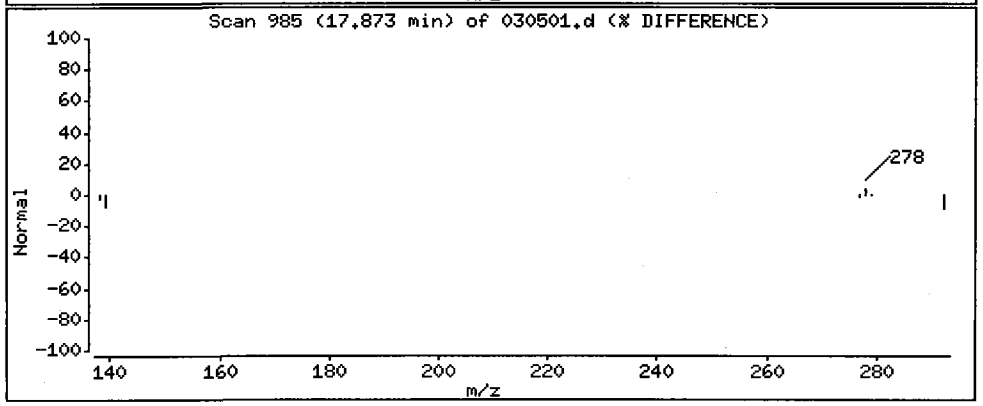
37 Indeno(1,2,3-cd)pyrene Concentration: 5.08 ug/L











Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1

Instrument: nt2.i

Sample Info: QM04MBW1

Volume Injected (uL): 2.0

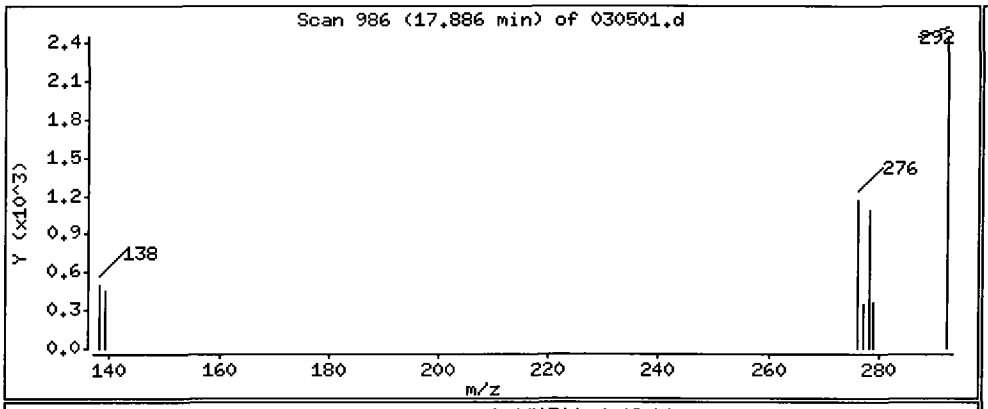
Operator: VTS

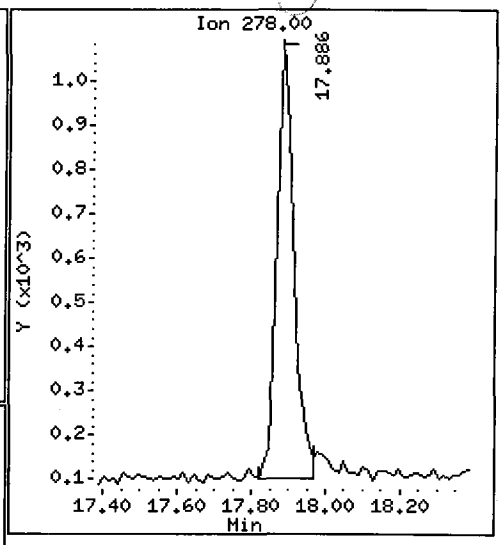
Column phase: ZB-5

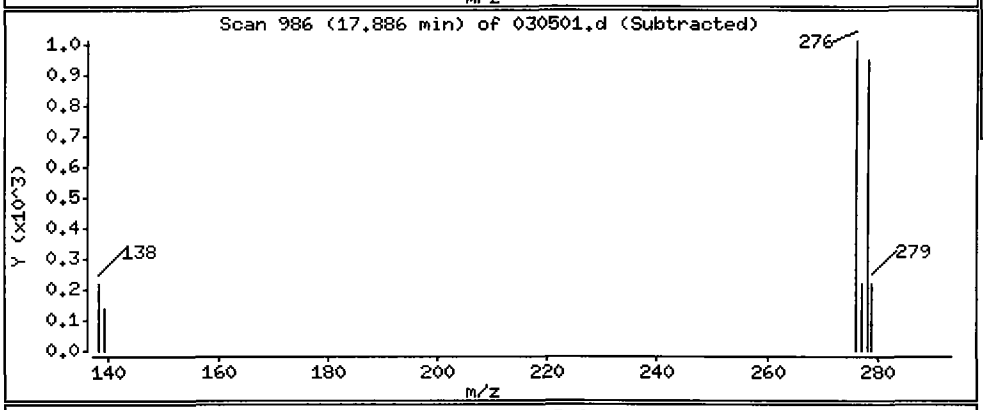
Column diameter: 0.25

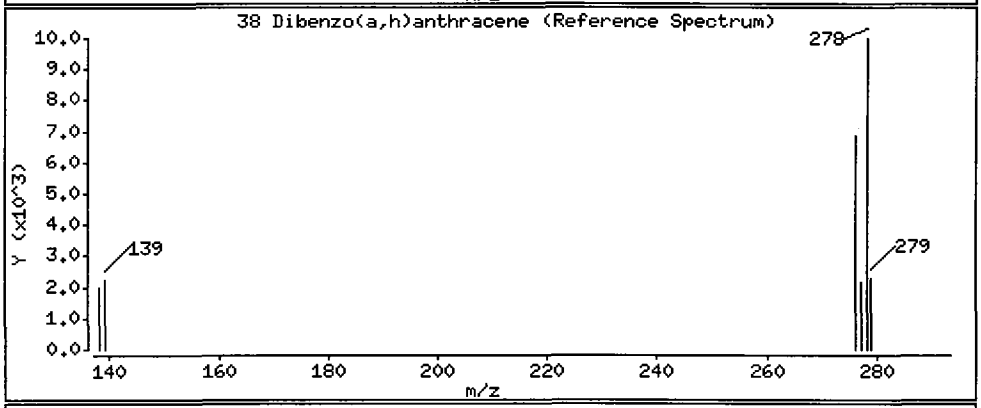
38 Dibenzo(a,h)anthracene

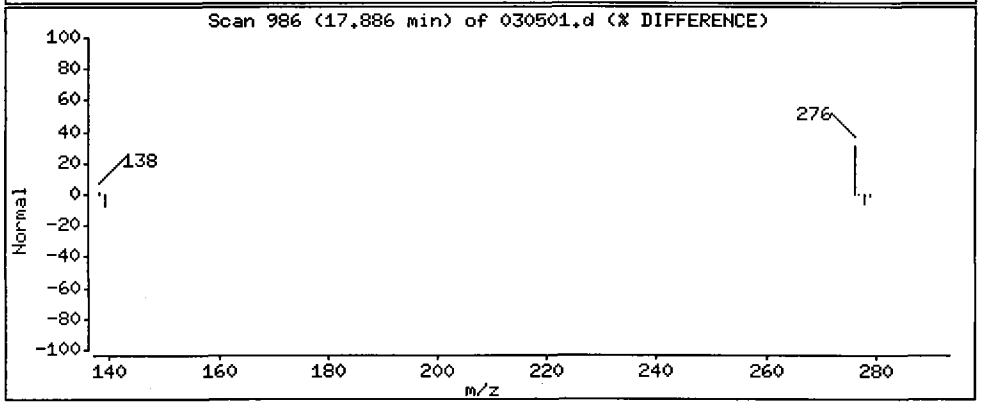
Concentration: 5.78 ug/L











Data File: /chem3/nt2.i/20100305.b/030501.d

Date : 05-MAR-2010 11:30

Client ID: QM04MBW1 Instrument: nt2.i

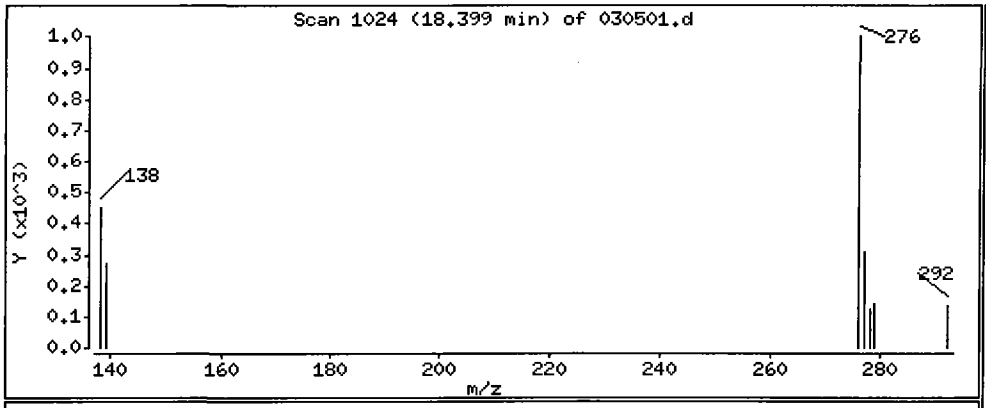
Sample Info: QM04MBW1

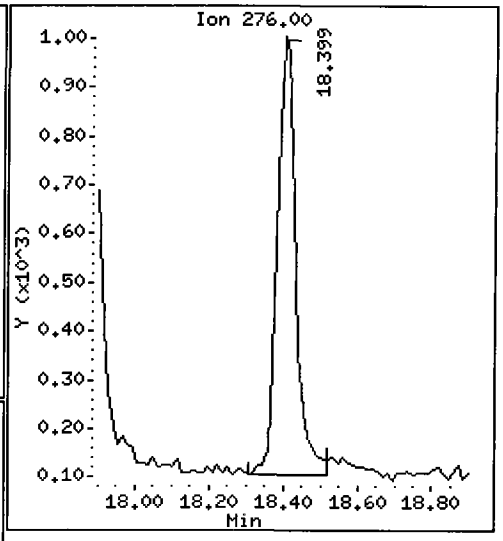
Volume Injected (uL): 2.0 Operator: VTS

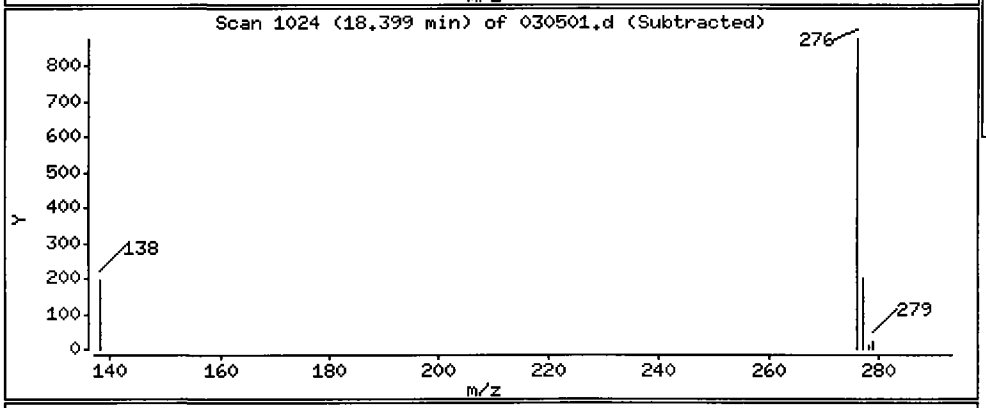
Column phase: ZB-5 Column diameter: 0.25

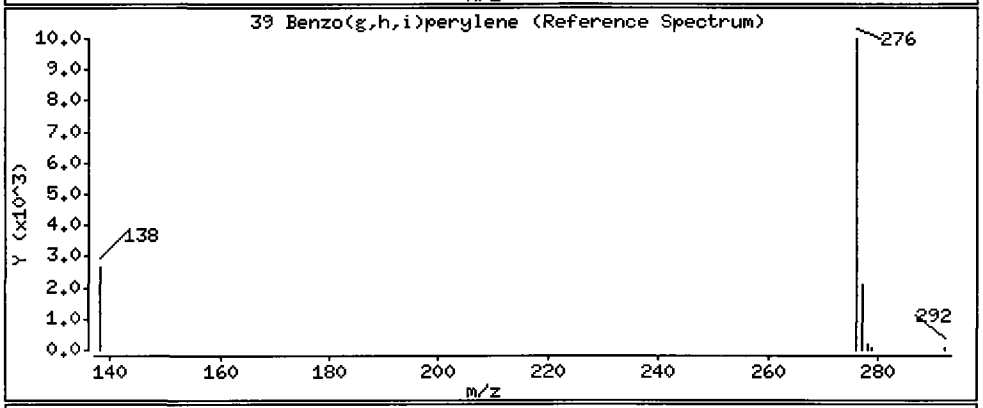
39 Benzo(g,h,i)perylene Concentration: 5.24 ug/L

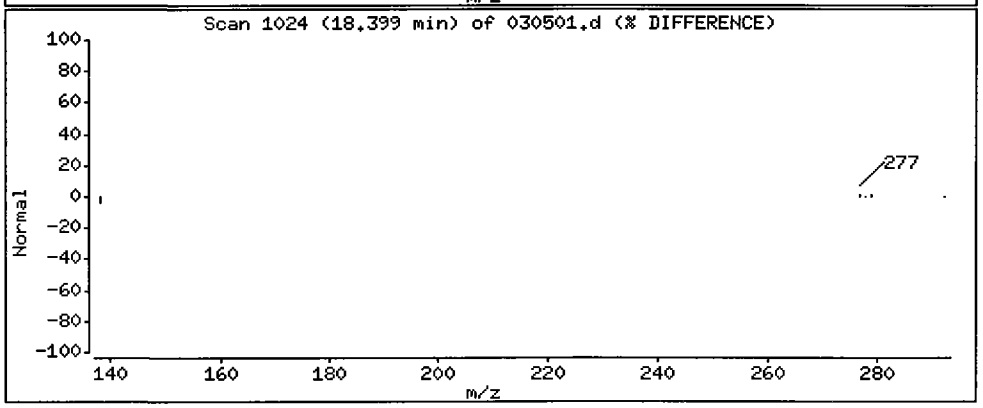
JGAL



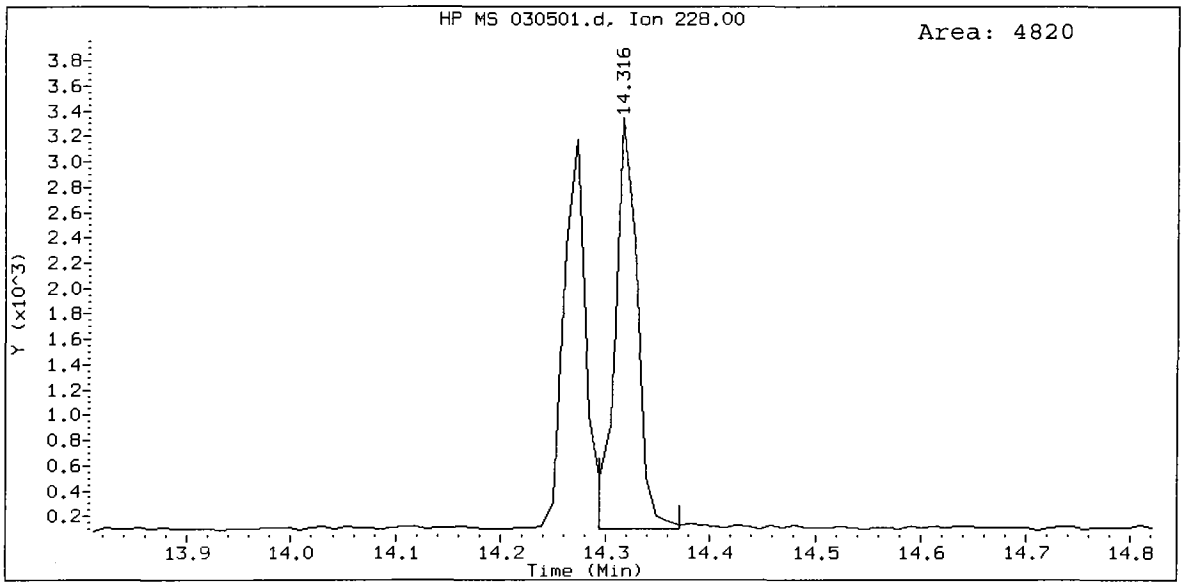


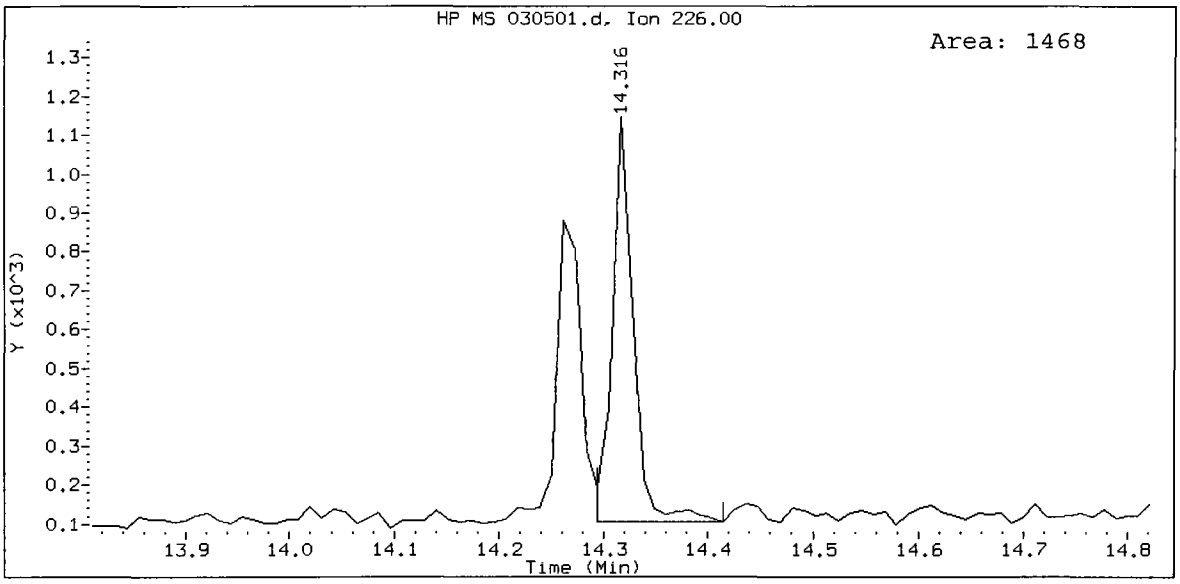






QM04MBW1, /chem3/nt2.i/20100305.b/030501.d
Chrysene Amount: 7.02





ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 12:44
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	---
91-57-6	2-Methylnaphthalene	0.010	---
90-12-0	1-Methylnaphthalene	0.010	---
208-96-8	Acenaphthylene	0.010	---
83-32-9	Acenaphthene	0.010	---
86-73-7	Fluorene	0.010	---
85-01-8	Phenanthrene	0.010	---
120-12-7	Anthracene	0.010	---
206-44-0	Fluoranthene	0.010	---
129-00-0	Pyrene	0.010	---
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
205-99-2	Benzo(b)fluoranthene	0.010	---
207-08-9	Benzo(k)fluoranthene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
191-24-2	Benzo(g,h,i)perylene	0.010	---
132-64-9	Dibenzofuran	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	59.7%
d14-Dibenzo(a,h)anthracene	48.3%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/030504.d
Lab Smp Id: QM04AMS Client Smp ID: CB31A022710COMP MS
Inj Date : 05-MAR-2010 12:44
Operator : VTS Inst ID: nt2.i
Smp Info : QM04AMS
Misc Info : 10-5087
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 05-Mar-2010 11:46 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 4 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)	
*	4 Naphthalene-d8	136	6.965	6.967	(1.000)	196703	200.000		
	5 Naphthalene	128	6.981	6.982	(1.002)	162269	171.317	171	
$	6 2-Methylnaphthalene-d10	152	7.812	7.813	(1.121)	90631	178.887	179	
	7 2-Methylnaphthalene	142	7.842	7.844	(1.126)	98248	177.868	178	
	8 1-Methylnaphthalene	142	7.981	7.982	(1.146)	99827	173.640	174	
	10 Acenaphthylene	152	8.970	8.969	(0.979)	149678	196.392	196	
*	11 Acenaphthene-d10	164	9.163	9.175	(1.000)	96306	200.000		
	12 Acenaphthene	153	9.202	9.201	(1.004)	91587	193.654	194	
	14 Dibenzofuran	168	9.408	9.407	(1.027)	141597	229.811	230	B
	15 Fluorene	166	9.817	9.817	(1.071)	109837	215.640	216	
*	18 Phenanthrene-d10	188	11.002	11.002	(1.000)	138057	200.000		
	19 Phenanthrene	178	11.017	11.017	(1.001)	189589	276.288	276	B
	20 Anthracene	178	11.079	11.079	(1.007)	154062	219.714	220	
	24 Fluoranthene	202	12.503	12.506	(1.136)	230374	308.236	308	B
	25 Pyrene	202	12.778	12.780	(1.161)	246371	324.737	325	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.270	14.262	(0.998)	159146	219.469	219
*	29 Chrysene-d12	240	14.292	14.295	(1.000)	145288	200.000	
	30 Chrysene	228	14.314	14.317	(1.002)	172408	240.983	241
	32 Benzo(b)fluoranthene	252	15.572	15.572	(0.968)	192422	218.024	218
	33 Benzo(k)fluoranthene	252	15.595	15.595	(0.969)	161914	168.968	169
	34 Benzo(a)pyrene	252	16.013	16.013	(0.995)	134622	194.674	195
*	35 Perylene-d12	264	16.091	16.091	(1.000)	154046	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.874	17.874	(1.111)	127921	159.631	160
$	36 Dibenzo(a,h)anthracene-d14	292	17.821	17.820	(1.107)	67601	144.778	145
	38 Dibenzo(a,h)anthracene	278	17.888	17.887	(1.112)	102231	163.099	163
	39 Benzo(g,h,i)perylene	276	18.400	18.400	(1.144)	117581	170.160	170

B

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 030504.d
Lab Smp Id: QM04AMS
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Calibration Date: 05-MAR-2010
Calibration Time: 10:33
Client Smp ID: CB31A022710COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	196703	13.63
11 Acenaphthene-d10	96677	48338	193354	96306	-0.38
18 Phenanthrene-d10	147750	73875	295500	138057	-6.56
29 Chrysene-d12	135219	67610	270438	145288	7.45
35 Perylene-d12	125815	62908	251630	154046	22.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.97	-0.02
11 Acenaphthene-d10	9.18	8.68	9.68	9.16	-0.14
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	0.00
29 Chrysene-d12	14.29	13.79	14.79	14.29	-0.02
35 Perylene-d12	16.09	15.59	16.59	16.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QM04AMS
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Client SDG: QM04
Fraction: SV
Client Smp ID: CB31A022710COMP MS
Operator: VTS
SampleType: MS
Quant Type: ISTD

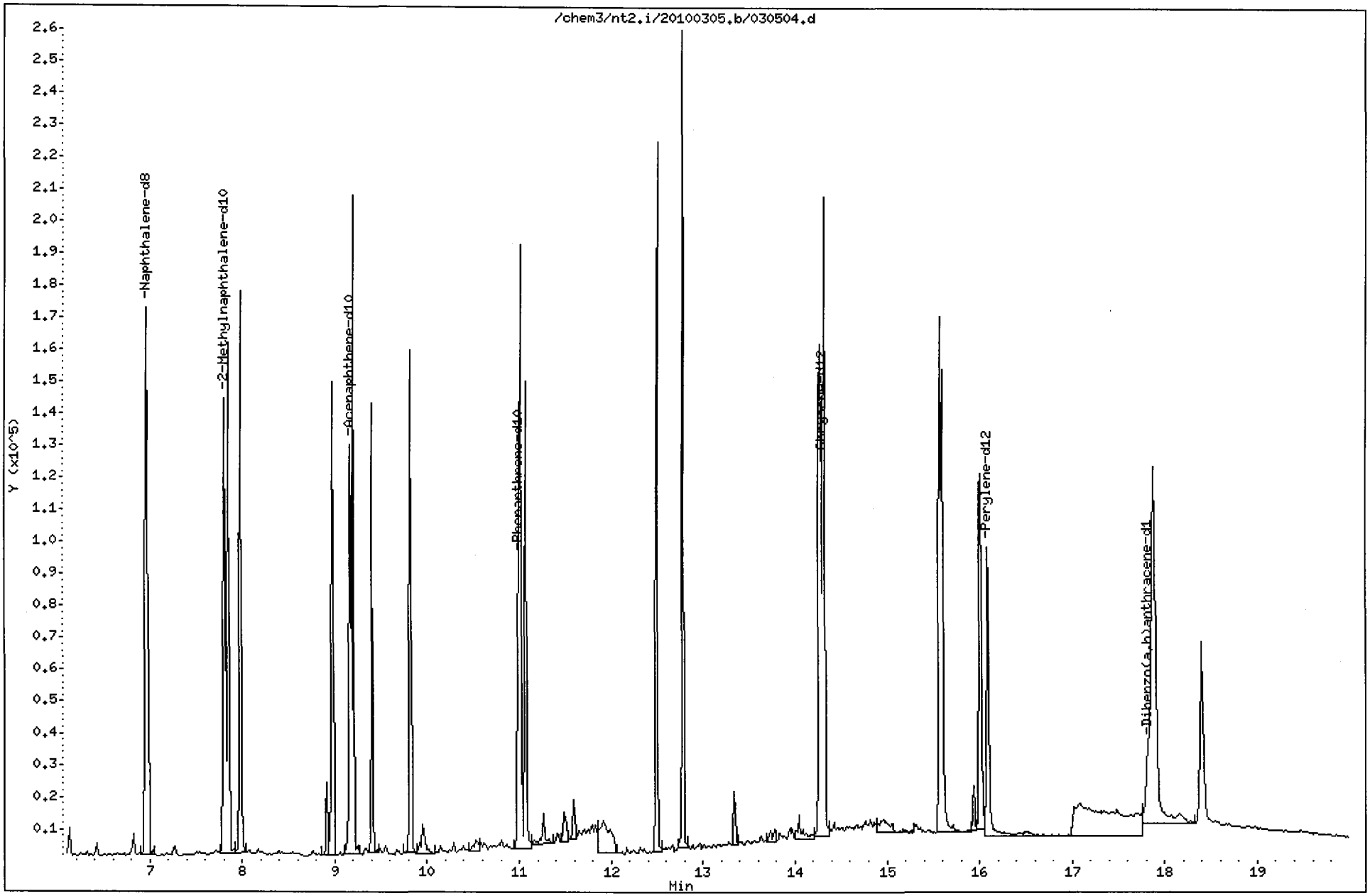
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	171	57.11	41-101
7 2-Methylnaphthalen	300	178	59.29	47-100
8 1-Methylnaphthalen	300	174	57.88	30-160
10 Acenaphthylene	300	196	65.46	35-100
12 Acenaphthene	300	194	64.55	43-104
14 Dibenzofuran	300	230	76.60	37-100
15 Fluorene	300	216	71.88	51-103
19 Phenanthrene	300	276	92.10	55-109
20 Anthracene	300	220	73.24	30-101
24 Fluoranthene	300	308	102.75	49-123
25 Pyrene	300	325	108.25	48-120
28 Benzo(a)anthracene	300	219	73.16	43-113
30 Chrysene	300	241	80.33	59-112
32 Benzo(b)fluoranthe	300	218	72.67	44-121
33 Benzo(k)fluoranthe	300	169	56.32	50-117
34 Benzo(a)pyrene	300	195	64.89	10-100
37 Indeno(1,2,3-cd)py	300	160	53.21	43-112
38 Dibenzo(a,h)anthra	300	163	54.37	42-114
39 Benzo(g,h,i)peryle	300	170	56.72	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	179	59.63	31-109
$ 36 Dibenzo(a,h)anthra	300	145	48.26	10-133

Data File: /chem3/nt2.i/20100305.b/030504.d
Date : 05-MAR-2010 12:44
Client ID: CB31A022710COMP MS
Sample Info: QM04AMS
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE DUPLICATE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/08/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
Event: POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/05/10 13:08
Instrument/Analyst: NT2/PK

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.010	---
91-57-6	2-Methylnaphthalene	0.010	---
90-12-0	1-Methylnaphthalene	0.010	---
208-96-8	Acenaphthylene	0.010	---
83-32-9	Acenaphthene	0.010	---
86-73-7	Fluorene	0.010	---
85-01-8	Phenanthrene	0.010	---
120-12-7	Anthracene	0.010	---
206-44-0	Fluoranthene	0.010	---
129-00-0	Pyrene	0.010	---
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
205-99-2	Benzo(b)fluoranthene	0.010	---
207-08-9	Benzo(k)fluoranthene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
191-24-2	Benzo(g,h,i)perylene	0.010	---
132-64-9	Dibenzofuran	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.0%
d14-Dibenzo(a,h)anthracene	58.7%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/030505.d
Lab Smp Id: QM04AMSD Client Smp ID: CB31A022710COMP MSD
Inj Date : 05-MAR-2010 13:08
Operator : VTS Inst ID: nt2.i
Smp Info : QM04AMSD
Misc Info : 10-5087
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 05-Mar-2010 11:46 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 5 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)	
*	4 Naphthalene-d8	136	6.965	6.967	(1.000)	199245	200.000		
	5 Naphthalene	128	6.981	6.982	(1.002)	162510	169.383	169	
$	6 2-Methylnaphthalene-d10	152	7.812	7.813	(1.121)	87706	170.906	171	
	7 2-Methylnaphthalene	142	7.842	7.844	(1.126)	97240	173.797	174	
	8 1-Methylnaphthalene	142	7.981	7.982	(1.146)	96708	166.068	166	
	10 Acenaphthylene	152	8.970	8.969	(0.979)	148084	198.805	199	
*	11 Acenaphthene-d10	164	9.163	9.175	(1.000)	94124	200.000		
	12 Acenaphthene	153	9.202	9.201	(1.004)	91691	198.368	198	
	14 Dibenzofuran	168	9.408	9.407	(1.027)	141947	235.719	236	B
	15 Fluorene	166	9.831	9.817	(1.073)	110865	222.704	223	
*	18 Phenanthrene-d10	188	11.000	11.002	(1.000)	140622	200.000		
	19 Phenanthrene	178	11.015	11.017	(1.001)	185540	265.455	265	B
	20 Anthracene	178	11.077	11.079	(1.007)	156707	219.410	219	
	24 Fluoranthene	202	12.504	12.506	(1.137)	231270	303.790	304	B
	25 Pyrene	202	12.778	12.780	(1.162)	250277	323.869	324	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.260	14.262	(0.998)	171546	234.877	235
*	29 Chrysene-d12	240	14.293	14.295	(1.000)	146335	200.000	
	30 Chrysene	228	14.315	14.317	(1.002)	184716	256.339	256
	32 Benzo(b)fluoranthene	252	15.572	15.572	(0.968)	174041	196.068	196
	33 Benzo(k)fluoranthene	252	15.595	15.595	(0.969)	218695	226.916	227
	34 Benzo(a)pyrene	252	16.013	16.013	(0.995)	147780	212.478	212
*	35 Perylene-d12	264	16.090	16.091	(1.000)	154933	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.874	17.874	(1.111)	145732	180.816	181
$	36 Dibenzo(a,h)anthracene-d14	292	17.820	17.820	(1.107)	82798	176.309	176
	38 Dibenzo(a,h)anthracene	278	17.887	17.887	(1.112)	113202	179.568	180
	39 Benzo(g,h,i)perylene	276	18.400	18.400	(1.144)	134982	194.224	194

B

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 030505.d
Lab Smp Id: QM04AMSD
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Calibration Date: 05-MAR-2010
Calibration Time: 10:33
Client Smp ID: CB31A022710COMP
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	199245	15.10
11 Acenaphthene-d10	96677	48338	193354	94124	-2.64
18 Phenanthrene-d10	147750	73875	295500	140622	-4.82
29 Chrysene-d12	135219	67610	270438	146335	8.22
35 Perylene-d12	125815	62908	251630	154933	23.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.97	-0.02
11 Acenaphthene-d10	9.18	8.68	9.68	9.16	-0.14
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	-0.01
29 Chrysene-d12	14.29	13.79	14.79	14.29	-0.01
35 Perylene-d12	16.09	15.59	16.59	16.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QM04AMSD
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Client SDG: QM04
Fraction: SV
Client Smp ID: CB31A022710COMP MSD
Operator: VTS
SampleType: MS
Quant Type: ISTD

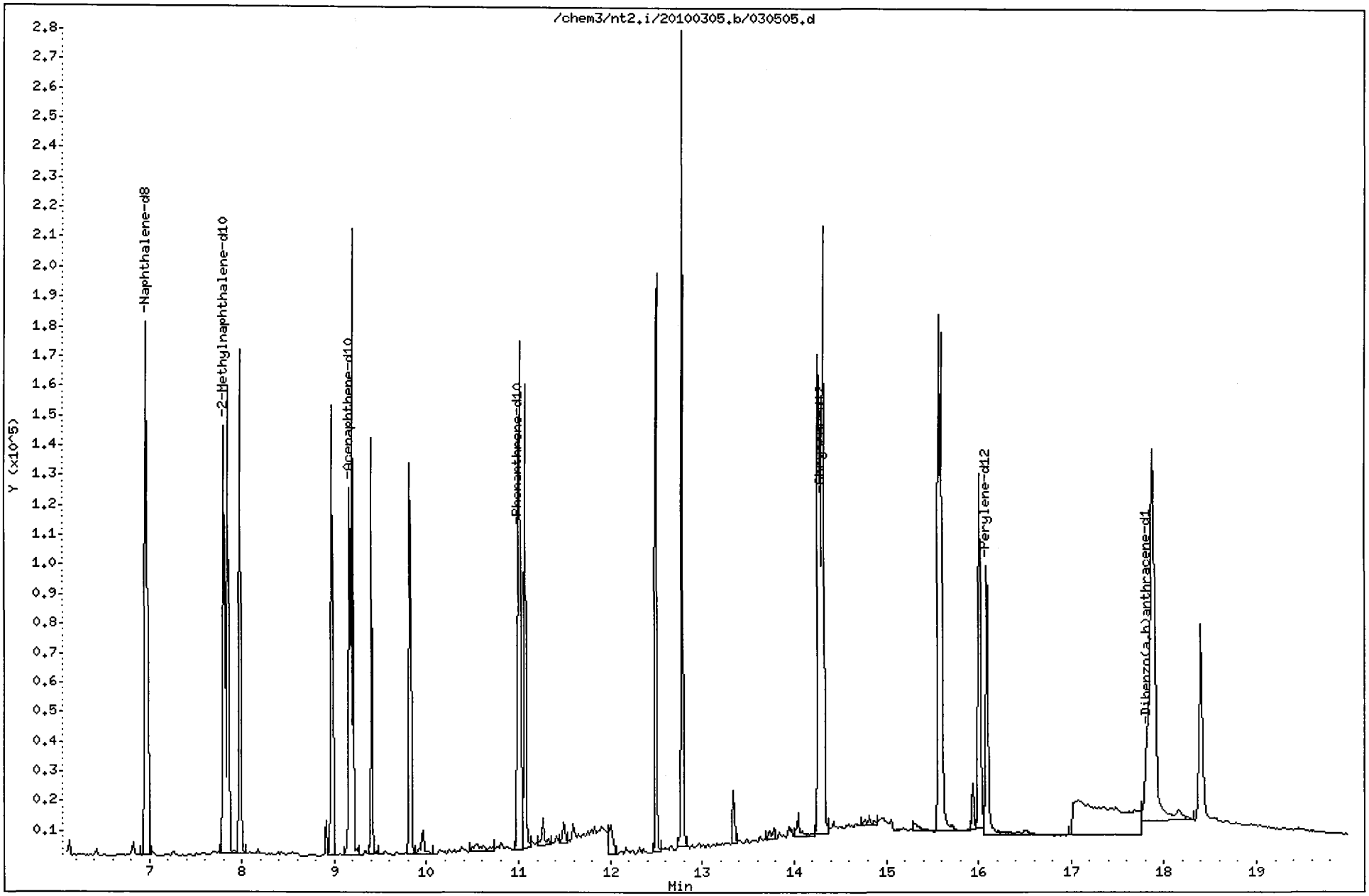
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	169	56.46	41-101
7 2-Methylnaphthalen	300	174	57.93	47-100
8 1-Methylnaphthalen	300	166	55.36	30-160
10 Acenaphthylene	300	199	66.27	35-100
12 Acenaphthene	300	198	66.12	43-104
14 Dibenzofuran	300	236	78.57	37-100
15 Fluorene	300	223	74.23	51-103
19 Phenanthrene	300	265	88.49	55-109
20 Anthracene	300	219	73.14	30-101
24 Fluoranthene	300	304	101.26	49-123
25 Pyrene	300	324	107.96	48-120
28 Benzo(a)anthracene	300	235	78.29	43-113
30 Chrysene	300	256	85.45	59-112
32 Benzo(b)fluoranthe	300	196	65.36	44-121
33 Benzo(k)fluoranthe	300	227	75.64	50-117
34 Benzo(a)pyrene	300	212	70.83	10-100
37 Indeno(1,2,3-cd)py	300	181	60.27	43-112
38 Dibenzo(a,h)anthra	300	180	59.86	42-114
39 Benzo(g,h,i)peryle	300	194	64.74	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	171	56.97	31-109
$ 36 Dibenzo(a,h)anthra	300	176	58.77	10-133

Data File: /chem3/nt2.i/20100305.b/030505.d
Date : 05-MAR-2010 13:08
Client ID: CB31A022710COMP MSD
Sample Info: QM04AMSD
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100305.b/030502.d
Lab Smp Id: QM04LCSW1 Client Smp ID: QM04LCSW1
Inj Date : 05-MAR-2010 11:54
Operator : VTS Inst ID: nt2.i
Smp Info : QM04LCSW1
Misc Info : 10-5087
Comment :
Method : /chem3/nt2.i/20100305.b/lowsim.m
Meth Date : 05-Mar-2010 11:46 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	6.966	6.967	(1.000)	194658	200.000	
	5 Naphthalene	128	6.982	6.982	(1.002)	181692	193.838	194
$	6 2-Methylnaphthalene-d10	152	7.813	7.813	(1.121)	106558	212.534	213
	7 2-Methylnaphthalene	142	7.843	7.844	(1.126)	110471	202.097	202
	8 1-Methylnaphthalene	142	7.982	7.982	(1.146)	115569	203.133	203
	10 Acenaphthylene	152	8.969	8.969	(0.979)	155646	203.675	204
*	11 Acenaphthene-d10	164	9.162	9.175	(1.000)	96565	200.000	
	12 Acenaphthene	153	9.201	9.201	(1.004)	104881	221.168	221
	14 Dibenzofuran	168	9.407	9.407	(1.027)	160980	260.568	261
	15 Fluorene	166	9.816	9.817	(1.071)	125156	245.056	245
*	18 Phenanthrene-d10	188	11.001	11.002	(1.000)	137584	200.000	
	19 Phenanthrene	178	11.016	11.017	(1.001)	184049	269.136	269
	20 Anthracene	178	11.078	11.079	(1.007)	158447	226.744	227
	24 Fluoranthene	202	12.505	12.506	(1.137)	209549	281.336	281
	25 Pyrene	202	12.779	12.780	(1.162)	214381	283.543	284

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.261	14.262	(0.998)	174813	255.446	255
*	29 Chrysene-d12	240	14.283	14.295	(1.000)	137114	200.000	
	30 Chrysene	228	14.316	14.317	(1.002)	183807	272.232	272
	32 Benzo(b)fluoranthene	252	15.565	15.572	(0.967)	181485	230.633	231
	33 Benzo(k)fluoranthene	252	15.596	15.595	(0.969)	237507	277.989	278
	34 Benzo(a)pyrene	252	16.007	16.013	(0.995)	118446	192.107	192
*	35 Perylene-d12	264	16.092	16.091	(1.000)	137347	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.873	17.874	(1.111)	143716	201.146	201
$	36 Dibenzo(a,h)anthracene-d14	292	17.819	17.820	(1.107)	91471	219.717	220
	38 Dibenzo(a,h)anthracene	278	17.886	17.887	(1.112)	124190	222.221	222
	39 Benzo(g,h,i)perylene	276	18.399	18.400	(1.143)	115547	187.547	188

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 030502.d
Lab Smp Id: QM04LCSW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Calibration Date: 05-MAR-2010
Calibration Time: 10:33
Client Smp ID: QM04LCSW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	194658	12.45
11 Acenaphthene-d10	96677	48338	193354	96565	-0.12
18 Phenanthrene-d10	147750	73875	295500	137584	-6.88
29 Chrysene-d12	135219	67610	270438	137114	1.40
35 Perylene-d12	125815	62908	251630	137347	9.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.97	6.47	7.47	6.97	0.00
11 Acenaphthene-d10	9.18	8.68	9.68	9.16	-0.14
18 Phenanthrene-d10	11.00	10.50	11.50	11.00	-0.01
29 Chrysene-d12	14.29	13.79	14.79	14.28	-0.08
35 Perylene-d12	16.09	15.59	16.59	16.09	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: QM04LCSW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100305.b/lowsim.m
Misc Info: 10-5087

Client SDG: QM04
Fraction: SV
Client Smp ID: QM04LCSW1
Operator: VTS
SampleType: LCS
Quant Type: ISTD

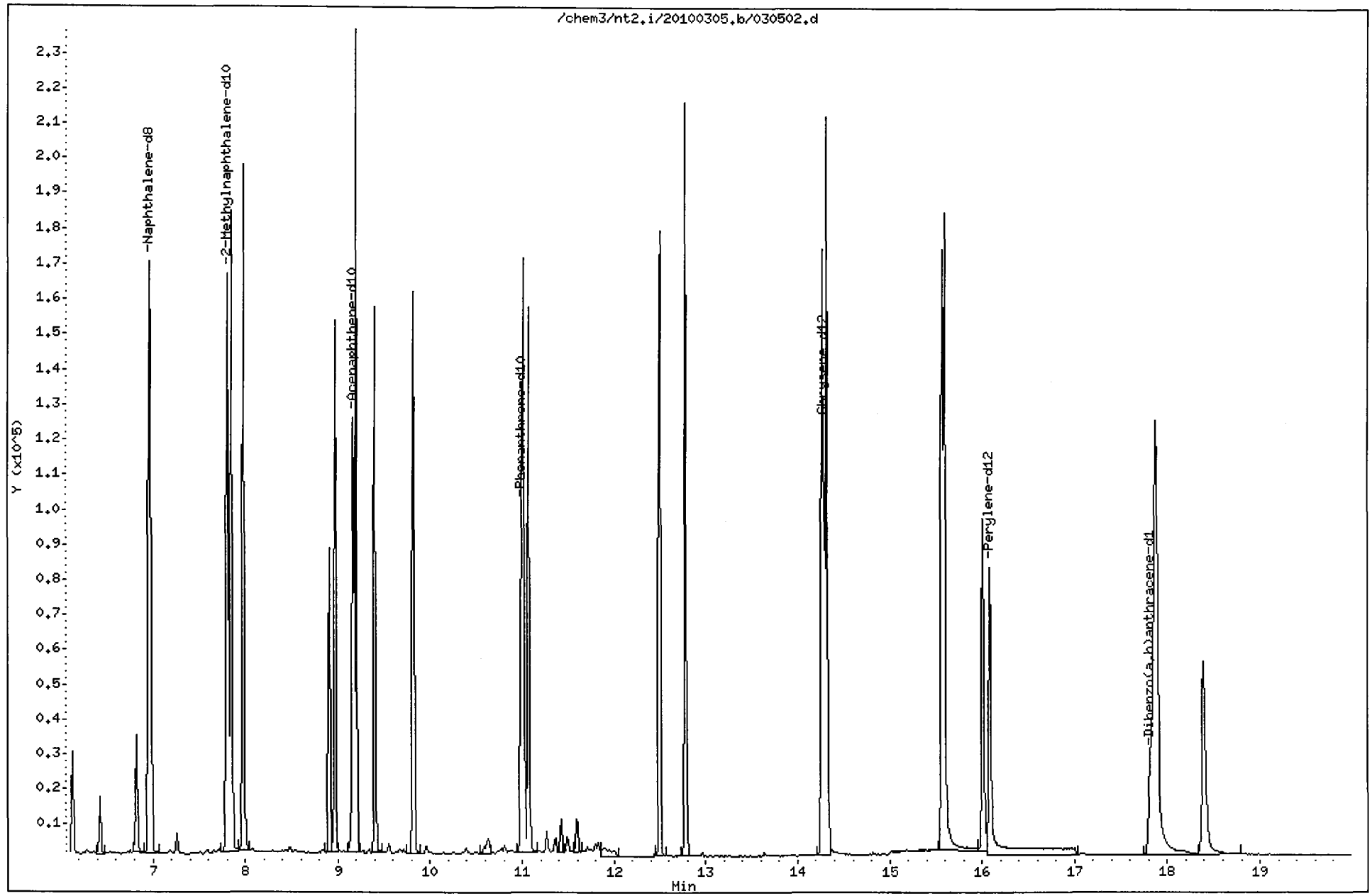
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	194	64.61	41-101
7 2-Methylnaphthalen	300	202	67.37	47-100
8 1-Methylnaphthalen	300	203	67.71	30-160
10 Acenaphthylene	300	204	67.89	35-100
12 Acenaphthene	300	221	73.72	43-104
14 Dibenzofuran	300	261	86.86	37-100
15 Fluorene	300	245	81.69	51-103
19 Phenanthrene	300	269	89.71	55-109
20 Anthracene	300	227	75.58	30-101
24 Fluoranthene	300	281	93.78	49-123
25 Pyrene	300	284	94.51	48-120
28 Benzo(a)anthracene	300	255	85.15	43-113
30 Chrysene	300	272	90.74	59-112
32 Benzo(b)fluoranthe	300	231	76.88	44-121
33 Benzo(k)fluoranthe	300	278	92.66	50-117
34 Benzo(a)pyrene	300	192	64.04	10-100
37 Indeno(1,2,3-cd)py	300	201	67.05	43-112
38 Dibenzo(a,h)anthra	300	222	74.07	42-114
39 Benzo(g,h,i)peryle	300	188	62.52	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	213	70.84	31-109
$ 36 Dibenzo(a,h)anthra	300	220	73.24	10-133

Data File: /chem3/nt2.i/20100305.b/030502.d
Date : 05-MAR-2010 11:54
Client ID: QM04LCSW1
Sample Info: QM04LCSW1
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



SIM Semivolatile Analysis
Extraction Bench Sheets/Run Logs

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

SIM PNA-Water
Liquid/Liquid (3520C) (SOP # 3311S)

Preparation Test SIM PNA # 4
ARI Job No(s) QM04

Low Level (0.01ppb)
Batch set up by: SP

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	Disassemble Liq/Liq	KD Hex X	TurboVap 1 2 3	(REQ) Silica Gel Clean (1:1)	TurboVap 1 2 3	Final Effective Volume	Volume to Lab	Comments
	QM04 MBW	Date 3/3/10	500mL	↓	↓	↓	↓	↓	0.5mL	0.5mL	
	SBW	↓	↓	↓	↓	↓	↓	↓	↓	↓	
	SBW Dup.		↓	↓	↓	↓	↓	↓	↓	↓	
5,7,8	QM04 A	checked	↓	↓	↓	↓	↓	↓	↓	↓	
↓	AMS	↓	↓	↓	↓	↓	↓	↓	↓	↓	
↓	AMSD	↓	↓	↓	↓	↓	↓	↓	↓	↓	
4	B	↓	↓	↓	↓	↓	↓	↓	↓	↓	
3	C	↓	↓	↓	↓	↓	↓	↓	↓	↓	
3	D	↓	↓	↓	↓	↓	↓	↓	↓	↓	
						CJ2					
Analyst/Date:	WC 3/3/10		AM346	3-4-10 TS	3/4/10						

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	I	100µL	8/12/10	WC	GJZ
Spike	18 B	100µL	8/28/10	WC	GJZ
Extraction Time: 1430		Liq/Liq Start: 1435		Liq/Liq Stop: 0000	

SPECIAL INSTRUCTIONS: 1. Rinse all glassware with Low Level DCM. 2. Use 500mL Liq/Liq Body
3. Add 20-25mL Low Level Hexane. 4. Add ~200mL Low Level DCM to Liq/Liq. 5. Add surr/spike.
6. Extract minimum 8 hrs. 7. KD (no drying column) to ~8mL at 80°. 8. Exchange (2 X with 10mL) to Low Level Hexane at 100°. 9. TurboVap. 10. Silica Clean-up=REQUIRED. 11. TurboVap. 12. Vial in Low Level DCM.
13. Post Screen extracts with any color noted for Silica Gel Clean-up.
A. Archive Y N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: QMQ4 Client ID: Floyd/Snider

Parameter: low level SIM pNA Client Project: Lora Lake Apartments

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☐ Wet sediment/sludge=	
☐ Standing Water Decanted=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☐ Rocks/Organics=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☒ Turbid/Color= A,B,C,D (Slightly yellow)	WC 3/3/10
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☐ Other Notes/Comments=	

Analytical Resources Inc.: Organics Instrument Log

NT-2 Serial No.: 82321977

Date: 10/21/09 Analysis: LowSim PNA Analyst: [illegible]

GC Program: LowSim Column No: 165239 Column Type: 5% MSi

Instrument Tune (.U or .CT.): 091028.U EM Voltage: 2424

Calibration File: df1021 Curve Date: 10/21/09

IS/SS	Ical/Ccal	LCS/ICV
1584-1	1665-3	

	Time	Filename	LabID	ClientId	DF									
1	1055	df1021.d	DFTPP		1	NO ISTDS FOUND								
2	1137	ic102101.d	PNA 250		1	6.23	173109	8.42	96677	10.21	147750	13.47	135219	15.11	125815
3	1200	ic102102.d	PNA 1000		1	6.23	188814	8.42	92483	10.21	148959	13.47	138468	15.10	125212
4	1222	ic102103.d	PNA 10		1	6.23	163657	8.42	80791	10.21	128448	13.47	118404	15.10	109902
5	1245	ic102104.d	PNA 500		1	6.23	177186	8.42	88802	10.21	144260	13.47	127406	15.10	116403
6	1307	ic102105.d	PNA 50		1	6.23	163275	8.42	80083	10.21	130872	13.47	119291	15.10	109601
7	1330	ic102106.d	PNA 100		1	6.23	164822	8.42	82096	10.21	134536	13.47	122702	15.10	111608
8	1352	ic102107.d	ICV		1	6.23	158208	8.42	82458	10.21	134236	13.47	116103	15.10	105713
9	1417	102101.d	PS52MBW1	PS52MBW1	1	6.23	175904	8.40	90261	10.21	137446	13.47	111636	15.10	103842
10	1440	102102.d	PS52LCSW1	PS52LCSW1	1	6.23	170961	8.42	90143	10.21	140571	13.47	114001	15.10	104592
11	1502	102103.d	PS52A	1009PSR02	1	6.24	174532	8.42	91014	10.21	138793	13.47	109311	15.10	100596
12	1525	102104.d	PS52B	1009PSR06	1	6.23	163118	8.42	88047	10.21	136570	13.48	128420	15.11	114082
13	1547	102105.d	PS52BMS	1009PSR06 MS	1	6.23	154113	8.40	86094	10.21	135585	13.47	122604	15.11	111870
14	1610	102106.d	PS52BMSD	1009PSR06 MS	1	6.23	157767	8.42	82085	10.21	132819	13.48	119576	15.10	107998
15	1633	102107.d	PS52C	1009PSR07	1	6.23	151004	8.40	83049	10.21	127310	13.48	115567	15.11	104650
16	1655	102108.d	PS52D	1009PSR08	1	6.23	145328	8.40	80578	10.21	126441	13.47	100861	15.10	94111
17	1718	102109.d	PS52E	1009PSR14	1	6.23	146730	8.40	78729	10.21	123966	13.47	99070	15.10	92085
18	1740	102110.d	PS52F	1009PSR09	1	6.23	148145	8.40	78140	10.21	120480	13.47	98501	15.10	89598
19	1803	102111.d	PS52G	1009PSR10	1	6.23	147860	8.40	76083	10.21	119300	13.46	95412	15.10	87073
20	1825	102112.d	PS52H	1009PSR11	1	6.38	3459916	8.43	138220	10.22	89906	13.47	67099	15.10	60014
21	1848	102113.d	PS52I	1009PSR12	1	6.24	144978	8.43	62601	10.22	69842	13.47	56461	15.10	50520
22	1910	102114.d	PS52J	SSV0378	1	6.23	70474	8.40	37554	10.21	58704	13.46	48381	15.10	44905
23	1933	102115.d	PS67A	1009PSR05	1	6.23	69936	8.40	36758	10.21	60869	13.47	48300	15.10	44710
24	1955	102116.d	PS67B	1009PSR13	1	6.23	66573	8.40	36261	10.21	55494	13.46	46657	15.10	42199
25	2018	102117.d	PS67C		1	6.23	67515	8.40	34507	10.21	55245	13.46	44617	15.10	40086
26	2040	102118.d	PS67D	1009PSR01	1	6.23	65209	8.40	34329	10.21	53352	13.46	42240	15.10	39135
27	2103	102119.d	PS67E	1009PSR03	1	6.23	76319	8.42	39233	10.22	59390	13.47	69138	15.10	45582
28	2125	102120.d	PS67F	1009PSR04	1	6.23	67640	8.42	37153	10.21	57142	13.47	50757	15.10	46670

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

New liner, clip col

IC102101

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: _____ Client ID: _____

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): NP2 Low SIM PNA CURVE 10/21/09

Instrument: NT-1 (NT-2) NT-4 NT-6 NT-8

Curve Date: 10/21/09 Analysis Start Date: _____

DFTPP Tune Meets Criteria?	(YES) / NO	Internal Standard Meets Criteria?	YES / NO
DDT Breakdown <20%?	(YES) / NO / NA	Method Blank In Control?	YES / NO
Peak Tailing Factor ≤2?	(YES) / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
ICal acceptable (YES) / NO; Q flag applied YES / (NO)		Surrogate Recovery In Control?	YES / NO
CCal acceptable YES / NO; Q flag applied YES / NO		Special Analysis Criteria Met?	YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

All cmpds < 20% RSD

Additional Details on Reverse: Yes / No

Analyst Signature: Phyllis **Date:** 10/22/09

Reviewer's Signature: J. D. **Date:** 11.21.2009

Analytical Resources Inc.: Organics Instrument Log

NT-2 Serial No.: 82321977

Date: 3/5/10 Analysis: LOW Sim PNA Analyst: MK

GC Program: SimPNA Column No: 171137 Column Type: 285 HSi

Instrument Tune (.U or .CT.): 030328.U EM Voltage: 2400

Calibration File: df0305 Curve Date: 2/23/10

IS/SS	Ical/Ccal	LCS/ICV
1584-1	1662-1	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt2.i/20100305.b

	Time	Filename	LabID	ClientId	DF								
1	0958	df0305.d	DFTPP		1	NO ISTDS FOUND							
2	1033	cc0305.d	PNA 250		1	6.97	185725	9.18	87858	11.00	131061	14.29	125215	16.09	118026
3	1130	030501.d	QM04MBW1		1	6.97	193103	9.17	94604	11.00	144207	14.29	139461	16.09	133752
4	1154	030502.d	QM04LCSW1		1	6.97	194658	9.16	96565	11.00	137584	14.28	137114	16.09	137347
5	1219	030503.d	QM04A		1	6.96	194491	9.16	93651	11.00	137003	14.28	141208	16.09	149311
6	1244	030504.d	QM04AMS		1	6.97	196703	9.16	96306	11.00	138057	14.29	145288	16.09	154046
7	1308	030505.d	QM04AMSD		1	6.97	199245	9.16	94124	11.00	140622	14.29	146335	16.09	154933
8	1333	030506.d	QM04B		1	6.96	200304	9.18	98440	11.00	139682	14.28	144871	16.09	153806
9	1358	030507.d	QM04C		1	6.97	194192	9.17	96979	11.00	137429	14.28	142155	16.09	146822
10	1422	030508.d	QM04D		1	6.97	190565	9.17	97253	11.00	135411	14.28	137694	16.09	143609

MK 3/8/10

Maintenance / Comments

NONE

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): CC0305

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: QM04 Client ID: Floyd-Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): Low Sim PNAs

Instrument: NT-1 (NT-2) NT-4 NT-6 NT-8

Curve Date: 10/21/09 Analysis Start Date: 3/5/10

DFTPP Tune Meets Criteria? (YES) / NO

Internal Standard Meets Criteria? (YES) / NO

DDT Breakdown <20%? (YES) / NO / NA

Method Blank In Control? (YES) / NO

Peak Tailing Factor ≤2? (YES) / NO / NA

LCS / LCSD Recovery In Control? (YES) / NO

ICal acceptable (YES) / NO; Q flag applied YES / (NO)

Surrogate Recovery In Control? (YES) / NO

CCal acceptable (YES) / NO; Q flag applied YES / (NO)

Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Several "J" level PNA's in MB. Samples "B" flagged.
All MB hits < RL.

Additional Details on Reverse: Yes / No

Analyst Signature: [signature] **Date:** 3/8/10

Reviewer's Signature: [signature] **Date:** 3/8/10

PCP/Chlorophenols ANALYSIS
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA

Client ID	TBP	TOT OUT
MB-030310	53.6%	0
LCS-030310	61.4%	0
CB31A022710COMP	57.2%	0
CB31A022710COMP MS	63.6%	0
CB31A022710COMP MSD	61.6%	0
CB4857022710COMP	60.8%	0
CB1022710COMP	64.4%	0
CB102022710COMP	66.8%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 10-5087 to 10-5090

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A022710COMP
MS/MSD

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted MS/MSD: 03/03/10

Sample Amount MS: 500 mL
MSD: 500 mL

Date Analyzed MS: 03/09/10 13:11
MSD: 03/09/10 13:31

Final Extract Volume MS: 50 mL
MSD: 50 mL

Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR

Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	0.56	2.38	2.50	72.8%	2.29	2.50	69.2%	3.9%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: LCS-030310
LAB CONTROL

Lab Sample ID: LCS-030310
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 12:31
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	1.92	2.50	76.8%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	61.4%

Results reported in µg/L

4

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

QM04MBW1

Lab Name: ANALYTICAL RESOURCES, INC — Client: FLOYD/SNIDER

ARI Job No.: QM04 — Project: LORA LAKES APARTMENTS

Lab Sample ID: QM04MBW1 — Lab File ID: 0309A005

Matrix (soil/water) LIQUID — Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y — Date Extracted: 03/03/10

Date Analyzed (1): 03/09/10 — Date Analyzed (2): 03/09/10

Time Analyzed (1): 1211 — Time Analyzed (2): 1211

Instrument ID (1): ECD1 — Instrument ID (2): ECD1

GC Column (1): ZB5 ID: 0.53(mm) — GC Column (2): ZB35 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QM04LCSW1	QM04LCSW1	03/09/10	03/09/10
02	CB31A022710C	QM04A	03/09/10	03/09/10
03	CB31A022710C	QM04AMS	03/09/10	03/09/10
04	CB31A022710C	QM04AMSD	03/09/10	03/09/10
05	CB4857022710	QM04B	03/09/10	03/09/10
06	CB1022710COM	QM04C	03/09/10	03/09/10
07	CB102022710C	QM04D	03/09/10	03/09/10

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 02/18/10 02/18/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 9.90

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	02/18/10	2017	9.90
02		PCPA	02/18/10	2037	9.91
03		PCPB	02/18/10	2057	9.91
04		PCPC	02/18/10	2117	9.90
05		PCPE	02/18/10	2137	9.90
06		PCPF	02/18/10	2156	9.90
07	ZZZZZ	ZZZZZ	02/18/10	2216	9.90
08	ZZZZZ	ZZZZZ	03/09/10	1052	9.92
09	ZZZZZ	ZZZZZ	03/09/10	1112	9.92
10	ZZZZZ	ZZZZZ	03/09/10	1131	9.91
11		PCP CCAL	03/09/10	1151	9.91
12	QM04MBW1	QM04MBW1	03/09/10	1211	9.92
13	QM04LCSW1	QM04LCSW1	03/09/10	1231	9.92
14	CB31A022710C	QM04A	03/09/10	1251	9.91
15	CB31A022710C	QM04AMS	03/09/10	1311	9.91
16	CB31A022710C	QM04AMSD	03/09/10	1331	9.91
17	CB4857022710	QM04B	03/09/10	1351	9.91
18	CB1022710COM	QM04C	03/09/10	1411	9.91
19	CB102022710C	QM04D	03/09/10	1431	9.91
20	ZZZZZ	ZZZZZ	03/09/10	1451	9.84
21	ZZZZZ	ZZZZZ	03/09/10	1510	9.91
22		PCP CCAL	03/09/10	1530	9.91

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 02/18/10 02/18/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.55

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	02/18/10	2017	10.54
02		PCPA	02/18/10	2037	10.55
03		PCPB	02/18/10	2057	10.55
04		PCPC	02/18/10	2117	10.54
05		PCPE	02/18/10	2137	10.54
06		PCPF	02/18/10	2156	10.54
07	ZZZZZ	ZZZZZ	02/18/10	2216	10.54
08	ZZZZZ	ZZZZZ	03/09/10	1052	10.55
09	ZZZZZ	ZZZZZ	03/09/10	1112	10.55
10	ZZZZZ	ZZZZZ	03/09/10	1131	10.55
11		PCP CCAL	03/09/10	1151	10.55
12	QM04MBW1	QM04MBW1	03/09/10	1211	10.56
13	QM04LCSW1	QM04LCSW1	03/09/10	1231	10.56
14	CB31A022710C	QM04A	03/09/10	1251	10.55
15	CB31A022710C	QM04AMS	03/09/10	1311	10.54
16	CB31A022710C	QM04AMSD	03/09/10	1331	10.55
17	CB4857022710	QM04B	03/09/10	1351	10.55
18	CB1022710COM	QM04C	03/09/10	1411	10.55
19	CB102022710C	QM04D	03/09/10	1431	10.55
20	ZZZZZ	ZZZZZ	03/09/10	1451	----
21	ZZZZZ	ZZZZZ	03/09/10	1510	10.55
22		PCP CCAL	03/09/10	1530	10.55

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

PCP/Chlorophenols ANALYSIS
Sample Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A022710COMP
SAMPLE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 12:51
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	0.56

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	57.2%

AR 3/10/2010

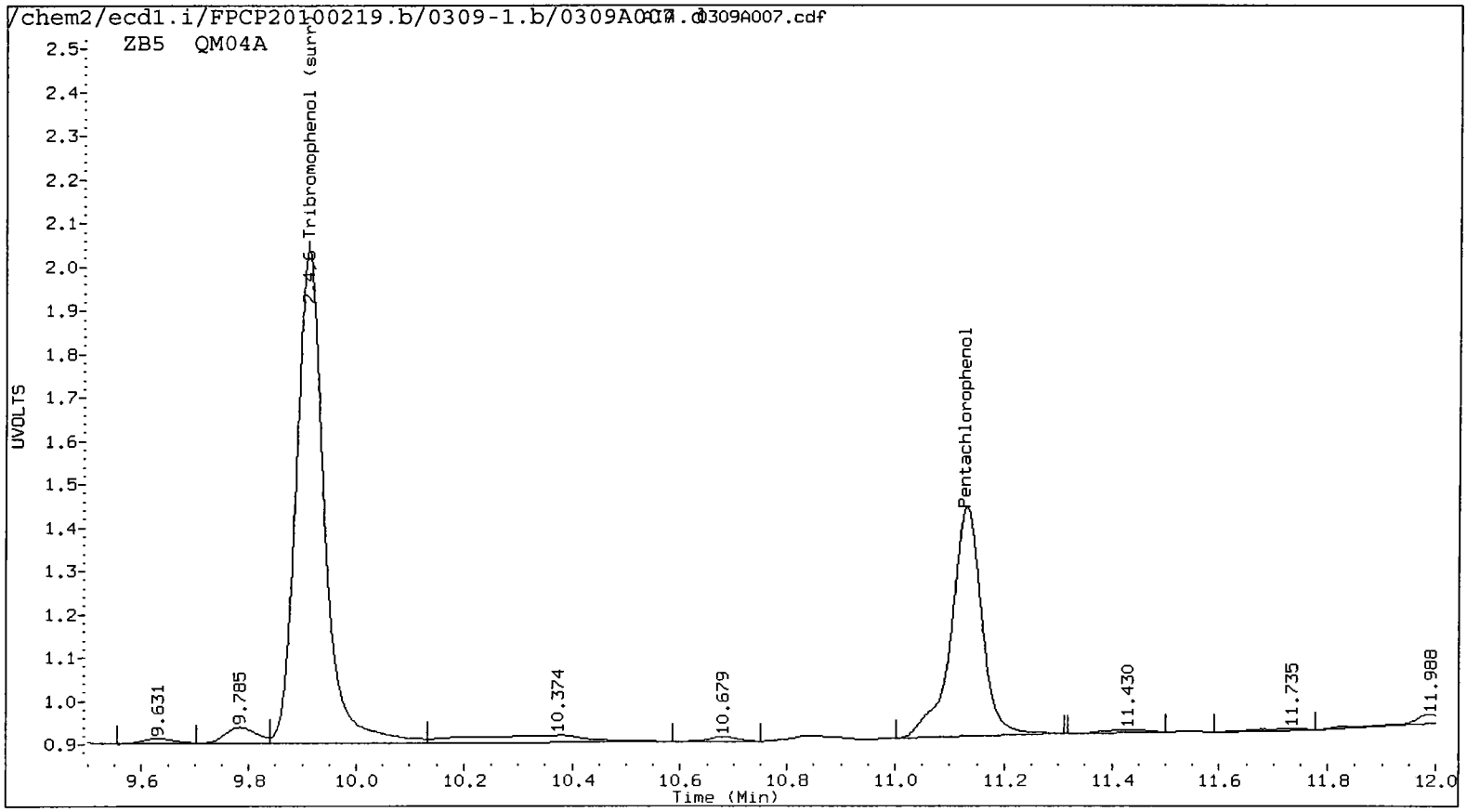
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A007.d ARI ID: QM04A
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A007.d Client ID: CB31A022710COMP
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 12:51
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.130	0.007	102898	11.577	0.001	103272	5.6197	5.0242	11.2	Pentachlorophenol
7.145	-0.045	18948	7.286	0.024	872	1.8752	0.0767	184.3*	2,4,6-Trichlorophenol
7.501	-0.039	5019	----			0.5010	0.0000	---	2,3,6-Trichlorophenol
8.192	0.055	14307	----			2.8269	0.0000	---	2,4,5-Trichlorophenol
----			9.348	0.067	2567	0.0000	0.3288	---	2,3,4-Trichlorophenol
8.951	0.039	10805	9.205	0.022	3370	0.7040	0.1984	112.1*	2,3,5,6-Tetrachlorophenol
----			11.011	-0.013	1541	0.0000	0.1178	---	2,3,4,5-Tetrachlorophenol
6.844	0.027	2869	7.083	-0.007	840	5.8293	1.4889	118.6*	2,4-Dichlorophenol
9.911	0.012	207844	10.549	0.002	239094	14.2	14.3	0.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	56.9	57.2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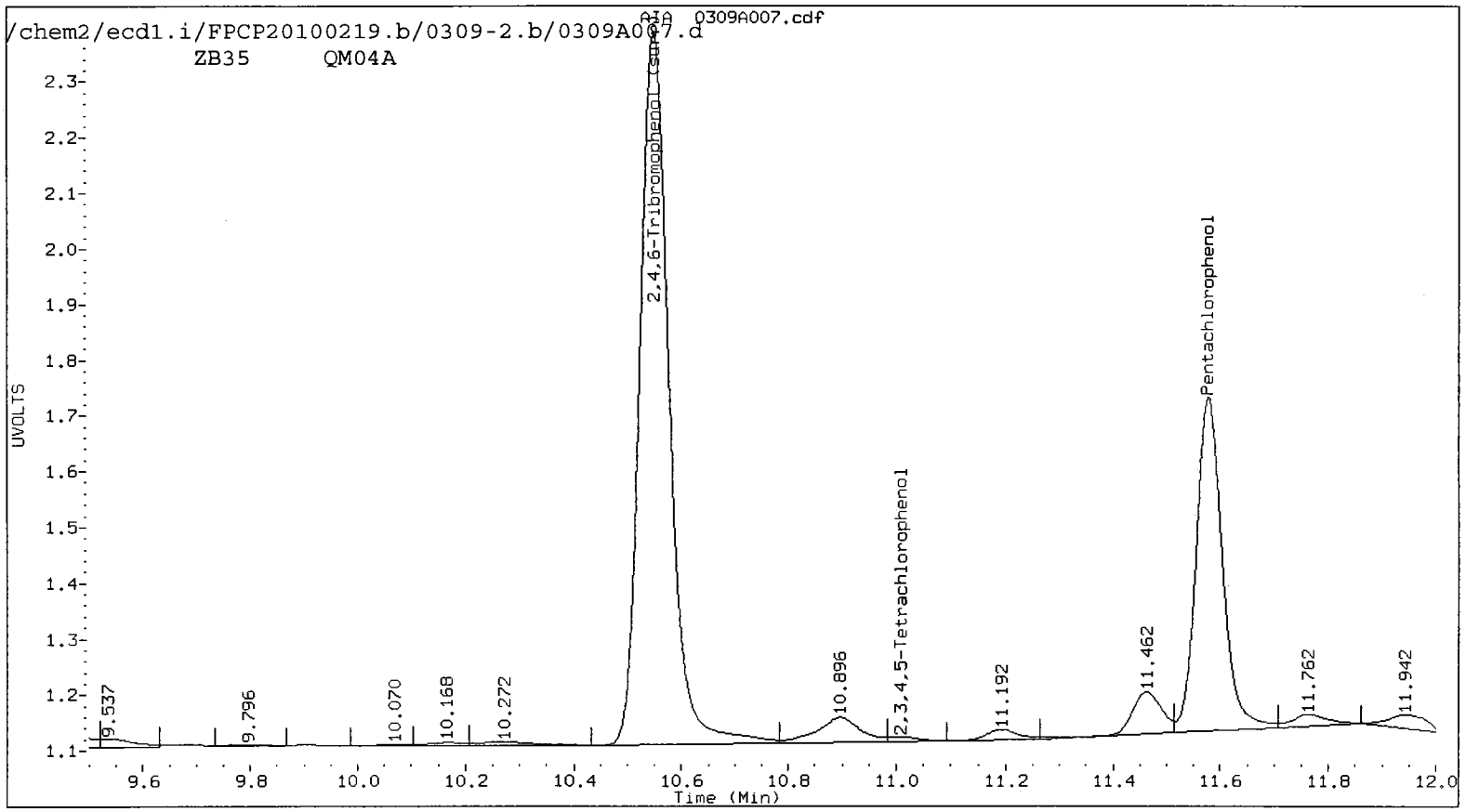
ZB5 QM04A
2,4,6-Tribromophenol (surr
Pentachlorophenol
9.631
9.785
10.374
10.679
11.430
11.735
11.988
UVOLTS
Time (Min)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0309A007.cdf
ZB35 QM04A
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.537
9.796
10.070
10.168
10.272
10.896
11.192
11.462
11.762
11.942
UVOLTS
Time (Min)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB4857022710COMP
SAMPLE

Lab Sample ID: QM04B
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 13:51
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**0.25**	**0.45**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	60.8%

FORM I

AR 3/10/2010

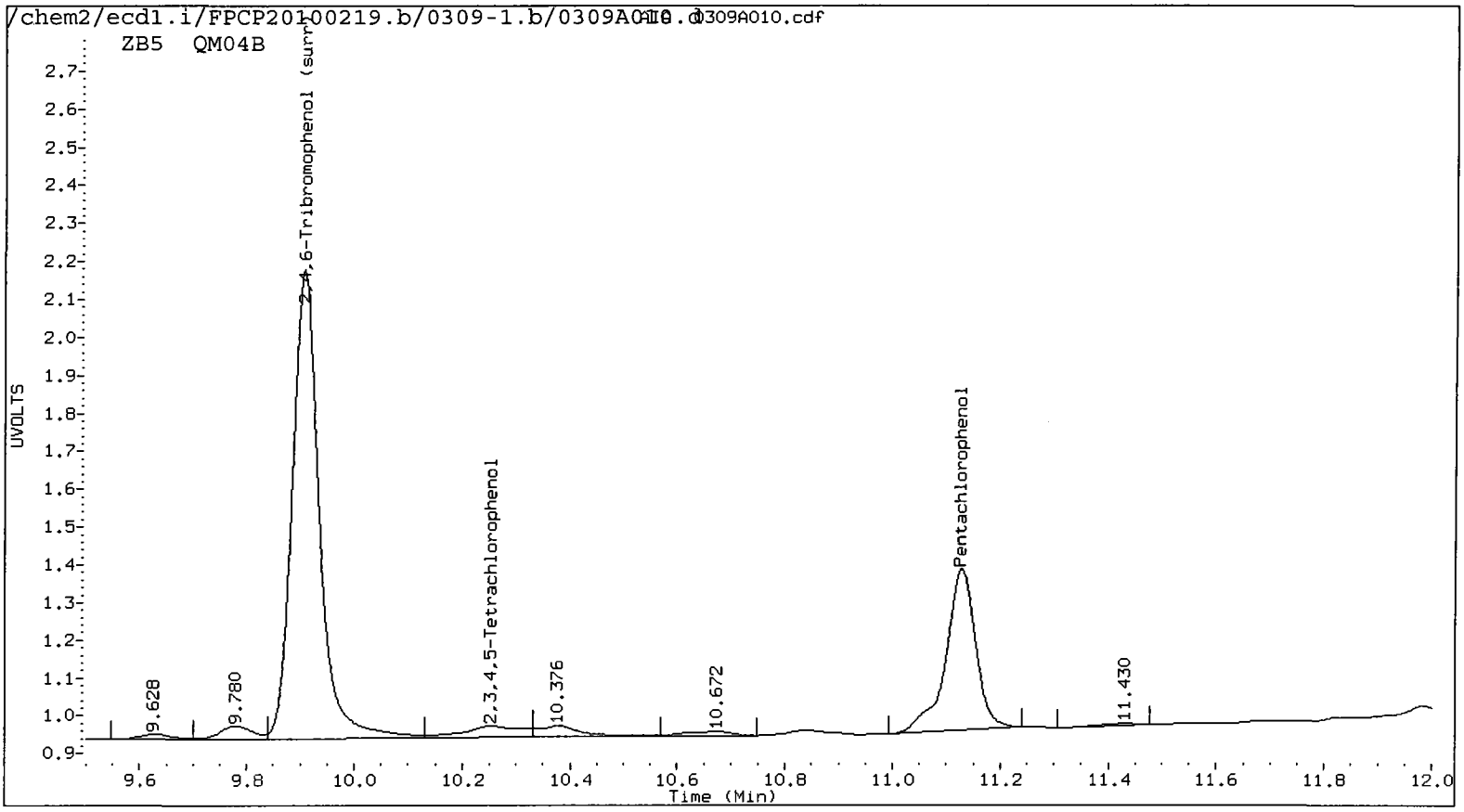
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A010.d ARI ID: QM04B
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A010.d Client ID: CB4857022710COMP
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 13:51
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.130	0.007	81973	11.577	0.001	88515	4.4769	4.3063	3.9	Pentachlorophenol
7.136	-0.054	22824	7.272	0.010	743	2.2588	0.0653	188.8*	2,4,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,6-Trichlorophenol
8.191	0.054	13326	8.548	0.029	1326	2.6330	0.2247	168.5*	2,4,5-Trichlorophenol
8.634	-0.047	27991	----			3.9576	0.0000	---	2,3,4-Trichlorophenol
8.949	0.037	7378	9.201	0.018	2803	0.4807	0.1650	97.8*	2,3,5,6-Tetrachlorophenol
10.255	-0.047	11090	11.008	-0.015	1651	0.9444	0.1262	152.8*	2,3,4,5-Tetrachlorophenol
6.843	0.026	3236	7.076	-0.015	770	6.5741	1.3648	131.2*	2,4-Dichlorophenol
9.908	0.009	217774	10.547	0.001	253524	14.9	15.27	1.7	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	59.7	60.7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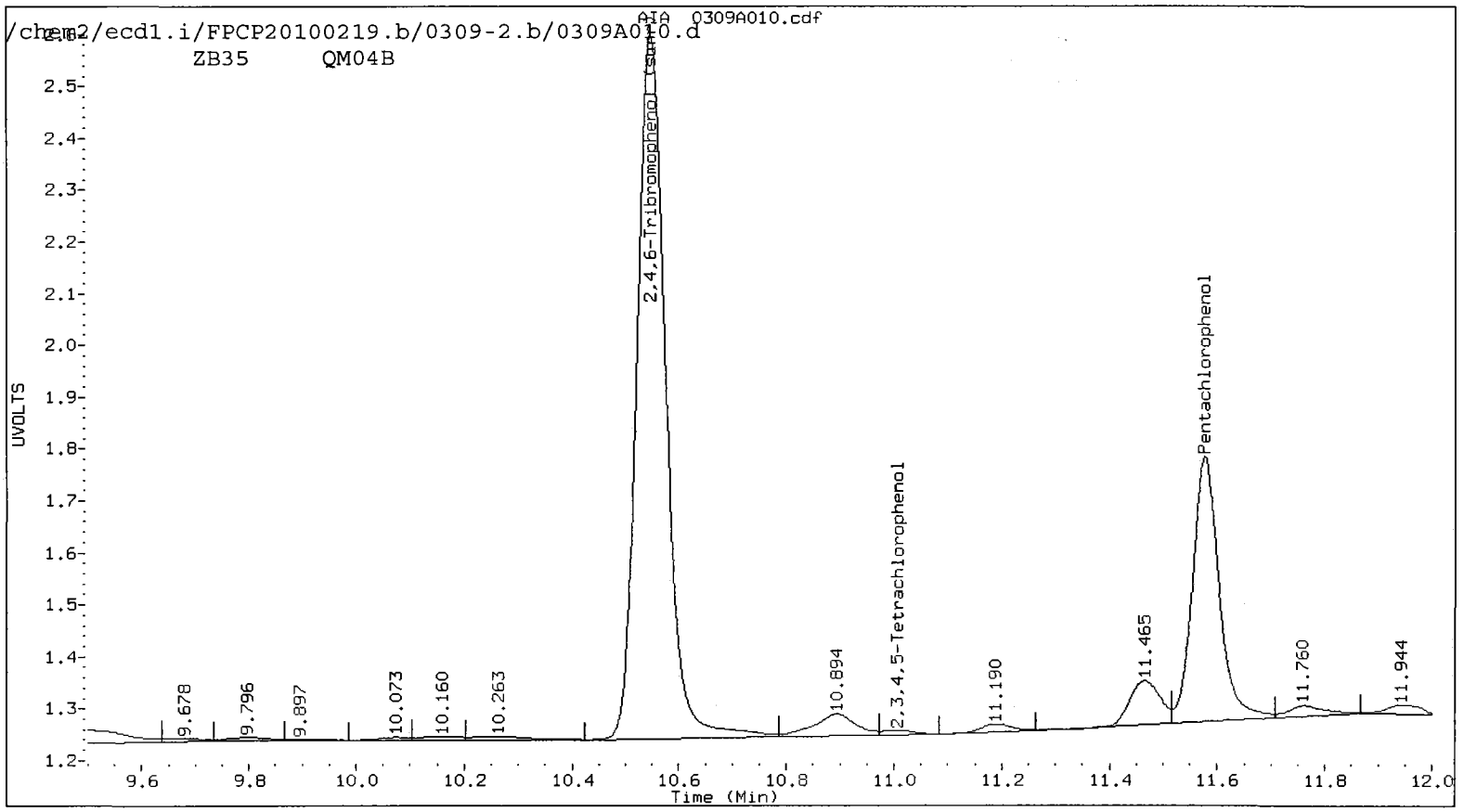
AIA 0309A010.cdf
ZB5 QM04B
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.628
9.780
10.376
10.672
11.430
UVOLTS
Time (Min)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AIA 0309A010.cdf
ZB35 QM04B
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.678
9.796
9.897
10.073
10.160
10.263
10.894
11.190
11.465
11.760
11.944
UVOLTS
Time (Min)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB1022710COMP
SAMPLE

Lab Sample ID: QM04C
LIMS ID: 10-5089
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 14:11
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	64.4%

AR 3/16/2010

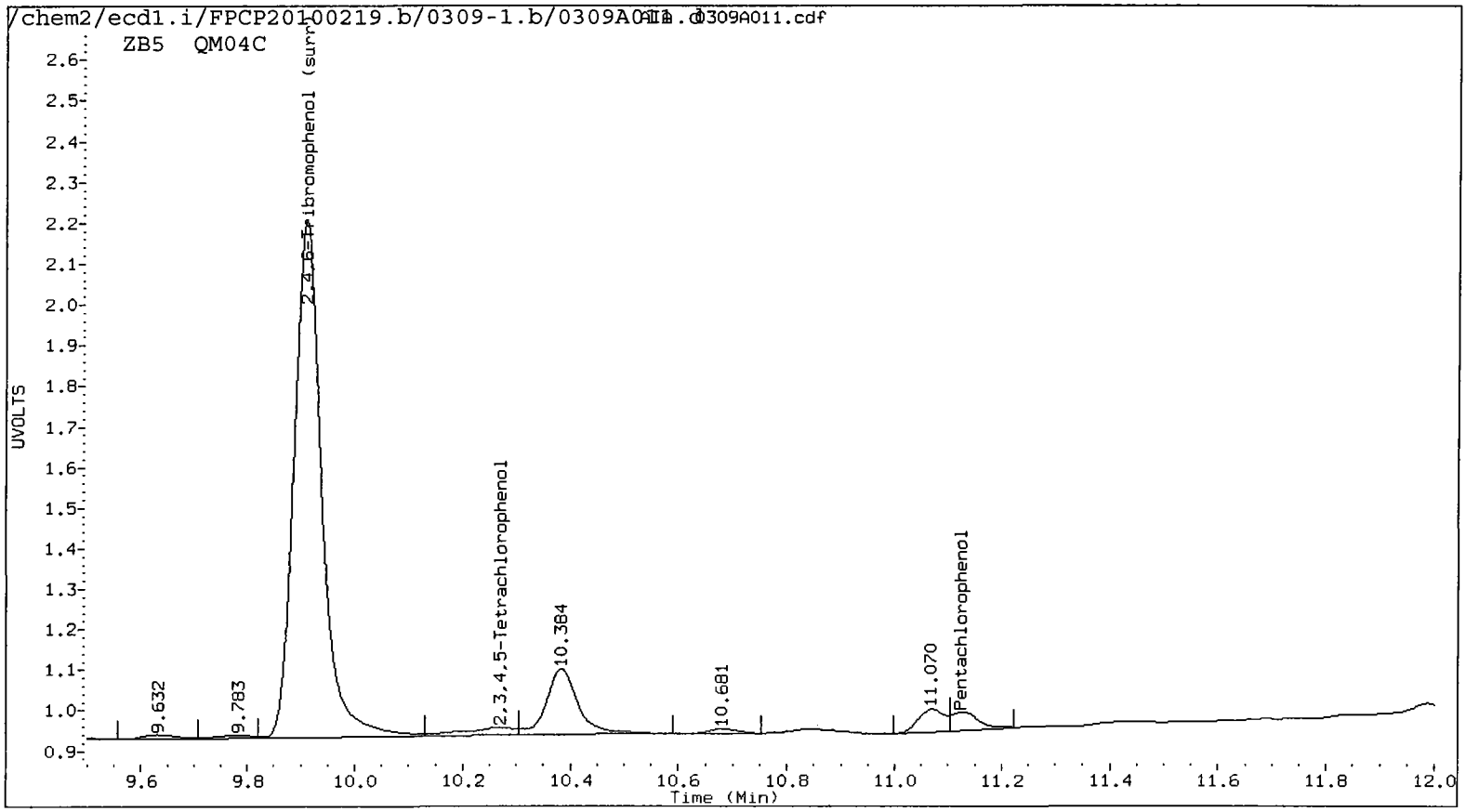
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A011.d ARI ID: QM04C
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A011.d Client ID: CB1022710COMP
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 14:11
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.127	0.004	7745	11.580	0.004	14200	0.4230	0.6908 IRL	48.1*	Pentachlorophenol
7.143	-0.047	18325	----			1.8135	0.0000	---	2,4,6-Trichlorophenol
7.545	0.005	8940	----			0.8922	0.0000	---	2,3,6-Trichlorophenol
----			8.462	-0.058	595	0.0000	0.1008	---	2,4,5-Trichlorophenol
8.708	0.027	9510	9.343	0.063	1932	1.3447	0.2475	137.8*	2,3,4-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,5,6-Tetrachlorophenol
10.270	-0.032	6702	11.006	-0.017	520	0.5707	0.0398	174.0*	2,3,4,5-Tetrachlorophenol
6.841	0.024	3779	7.080	-0.010	1049	7.6762	1.8593	122.0*	2,4-Dichlorophenol
9.910	0.011	229855	10.547	0.001	269498	15.7	16.1	2.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	63.0	64.5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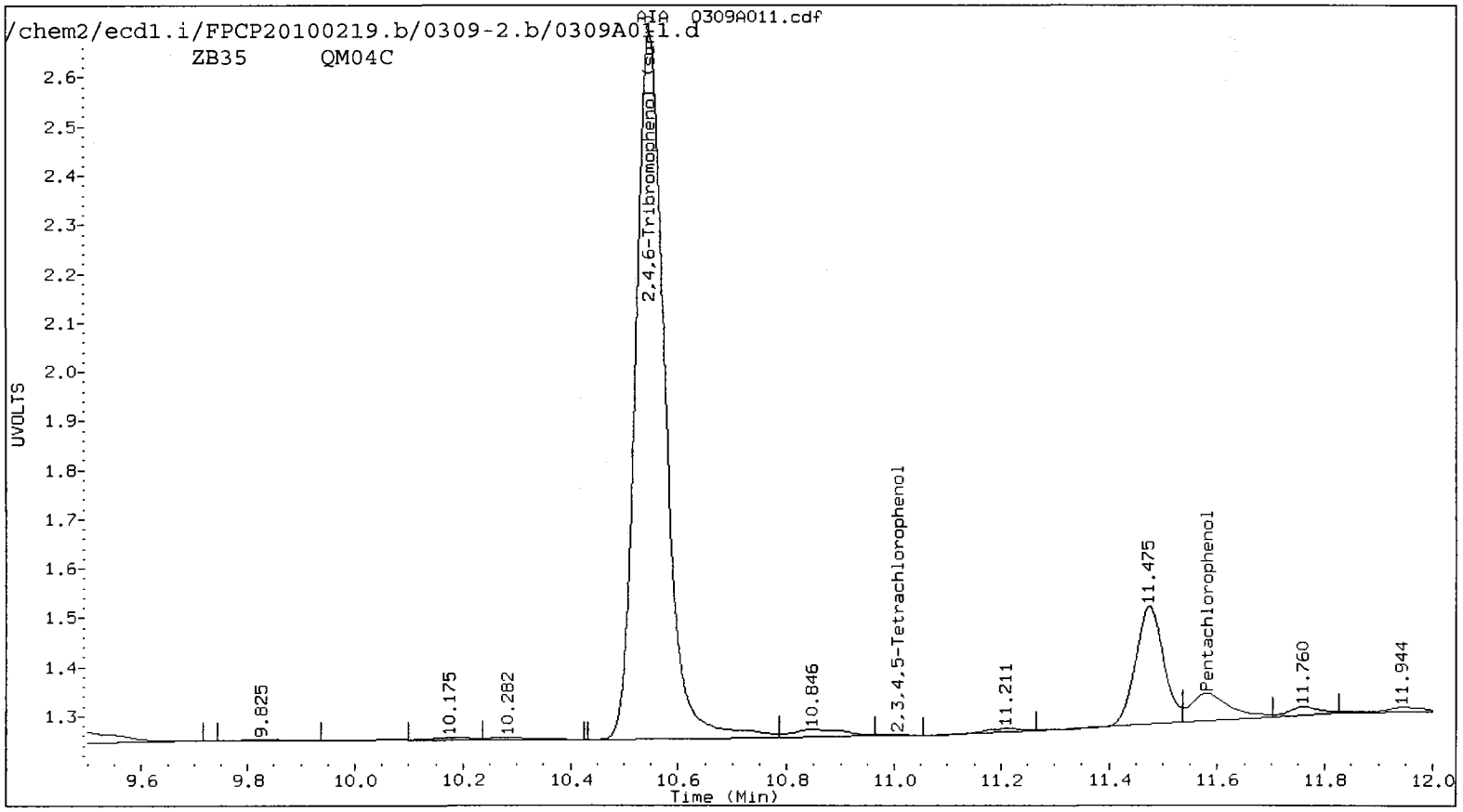
ZB5 QM04C
UVOLTS
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.632
9.783
10.384
10.681
11.070
Time (Min)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ZB35 QM04C
UVOLTS
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.825
10.175
10.282
10.846
11.211
11.475
11.760
11.944
Time (Min)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB102022710COMP
SAMPLE

Lab Sample ID: QM04D
LIMS ID: 10-5090
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 14:31
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	66.8%

AR 3/10/2010

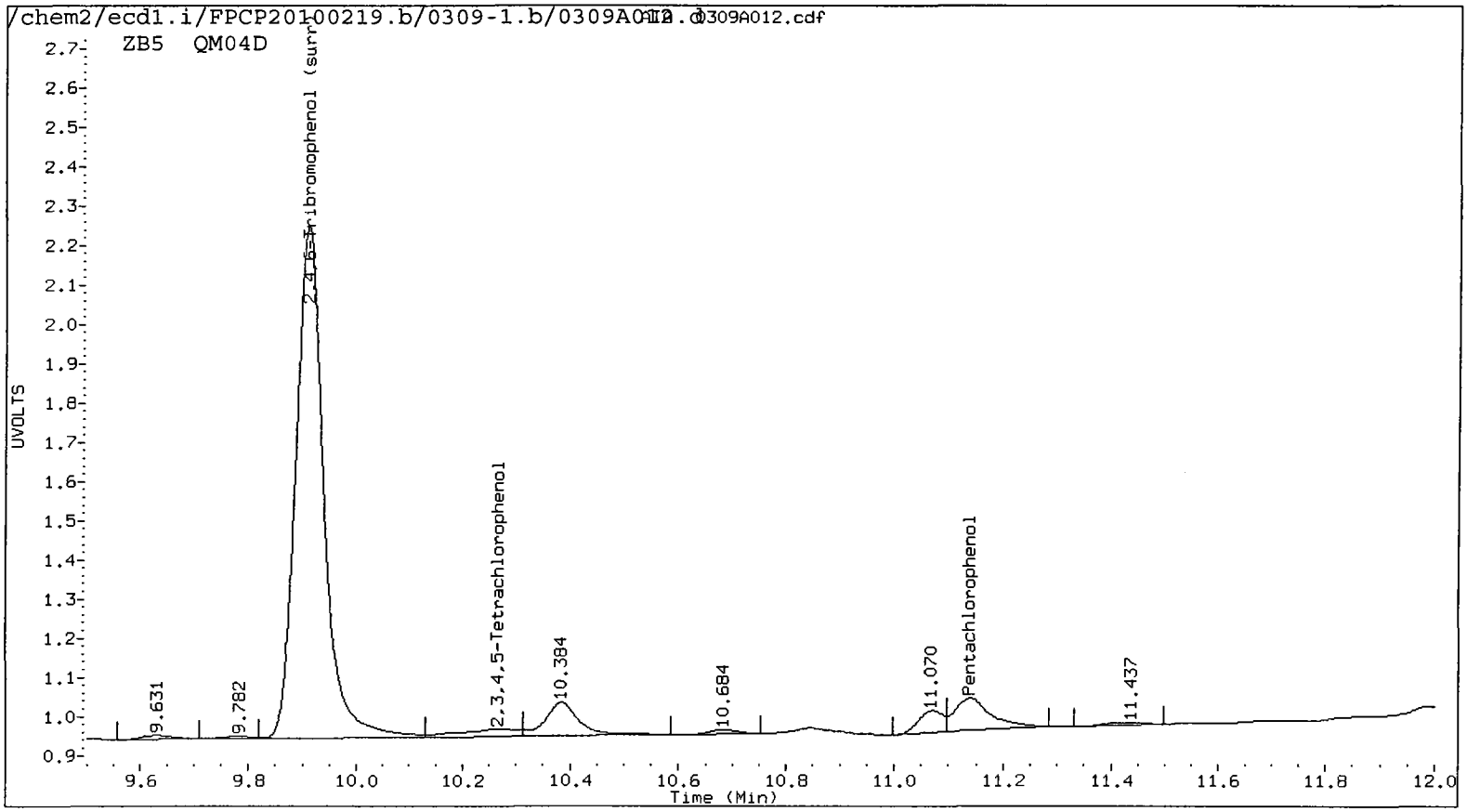
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A012.d ARI ID: QM04D
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A012.d Client ID: CB102022710COMP
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 14:31
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.140	0.017	19190	11.580	0.004	12916	1.0481	0.6284 RC	50.1*	Pentachlorophenol
7.144	-0.046	18394	----			1.8204	0.0000	---	2,4,6-Trichlorophenol
7.504	-0.036	8030	----			0.8014	0.0000	---	2,3,6-Trichlorophenol
----			8.460	-0.060	566	0.0000	0.0959	---	2,4,5-Trichlorophenol
8.707	0.026	10378	9.342	0.062	2124	1.4674	0.2721	137.4*	2,3,4-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,5,6-Tetrachlorophenol
10.268	-0.034	7669	----			0.6531	0.0000	---	2,3,4,5-Tetrachlorophenol
6.840	0.023	3726	7.079	-0.012	1044	7.5681	1.8505	121.4*	2,4-Dichlorophenol
9.910	0.011	237817	10.548	0.002	278306	16.3	16.7	2.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	65.2	66.6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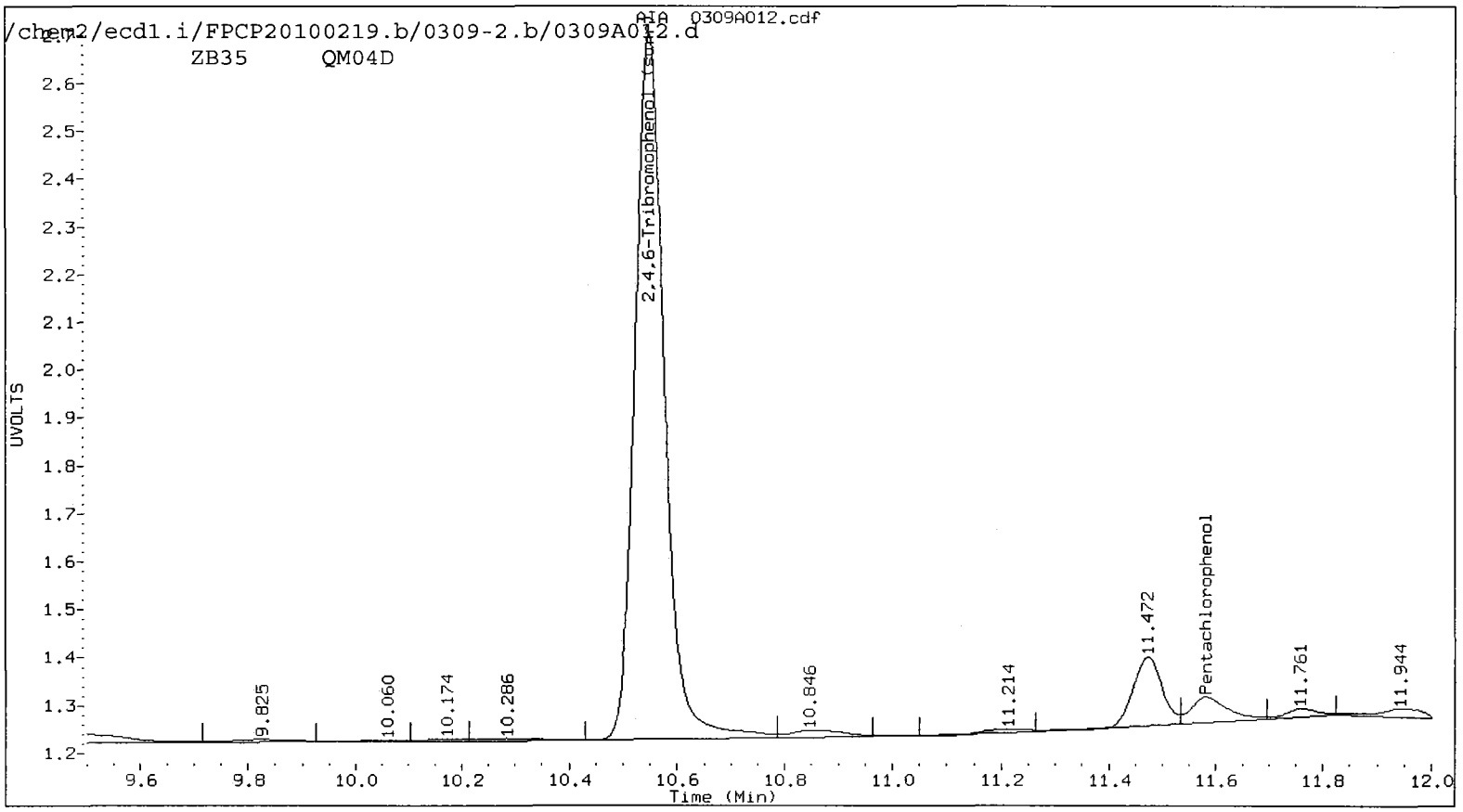
ZB5 QM04D
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.631
9.782
10.384
10.684
11.070
11.437
UVOLTS
Time (Min)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ZB35 QM04D
2,4,6-Tribromophenol (surr
Pentachlorophenol
9.825
10.060
10.174
10.286
10.846
11.214
11.472
11.761
11.944
UVOLTS
Time (Min)

PCP/Chlorophenols ANALYSIS
Standard Raw Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 02/18/10

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol___	11.13	11.13	11.13	11.12	11.12	11.13	11.05	11.19
2,4,6-Trichloropheno	7.19	7.19	7.19	7.19	7.19	7.19	7.12	7.26
2,3,6-Trichloropheno	7.55	7.55	7.54	7.54	7.54	7.54	7.47	7.61
2,4,5-Trichloropheno	8.16	8.15	8.14	8.14	8.14	8.15	8.07	8.21
2,3,4-Trichloropheno	8.70	8.70	8.69	8.69	8.68	8.69	8.61	8.75
2,3,5,6-Tetrachlorop	8.92	8.92	8.92	8.91	8.91	8.92	8.84	8.98
2,3,4,5-Tetrachlorop	10.32	10.32	10.31	10.31	10.30	10.31	10.23	10.37
2,4-Dichlorophenol__	6.82	6.82	6.82	6.82	6.82	6.82	6.75	6.89
2,4,6-Tribromophenol	9.91	9.91	9.90	9.90	9.90	9.90	9.83	9.97

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 02/18/10

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol___	11.58	11.58	11.57	11.57	11.57	11.57	11.51	11.65
2,4,6-Trichloropheno	7.26	7.26	7.26	7.26	7.26	7.26	7.19	7.33
2,3,6-Trichloropheno	7.79	7.79	7.79	7.79	7.78	7.79	7.72	7.86
2,4,5-Trichloropheno	8.52	8.52	8.52	8.51	8.51	8.52	8.45	8.59
2,3,4-Trichloropheno	9.28	9.28	9.28	9.27	9.27	9.28	9.21	9.35
2,3,5,6-Tetrachlorop	9.19	9.18	9.18	9.18	9.18	9.18	9.11	9.25
2,3,4,5-Tetrachlorop	11.03	11.02	11.02	11.02	11.02	11.02	10.95	11.09
2,4-Dichlorophenol__	7.09	7.09	7.09	7.09	7.09	7.09	7.02	7.16
2,4,6-Tribromophenol	10.55	10.55	10.54	10.54	10.54	10.54	10.48	10.62

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 02/18/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol____	19260	20286	19708	18632	16832	15143	10.7	A
2,4,6-Trichlorophenol	12690	11388	9439	10360	8705	8048	17.2	A
2,3,6-Trichlorophenol	11610	10956	10515	10092	8822	8128	13.1	A
2,4,5-Trichlorophenol	5557	5419	5418	5382	4505	4088	12.0	A
2,3,4-Trichlorophenol	8452	8484	7742	6654	5844	5260	19.3	A
2,3,5,6-Tetrachloroph	16891	16608	16259	15694	13938	12707	10.8	A
2,3,4,5-Tetrachloroph	14069	13078	12346	11471	10474	9024	15.5	A
2,4-Dichlorophenol___	539	574	536	478	449	376	14.8	A
2,4,6-Tribromophenol	16092	15471	15178	14700	13698	12467	9.0	A
						AVE RSD	13.6	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A012.d
LVL 2: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A013.d
LVL 3: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A014.d
LVL 4: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A011.d
LVL 5: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A015.d
LVL 6: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A016.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 02/18/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol____	21892	22397	21863	20727	19095	17355	9.6	A
2,4,6-Trichlorophenol	12480	12200	12371	11514	10380	9304	11.2	A
2,3,6-Trichlorophenol	12934	12277	11772	11120	10187	9386	11.7	A
2,4,5-Trichlorophenol	6873	6583	6297	5844	5218	4589	14.7	A
2,3,4-Trichlorophenol	8997	8826	8328	7674	6874	6144	14.5	A
2,3,5,6-Tetrachloroph	18467	18264	17819	17161	15802	14414	9.3	A
2,3,4,5-Tetrachloroph	13447	14149	13746	14433	11943	10771	10.9	A
2,4-Dichlorophenol___	664	633	639	562	478	409	18.0	A
2,4,6-Tribromophenol	17723	17320	17250	16916	16059	14968	6.1	A
						AVE RSD	11.8	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A012.d/0218A012.cdf
LVL 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A013.d/0218A013.cdf
LVL 3: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A014.d/0218A014.cdf
LVL 4: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A011.d/0218A011.cdf
LVL 5: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A015.d/0218A015.cdf
LVL 6: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A016.d/0218A016.cdf

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 18-FEB-2010 20:17
End Cal Date : 18-FEB-2010 21:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20100219.b/FPCPB.m
Cal Date : 19-Feb-2010 09:37 jrains
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A012.d/0218A012.cdf
Level 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A013.d/0218A013.cdf
Level 3: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A014.d/0218A014.cdf
Level 4: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A011.d/0218A011.cdf
Level 5: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A015.d/0218A015.cdf
Level 6: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A016.d/0218A016.cdf

	Compound	2.500 Level 1	6.250 Level 2	12.500 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD
1	2,4-Dichlorophenol	664	633	639	562	478	409	564	18.037
2	2,4,6-Trichlorophenol	12480	12200	12371	11514	10380	9304	11375	11.253
3	2,3,6-Trichlorophenol	12934	12277	11772	11120	10187	9386	11280	11.747
4	2,4,5-Trichlorophenol	6873	6583	6297	5844	5218	4589	5901	14.692
5	2,3,5,6-Tetrachlorophenol	18467	18264	17819	17161	15802	14414	16988	9.334
6	2,3,4-Trichlorophenol	8997	8826	8328	7674	6874	6144	7807	14.469
8	2,3,4,5-Tetrachlorophenol	13447	14149	13746	14433	11943	10771	13081	10.905
9	Pentachlorophenol	21892	22397	21863	20727	19095	17355	20555	9.557
$ 7	2,4,6-Tribromophenol (surr)	17723	17320	17250	16917	16059	14968	16706	6.098

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 18-FEB-2010 20:17
End Cal Date : 18-FEB-2010 21:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20100219.b/FPCPB.m
Cal Date : 19-Feb-2010 09:37 jrains
Curve Type : Average

Average %RSD Results.
Calculated Average %RSD = 11.78791
Maximun Average %RSD = 20.00000
* Passed Average %RSD Test.

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 18-FEB-2010 20:17
End Cal Date : 18-FEB-2010 21:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20100219.b/FPCP.m
Cal Date : 19-Feb-2010 09:46 jrains
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A012.d
Level 2: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A013.d
Level 3: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A014.d
Level 4: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A011.d
Level 5: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A015.d
Level 6: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A016.d

	Compound	2.500 Level 1	6.250 Level 2	12.500 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD
1	2,4-Dichlorophenol	539	575	536	479	449	376	492	14.760
2	2,4,6-Trichlorophenol	12690	11388	9439	10360	8705	8048	10105	17.155
3	2,3,6-Trichlorophenol	11610	10956	10515	10092	8822	8128	10020	13.139
4	2,4,5-Trichlorophenol	5557	5419	5418	5382	4505	4088	5061	12.056
5	2,3,4-Trichlorophenol	8452	8484	7742	6654	5844	5260	7073	19.296
6	2,3,5,6-Tetrachlorophenol	16891	16608	16259	15694	13938	12707	15349	10.856
8	2,3,4,5-Tetrachlorophenol	14069	13078	12346	11471	10474	9024	11744	15.530
9	Pentachlorophenol	19260	20286	19708	18632	16832	15143	18310	10.669
$ 7	2,4,6-Tribromophenol (surr)	16092	15471	15178	14700	13698	12467	14601	9.030

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 18-FEB-2010 20:17
End Cal Date : 18-FEB-2010 21:56
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20100219.b/FPCP.m
Cal Date : 19-Feb-2010 09:46 jrains
Curve Type : Average

Average %RSD Results.

Calculated Average %RSD = 13.46642
Maximun Average %RSD = 20.00000
* Passed Average %RSD Test.

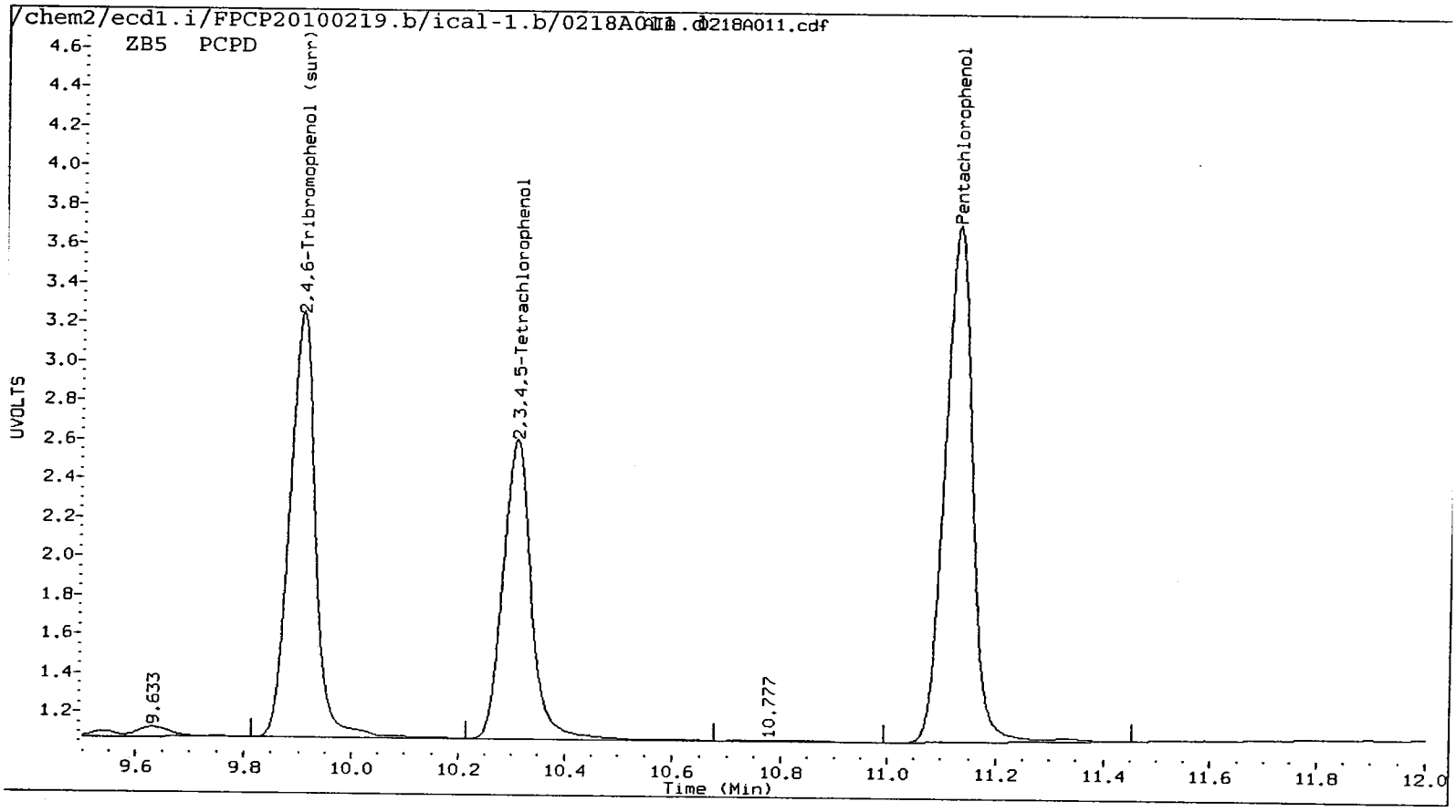
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A011.d ARI ID: PCPD
Data file 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A011.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 18-FEB-2010 20:17
Compound Sublist: all Report Date: 02/19/2010 10:00
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.125	0.002	465799	11.573	-0.003	518187	25.0000	25.2100	0.8	Pentachlorophenol
7.190	0.000	258988	7.261	-0.001	287844	25.0000	23.2129	7.4	2,4,6-Trichlorophenol
7.544	0.004	252304	7.785	-0.002	278010	25.0000	24.1939	3.3	2,3,6-Trichlorophenol
8.140	0.003	134543	8.513	-0.007	146106	25.0000	24.4528	2.2	2,4,5-Trichlorophenol
8.687	0.006	166342	9.273	-0.007	191858	25.0000	24.5746	1.7	2,3,4-Trichlorophenol
8.914	0.002	392346	9.180	-0.004	429030	25.0000	25.2550	1.0	2,3,5,6-Tetrachlorophenol
10.306	0.004	286776	11.019	-0.004	360825	25.0000	27.5833	9.8	2,3,4,5-Tetrachlorophenol
6.820	0.003	119627	7.088	-0.002	140384	250.0000	207.3163	18.7	2,4-Dichlorophenol
9.902	0.003	367511	10.543	-0.003	422914	25.0	25.3	1.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	100.0	101.3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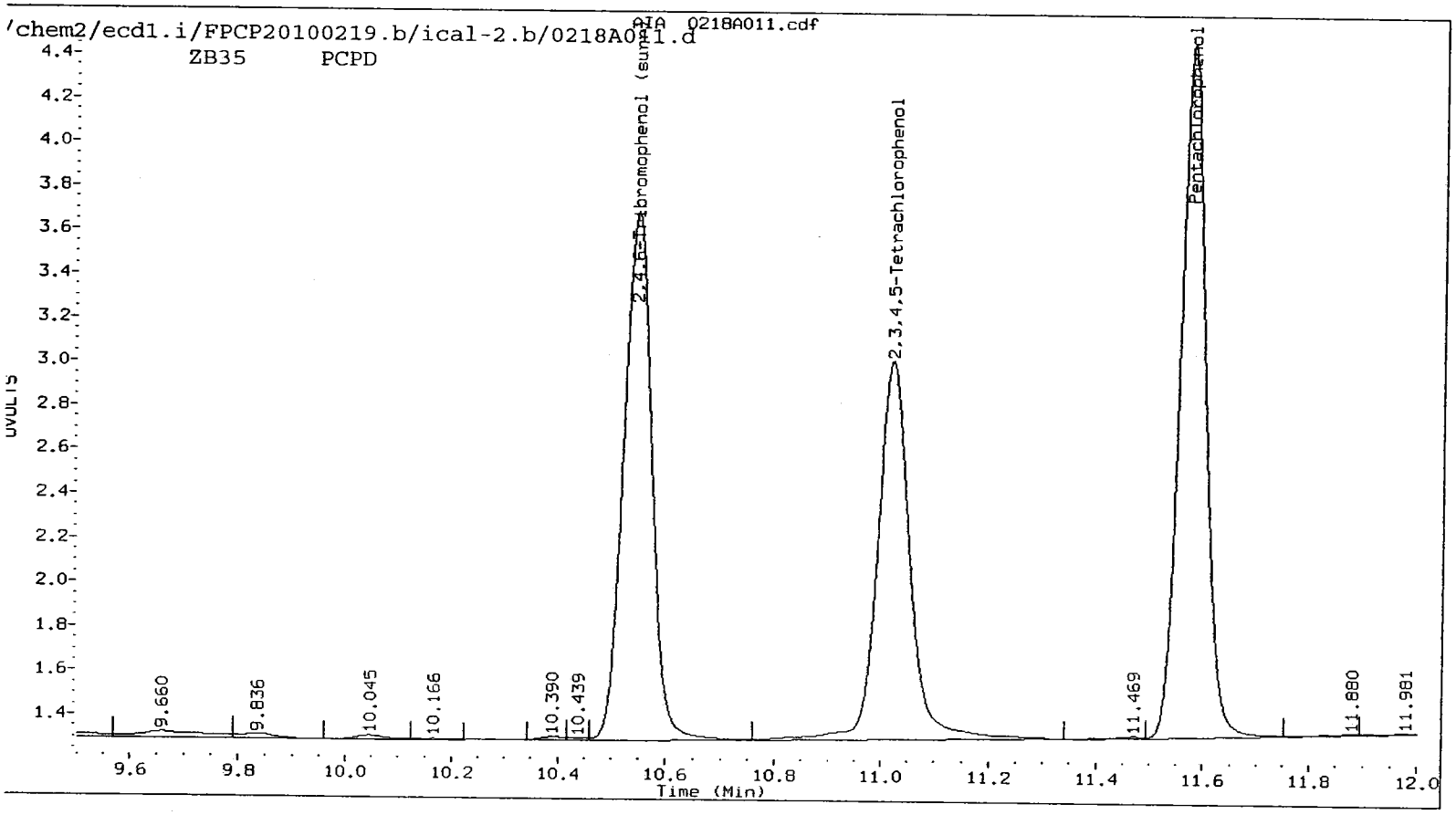
0218A011.cdf
ZB5 PCPD
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.633
10.777
UVOLTS
Time (Min)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0218A011.cdf
ZB35 PCPD
2,3,4,5-Tetrachlorophenol
9.660
9.836
10.045
10.166
10.390
10.439
11.469
11.880
11.981
UVOLTS
Time (Min)

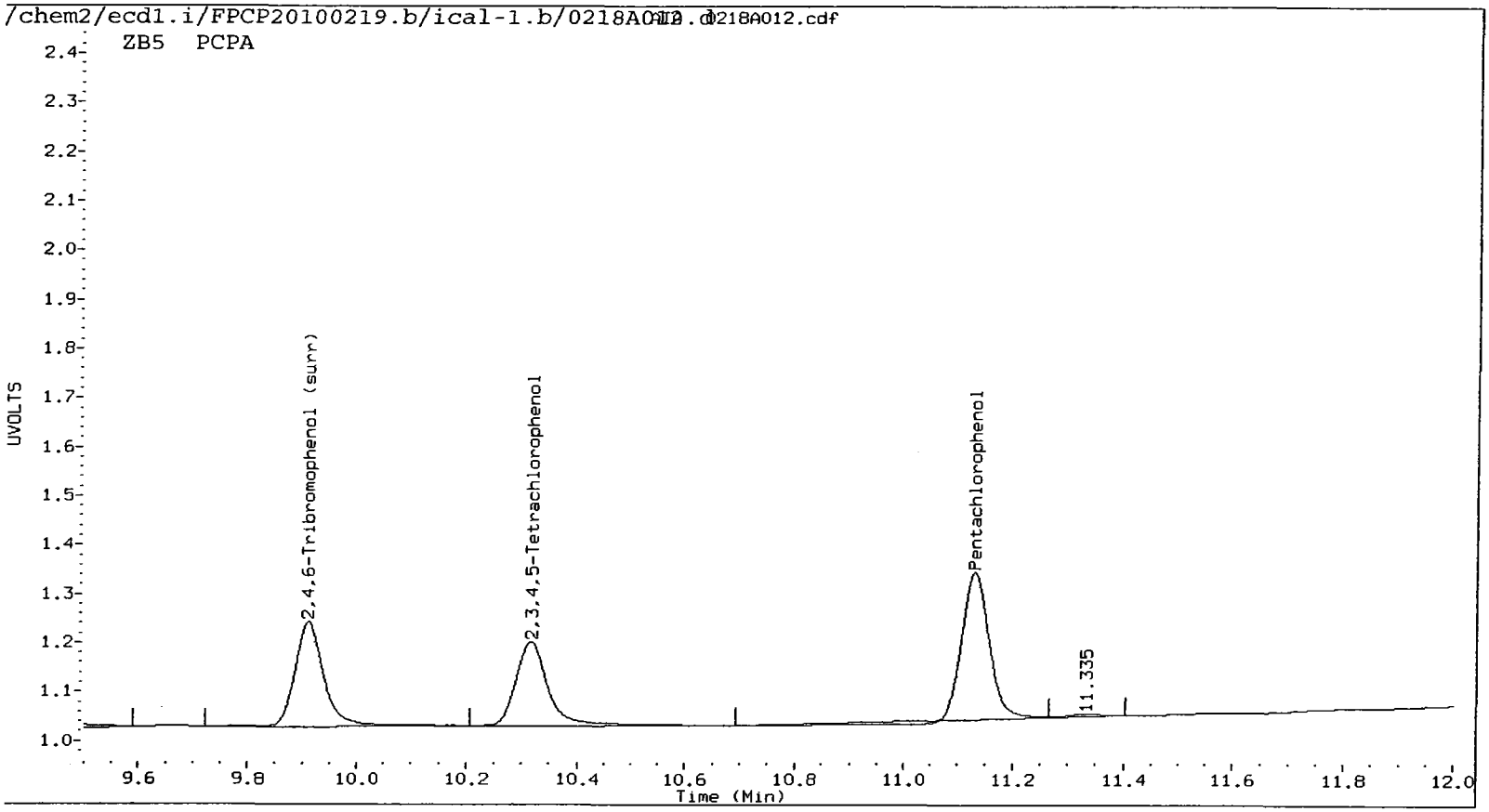
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A012.d ARI ID: PCPA
Data file 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A012.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 18-FEB-2010 20:37
Compound Sublist: all Report Date: 02/19/2010 10:00
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.131	0.008	48151	11.577	0.001	54730	2.5415	2.6626	4.7	Pentachlorophenol
7.193	0.003	31724	7.262	0.000	31199	2.7527	2.6369	4.3	2,4,6-Trichlorophenol
7.546	0.006	29024	7.788	0.001	32334	2.6748	2.8423	6.1	2,3,6-Trichlorophenol
8.157	0.019	13893	8.523	0.003	17182	2.5401	2.8843	12.7	2,4,5-Trichlorophenol
8.700	0.019	21131	9.283	0.003	22492	2.7977	2.8810	2.9	2,3,4-Trichlorophenol
8.923	0.011	42228	9.185	0.002	46168	2.5919	2.7177	4.7	2,3,5,6-Tetrachlorophenol
10.316	0.014	35172	11.025	0.002	33617	2.7543	2.5699	6.9	2,3,4,5-Tetrachlorophenol
6.823	0.006	13475	7.092	0.001	16607	28.1209	27.1340	3.6	2,4-Dichlorophenol
9.911	0.012	40229	10.548	0.002	44308	2.6	2.7	1.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	10.5	10.6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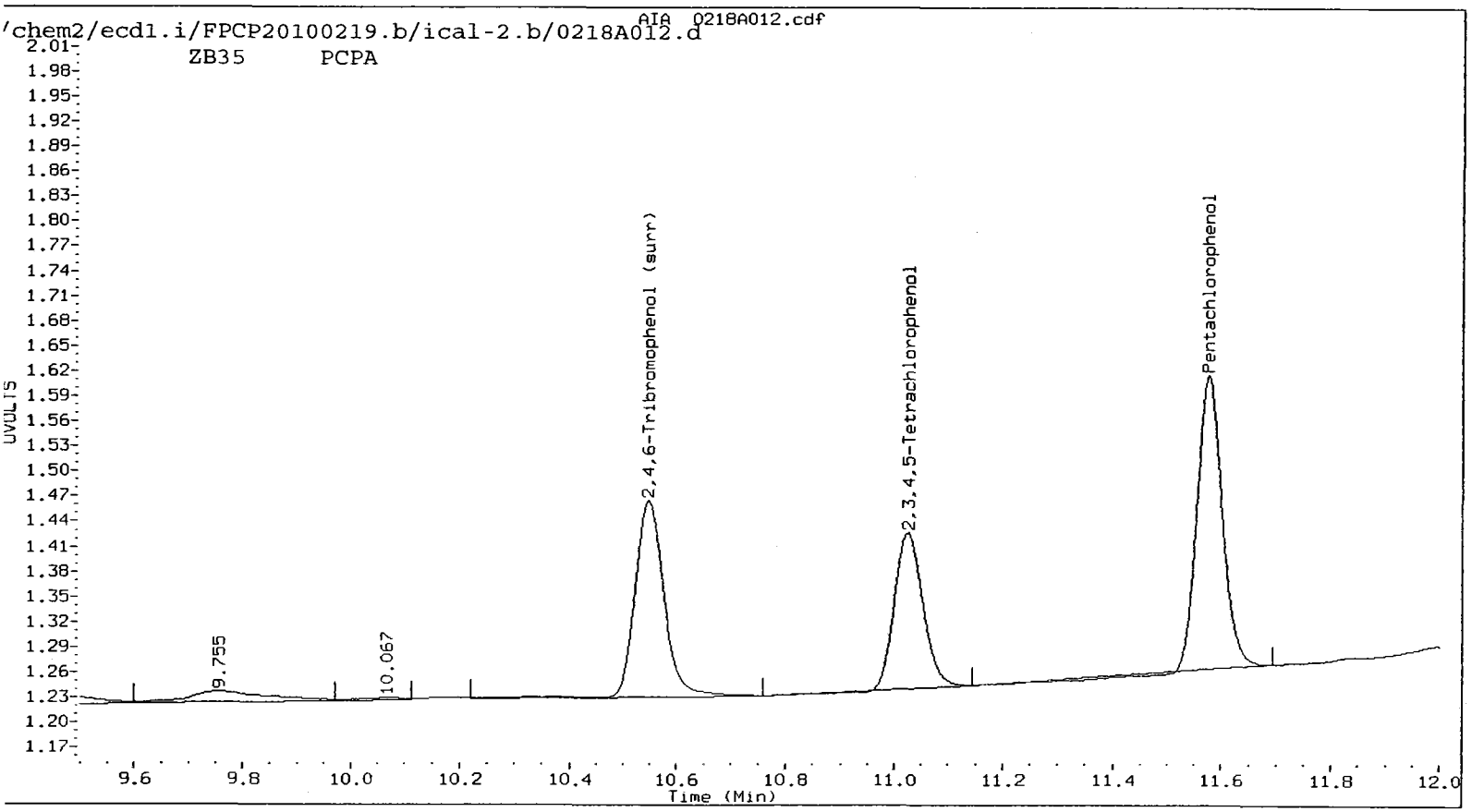
AIA 0218A012.cdf
ZB5 PCPA
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
11.335
Time (Min)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AIA 0218A012.cdf
ZB35 PCPA
UVOLTS
9.755
10.067
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)

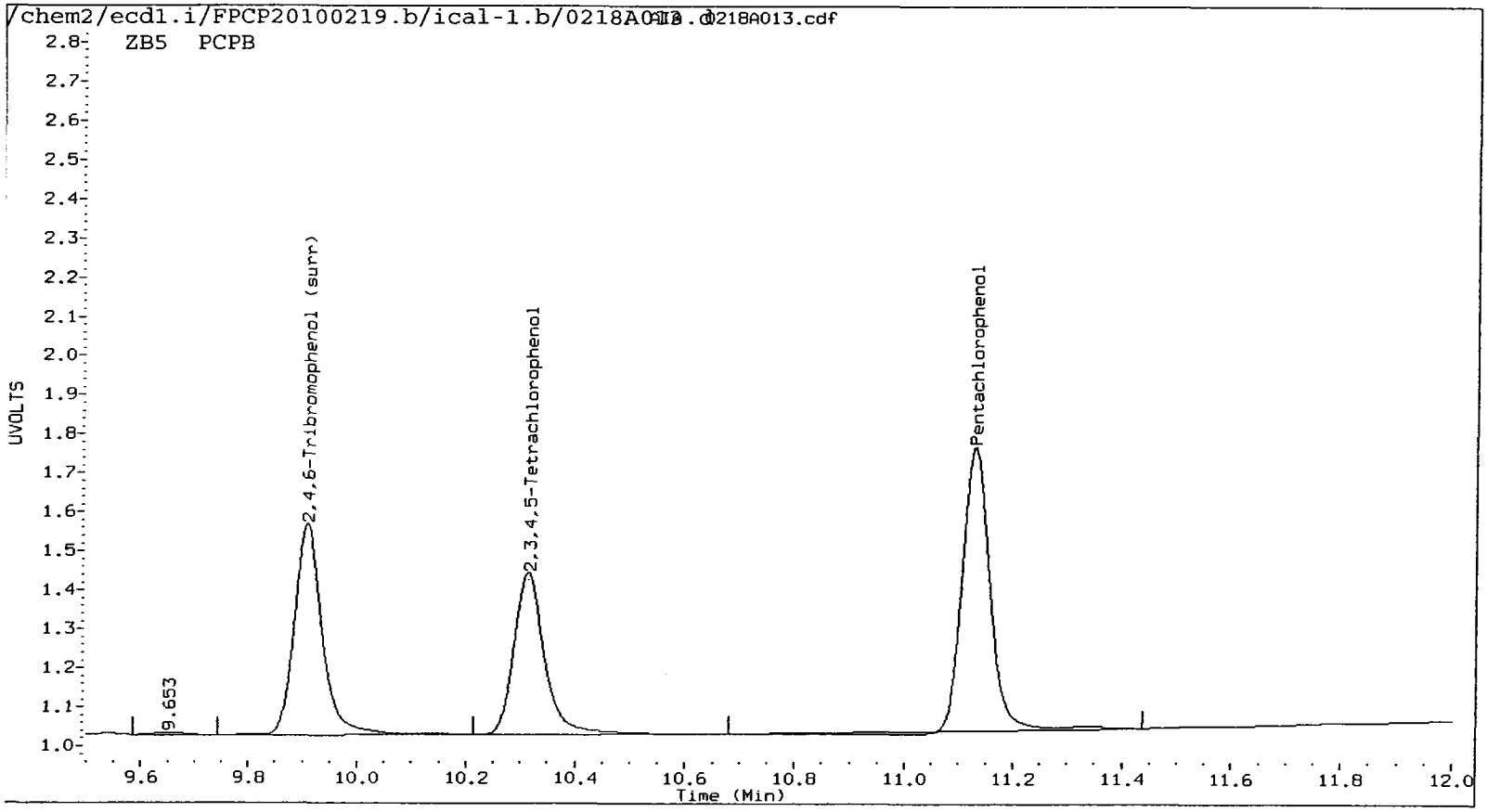
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A013.d ARI ID: PCPB
Data file 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A013.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 18-FEB-2010 20:57
Compound Sublist: all Report Date: 02/19/2010 10:00
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.130	0.007	126786	11.576	0.000	139982	6.5378	6.8102	4.1	Pentachlorophenol
7.193	0.003	71176	7.262	0.000	76250	6.2005	6.7035	7.8	2,4,6-Trichlorophenol
7.547	0.007	68473	7.787	0.000	76734	6.2901	6.8029	7.8	2,3,6-Trichlorophenol
8.153	0.016	33871	8.520	0.000	41146	6.2117	6.9730	11.5	2,4,5-Trichlorophenol
8.697	0.016	53024	9.280	0.000	55164	6.7432	7.0658	4.7	2,3,4-Trichlorophenol
8.922	0.010	103801	9.184	0.000	114152	6.3302	6.7196	6.0	2,3,5,6-Tetrachlorophenol
10.315	0.013	81738	11.023	0.000	88429	6.3497	6.7600	6.3	2,3,4,5-Tetrachlorophenol
6.823	0.006	35911	7.091	0.000	39550	73.9256	70.1023	5.3	2,4-Dichlorophenol
9.909	0.010	96694	10.546	0.000	108248	6.3	6.5	3.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	25.1	25.9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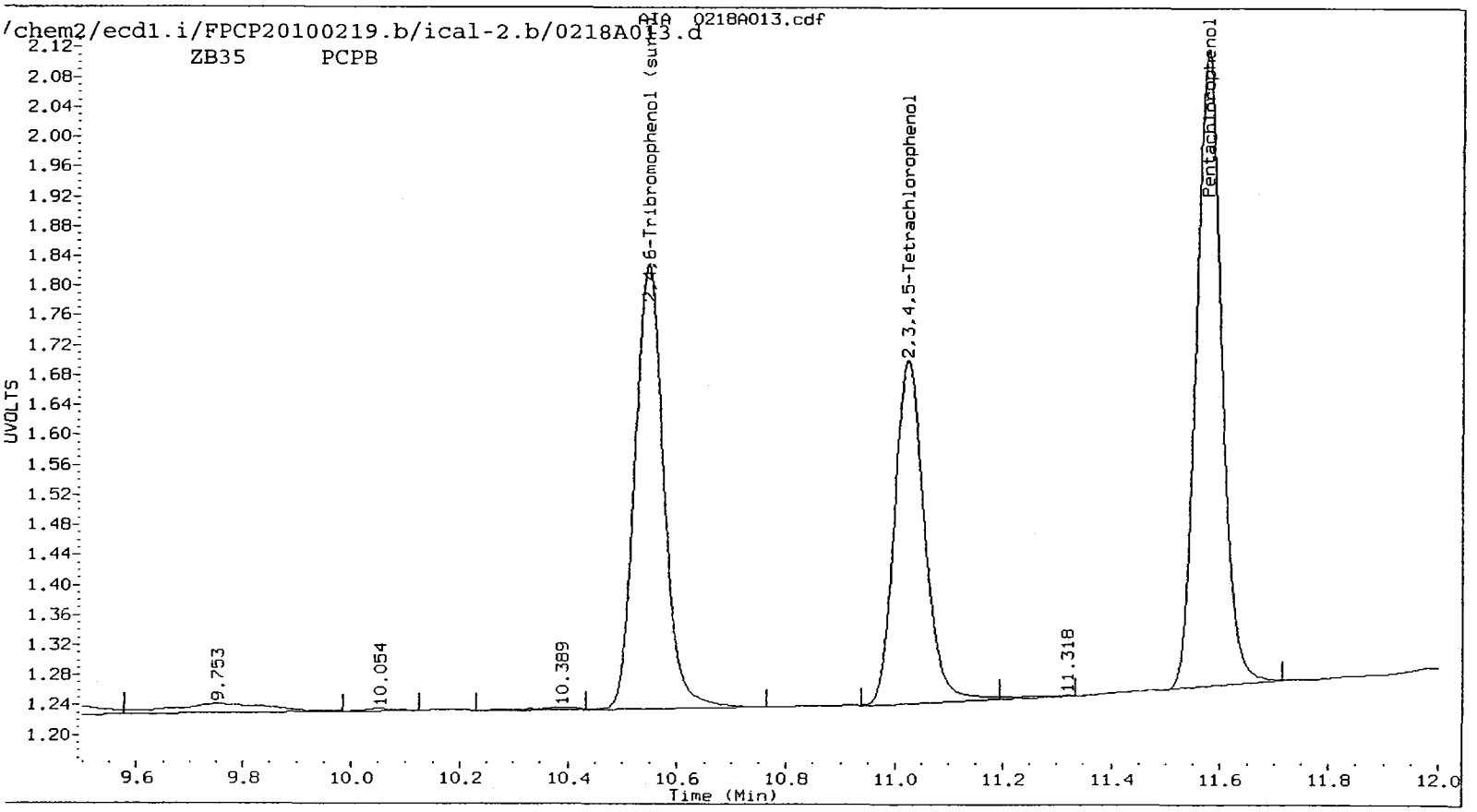
AID 0218A013.cdf
ZB5 PCPB
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.653
Time (Min)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ZB35 PCPB
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.753
10.054
10.389
11.318
Time (Min)

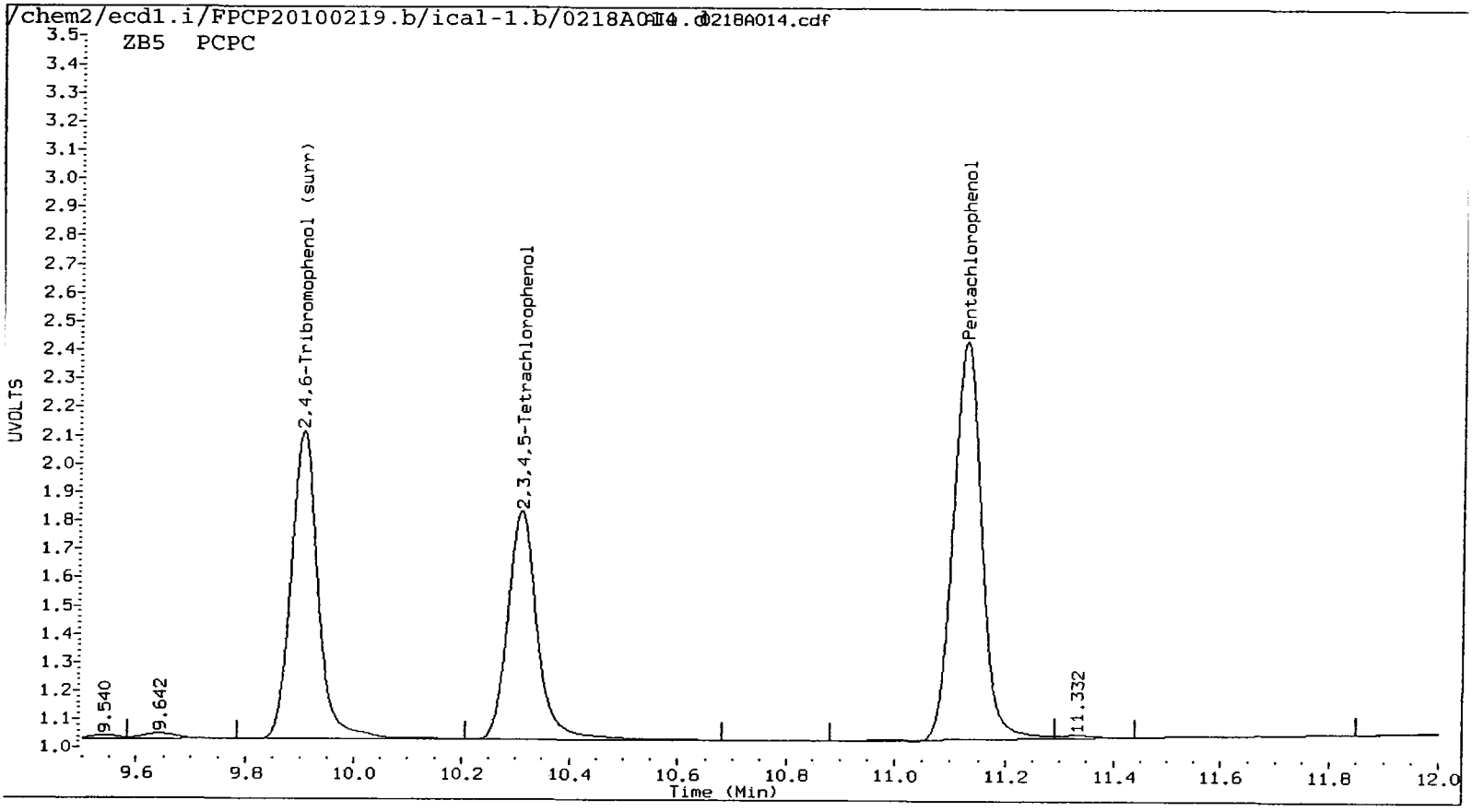
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A014.d ARI ID: PCPC
Data file 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A014.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 18-FEB-2010 21:17
Compound Sublist: all Report Date: 02/19/2010 10:00
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.126	0.003	246351	11.574	-0.002	273284	12.6518	13.2954	5.0	Pentachlorophenol
7.190	0.000	117988	7.262	0.000	154642	10.7564	13.3368	21.4	2,4,6-Trichlorophenol
7.544	0.004	131437	7.786	-0.001	147154	12.1779	13.0207	6.7	2,3,6-Trichlorophenol
8.143	0.006	67722	8.517	-0.003	78715	12.4397	13.3353	6.9	2,4,5-Trichlorophenol
8.690	0.009	96775	9.277	-0.004	104097	12.3548	13.3336	7.6	2,3,4-Trichlorophenol
8.916	0.004	203238	9.182	-0.002	222741	12.4205	13.1117	5.4	2,3,5,6-Tetrachlorophenol
10.309	0.006	154324	11.021	-0.002	171820	12.1124	13.1348	8.1	2,3,4,5-Tetrachlorophenol
6.820	0.003	67050	7.090	-0.001	79892	135.1393	135.7267	0.4	2,4-Dichlorophenol
9.904	0.005	189722	10.544	-0.002	215625	12.4	12.9	4.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	49.4	51.6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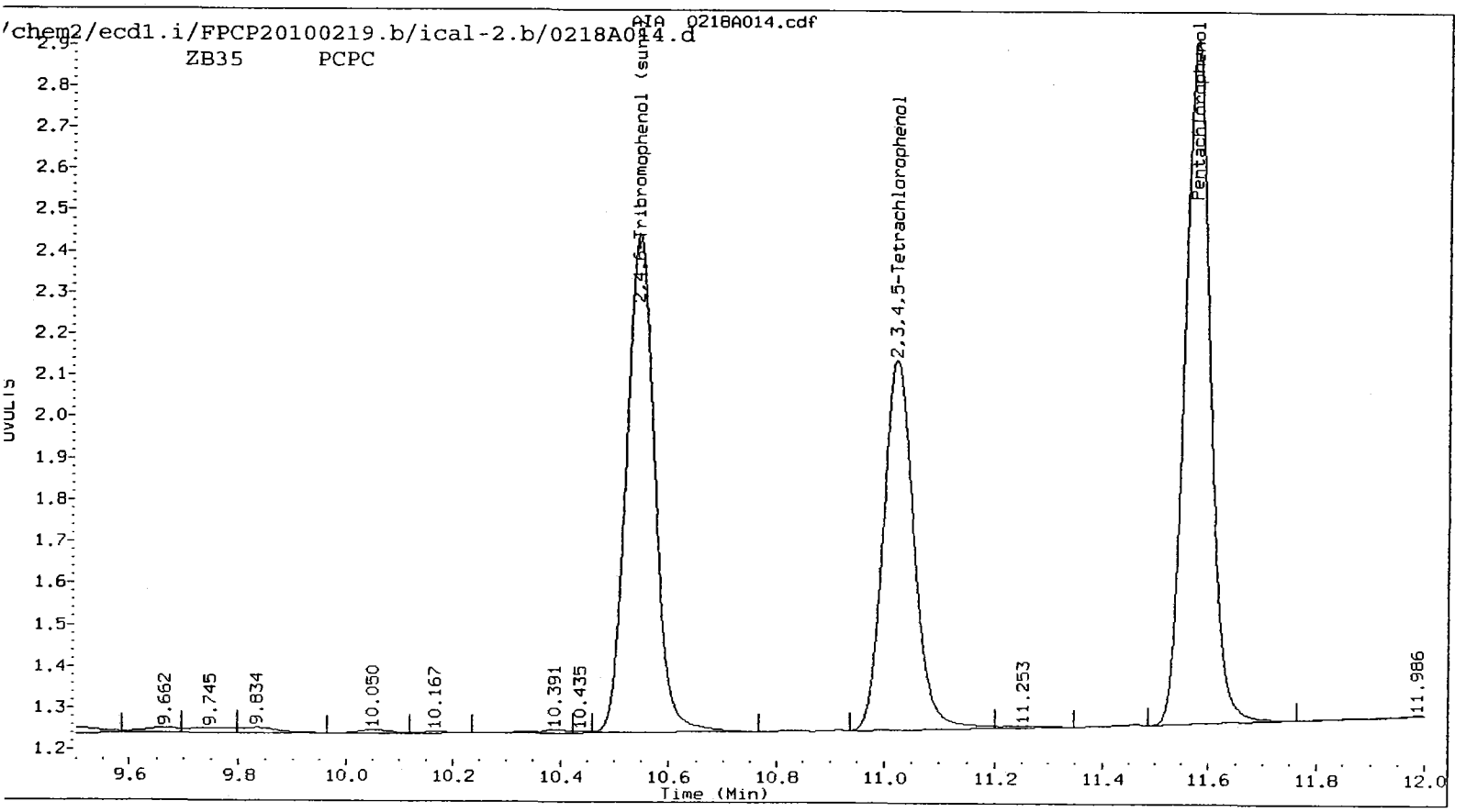
0218A014.cdf
ZB5 PCPC
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.540
9.642
11.332
Time (Min)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0218A014.cdf
ZB35 PCPC
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.662
9.745
9.834
10.050
10.167
10.391
10.435
11.253
11.986
Time (Min)

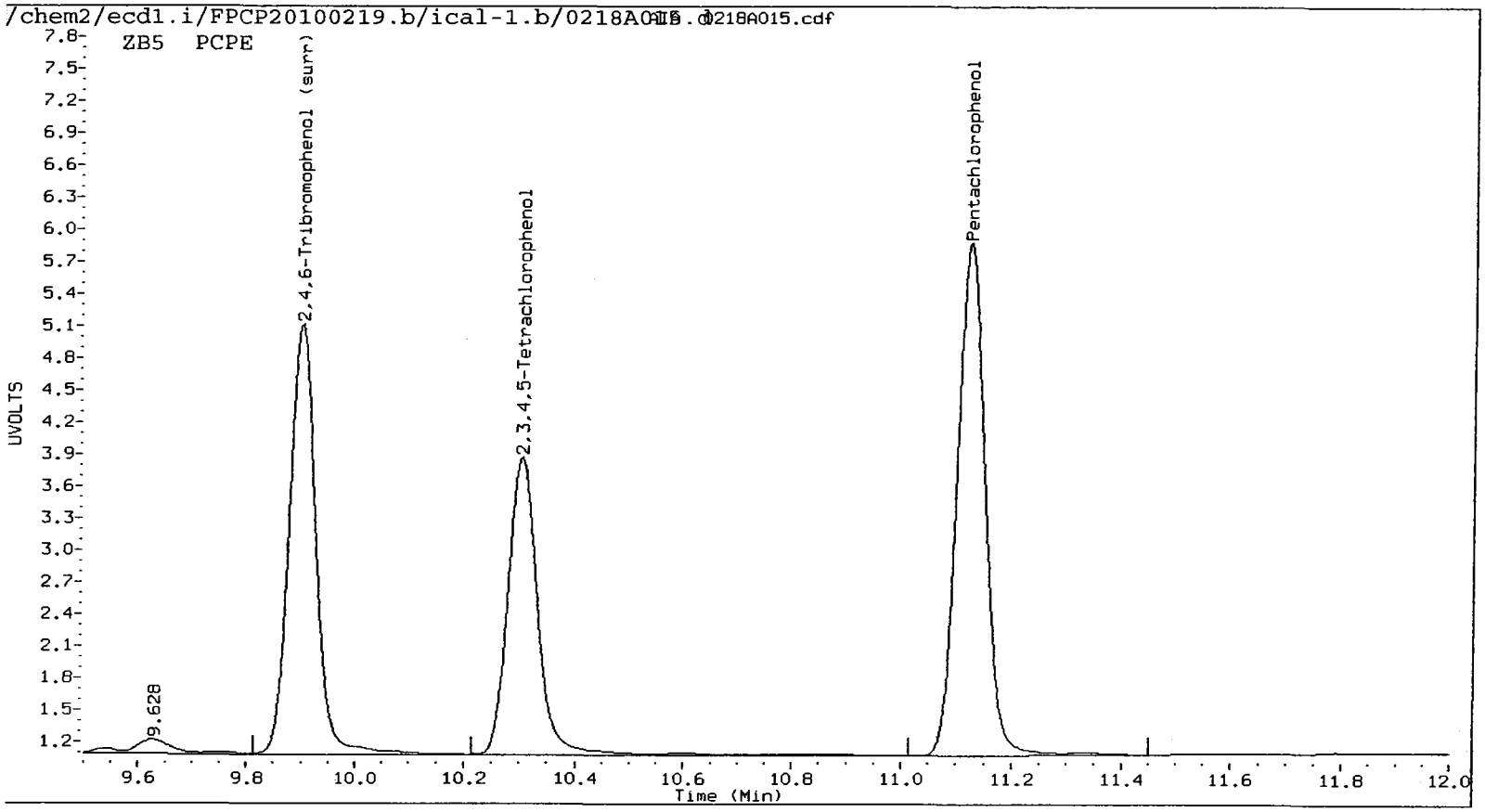
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A015.d ARI ID: PCPE
Data file 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A015.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 18-FEB-2010 21:37
Compound Sublist: all Report Date: 02/19/2010 10:00
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.124	0.001	841607	11.573	-0.003	954743	44.4268	46.4485	4.4	Pentachlorophenol
7.190	0.000	435261	7.260	-0.002	518978	41.3891	44.9202	8.2	2,4,6-Trichlorophenol
7.544	0.004	441107	7.785	-0.002	509370	42.4186	45.1632	6.3	2,3,6-Trichlorophenol
8.140	0.003	225240	8.511	-0.009	260911	42.8525	44.2164	3.1	2,4,5-Trichlorophenol
8.684	0.003	292192	9.271	-0.009	343721	39.2987	44.0264	11.3	2,3,4-Trichlorophenol
8.913	0.001	696892	9.179	-0.005	790093	43.8904	46.5091	5.8	2,3,5,6-Tetrachlorophenol
10.304	0.002	523702	11.017	-0.006	597151	42.6204	45.6492	6.9	2,3,4,5-Tetrachlorophenol
6.821	0.004	224635	7.088	-0.003	239032	486.4561	408.8435	17.3	2,4-Dichlorophenol
9.901	0.002	684881	10.541	-0.005	802969	45.6	48.1	5.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	182.3	192.3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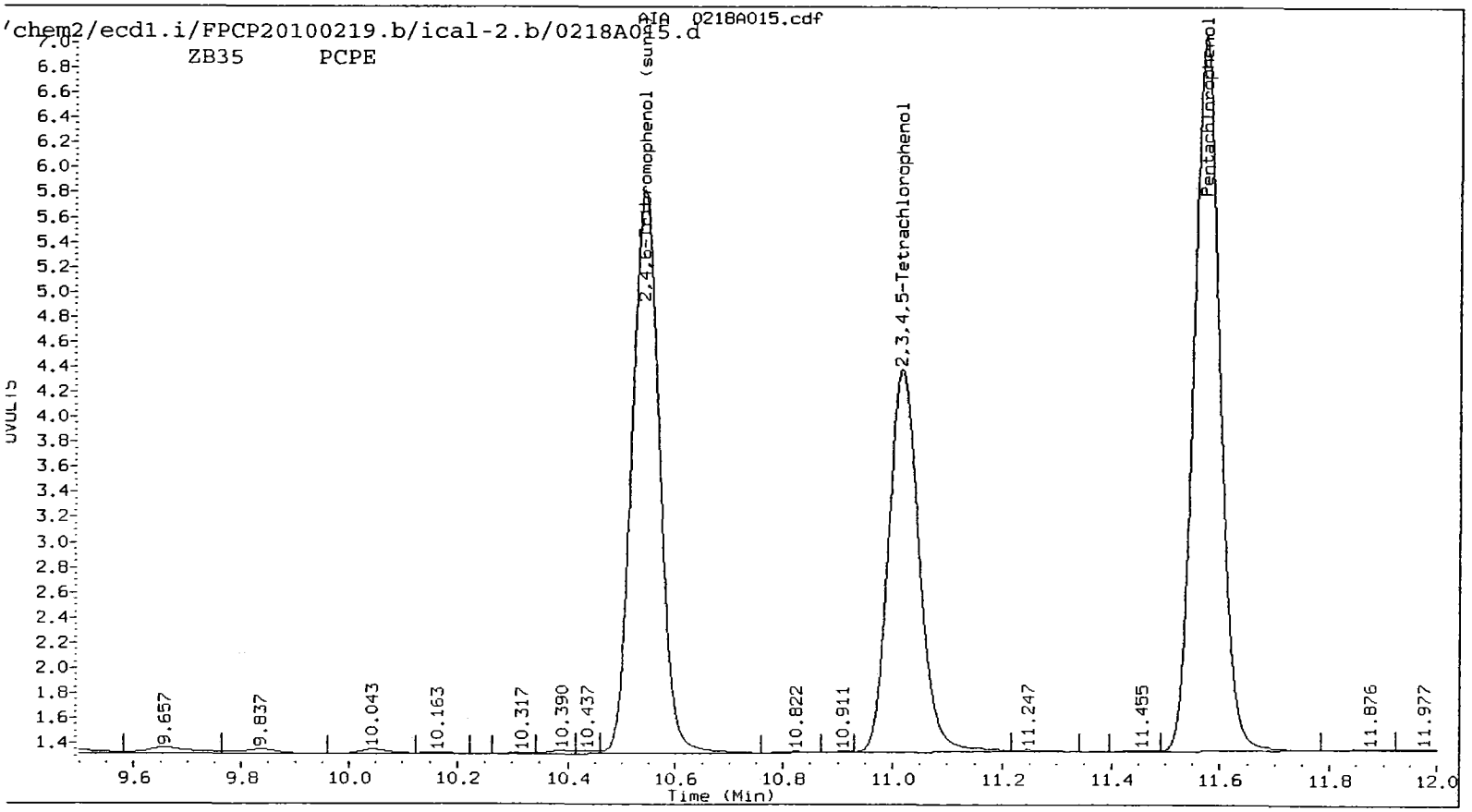
AIA 0218A015.cdf
ZB5 PCPE
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.628
UVOLTS
Time (Min)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AIA 0218A015.cdf
ZB35 PCPE
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.657
9.837
10.043
10.163
10.317
10.390
10.437
10.822
10.911
11.247
11.455
11.876
11.977
Time (Min)

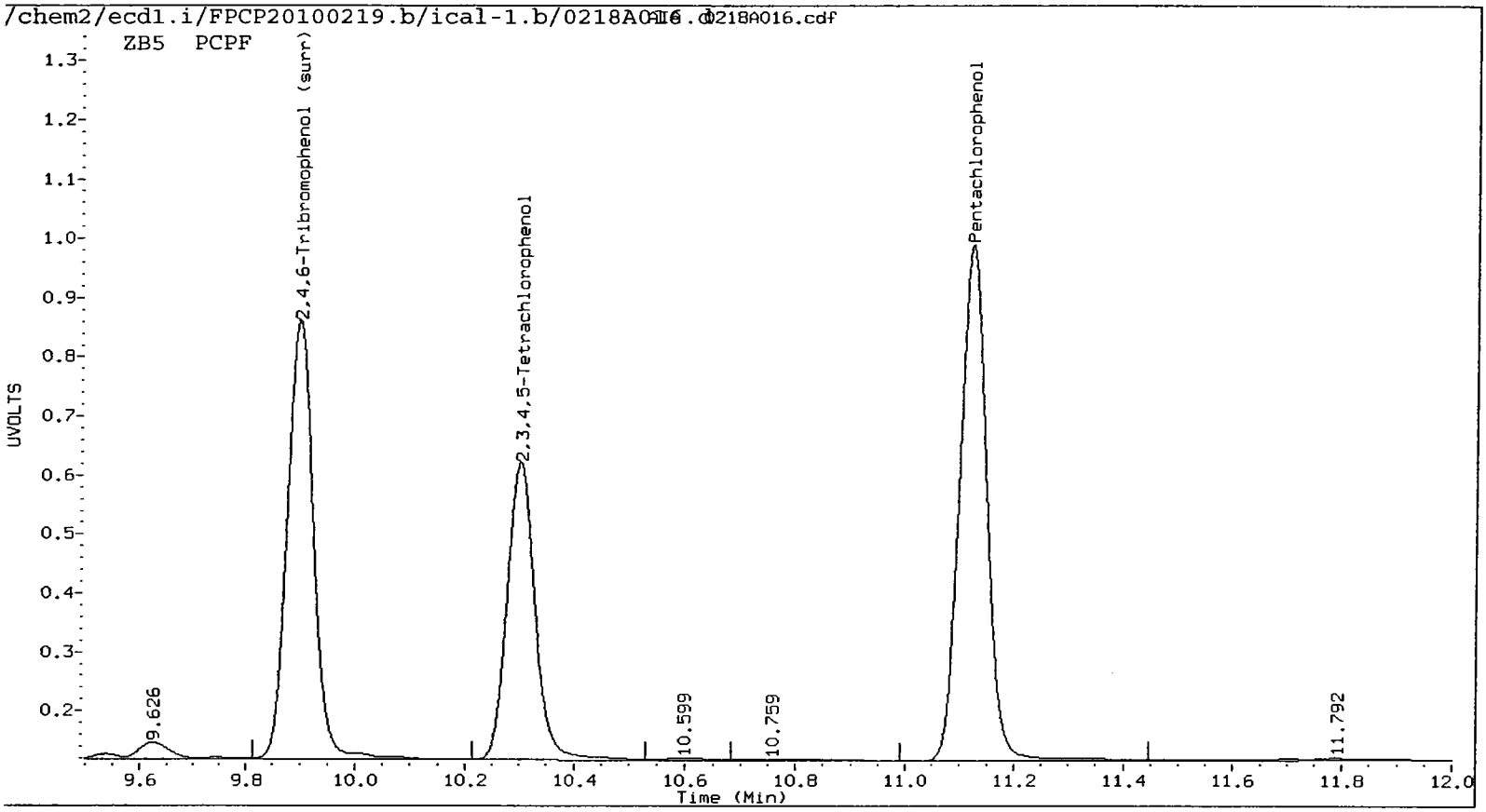
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A016.d ARI ID: PCPF
Data file 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A016.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 18-FEB-2010 21:56
Compound Sublist: all Report Date: 02/19/2010 10:00
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.123	0.000	1514288	11.572	-0.004	1735502	82.7019	84.4327	2.1	Pentachlorophenol
7.190	0.000	804812	7.261	-0.001	930429	79.6454	80.6929	1.3	2,4,6-Trichlorophenol
7.540	0.000	812798	7.785	-0.002	938616	81.1142	83.2139	2.6	2,3,6-Trichlorophenol
8.137	0.000	408754	8.510	-0.009	458891	80.7591	77.7679	3.8	2,4,5-Trichlorophenol
8.681	0.000	526042	9.271	-0.010	614354	74.3764	78.6910	5.6	2,3,4-Trichlorophenol
8.912	0.000	1270676	9.179	-0.005	1441375	82.7830	84.8470	2.5	2,3,5,6-Tetrachloropheno
10.302	0.000	902416	11.016	-0.007	1077091	76.8427	82.3380	6.9	2,3,4,5-Tetrachlorophenol
6.817	0.000	376259	7.087	-0.003	409238	938.2954	703.1714	28.6	2,4-Dichlorophenol
9.899	0.000	1246694	10.541	-0.005	1496833	85.4	89.6	4.8	2,4,6-Tribromophenol (sur

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	341.5	358.4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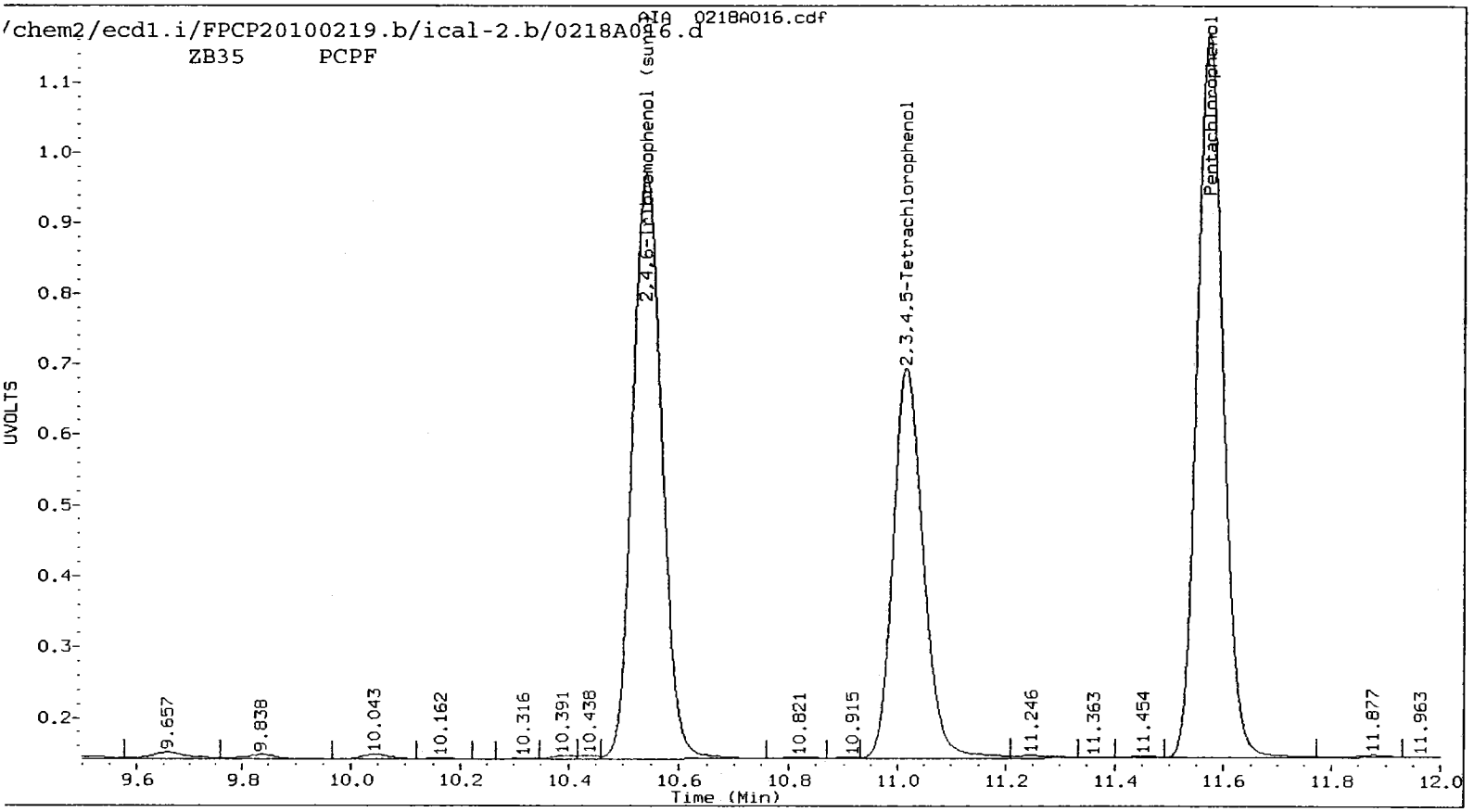
0218A016.cdf
ZB5 PCPF
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.626
10.599
10.759
11.792
UVOLTS
Time (Min)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0218A016.cdf
ZB35 PCPF
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.657
9.838
10.043
10.162
10.316
10.391
10.438
10.821
10.915
11.246
11.363
11.454
11.877
11.963
UVOLTS
Time (Min)

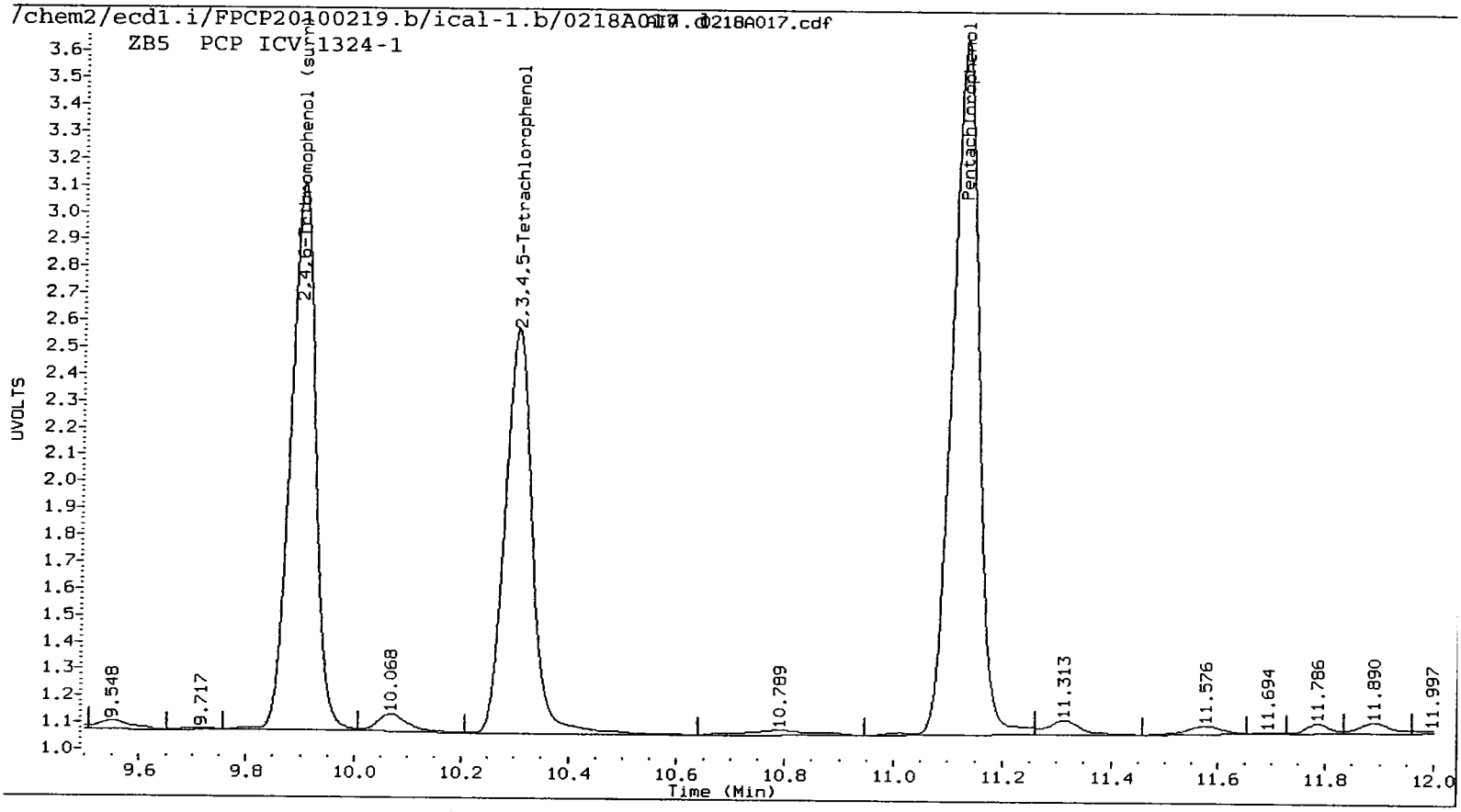
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/ical-1.b/0218A017.d ARI ID: PCP ICV 1324-1
Data file 2: /chem2/ecd1.i/FPCP20100219.b/ical-2.b/0218A017.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 18-FEB-2010 22:16
Compound Sublist: all Report Date: 02/19/2010 10:00
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.123	0.000	442522	11.573	-0.003	520085	24.1681	25.3023	4.6	Pentachlorophenol
7.190	0.000	262734	7.262	0.000	296428	26.0005	25.7082	1.1	2,4,6-Trichlorophenol
7.540	0.000	232672	7.786	-0.001	268515	23.2198	23.8055	2.5	2,3,6-Trichlorophenol
8.133	-0.004	143744	8.511	-0.008	149667	28.4001	25.3640	11.3	2,4,5-Trichlorophenol
8.679	-0.002	167164	9.271	-0.010	173518	23.6351	22.2254	6.1	2,3,4-Trichlorophenol
8.910	-0.002	349991	9.180	-0.004	419174	22.8015	24.6749	7.9	2,3,5,6-Tetrachlorophenol
10.302	0.000	265864	11.017	-0.006	298698	22.6389	22.8340	0.9	2,3,4,5-Tetrachlorophenol
6.820	0.003	121854	7.090	-0.001	134770	303.8732	231.5688	27.0	2,4-Dichlorophenol
9.898	-0.001	323910	10.542	-0.005	418827	22.2	25.1	12.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	96.7	101.2
2,4,6-Trichlorophenol	104.0	102.8
2,3,6-Trichlorophenol	92.9	95.2
2,4,5-Trichlorophenol	113.6	101.5
2,3,4-Trichlorophenol	94.5	88.9
2,3,5,6-Tetrachlorophenol	91.2	98.7
2,3,4,5-Tetrachlorophenol	90.6	91.3
2,4-Dichlorophenol	121.5	92.6
2,4,6-TBP (surr)	44.4	50.1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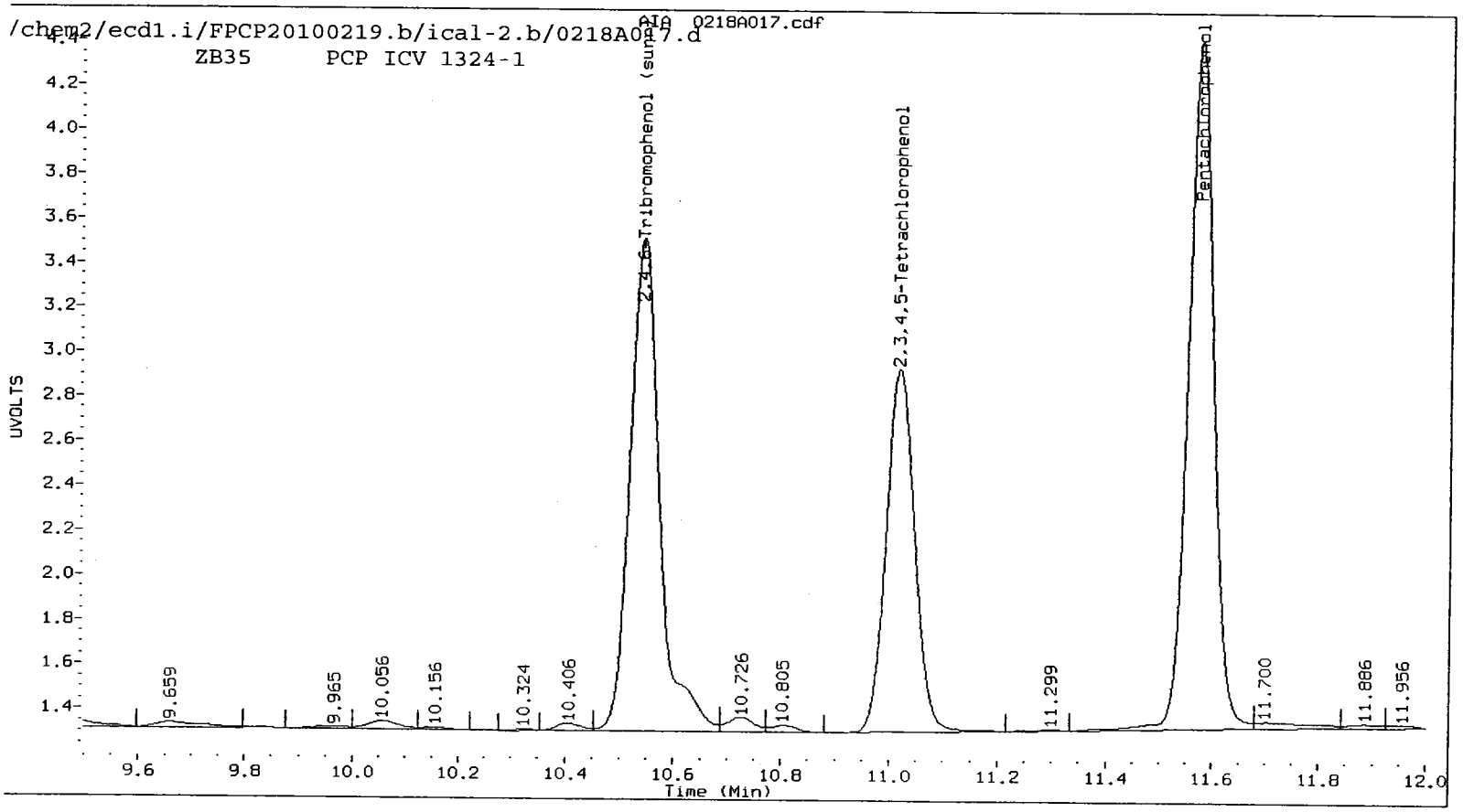
AIA 0218A017.cdf
ZB5 PCP ICV1324-1
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.548
9.717
10.068
10.789
11.313
11.576
11.694
11.786
11.890
11.997
UVOLTS
Time (Min)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ZB35 PCP ICV 1324-1
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.659
9.965
10.056
10.156
10.324
10.406
10.726
10.805
11.299
11.700
11.886
11.956
UVOLTS
Time (Min)

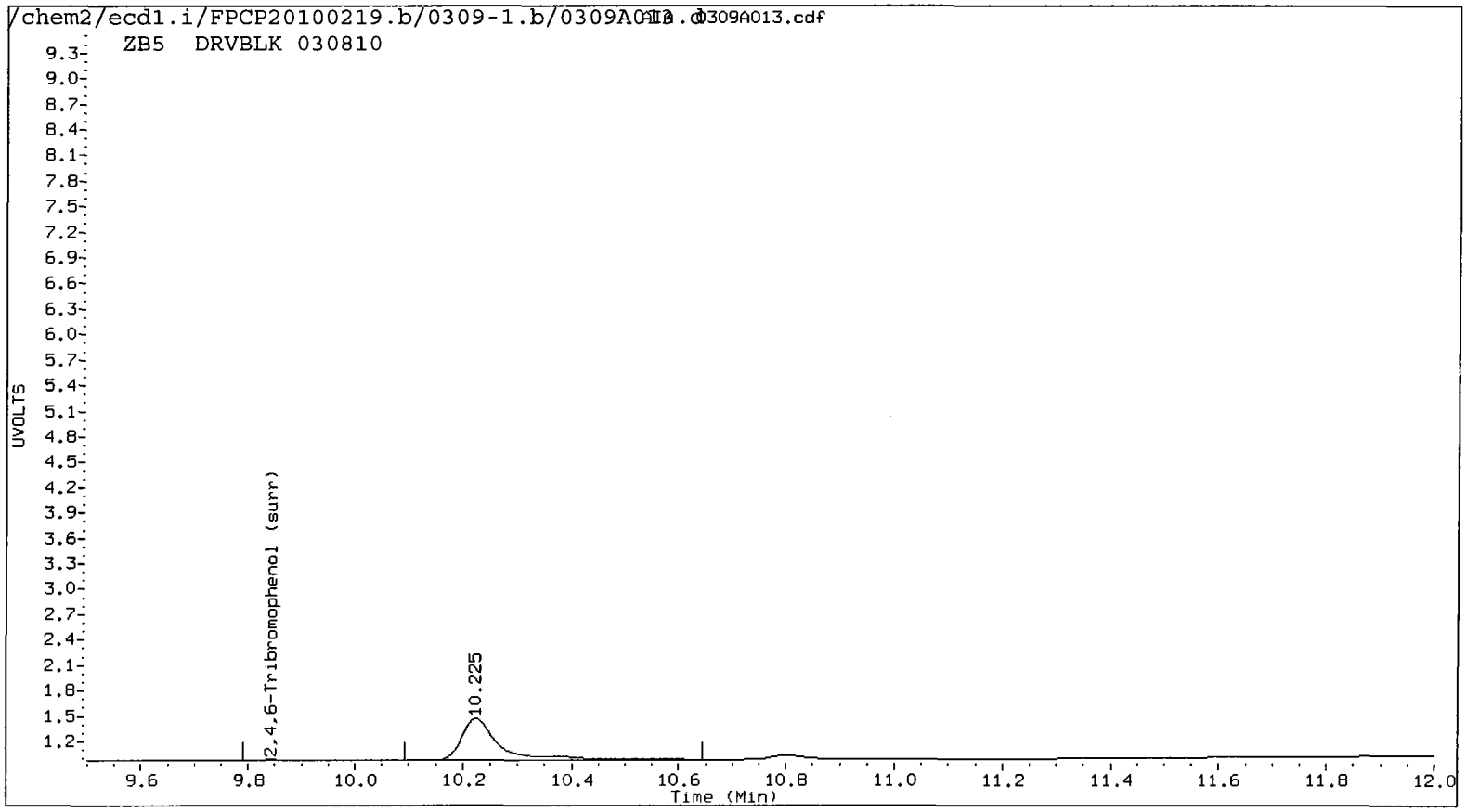
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A013.d ARI ID: DRVBLK 030810
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A013.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 14:51
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
----			11.590	0.014	86791	0.0000	4.2224	---	Pentachlorophenol
----			7.230	-0.032	8952	0.0000	0.7871	---	2,4,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,6-Trichlorophenol
8.137	-0.001	2794	----			0.5521	0.0000	---	2,4,5-Trichlorophenol
8.647	-0.034	9569	----			1.3530	0.0000	---	2,3,4-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
6.858	0.041	58768	----			119.3671	0.0000	---	2,4-Dichlorophenol
9.844	-0.055	2265	----			0.2	0.0	---	2,4,6-Tribromophenol (surr

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	0.6	0.0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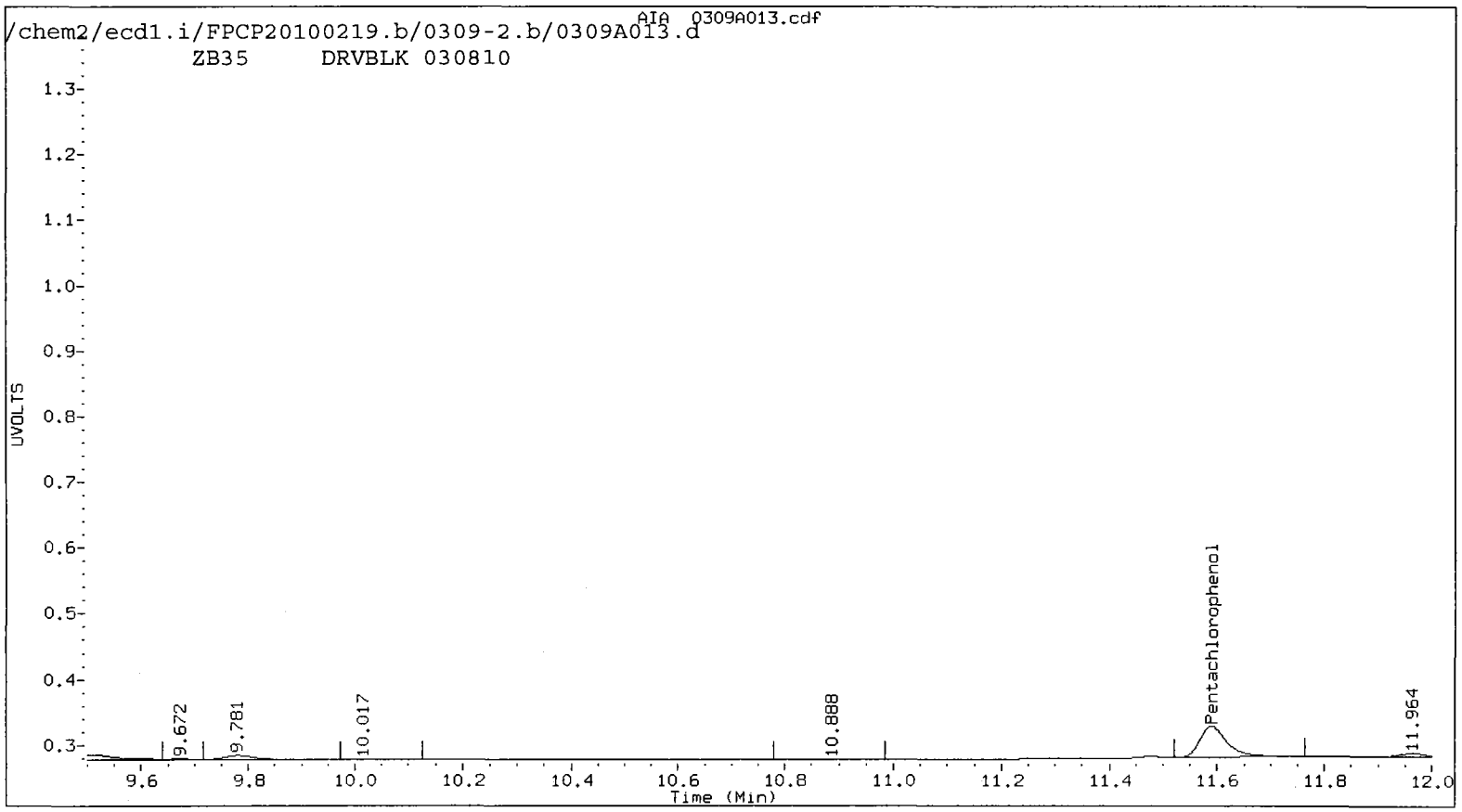
ZB5 DRVBLK 030810
UVOLTS
2,4,6-Tribromophenol (surr)
10.225
Time (Min)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AIA 0309A013.cdf
ZB35 DRVBLK 030810
UVOLTS
9.672
9.781
10.017
10.888
Pentachlorophenol
11.964
Time (Min)

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 02/18/10 02/18/10

Client Sample No.(PCP): Date Analyzed :03/09/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1151

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.13	11.05	11.19	23.8	25.0	-4.8
2,4,6-Trichlorophenol	7.20	7.12	7.26	26.8	25.0	7.2
2,3,6-Trichlorophenol	7.55	7.47	7.61	24.1	25.0	-3.6
2,4,5-Trichlorophenol	8.15	8.07	8.21	25.5	25.0	2.0
2,3,4-Trichlorophenol	8.70	8.61	8.75	26.4	25.0	5.6
2,3,5,6-Tetrachlorophenol	8.92	8.84	8.98	25.1	25.0	0.4
2,3,4,5-Tetrachlorophenol	10.32	10.23	10.37	23.6	25.0	-5.6
2,4-Dichlorophenol	6.83	6.75	6.89	264	250	5.6
2,4,6-Tribromophenol (surr	9.91	9.83	9.97	23.5	25.0	-6.0

AVERAGE %D = 4.5

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 02/18/10 02/18/10

Client Sample No.(PCP): Date Analyzed :03/09/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1151

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.58	11.51	11.65	23.6	25.0	-5.6
2,4,6-Trichlorophenol	7.27	7.19	7.33	24.3	25.0	-2.8
2,3,6-Trichlorophenol	7.79	7.72	7.86	23.2	25.0	-7.2
2,4,5-Trichlorophenol	8.52	8.45	8.59	24.4	25.0	-2.4
2,3,4-Trichlorophenol	9.28	9.21	9.35	24.0	25.0	-4.0
2,3,5,6-Tetrachlorophenol	9.19	9.11	9.25	23.3	25.0	-6.8
2,3,4,5-Tetrachlorophenol	11.03	10.95	11.09	23.4	25.0	-6.4
2,4-Dichlorophenol	7.09	7.02	7.16	246	250	-1.6
2,4,6-Tribromophenol (surr	10.55	10.48	10.62	23.4	25.0	-6.4

AVERAGE %D = 4.8

FORM VII PCP

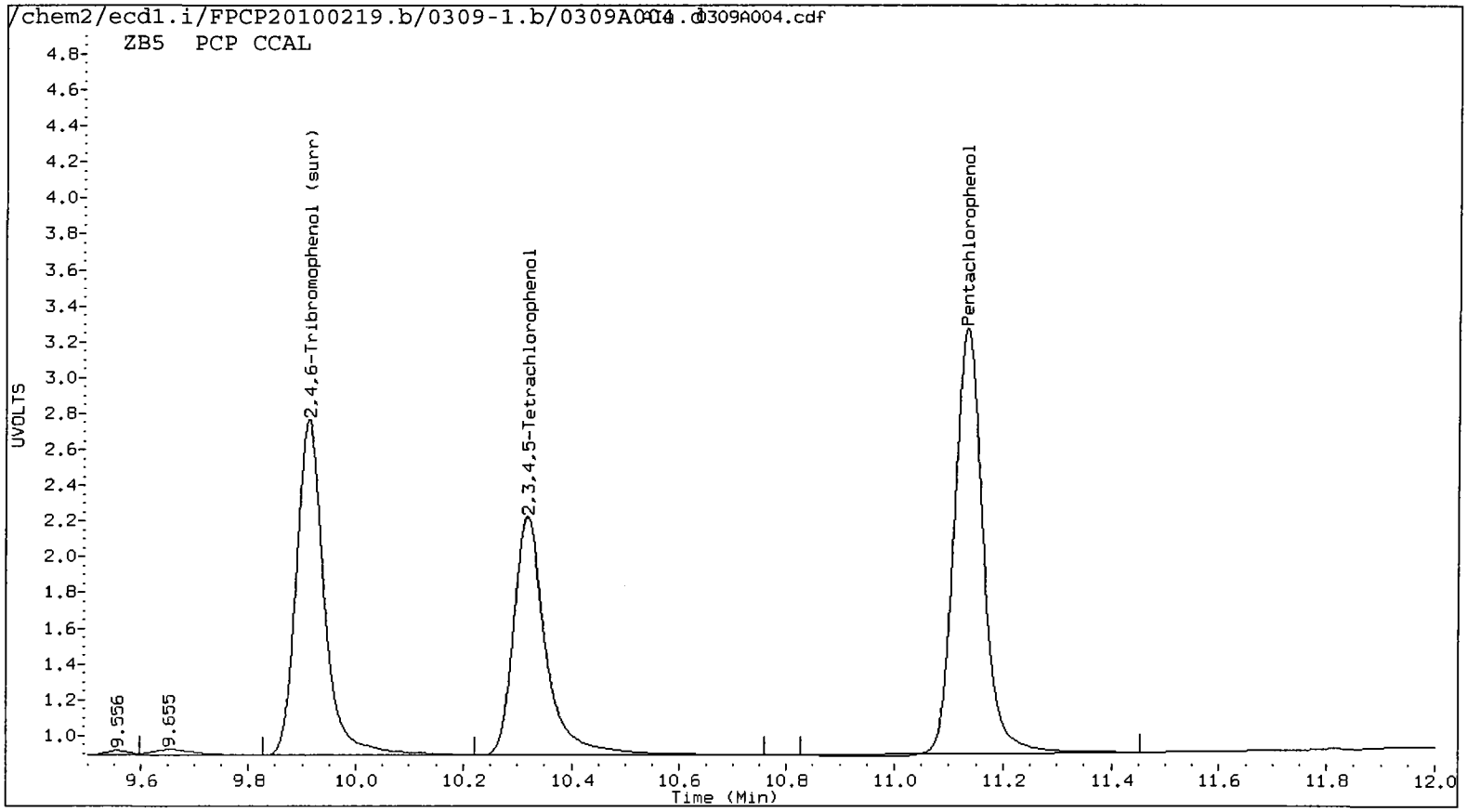
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A004.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A004.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 11:51
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.134	0.011	436649	11.580	0.004	484981	23.8473	23.5945	1.1	Pentachlorophenol
7.198	0.008	271272	7.266	0.004	276209	26.8456	24.2826	10.0	2,4,6-Trichlorophenol
7.549	0.009	241227	7.791	0.005	261761	24.0736	23.2067	3.7	2,3,6-Trichlorophenol
8.153	0.016	129256	8.522	0.003	143863	25.5377	24.3804	4.6	2,4,5-Trichlorophenol
8.699	0.019	187107	9.283	0.003	187548	26.4549	24.0226	9.6	2,3,4-Trichlorophenol
8.923	0.011	384887	9.187	0.004	396268	25.0749	23.3265	7.2	2,3,5,6-Tetrachlorophenol
10.319	0.017	277575	11.029	0.006	305651	23.6362	23.3654	1.2	2,3,4,5-Tetrachlorophenol
6.826	0.009	129872	7.094	0.003	139040	263.7896	246.4481	6.8	2,4-Dichlorophenol
9.912	0.013	342545	10.552	0.005	391151	23.5	23.4	0.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	95.4	94.4
2,4,6-Trichlorophenol	107.4	97.1
2,3,6-Trichlorophenol	96.3	92.8
2,4,5-Trichlorophenol	102.2	97.5
2,3,4-Trichlorophenol	105.8	96.1
2,3,5,6-Tetrachlorophenol	100.3	93.3
2,3,4,5-Tetrachlorophenol	94.5	93.5
2,4-Dichlorophenol	105.5	98.6
2,4,6-TBP (surr)	93.8	93.7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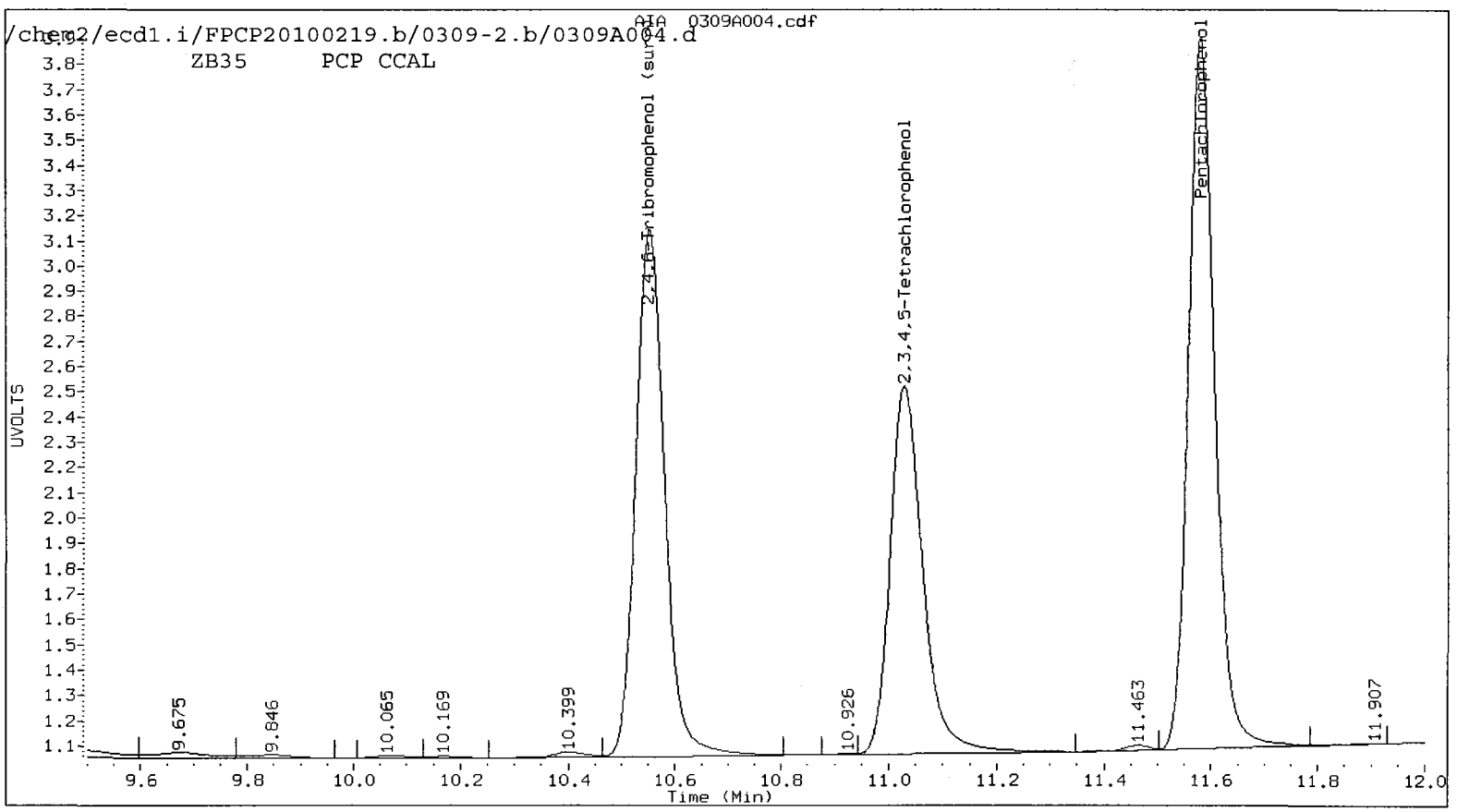
AIB 0309A004.cdf
ZB5 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.556
9.655
Time (Min)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AIB 0309A004.cdf
ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.675
9.846
10.065
10.169
10.399
10.926
11.463
11.907
Time (Min)

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 02/18/10 02/18/10

Client Sample No.(PCP): Date Analyzed :03/09/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1530

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.13	11.05	11.19	24.7	25.0	-1.2
2,4,6-Trichlorophenol	7.19	7.12	7.26	27.3	25.0	9.2
2,3,6-Trichlorophenol	7.55	7.47	7.61	24.4	25.0	-2.4
2,4,5-Trichlorophenol	8.15	8.07	8.21	26.4	25.0	5.6
2,3,4-Trichlorophenol	8.69	8.61	8.75	25.8	25.0	3.2
2,3,5,6-Tetrachlorophenol	8.92	8.84	8.98	25.6	25.0	2.4
2,3,4,5-Tetrachlorophenol	10.31	10.23	10.37	23.4	25.0	-6.4
2,4-Dichlorophenol	6.82	6.75	6.89	260	250	4.0
2,4,6-Tribromophenol (surr	9.91	9.83	9.97	24.5	25.0	-2.0

AVERAGE %D = 4.0

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: QM04 Project: LORA LAKES APARTMENTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 02/18/10 02/18/10

Client Sample No.(PCP): Date Analyzed :03/09/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1530

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.58	11.51	11.65	24.6	25.0	-1.6
2,4,6-Trichlorophenol	7.26	7.19	7.33	25.0	25.0	0.0
2,3,6-Trichlorophenol	7.79	7.72	7.86	23.8	25.0	-4.8
2,4,5-Trichlorophenol	8.52	8.45	8.59	25.0	25.0	0.0
2,3,4-Trichlorophenol	9.28	9.21	9.35	24.8	25.0	-0.8
2,3,5,6-Tetrachlorophenol	9.18	9.11	9.25	24.2	25.0	-3.2
2,3,4,5-Tetrachlorophenol	11.02	10.95	11.09	24.4	25.0	-2.4
2,4-Dichlorophenol	7.09	7.02	7.16	250	250	0.0
2,4,6-Tribromophenol (surr	10.55	10.48	10.62	24.6	25.0	-1.6

AVERAGE %D = 1.6

FORM VII PCP

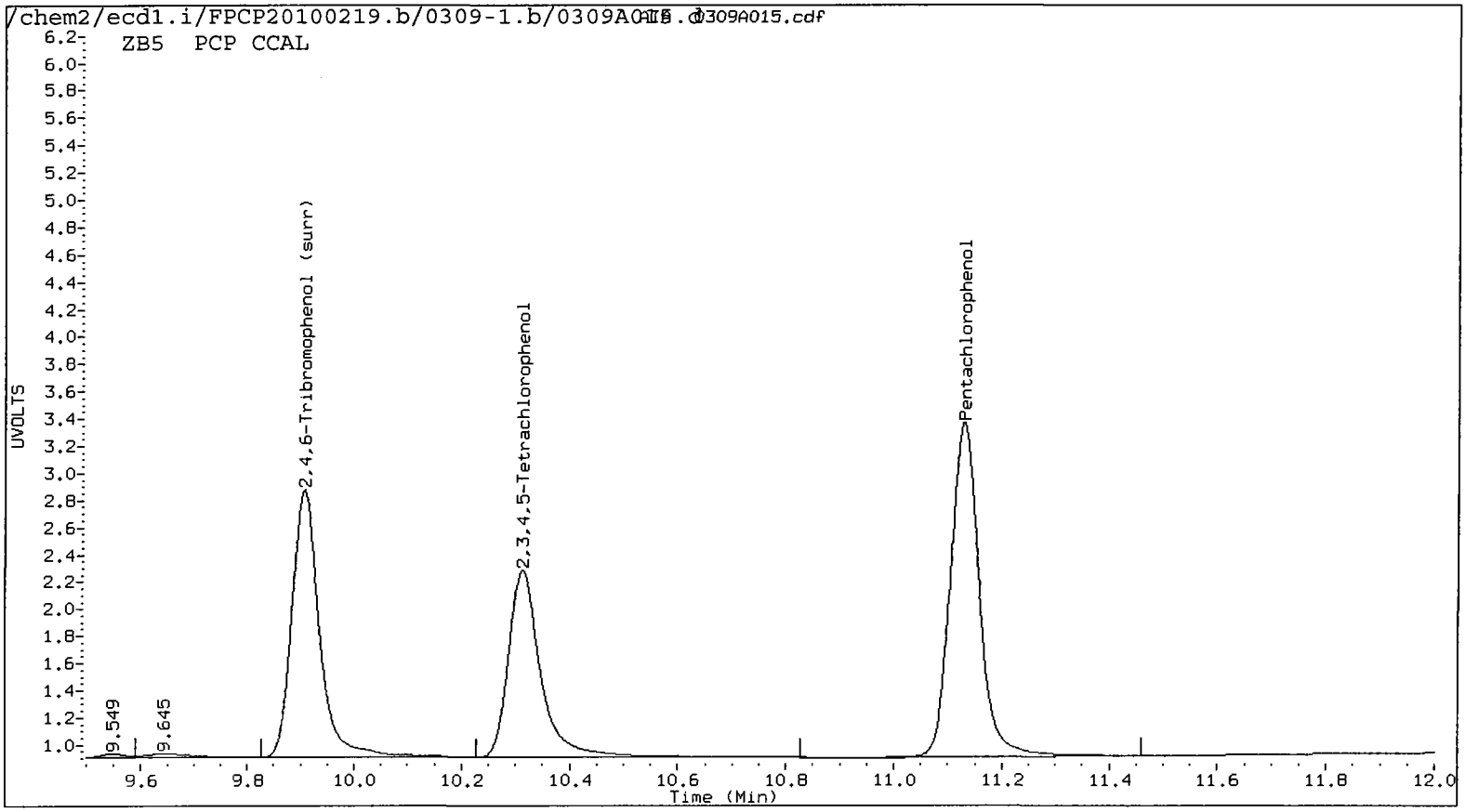
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A015.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A015.d Client ID:
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 15:30
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.129	0.006	452194	11.576	0.000	505021	24.6963	24.5694	0.5	Pentachlorophenol
7.195	0.005	276059	7.262	0.000	284183	27.3193	24.9836	8.9	2,4,6-Trichlorophenol
7.546	0.006	244778	7.787	0.000	268299	24.4280	23.7864	2.7	2,3,6-Trichlorophenol
8.149	0.012	133816	8.518	-0.001	147794	26.4387	25.0466	5.4	2,4,5-Trichlorophenol
8.695	0.014	182693	9.279	-0.002	193463	25.8308	24.7802	4.2	2,3,4-Trichlorophenol
8.918	0.006	393177	9.184	0.000	410992	25.6151	24.1932	5.7	2,3,5,6-Tetrachlorophenol
10.313	0.011	275456	11.024	0.000	318733	23.4557	24.3655	3.8	2,3,4,5-Tetrachlorophenol
6.823	0.006	128226	7.090	0.000	141217	260.4460	250.3068	4.0	2,4-Dichlorophenol
9.907	0.008	357346	10.547	0.000	410362	24.5	24.6	0.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	98.8	98.3
2,4,6-Trichlorophenol	109.3	99.9
2,3,6-Trichlorophenol	97.7	95.1
2,4,5-Trichlorophenol	105.8	100.2
2,3,4-Trichlorophenol	103.3	99.1
2,3,5,6-Tetrachlorophenol	102.5	96.8
2,3,4,5-Tetrachlorophenol	93.8	97.5
2,4-Dichlorophenol	104.2	100.1
2,4,6-TBP (surr)	97.9	98.3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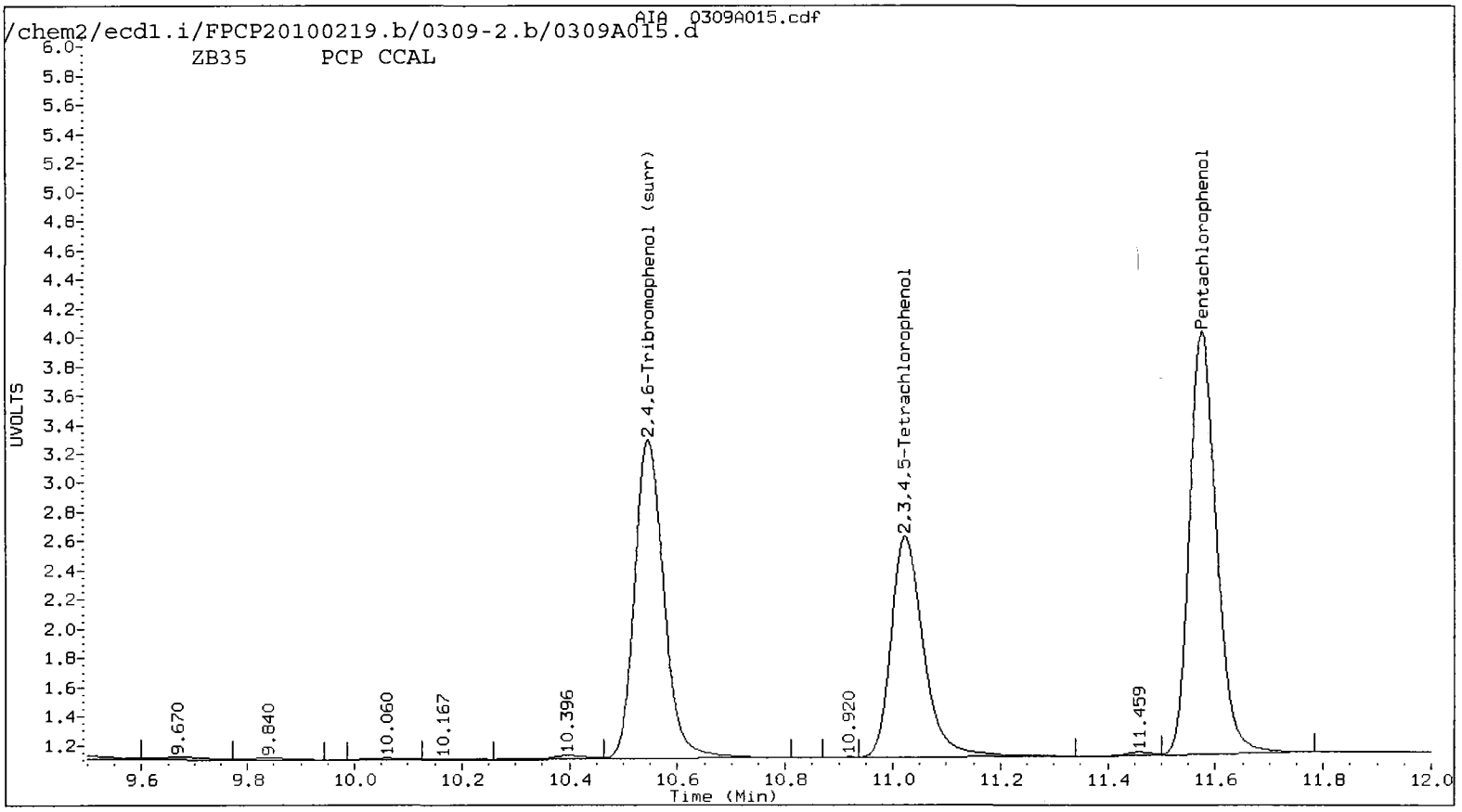
ZB5 PCP CCAL
UVOLTS
9.549
9.645
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)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ZB35 PCP CCAL
UVOLTS
9.670
9.840
10.060
10.167
10.396
2,4,6-Tribromophenol (surr)
10.920
2,3,4,5-Tetrachlorophenol
11.459
Pentachlorophenol
Time (Min)

PCP/Chlorophenols ANALYSIS
QC Raw Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-030310
METHOD BLANK

Lab Sample ID: MB-030310
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 12:11
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	53.6%

FORM I

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

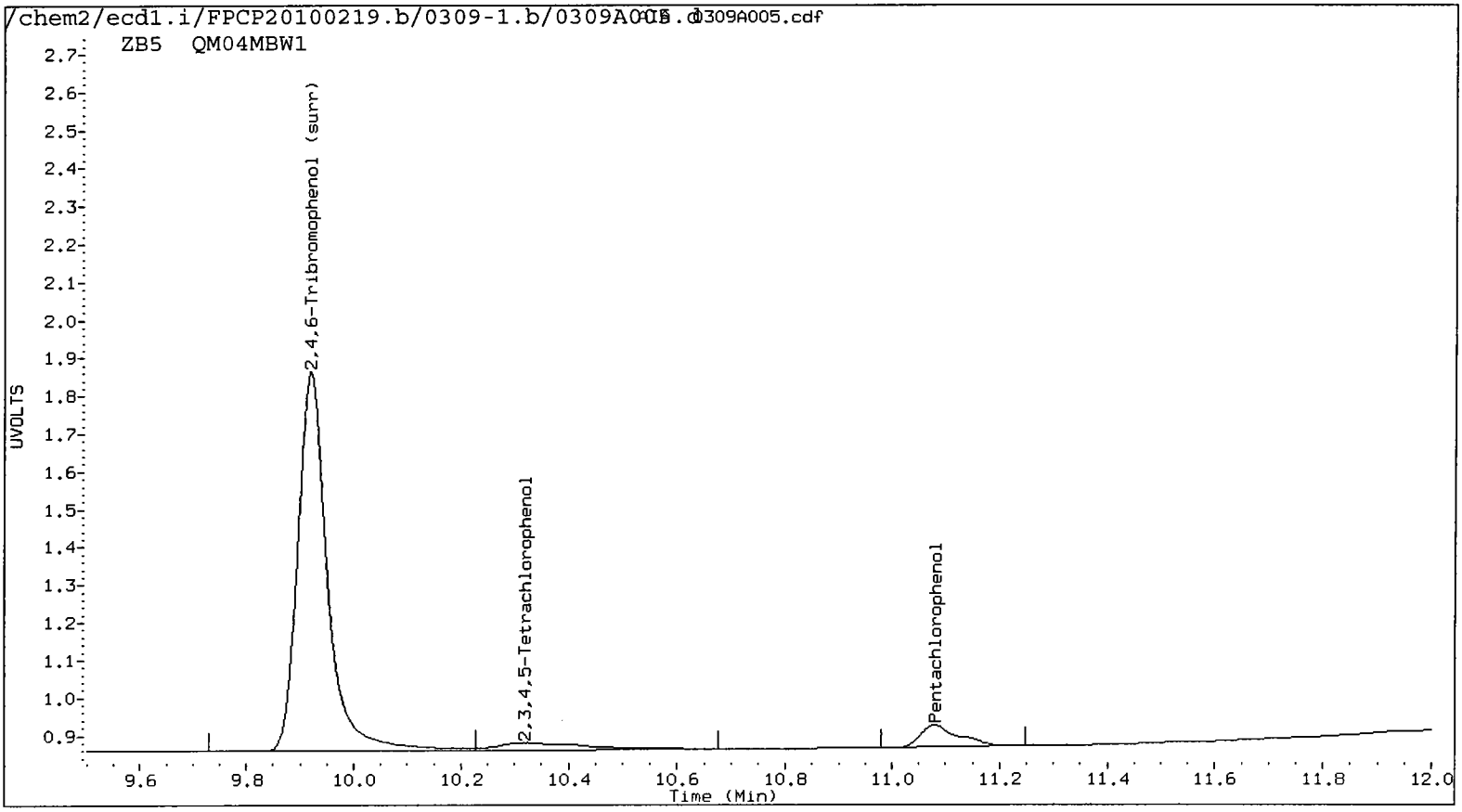
AR 3/10/2010

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A005.d ARI ID: QM04MBW1
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A005.d Client ID: QM04MBW1
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 12:11
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
11.080	-0.043	14641	11.590	0.014	2335	0.7997	0.1136	150.2*	Pentachlorophenol
7.161	-0.029	20822	----			2.0606	0.0000	---	2,4,6-Trichlorophenol
----			7.724	-0.063	21239	0.0000	1.8830	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,5,6-Tetrachlorophenol
10.320	0.018	11219	----			0.9554	0.0000	---	2,3,4,5-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,4-Dichlorophenol
9.920	0.020	194940	10.555	0.009	218051	13.4	13.1	2.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	53.4	52.2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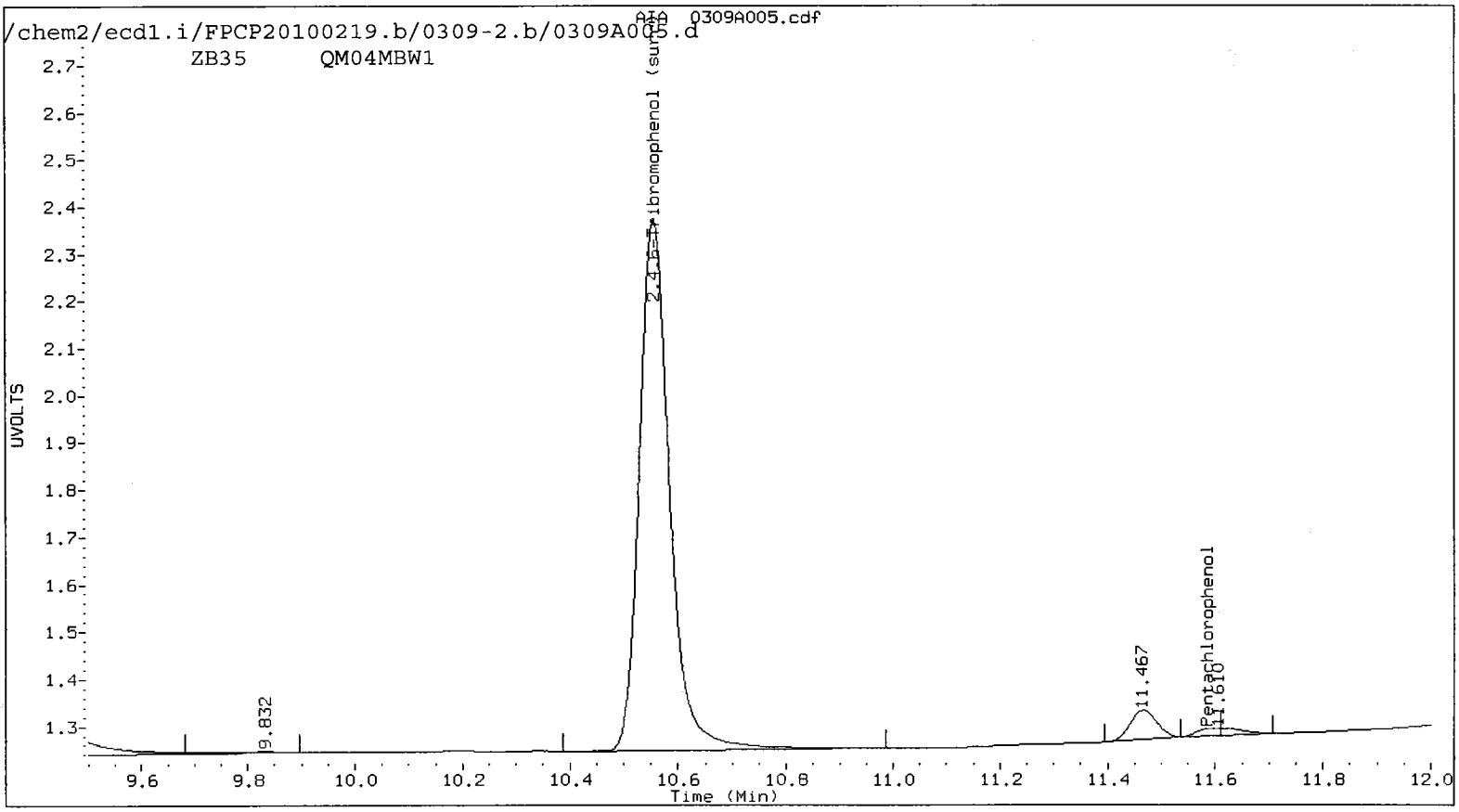
ZB5 QM04MBW1
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)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ZB35 QM04MBW1
2,4,6-Tribromophenol (surr)
9.832
11.467
11.610
Pentachlorophenol
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report AR 3/10/2010

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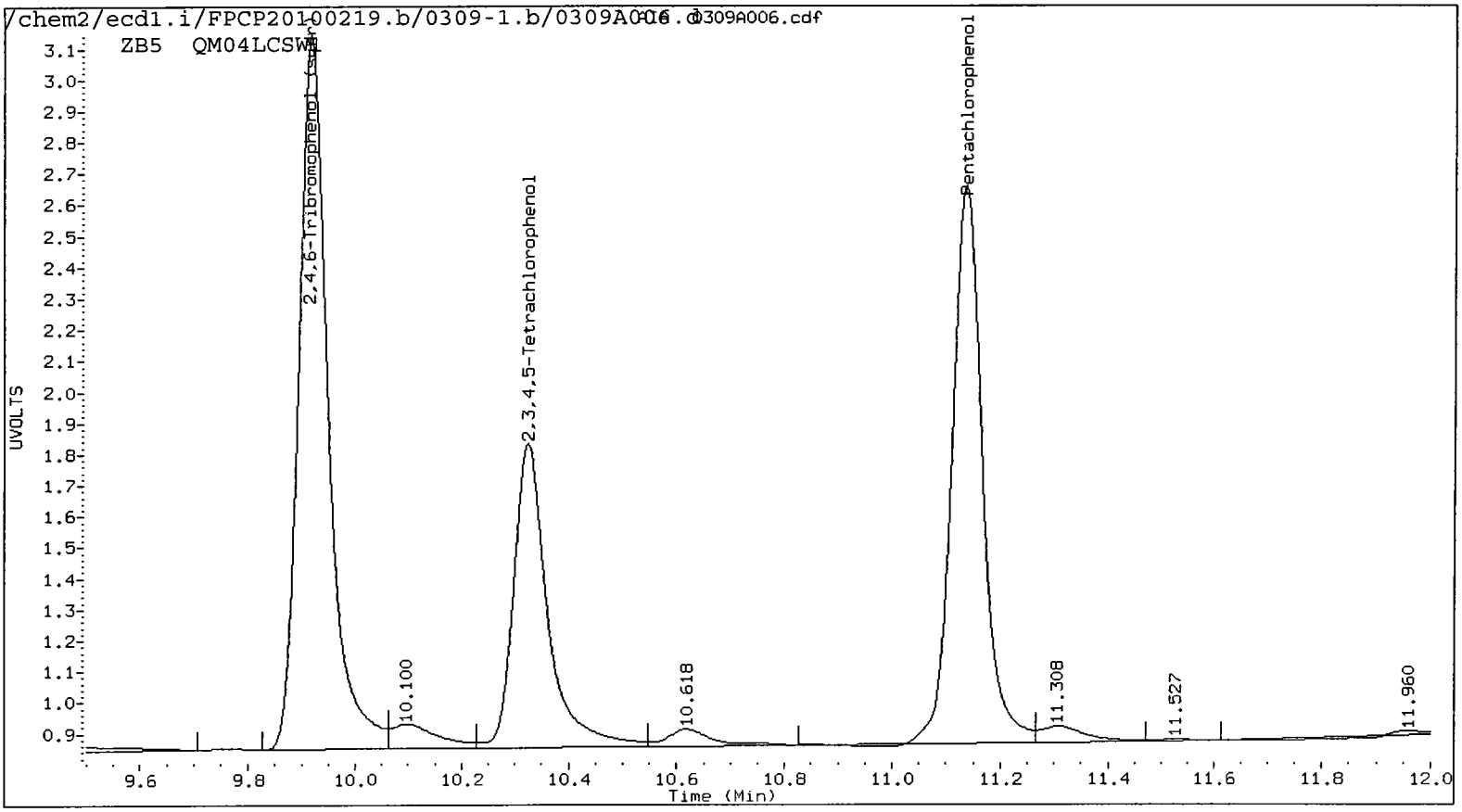
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A006.d Client ID: QM04LCSW1
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 12:31
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.136	0.013	345408	11.582	0.006	394626	18.8642	19.1987	1.8	Pentachlorophenol
7.197	0.007	185951	7.266	0.004	198750	18.4020	17.4729	5.2	2,4,6-Trichlorophenol
7.550	0.010	180437	7.792	0.005	191902	18.0069	17.0133	5.7	2,3,6-Trichlorophenol
8.163	0.026	103564	8.528	0.009	108405	20.4615	18.3714	10.8	2,4,5-Trichlorophenol
8.711	0.030	145017	9.290	0.010	160691	20.5038	20.5824	0.4	2,3,4-Trichlorophenol
8.928	0.016	295208	9.191	0.007	293365	19.2325	17.2691	10.8	2,3,5,6-Tetrachlorophenol
10.325	0.022	216103	11.033	0.009	231979	18.4017	17.7336	3.7	2,3,4,5-Tetrachlorophenol
6.827	0.010	76362	7.095	0.005	85759	155.1016	152.0091	2.0	2,4-Dichlorophenol
9.917	0.018	443547	10.555	0.009	513166	30.4	30.7	1.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	75.5	76.8
2,4,6-Trichlorophenol	73.6	69.9
2,3,6-Trichlorophenol	72.0	68.1
2,4,5-Trichlorophenol	81.8	73.5
2,3,4-Trichlorophenol	82.0	82.3
2,3,5,6-Tetrachlorophenol	76.9	69.1
2,3,4,5-Tetrachlorophenol	73.6	70.9
2,4-Dichlorophenol	62.0	60.8
2,4,6-TBP (surr)	60.8	61.4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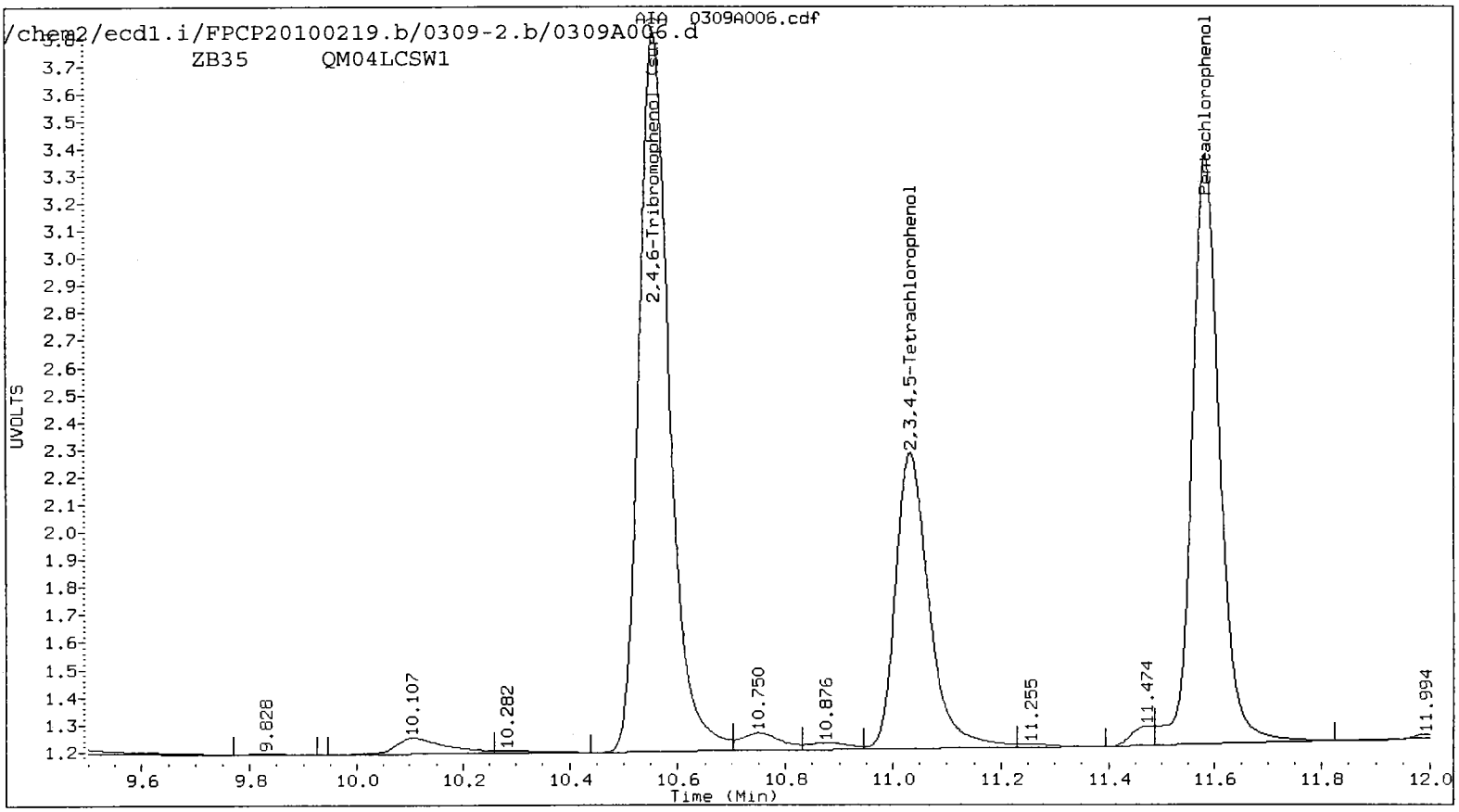
ZB5 QM04LCSW1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
10.100
10.618
11.308
11.527
11.960
Time (Min)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ZB35 QM04LCSW1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.828
10.107
10.282
10.750
10.876
11.255
11.474
11.994
Time (Min)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 13:11
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	63.6%

AR 3/10/2010

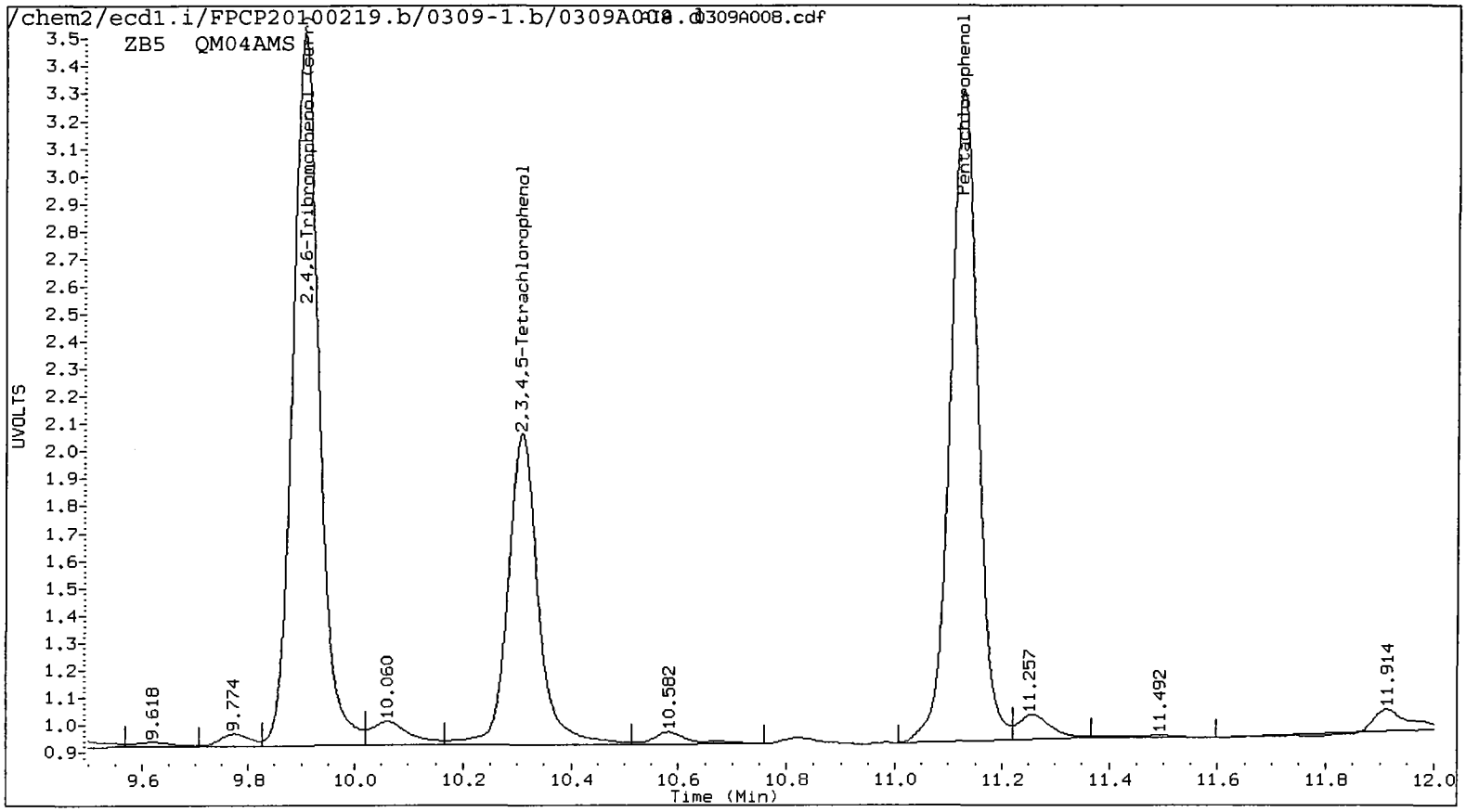
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A008.d ARI ID: QM04AMS
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A008.d Client ID: CB31A022710COMP MS
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 13:11
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
11.127	0.004	423731	11.573	-0.003	488436	23.1418	23.7625	2.6	Pentachlorophenol
7.194	0.004	203408	7.262	0.000	203957	20.1296	17.9306	11.6	2,4,6-Trichlorophenol
7.546	0.006	182406	7.787	0.000	199889	18.2035	17.7214	2.7	2,3,6-Trichlorophenol
8.149	0.012	104720	8.517	-0.003	104401	20.6900	17.6927	15.6	2,4,5-Trichlorophenol
8.694	0.013	123806	9.278	-0.002	126997	17.5048	16.2667	7.3	2,3,4-Trichlorophenol
8.918	0.006	298609	9.182	-0.002	325855	19.4541	19.1816	1.4	2,3,5,6-Tetrachlorophenol
10.308	0.006	221561	11.020	-0.003	236495	18.8665	18.0788	4.3	2,3,4,5-Tetrachlorophenol
6.825	0.008	59765	7.091	0.000	72610	121.3923	128.7010	5.8	2,4-Dichlorophenol
9.905	0.006	450548	10.544	-0.002	531109	30.9	31.8	3.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	92.6	95.1
2,4,6-Trichlorophenol	80.5	71.7
2,3,6-Trichlorophenol	72.8	70.9
2,4,5-Trichlorophenol	82.8	70.8
2,3,4-Trichlorophenol	70.0	65.1
2,3,5,6-Tetrachlorophenol	77.8	76.7
2,3,4,5-Tetrachlorophenol	75.5	72.3
2,4-Dichlorophenol	48.6	51.5
2,4,6-TBP (surr)	61.7	63.6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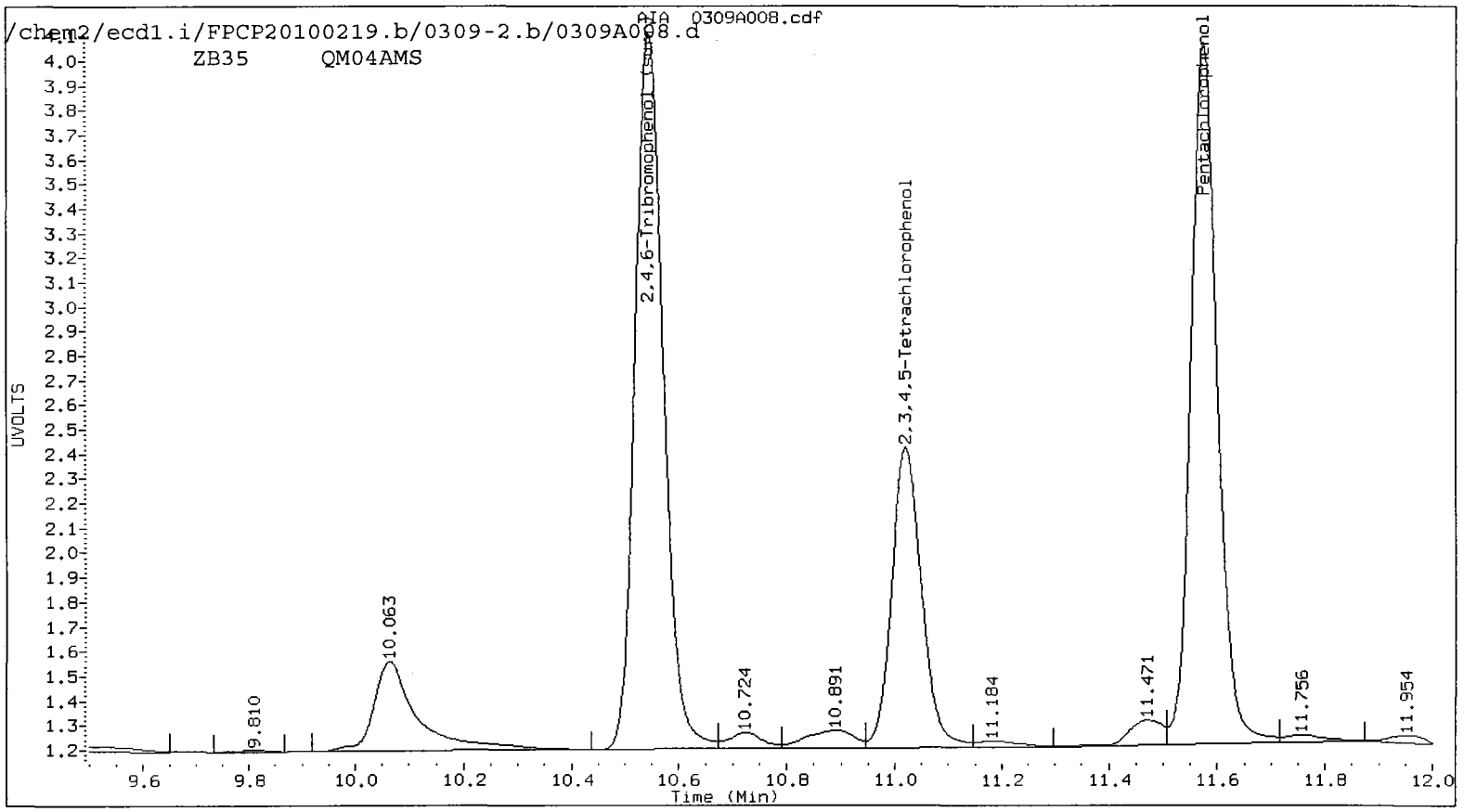
ZB5 QM04AMS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.618
9.774
10.060
10.582
11.257
11.492
11.914
UVOLTS
Time (Min)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ZB35 QM04AMS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.810
10.063
10.724
10.891
11.184
11.471
11.756
11.954
UVOLTS
Time (Min)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A022710COMP
MATRIX SPIKE DUP

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/10/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

Date Extracted: 03/03/10
Date Analyzed: 03/09/10 13:31
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	61.6%

AR 3/16/2010

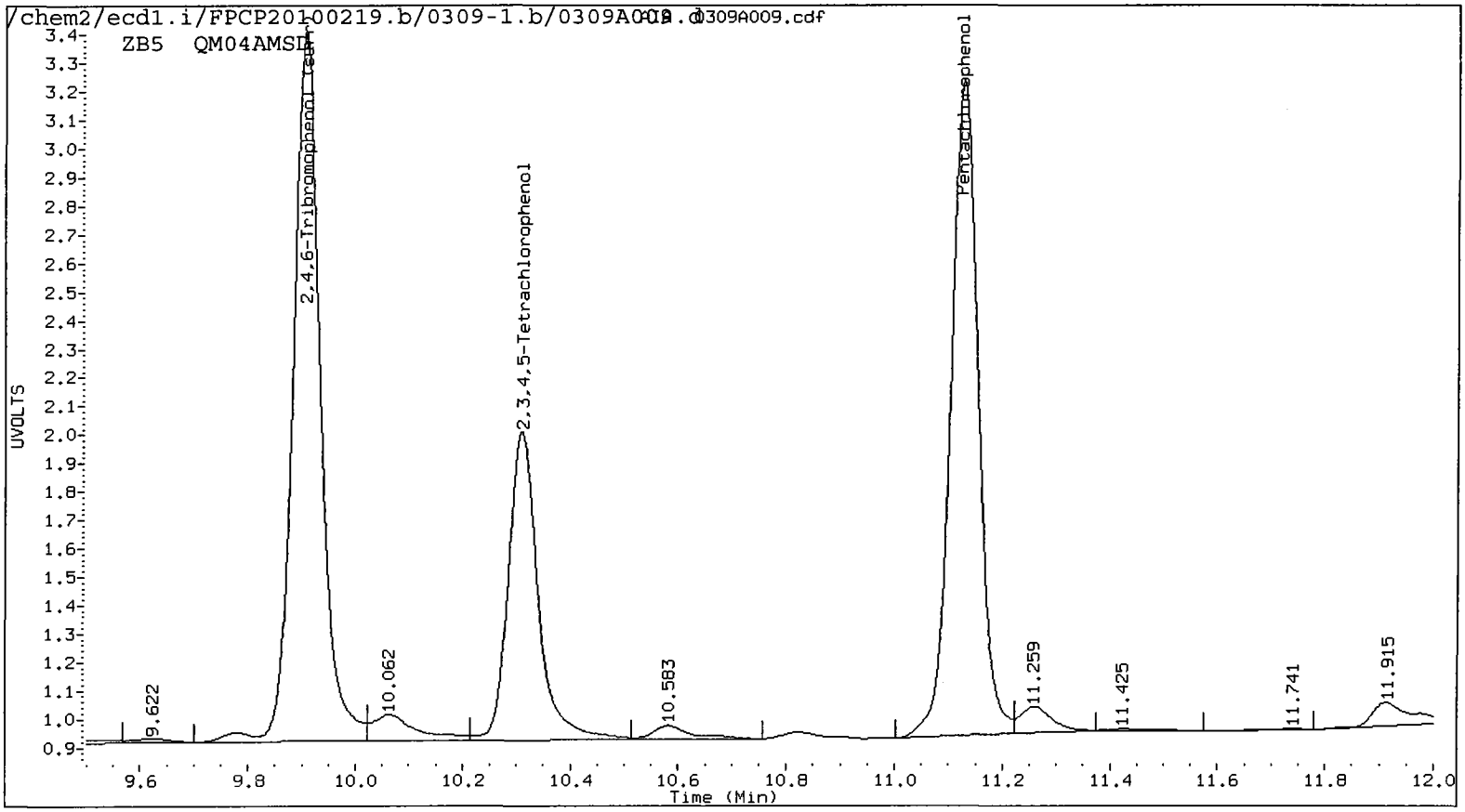
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

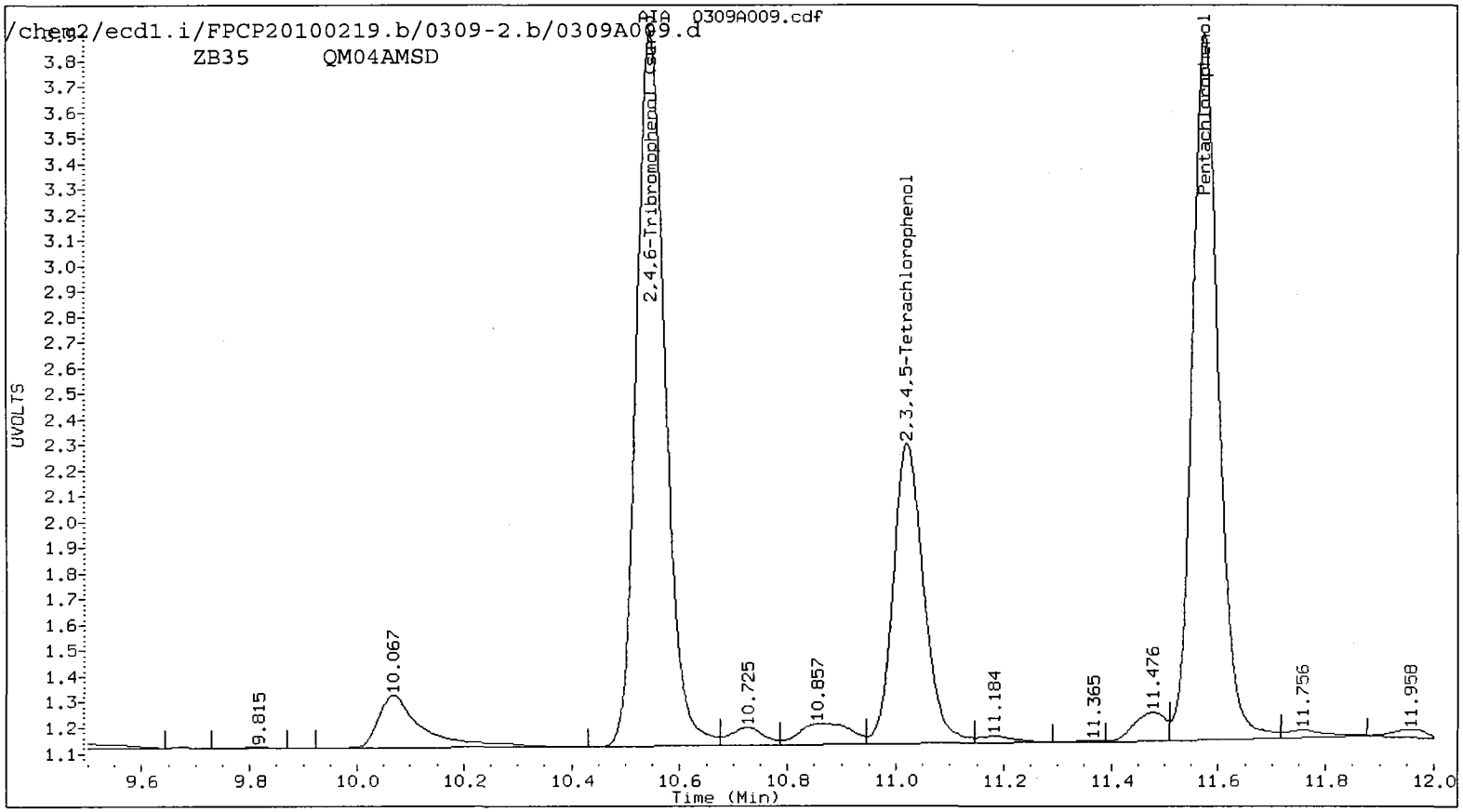
Data file 1: /chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A009.d ARI ID: QM04AMSD
Data file 2: /chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A009.d Client ID: CB31A022710COMP MSD
Method: /chem2/ecd1.i/FPCP20100219.b/FPCP.m Injection Date: 09-MAR-2010 13:31
Compound Sublist: all Report Date: 03/10/2010 16:19
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
11.127	0.004	407407	11.573	-0.003	470890	22.2503	22.9089	2.9	Pentachlorophenol
7.195	0.005	198248	7.262	0.000	197732	19.6190	17.3834	12.1	2,4,6-Trichlorophenol
7.546	0.006	179995	7.787	0.000	190848	17.9629	16.9198	6.0	2,3,6-Trichlorophenol
8.151	0.014	103809	8.518	-0.001	101175	20.5100	17.1460	17.9	2,4,5-Trichlorophenol
8.696	0.015	121693	9.280	-0.001	120303	17.2061	15.4093	11.0	2,3,4-Trichlorophenol
8.919	0.007	291447	9.183	0.000	312253	18.9875	18.3809	3.2	2,3,5,6-Tetrachlorophenol
10.309	0.007	209893	11.021	-0.002	228936	17.8729	17.5010	2.1	2,3,4,5-Tetrachlorophenol
6.826	0.009	44384	7.092	0.001	48397	90.1503	85.7836	5.0	2,4-Dichlorophenol
9.906	0.007	446834	10.546	-0.001	514122	30.6	30.8	0.6	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	89.0	91.6
2,4,6-Trichlorophenol	78.5	69.5
2,3,6-Trichlorophenol	71.9	67.7
2,4,5-Trichlorophenol	82.0	68.6
2,3,4-Trichlorophenol	68.8	61.6
2,3,5,6-Tetrachlorophenol	75.9	73.5
2,3,4,5-Tetrachlorophenol	71.5	70.0
2,4-Dichlorophenol	36.1	34.3
2,4,6-TBP (surr)	61.2	61.5


/chem2/ecd1.i/FPCP20100219.b/0309-1.b/0309A009.d
0309A009.cdf
ZB5 QM04AMSD
UVOLTS
2,4,6-Tribromophenol Isurr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.622
10.062
10.583
11.259
11.425
11.741
11.915
Time (Min)


/chem2/ecd1.i/FPCP20100219.b/0309-2.b/0309A009.d
0309A009.cdf
ZB35 QM04AMSD
UVOLTS
2,4,6-Tribromophenol Isurr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.815
10.067
10.725
10.857
11.184
11.365
11.476
11.756
11.958
Time (Min)

PCP/Chlorophenols ANALYSIS
Extraction Bench Sheets/Run Logs

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

8041 PCP – Water
Separatory Funnel (3510C) (SOP # 3311S)

Preparation Test PCP # 1

ARI Job No(s) QM04

In-House (0.25ppb)
Batch set up by: SP

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	KD Exchange To Hexane (X 2)	Turbo Vap 1 (2) 3	Final Effective Volume	Volume to Lab	Derivitize	Comments
	QM04 MB	Date 3/3/10	500mL			50mL	1-2mL		
	SB								
	SB Dup.								
2,3,4	QM04A	checked							
	AMS								
	AMSD								
3	B								
4	C								
4	D								
					CTZ				
Analyst/Date:	WC	3/31/10		3.4-TS 3-4-10	3/4/10	→	→		

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	F 1683-3	100µL 12.5	12/9/10	WC	SP
Spike	6 ~~1702-2~~ 1655-3	100µL 12.5	9/24/10	WC	SP
Extraction Time:	1525	125			

SPECIAL INSTRUCTIONS: 1. Add surr/spike. 2. Acidify all with 1:1 Sulfuric Acid 3. Extract 3X with 30mL DCM.

4. KD (NO Drying Column) at 80° to 5mL. 5. Exchange (2 X with 20mL) Hexane at 100°. 6. Turbo Vap to 1-2mL

7. Pipet using Hexane into Herb Tubes. 8. GC Analyst to Derivitize. A. Archive Y (N)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: QM04 Client ID: Floyd/Snider

Parameter: PCP Client Project: Lora Lake Apartments

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☐ Wet sediment/sludge=	
☐ Standing Water Decanted=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☐ Rocks/Organics=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☒ Turbid/Color= A(A,AmsAmsd),B,C,D; slighty yellow	WC 3/3/10
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☐ Other Notes/Comments=	

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 2/18/2010 Analysis: Herb/PCP Analyst: JR & AR

GC Program: HERB.M & Column No: 150608/148146 Column Type: 235/ZB35

Instrument Tune (.U or .CT.): PCPFAST.M EM Voltage: NA

Calibration File: EPCP20100219.b & HERB20100818.b Curve Date: 2/18/2010

IS/SS	Ical/Ccal	LCS/ICV
	1659-1	1353-2
	1663-2	1324-1
		1702-3

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20100218.b/ical-2.t

	Inject Date/Time	Filename	DF	LabID	ClientID
1	18-FEB-2010 14:52	0218A002.d	1	PCPD	
2	18-FEB-2010 15:28	0218A003.d	1	PCPA	
3	18-FEB-2010 16:04	0218A004.d	1	PCPB	
4	18-FEB-2010 16:40	0218A005.d	1	PCPC	
5	18-FEB-2010 17:17	0218A006.d	1	PCPE	
6	18-FEB-2010 17:53	0218A007.d	1	PCPF	
7	18-FEB-2010 18:29	0218A008.d	1	PCP ICV 1324-1	
8	18-FEB-2010 19:05	0218A009.d	1	PCP ICV 1702-3	
9	18-FEB-2010 19:41	0218A010.d	1	DRVBLK 021810	
10	18-FEB-2010 20:17	0218A011.d	1	PCPD	
11	18-FEB-2010 20:37	0218A012.d	1	PCPA	
12	18-FEB-2010 20:57	0218A013.d	1	PCPB	
13	18-FEB-2010 21:17	0218A014.d	1	PCPC	
14	18-FEB-2010 21:37	0218A015.d	1	PCPE	
15	18-FEB-2010 21:56	0218A016.d	1	PCPF	
16	18-FEB-2010 22:16	0218A017.d	1	PCP ICV 1324-1	
17	18-FEB-2010 22:36	0218A018.d	1	PCP ICV 1702-3	
18	18-FEB-2010 22:56	0218A019.d	1	DRVBLK 021810	
19	18-FEB-2010 23:16	0218A020.d	1	PCP CCAL	
20	18-FEB-2010 23:35	0218A021.d	1	QJ18MBW1	QJ18MBW1
21	18-FEB-2010 23:55	0218A022.d	1	QJ18LCSW1	QJ18LCSW1
22	19-FEB-2010 00:15	0218A023.d	1000	QJ18A	SW 13#
23	19-FEB-2010 00:35	0218A024.d	1	QJ18B	SW 2#
24	19-FEB-2010 00:55	0218A025.d	50	QJ18C	SW 15#
25	19-FEB-2010 01:15	0218A026.d	1	PCP	
26	19-FEB-2010 01:34	0218A027.d	1	PCP CCAL	
27	19-FEB-2010 01:54	0218A028.d	1	QJ36MBW1	QJ36MBW1
28	19-FEB-2010 02:14	0218A029.d	1	QJ36LCSW1	QJ36LCSW1
29	19-FEB-2010 02:34	0218A030.d	1	QJ36LCSDW1	QJ36LCSDW1
30	19-FEB-2010 02:54	0218A031.d	1	QJ36A	MW-2
31	19-FEB-2010 03:13	0218A032.d	1	QJ36B	MW-3
32	19-FEB-2010 03:33	0218A033.d	10	QJ36C	MW-15
33	19-FEB-2010 03:53	0218A034.d	1	QJ36D	MW-16
34	19-FEB-2010 04:13	0218A035.d	1	QJ36E	MW-17
35	19-FEB-2010 04:33	0218A036.d	1	QJ36F	MW-18
36	19-FEB-2010 04:52	0218A037.d	1	QJ36G	MW-22
37	19-FEB-2010 05:12	0218A038.d	1	PCP	
38	19-FEB-2010 05:32	0218A039.d	1	PCP CCAL	
39	19-FEB-2010 05:52	0218A040.d	40	QJ36H	MW-23
40	19-FEB-2010 06:12	0218A041.d	1	QJ36I	MW-24
41	19-FEB-2010 06:32	0218A042.d	10	QJ36J	MW-25
42	19-FEB-2010 06:51	0218A043.d	1	QJ36K	MW-26
43	19-FEB-2010 07:11	0218A044.d	1	QJ36L	MW-27
44	19-FEB-2010 07:31	0218A045.d	1	QJ36M	MW-28
45	19-FEB-2010 07:51	0218A046.d	1	QJ36N	MW-29
46	19-FEB-2010 08:11	0218A047.d	1	QJ36O	MW-30
47	19-FEB-2010 08:30	0218A048.d	1	QJ36P	MW-31
48	19-FEB-2010 08:50	0218A049.d	200	QJ36Q	MW-32
49	19-FEB-2010 09:10	0218A050.d	1	PCP	
50	19-FEB-2010 09:30	0218A051.d	1	PCP CCAL	

AR 2/23/2010

Maintenance / Comments

Cleaned inlet, cleaned liner & clipped loop from pre-column

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: pentachlorophenol Client ID: _____

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) (**Other**)

Parameter(s): PCP (pentachlorophenol) 2,4,6-Tribromophenol

Instrument: FID-3A FID-3B FID-4A FID-4B FID-7 FID-8
(ECD-1) ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 02/18/10 Analysis Start: 02/18/10

Endrin/DDT Breakdown <15%? YES / NO / (NA) Method Blank In Control? YES / NO

ICal Meets RF & %RSD Criteria? (YES) / NO LCS/LCSD Recovery In Control? YES / NO

CCal Meets RF & %RSD Criteria (YES) / NO Surrogate Recovery In Control? (YES) / NO

Internal Standard Meets Criteria? YES / NO / (NA) Special Analysis Criteria Met? YES / NO / (NA)

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / (No)

Analyst Signature: _____ **Date:** 02/19/10

Reviewer's Signature: _____ **Date:** 2/19/10

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 3/9/2010 Analysis: PCP Analyst: AR

GC Program: PCPFAST.M Column No: 150608/148146 Column Type: 2B5/2B35

Instrument Tune (.U or .CT.): NA EM Voltage: NA

Calibration File: FPCP20100219.b Curve Date: 2/18/2010

IS/SS	Ical/Ccal	LCS/ICV
	1659-1 & 1663-2	1353-2, 1324-1 & 1702-3

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/FPCP20100219.b/0309-1.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	09-MAR-2010 10:52	0309A001.d	1	PCP	
2	09-MAR-2010 11:12	0309A002.d	1	PCP	
3	09-MAR-2010 11:31	0309A003.d	1	PCP	
4	09-MAR-2010 11:51	0309A004.d	1	PCP CCAL	
5	09-MAR-2010 12:11	0309A005.d	1	QM04MBW1	QM04MBW1
6	09-MAR-2010 12:31	0309A006.d	1	QM04LCSW1	QM04LCSW1
7	09-MAR-2010 12:51	0309A007.d	1	QM04A	CB31A022710COMP
8	09-MAR-2010 13:11	0309A008.d	1	QM04AMS	CB31A022710COMP MS
9	09-MAR-2010 13:31	0309A009.d	1	QM04AMSD	CB31A022710COMP MSD
10	09-MAR-2010 13:51	0309A010.d	1	QM04B	CB4857022710COMP
11	09-MAR-2010 14:11	0309A011.d	1	QM04C	CB1022710COMP
12	09-MAR-2010 14:31	0309A012.d	1	QM04D	CB102022710COMP
13	09-MAR-2010 14:51	0309A013.d	1	DRVBLK 030810	
14	09-MAR-2010 15:10	0309A014.d	1	PCP	
15	09-MAR-2010 15:30	0309A015.d	1	PCP CCAL	

AR 3/10/2010

Maintenance / Comments

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: QM04 Client ID: Floyd-Snider

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) **Other**

Parameter(s): Cl Phenols, PCP only, 4125, 8041 Method

Instrument: FID-3A FID-3B FID-4A FID-4B FID-7 FID-8
ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 2/18/2010 Analysis Start: 3/9/2010

Endrin/DDT Breakdown <15%? YES / NO / NA

Method Blank In Control? YES / NO

ICal Meets RF & %RSD Criteria? YES / NO

LCS/LCSD Recovery In Control? YES / NO

CCal Meets RF & %RSD Criteria YES / NO

Surrogate Recovery In Control? YES / NO

Internal Standard Meets Criteria? YES / NO / NA

Special Analysis Criteria Met? YES / NO / NA
VDP

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 3/10/2010

Reviewer's Signature: _____ **Date:** 3/10/10

Metals Analysis
QC Summary Data

prepared
for

Floyd/Snider

Project: Lora Lake Apartments, POS-LLA

ARI JOB NO: QM04

prepared
by

Analytical Resources, Inc.

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lake Apartments

SDG: QM04

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
CB31A022710COMP	QM04A	10-5087	
CB31A022710COMPD	QM04ADUP	10-5087	
CB31A022710COMPS	QM04ASPK	10-5087	
CB48570227l0COMP	QM04B	10-5088	
PBW	QM04MB1	10-5088	
LCSW	QM04MB1SPK	10-5088	
CB1022710COMP	QM04C	10-5089	
CB102022710COMP	QM04D	10-5090	
CB31A022710COMP	QM04E	10-5091	
CB31A022710COMPD	QM04EDUP	10-5091	
CB31A022710COMPS	QM04ESPK	10-5091	
CB48570227l0COMP	QM04F	10-5092	
PBW	QM04MB2	10-5092	
LCSW	QM04MB2SPK	10-5092	
CB1022710COMP	QM04G	10-5093	
CB102022710COMP	QM04H	10-5094	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 4/1/10 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A022710COMP
DUPLICATE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.7	0.7	0.0%	+/- 0.2	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04A
LIMS ID: 10-5087
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.680	27.7	25.0	108%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: QM04LCS
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	26.9	25.0	108%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: QM04MB
LIMS ID: 10-5088
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: CB31A022710COMP
DUPLICATE

Lab Sample ID: QM04E
LIMS ID: 10-5091
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.4	0.4	0.0%	+/- 0.2	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: CB31A022710COMP
MATRIX SPIKE

Lab Sample ID: QM04E
LIMS ID: 10-5091
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: 02/27/10
Date Received: 03/01/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.350	27.0	25.0	107%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: METHOD BLANK**

Lab Sample ID: QM04MB
LIMS ID: 10-5092
Matrix: Water
Data Release Authorized:
Reported: 03/31/10

QC Report No: QM04-Floyd/Snider
Project: Lora Lake Apartments
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	03/03/10	200.8	03/30/10	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit